

THE
YOUNG
ECONOMIST'S
JOURNAL



ISSUE ONE

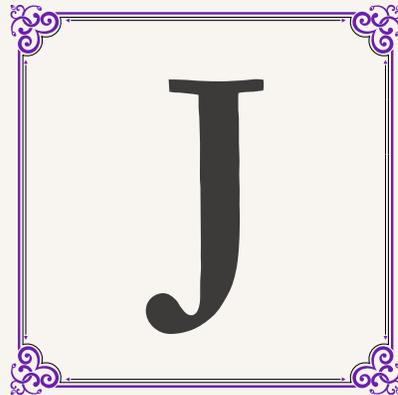
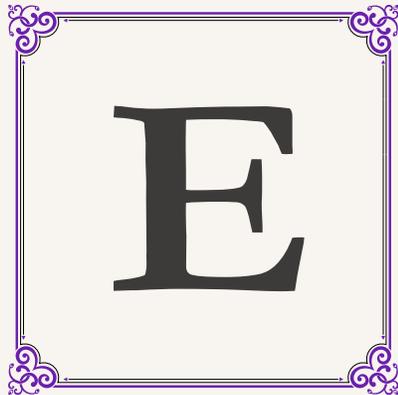
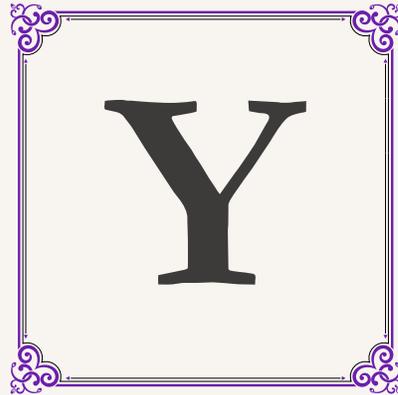
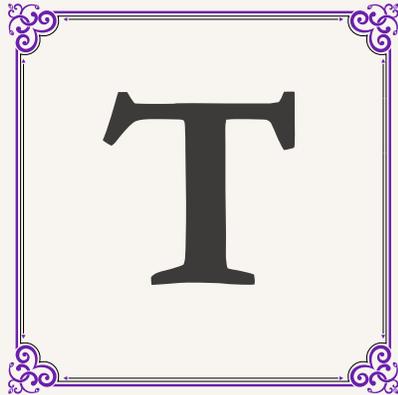


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From the President of MADE

The vision behind The Young Economist's Journal was to create a platform where students could explore and express their passion for Economics by writing on topics of their own choosing, engaging beyond the boundaries of the high school syllabus. The quality of the submissions in this issue reflects the success of this vision, with articles that are thoughtful, ambitious, and demonstrate strong economic insight. In addition, conversations with several authors also highlighted how rewarding and enjoyable the process was. As a result, it is clear that this initiative supports Make A Difference with Economics' mission to inspire and equip a broader and more diverse range of students to study Economics.

I believe that a celebration of this initiative's success would not be complete without showing gratitude to the University of Sydney Economics Society for their support with this journal, as well as the Commonwealth Treasury for their generous provision of experiential prizes for the winners of each issue.

Finally, I hope you enjoy the pieces in this journal and take the opportunity to discuss and share the ideas presented here with your peers!

Gabriel Song
President, MADE

From the Director of Publications at the USyd EconSoc

The Young Economist's Journal is a collaborative initiative that invites students to write, to think, and to explore the world of economics long before they ever step foot into a university lecture. I believe that through essay writing and thoughtful review, students don't just encounter new ideas, but actively contribute to the economic conversations that interest them.

Serving on the review panel, alongside my excellent peers Aarushi (Programs Director) and Basma (Education Director), I have had the privilege of reading and refining these pieces, witnessing first-hand the curiosity and thoughtfulness within each work. As such, this journal is a testament to the passion and merit of those students who chose to put their ideas on the page.

On behalf of USYD Economics, we look forward to our continued engagement with MADE, and I only hope this initial publication sparks more students to enter the exciting space of economic writing.

Leo Biju
Director of Publications, USYD EconSoc

First Prize

HOW BEHAVIOUR FRACTURES
COMPETITION THEORY:



THE IRRATIONAL DECISION
MAKING OF AUSTRALIAN
CONSUMERS IN CONCENTRATED
MARKETS

ALEX CHEN
SYDNEY GRAMMAR SCHOOL
NSW

Consumer behaviour rarely follows economic theory of price switching, instead, it follows predictable and delayed patterns which prioritise comfort over potential gain. Despite markets where competition exists, and alternatives present, consumers rely overly on familiar brands which provide stability, reducing competitive pressure and maintaining market share. Australia itself presents as a persistent contradiction to rational behaviour, where consumer demand within concentrated markets is often stagnant despite shifts in pricing, founded upon the principles of behavioural economics of loss aversion, brand loyalty and bounded rationality, where consumers frame switching as a risk rather than opportunity. Hence, it is our predictable characteristics which erodes the assumption of rationality within competition theory and incentivises firms to actively target our behaviour to hinder consumer responsiveness. It is these conditions which allow for oligopolies and monopolies to prosper, significantly reducing standard of life through stagnant innovation and low productivity growth. Ultimately, current policies that are postulated upon the direct correlation between firm count and competition must frame through a behavioural lens which emphasises on restoring demand-side movement by promoting low-risk switching and restrain consumer “lock-ins” through loyalty programs.

The core of this issue remains in the fluctuations of demand and consumer responses to price changes underpinned by assumptions of rational behaviour. Theory states that the price mechanism should determine equilibrium as price changes lead to subsequent demand shifts, signifying to suppliers how quantity supplied should then change. Hence, profits are determined by consumer sovereignty rather than firms. Thus, if price were to rise, demand would fall with consumers exploring substitutes within the market, signifying strong price sensitivity. It is this consumer behaviour which drives the cog for major economic theories such as welfare maximisation through which price-taking behaviour and a fragmented market leads to marginal cost pricing and drives efficient production processes through specialisation. Yet in reality, these outcomes of competition are dependent on behavioural responsiveness, where friction could diminish the transformative effect of competitive pressure. This is illustrated in JA Schmitz Jr's (2005) finding that US and Canadian iron ore mines doubled labour productivity following liberalisation that allowed competition from Brazil. Representing an efficient response to market change that overcame cognitive biases such as loss aversion, a lack of consumer inertia in the 1980s led to a severe crisis. Ultimately, this forced firms to change work practices such as reduction in overstaffing which if left unaddressed would emphasise high operational costs and low engagement, revealing the link between competition and standard of living when behavioural biases are absent.

Hence, competition theory fractures under our innate behavioural biases which reduces the efficacy of market systems and lead to consumer inertia, rather than a lack of market competition. Within concentrated markets dominated by monopolies and oligopolies, these behaviours are accentuated and hence diminish consumer sovereignty through suppressing the corrective mechanisms that increase competitive pressure. Rather, consumer behaviour reflects bounded rationality, where this sub-optimal decision making culminates in loss aversion and sunk-cost fallacy in which consumers are more sensitive to potential losses and hence will prioritise inaction over risk-taking. Hence, by fracturing the determinism of demand elasticity, it allows these firms to maintain high market power and price-set without consumer defection. Paradoxically, even when competition rises, frictions such as choice overload can catalyse consumer stress in the pursuit for optimisation, delaying responsiveness which engrains inertia. The RBA estimates that a misallocation of resources from low competitive pressure in firms, productivity has dropped between 1-3% by 2017, equating to each Australian \$3000 worse off today (Micallef, 2025). Importantly, this lack of productivity growth is portrayed to be a result of behavioral limitations rather than structural issues regarding the central bank's monetary policy, with the RBA governor stating "There's nothing the reserve bank can do". Hence, the Productivity Commission estimates that if current trends of consumer inertia continue, concentrated markets may result in full time workers \$14,000 worse off every year (Micallef, 2025). Thus, as a result of corrective mechanisms fracturing not under a lack of structure but behavioural biases, standard of living has dropped with correction policies difficult to implement.

Australia's market concentration and barriers to entry have only facilitated consumer biases, with a lack in price and quantity differentiation shifting competition away from quantitative factors toward brand loyalty and recognition. Australia's comparative advantage in agriculture reflects this scenario, as minimal imports result in concentrated wholesale markets from a lack of foreign competition. Hence, this "upstream" concentration (Micallef, 2025) often results in a narrowing range of "downstream" goods and prices, as sellers buy from common firms. This "flow-down" effect constrains innovation and competitive pressure, accentuating consumer inertia as potential gain from switching is reduced. This lack of competition especially in concentrated markets has diminished needs for modern innovation as market power remains constant, with labour productivity (20 year average) falling continually, highlighted by the 2023-24 year recording 0.8% growth compared to 1.7% in 2015-16 (Australian Bureau of Statistics, 2024).

Australia's supermarket sector reflects competition, yet reveals its superficiality as market powers rely instead on behavioural bias to spur consumer inertia and maintain profitability, rather than price or product differentiation. Despite the supermarket market comprising thousands of firms, 67% (LaFrenz & McIlroy, 2025) of market share is split between Coles and Woolworths, highlighting an oligopoly that results from low switching and brand loyalty despite price inflations. Hence, consumer choice will persist even if more independent firms join the market, elucidating the ineffectiveness of increased competition from high barriers to entry. The predictability of human behaviour has inevitably led to exploitations of these characteristics, with Woolworths and Coles both implementing reward programs: Everyday Rewards and Flybuy respectively. This reinforces price inelasticity as consumers already enrolled into a reward program are less likely to search for a substitute chain when prices rise. Thus, despite existing competition within this sector, Woolworths and Coles has been able to gain significant market share through targeting consumer satisfaction, being celebrated as Australia's two most trusted brands (Roy Morgan, 2025) during 2022 (Post-COVID) and hence experiencing high sales (with Woolworths experiencing 9.2% growth during this financial year) despite maintaining elevated gross profit margins (30.4% for Woolworths and 26.3% for Coles) higher than all international competitors (Barrett, 2024) including Costco, Tesco and more. Yet, the catalysing effect of consumer loyalty and decision making is accentuated during Woolworths and Coles' dramatic fall from "most trusted" in 2024 by 239 and 237 places respectively (Roy Morgan, 2025), with Woolworths now named as the "least trusted brand". This follows ACCC allegations of misleading consumers during specials (ACCC, 2024), with products experiencing a 15% increase in price (or more) just before being placed on promotion deals such as Coles's "Down Down". Resultantly, profits experienced a large dip, with Woolworths's profits falling by $\frac{1}{5}$, (LaFrenz & McIlroy, 2025) followed by stocks slumping 21% since FY25 on the 26th of August, experiencing new lows not seen since the pandemic. Ultimately, this link between public perception and sale profits emphasises that oligopolies rely on brand name and consumer loyalty to hinder consumer inertia and maintain market power, rather than price or product differentiation which competition theory predicts.

While supermarkets explore consumer correction in response to ethical allegations, the airline industry reveals the contextuality of brand perception as a correction mechanism, where even record fines and compensation fail to shift demand. Virgin Australia and Qantas represent a duopoly in the market, existing as close substitutes to one another due to shared major international and domestic airway routes which diminishes their ability for product differentiation. Yet, both airlines target behavioural biases to reduce demand elasticity, such as their loyalty programs: Qantas's Frequent Flyer and Virgin Australia's Velocity Frequent Flyer that causes friction when switching, as long-term point benefits encourage consumer inertia. With the airline industry depending heavily on safety, consumers prioritise track record and reliability over cost optimisation. Hence, Virgin and Qantas have been able to further brand loyalty through exceptional satisfaction rates, with Virgin's Net Promoter Score (NPS) of 27 in 2024 which experienced a rise of 4 points (Virgin Australia, 2025a). Resultantly, both firms have been able to achieve high profit margins with EBIT margins 14% and 11.4% respectively (Qantas, 2025). Yet, the extent of consumer inertia was reflected in 2025 where Qantas experienced a fine of \$90m alongside with \$120m compensation for illegally outsourcing staff during COVID-19 (Khadem, 2025) while simultaneously experiencing a 15% increase in underlying profit before tax and higher passenger growth compared to the previous year (Qantas, 2025), highlighting limited consumer responsiveness even in fraud. This juxtaposition to supermarkets suggests minimal consumer shifts as a correction mechanism from behavioural friction, overshadowed by assumptions within competition theory.

Ultimately, current policy reforms are inefficacious not because competition does not exist but because behavioural biases often control consumer decisions, diminishing rational decisions assumed by competition theory. It is under these foundations such as sunk cost fallacy and loss aversion, where consumers are hesitant of the perceived risk in consumer switching, reducing competitive pressure within the market. Hence, to improve living standards and productivity, policies must be aligned with behavioural economics and reduce this friction rather than structural solutions which assume rationality. Despite the ACCC traditionally encouraging competitive behaviour within markets through policies that prohibit anti-competitive agreements and predatory pricing as well as recent recommendations (ACCC, 21 March 2025) such as for clearer pricing, these have targeted structural adjustments for competition while ignoring demand-side biases which creates inertia and sub-optimal decision making. Ultimately, in order to restore competitive pressure, policies must shift focus to reducing behavioural friction by promoting low-cost switching and movement.

Overall, competition theory assumes that rivalry between firms in markets will drive standard of living through greater innovation and lower costs. Yet, consumer behaviour often deviates from economic theory of price switching, instead following predictable and delayed patterns which prioritise comfort over potential gain. Hence, it is this friction between behavioural biases and rational judgement which diminishes competitive pressure, leading to market concentration despite existing alternatives. This behaviour breeds oligopolies and monopolies, consequently reducing labour productivity and purchasing power as prices stay high. Ultimately, for efficacy, traditional policies that focus on structural adjustments to increase competition must shift to also address behavioural economics. Thus, this should be done through promoting substitute-switching and demand correction mechanisms through fundamentally reducing friction in decision making.

REFERENCES:

ACCC. (2024, September 23). ACCC takes Woolworths and Coles to court over alleged misleading “prices dropped” and “Down Down” claims. Australian Competition and Consumer Commission.

<https://www.accc.gov.au/media-release/accc-takes-woolworths-and-coles-to-court-over-alleged-misleading-prices-dropped-and-down-down-claims>

ACCC. (2025, March 21). ACCC recommends supermarket reforms to provide better outcomes for consumers and suppliers. Australian Competition and Consumer Commission.

<https://www.accc.gov.au/media-release/accc-recommends-supermarket-reforms-to-provide-better-outcomes-for-consumers-and-suppliers>

Australian Bureau of Statistics. (2024). Productivity. Australian Bureau of Statistics; Australian Bureau of Statistics.

<https://www.abs.gov.au/statistics/measuring-what-matters/measuring-what-matters-themes-and-indicators/prosperous/productivity>

Barrett, J. (2024, October). Profit margins at Coles and Woolworths were in line with major overseas supermarkets in 2008. Now they're the highest in the world. The Guardian; The Guardian.

<https://www.theguardian.com/australia-news/2024/oct/01/coles-and-woolworths-have-leapfrogged-their-peers-in-profitability-these-charts-prove-it>

Khadem, N. (2025, August 18). Federal Court fines Qantas \$90 million penalty for illegally outsourcing ground handling workforce. Abc.net.au; ABC News.

<https://www.abc.net.au/news/2025-08-18/qantas-fined-in-federal-court-job-outsourcing-penalty/105659978>

Luca Ittimani. (2025, August 27). Woolworths struggles to win back “price trust” from customers – and investors – as Coles’ value rises. The Guardian; The Guardian.

<https://www.theguardian.com/business/2025/aug/27/woolworths-coles-results-market-value>

Micallef, C. (2025, August 14). Reason Aussies are \$3k worse off. News.com.au; news.com.au — Australia’s leading news site for latest headlines.

<https://www.news.com.au/finance/economy/australian-economy/living-standards-smashed-on-a-lack-of-business-competition-rba/news-story/89e2c733a38f05f166168fa5445d2cff>

Qantas. (2025). Qantas Investors | Investor Centre. Qantas.com.

<https://investor.qantas.com/investors/?page=result-centre>

Roy Morgan. (2025, January 23). Woolworths and Coles: From Most Trusted to Most Distrusted - Roy Morgan Research. Roymorgan.com.

<https://www.roymorgan.com/findings/9784-supermarkets-trust-and-distrust-woolworths-and-coles-january-2025>

Schmitz Jr., James A. (2005). What Determines Productivity? Lessons from the Dramatic Recovery of the U.S. and Canadian Iron Ore Industries Following Their Early 1980s Crisis. Journal of Political Economy, 113(3), 582–625.

<https://doi.org/10.1086/429279>

Virgin Australia. (2025a). Annual Report Contents.

<https://www.virginaustralia.com/content/dam/vaa/documents/investor-centre/vgn-annual-report-fy25.pdf>

Virgin Australia. (2025b). ASX Announcement Virgin Australia delivers on Prospectus forecasts, recording strong performance in revenue and earnings in FY25.

<https://www.virginaustralia.com/content/dam/vaa/documents/investor-centre/fy25-financial-results-asx-release.pdf>

LaFrenz, C., & McIlroy, T. (2025, March 20). WOW, COL ASX: ACCC finds Woolworths, Coles some of the most profitable in the world. Australian Financial Review.

<https://www.afr.com/politics/federal/woolworths-coles-among-world-s-most-profitable-supermarkets-accc-20250320-p5ll6g>

Highlights

“Alex’s exploration of how behavioural economics unsettles traditional competition theory was immediately engaging, particularly in its focus on the everyday experiences of Australian consumers. The essay reframed questions of market concentration through a behavioural lens, offering a perspective that felt both fresh and grounded in reality. Supported by contemporary evidence and real-world research, the piece moved comfortably between theory and application. A confident analytical voice ran throughout, reflecting strong economic understanding applied to a genuinely interesting subject. Overall, this was a thoughtful and assured piece that showed clear intellectual curiosity and maturity.

Well done Alex!”

Interview

Question: What inspired you to write this?

I felt inspired to write my article about competition theory as I felt deeply intrigued by the rift between economic theory and real world applications. Though I had learnt economic theory all throughout Year 11 and up until now, it never articulated the physical applications of this theory. After reading several journals on the rising cost of living, particularly in the supermarket sector, I wondered how two large supermarket franchises could dominate the market completely and continually drive prices up largely in the pursuit of profit without consumers acting. I hope my article can inform those intrigued by this same question and provide a behavioural lens into the 'irrational' decision making of Australian consumers, exacerbated within concentrated markets!

Question: How did you find the writing process? Was it rewarding? Was it challenging?

Initially I found the writing process quite difficult as it took some time to plan out my argument as well as reading enough sources to write an informed response on an issue that is still prevalent to Australian consumers today. Though after beginning the writing process, I found it quite interesting and I actually ended up almost pulling an all nighter as time seemed to fly! Looking back, this experience was definitely rewarding (not only in a tangible way) as it furthered my economic understanding and provided me with insight into the actions of everyday consumers. I definitely recommend students giving this journal a go, whether you're just studying Economics at school or are deeply passionate in the subject, as it can definitely further your knowledge!

Second Prize

THE RISE OF THE DEFAULT ECONOMY



METHULI KALUPAHANA
THE PONDS HIGH SCHOOL
NSW

Economic outcomes are often described as the result of choice. Individuals are assumed to weigh costs and benefits, markets are assumed to translate preferences into prices, and inequality is frequently explained as the cumulative outcome of individual decisions. This framework is analytically neat. It is also increasingly incomplete.

A substantial body of economic research shows that when decisions become complex, delayed, or difficult to evaluate, individuals systematically remain with default options rather than actively selecting alternatives. Defaults are not neutral starting points; they become outcomes when the cost of decision making is high. As economic systems become more intricate, the number of such moments expands. Information becomes harder to process, responsibility more diffuse, and the effort required to intervene rises (Australian Prudential Regulation Authority [APRA], 2023).

Australia's institutional design reflects this reality. Major economic domains: education finance, labour market entry, housing, and retirement savings, are structured around what happens when no active decision is made. In superannuation, for example, the MySuper framework explicitly exists to capture members who do not make an active fund choice, recognising that disengagement is not exceptional but expected (APRA, 2023). In higher education, student debt is administered automatically through the tax system, embedding repayment as a background condition rather than an actively managed obligation (Australian Government Department of Education, 2024; Australian Taxation Office [ATO], 2024). What emerges is a default economy; an environment in which participation, exposure to risk, and access to future opportunity are increasingly shaped by inherited settings rather than deliberate choice. From an economic perspective, defaults operate as a form of non price rationing. Instead of allocating outcomes through wages, interest rates, or fees, they allocate outcomes through friction. When the cost of active decision making rises, in time, information, or uncertainty, remaining in the default becomes the dominant strategy. This does not imply irrationality. Rather, it reflects bounded rationality operating in environments where optimization is expensive and the penalties for error are asymmetric.

This matters because default based allocation interacts with inequality in a predictable way. Individuals with greater financial buffers or institutional literacy are better able to absorb the cost of experimentation and adjustment. Those without such buffers face higher downside risk from deviation, making inaction economically rational even when the default is suboptimal. In this sense, defaults do not merely simplify choice; they stratify outcomes.

These outcomes rarely attract attention because they do not originate from a single policy decision or market shock. Instead, they accumulate quietly. The force of defaults lies in how unevenly they are lived. Individuals with time, financial buffers, and institutional literacy are better positioned to override them. Others are not. Over time, that difference shapes where people end up. This unsettles the assumption that outcomes simply reflect preference. What remains is something structural: where people were placed, and how difficult it was to move. Economic power has not disappeared. It has shifted into design.

Education by Default

Education is often framed as an early, intentional investment in human capital. In practice, participation in tertiary education increasingly resembles a continuation rather than a discrete decision. Australia's student loan system lowers immediate friction by design. HELP debts are incurred without upfront payment, indexed annually, and repaid automatically through the tax system once income thresholds are met (Australian Government Department of Education, 2024; ATO, 2024). Recent policy changes, including the legislated 20% reduction of eligible HELP debts as at 1 June 2025, further reinforce the treatment of education debt as a system managed background condition rather than an individually negotiated liability (Australian Government Parliamentary Library, 2024).

The scale of that background burden is significant. By 2023–24, the average HELP balance exceeded \$27,000, with a substantial share of borrowers carrying debts well above that level (Australian Government Parliamentary Library, 2024), according to Australian Government reporting. These costs are rarely confronted at the point of enrolment, but they persist long after graduation.

The economic significance of this structure lies not only in the size of the debt, but in how it is experienced. Because HELP repayments are income contingent and collected through the tax system, they reduce the salience of borrowing at the point of enrolment while extending its effects well into working life. This shifts the education decision away from a conventional cost benefit calculation and toward a behavioural default, where participation occurs first and evaluation follows later.

Over time, these deferred costs influence labour market behaviour. Graduates with outstanding debt may display lower tolerance for income volatility, reduced willingness to accept unpaid training periods, or delayed transitions into self employment or further study outside the formal system. In this way, education debt does not merely reflect past decisions; it shapes future economic flexibility.

At the same time, labour market credential requirements have expanded. As degrees become more common, their signalling value shifts from distinction to eligibility. In that context, opting out of higher education increasingly resembles risk exposure rather than choice. Additional qualifications then appear as rational responses to uncertainty, even when marginal returns are unclear.

This produces a self reinforcing cycle. Each stage of education generates sunk costs: time, debt, delayed earnings, that make interruption harder to justify. Participation becomes momentum. Momentum substitutes for intention.

No institution mandates enrollment. Yet the environment is structured such that opting out carries more ambiguity than opting in. Education becomes something held onto rather than chosen, not because outcomes are guaranteed, but because the absence of credentials appears more dangerous.

Defaulting into Precarity

The labour market is where these inherited conditions become binding.

Official ABS data illustrates how risk is distributed at the point of entry. In August 2024, 73.6% of labour hire workers lacked paid leave entitlements, compared with 21.6% of employees overall, according to the Australian Bureau of Statistics (Australian Bureau of Statistics [ABS], 2024). More than 35% of labour hire workers were not guaranteed minimum weekly hours, and over half had been in their role for less than a year, indicating persistent instability rather than short term transition (ABS, 2024).

These are not marginal arrangements. They define how work is experienced by a significant segment of the workforce. When income is uncertain and hours fluctuate, the economic cost of job search rises sharply. Leaving a role becomes risky not because alternatives do not exist, but because the period between jobs is unpaid while expenses are fixed.

Housing pressures intensify this constraint. In NSW, median weekly rents in Sydney increased from \$550 in 2014 to \$775 in 2024, with particularly sharp rises following the pandemic period. Higher rents reduce financial slack (NSW Department of Communities and Justice, 2024), and punish interruption, converting labour market “flexibility” into dependence. From an economic standpoint, this combination of insecure work and rising housing costs shifts risk away from firms and onto individuals. When hours are uncertain and housing costs are fixed, workers face a classic liquidity constraint: they may prefer to search for better employment but lack the short term income buffer required to do so. The result is reduced labour mobility, even in the presence of nominal job availability.

This dynamic weakens the equalising function traditionally attributed to labour markets. Instead of reallocating workers toward higher productivity or better matches, markets begin to lock individuals into positions that minimise short term risk rather than maximise long term returns. What appears as persistence is often not preference, but constraint operating under tightened margins.

The result is compression rather than paralysis. Choices do not disappear, but the cost of changing direction increases. Temporary arrangements extend, not through preference, but through repetition under constraint.

By the time stability appears, it often arrives on terms shaped by this narrowing. Risk has already been internalised, bargaining power has thinned, and starting again carries a higher expected cost. Work does not undo the logic of education, it anchors it.

Retirement by Inertia

Retirement is where time removes the possibility of correction.

Australia’s retirement system is explicitly default driven. The MySuper framework exists to serve members who do not make active investment or fund choices, recognising that long term disengagement is common (APRA, 2023). APRA’s regulatory focus on performance benchmarking and heatmaps reflects the same reality: small differences in fees and returns compound materially over decades when accounts are left unchanged (APRA, 2023).

The issue here is not negligence, but accumulation. Missed years of compounding cannot be recovered, and once retirement adequacy becomes salient, the conditions that produced it are largely fixed.

Retirement outcomes rarely reflect a single error, rather, they reflect the cumulative effect of defaults interacting with time.

Governing without Choosing

Economics has long relied on choice as its organising principle. Preferences are assumed to be revealed through behaviour, and responsibility is assigned accordingly. Yet across education, labour markets, housing, and retirement, outcomes are increasingly shaped by what happens when no decision is required.

Defaults govern quietly. They allocate risk, structure participation, and harden trajectories without explicit instruction. Because no single moment of choice is visible, responsibility appears individual while power remains dispersed.

This is not merely theoretical. National survey evidence shows that economic constraint is already recognised by younger Australians. The 2025 Australian Youth Barometer reports that 85% of Australians aged 18–24 experienced financial insecurity in the previous year, and nearly 80% expect to be financially worse off than their parents (Australian Youth Barometer, 2025).

Recognising the default economy does not require rejecting markets or individual responsibility. It requires acknowledging that institutional design governs outcomes as effectively as explicit decisions. In such an environment, the most consequential economic choices are often the ones people never realise they were part of.

Economic life remains governed, just not always through choosing.

References

1. Australian Bureau of Statistics. (2022, December 16). Labour hire workers, June 2022 | Australian Bureau of Statistics. www.abs.gov.au. <https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/labour-hire-workers/latest-release>
2. Australian Government. (2024). HECS-HELP - Study Assist, Australian Government. Studyassist.gov.au. <https://www.studyassist.gov.au/financial-and-study-support/hecs-help>
3. Australian Government. (2024b). Loan repayments - Study Assist, Australian Government. Studyassist.gov.au. <https://www.studyassist.gov.au/managing-and-repaying-your-loan/loan-repayments>
4. Universities Accord (Cutting Student Debt by 20 Per Cent) Bill 2025 [Preliminary Digest]. (2025). Aph.gov.au. https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/bd/bd2526/26bd001
5. APRA. (2023). MySuper Product Heatmap | APRA. www.apra.gov.au. <https://www.apra.gov.au/mysuper-product-heatmap-0>
6. MySuper Product Performance | APRA. (2025). Apra.gov.au. <https://www.apra.gov.au/mysuper-product-performance>
7. contact=13 28 65, scheme=AGLSTERMS A. corporateName=Australian T. O. address=GPO B. 9990 C. A. 2600; (2024). Study and training loan indexation rates. www.ato.gov.au. <https://www.ato.gov.au/tax-rates-and-codes/study-and-training-support-loans-indexation-rates>
8. admin. (n.d.). Rent and sales report - interactive dashboard. Communities and Justice. <https://dcj.nsw.gov.au/about-us/families-and-communities-statistics/housing-rent-and-sales/rent-and-sales-report.html>
9. for, C., Walsh, L., Huynh, T. B., & Deng, Z. (2025). The 2025 Australian Youth Barometer. Monash University. <https://doi.org/10.26180/30184270.v2>

Highlights

“Methuli’s exploration of the “default economy” stood out for its originality and ambition. The framing brought together behavioural economics and game theory in a way that felt clear, purposeful, and well beyond typical high-school work. A controlled and confident writing style, supported by quality research and sharp economic insight, made the essay both engaging and easy to follow. Altogether, this was an excellent read and a strong reflection of Methuli’s clarity and confidence as a writer!”

Interview

Question: What inspired you to write this?

The idea didn’t start as an economics argument, but as a general feeling I kept noticing in everyday life. A lot of things don’t happen because we actively decide on them; they just sort of happen. Routines form, paths continue, and before you realise it, you’re somewhere you never consciously chose, just because it was easier not to stop and question it. While studying economics, I started to recognise that same pattern in the systems we learn about. Outcomes that are usually explained as the result of choice often seemed to emerge from momentum instead. Making that connection stayed with me, and writing the piece became a way of exploring it properly and thinking through how much of economics is shaped by continuation rather than choice.

Question: How did you find the writing process? Was it rewarding? Was it challenging?

The writing process was challenging in a way that felt genuinely productive. A lot of it involved stripping ideas back rather than adding to them, and working out what actually mattered and what could be let go. There were moments where I had to sit with uncertainty instead of rushing to a conclusion, which wasn’t always comfortable but ended up being valuable. What made the process rewarding was realising that the piece didn’t need a clean resolution to be strong, and learning how to refine an argument even when the outcome remained unsettled.

Third Prize

A BUBBLE YOU DON'T
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ARTIFICIAL
INTELLIGENCE

NIKHIL MOGILI
THE PONDS HIGH SCHOOL
NSW

The Predicament

As Artificial Intelligence (AI) continues to grow its global market share, surpassing approximately \$244 billion in 2025, with projections of over \$1.8 trillion by 2030 (Synthesia, 2025), expectedly, investment into related business research and development projects has grown by as much as 18% during 2024, solely within Australia (ABS, 2025).

“And just like any other company that blissfully ignored the Internet at the turn of the century, the ones that dismiss the Internet of Things risk getting left behind.”

(Fast Company, 2015)

The same scenario is transpiring with AI, and this time, the firms are aware.

Businesses, particularly those leading the S&P 500, are continuing to pour billions into leading this race, ensuring to remain consistent with developing technology and maintain competition, with investors following close in order to capitalize.

However, reminiscent of the *Dot-com* bubble, high - stakes investment into AI technology have mirrored the early stages of the burst during the late 1990s (Fortune, 2025). Public economic corporations, specifically the Bank of England; also indicating stretched stock market valuations, primarily amongst AI - oriented technology firms (CNBC, 2025).

The speculative nature of this bubble, however, remains debated, with evidence both supporting and refuting arguments upon the likelihood of its occurrence.

Capital Expenditure Boom

Companies have begun to raise copious amounts of money in order to prepare for a future shaped by AI, with the ‘Magnificent 7’ leaders in the S&P 500 such as Apple, Amazon, Alphabet (formerly Google), Meta, Microsoft, Nvidia, and Tesla, expected to have invested a combined \$385 billion into AI by the end of 2025 (GOMarkets, 2025).

These expenditures have come in the form of various applications with the most prominent being infrastructure, of which resources vary in tangibility. The extensive physical and computational infrastructure for AI ranges from expansive data centres for consolidation, through to powerful processing units for performance (Cloudian, 2025).

Nvidia has dominated this aspect, leveraging its manufacturing of GPUs in order to get ahead of others, occupying between 70% and 95% of the market share for AI chips (CNBC, 2024); allowing sales to support further reinvestment into innovation and infrastructure; propelling it to the forefront of development.

Fear of Missing Out

Characteristic to investment bubbles, the situation surrounding AI has also fostered a profound Fear Of Missing Out amongst both companies and investors.

Nvidia's methodologies have only exacerbated this process, enacting the analogy of selling shovels during a gold rush (Futurism, 2023); by supporting the computational functionality of other AI companies, Nvidia effectively utilises this profit in order to perpetuate this cycle of self - sustenance (Bloomberg via TSCS, 2025).

Overvaluation

As of December 2025, the Shiller Cyclically Adjusted Price-Earning (CAPE) ratio for the S&P 500 reached approximately 39.47 (MacroMicro, 2026); slightly reduced from the record highest of 40.20 during the Dot-com Bubble of 1999 - A trusted and proven metric indicating at a severe overvaluation of the top current indices, the most substantial 7 of which are chasing AI technology, and significantly, account for a disproportionately large percentage of the S&P 500's total market capitalisation; creating a precarious degree of potential for the market to succumb following a sudden correction.

Problematic Return On Investment (ROI) Projections

Reminiscent of the mounting potential for collapse, AI investment could forecast detrimental market corrections as returns unravel.

Notably, this overvaluation has been compounded by the extensive overexcitement and rumours surrounding the innovation's revolutionary capabilities, with it being acknowledged by OpenAI CEO Sam Altman (MIT, 2025), and described to exhibit "elements of irrationality" by Alphabet CEO Sundar Pichai (BBC, 2025).

However, ROIs from AI indices have all but substantiated the intentions of capital contributors, with approximately 95% of organisations that invested in generative AI were yielding "zero return." (MIT, 2025).

Further analysis dictates that despite being attributed to a \$500 Billion valuation (Reuters, 2025), OpenAI's projected annual revenue remains as low as \$13 Billion (Reuters, 2025).

Opposing views instead indicate at the absence of an AI Bubble, primarily highlighting substantive prospective growth into the future and subsequently high profitability. AI companies are already stating record annual revenue, with the highest being Nvidia, notably expressing approximately \$32 Billion in profits, a large 65% increase in growth from the previous year (PBS, 2025). Others such as OpenAI have projected over \$20 Billion in annualised revenue by the end of 2025 and "Hundreds of Billions" by 2030. Although, not only does this fail to reach the \$2 Trillion benchmark for the cost to break even predicted by Bain & Company (Bain & Company, 2025), most firms' investments into data centres and other forms of AI infrastructure, required to reach these already deficient projections, were largely fuelled by debt, further hindering the approach to the aforementioned break - even point (Goldman Sachs via Fortune, 2025). Furthermore, the bottlenecks of energy sourcing and maintenance of infrastructure under government regulation of fossil fuels, in the face of prolonged waiting periods for specialised nuclear plants will only slow and inhibit profitability, underscored by the need for frequent replacement from constant developments in AI hardware by manufacturers, threatening repeated depreciation and obsolescence after only 2 to 3 years of use (CNBC, 2025).

Repercussions - The Impact of an AI Bubble's Burst

A burst; and its subsequently exponential market corrections, particularly at the scale at which the speculative AI bubble is growing, would be detrimental to global economics, with widespread, generalised financial slowdown and limitations across the technological industry, amounting significant pressure upon government recovery programs for aid and recovery in its wake.

Economic Fallout

As a result of the top 5 companies in the S&P 500, all tech firms involved with AI, now representing approximately 30% of the stock market's funds (CNBC, 2025), and the largely dependent nature of smaller companies upon these giants, the safety of diversification has been eradicated, with devaluation amongst severe concentration jeopardising crucial aspects of economies in the event of a burst, and potentially plunging many into deep recessions.

Liquid assets of wealth belonging to large investment systems such as hedge funds will effectively depreciate far beyond their respective adjusted cost bases, forcing unrealised losses, with projections of approximately \$15 Trillion amongst investors outside of the USA alone (The Bulletin/SASB, 2025). Similarly, the major aspect of Australian superannuation, and other related retirement funds, will be heavily exposed to these potential market corrections through their upwards of \$143 Billion invested into AI - focused stocks (AFR, 2025); excessive devaluation debilitating these portfolios (Goldstein via PennToday, 2025).

Sudden, substantial devaluation in asset prices and the subsequent lowered adjustment of wages will effectuate a self - reinforcing feedback loop of debt deflation. The AI industry has been built upon large amounts of debt, visible with Hyperscalers such as Amazon, Alphabet, Meta, Microsoft, Oracle having issued roughly \$121 billion in new debt so far in 2025, and \$90 billion raised in the past three months alone (Mellon, 2025). Serving as the fuel, together with the spark of the AI bubble's burst, the precarious situation is only waiting to culminate into a perpetuating, self - sustaining flame.

Industrial Limitations

The extensive AI industry, comprised of various highly valued assets, particularly those of widespread infrastructure, highly skilled employees and numerous startups, remains at risk of being compromised as a result of a burst.

Firstly, the expansive hardware and infrastructure, composed of data centres and chips specialised for AI application, will remain under-utilised, falling victim to a similar fate of the fibre optic cable from the Dot - com bubble through repurposing, or continuing to depreciate through a steady decline in demand (The Bulletin/SASB, 2025). Specifically for AI chips, this effect will be accentuated through the aforementioned, limited lifetime of this hardware's computational efficacy, likely faring worse than the prolonged usage of fibre optic cable (The Bulletin/SASB, 2025).

Additionally, startups are continually being acquired by larger, more financially stable companies, with the primary goal of implementing newfound AI technology within their own models to increase profitability (M&A Worldwide, 2025). However, following an AI bubble burst, with smaller firms lacking the cash reserves and debt management necessary for resilience against a major market correction, these will become easier targets for the ones which are able to adapt, allowing for these to capitalise upon the inflicted debilitation to aid this process.

Moreover, as a result of widespread acquisition of startups, the unemployment rate will rise as highly skilled, yet specifically specialised workers for AI are forced out of startups after their acquisition, as the buyer frequently aims to retain only a certain fraction of the previous employees which maximise the intellectual property being gained (8seneca, 2025).

The AI Bubble & The Environment

Other proponents argue that the bursting of the AI bubble is a positive global development, in regard to preventing further damage towards environmental sustainability, predominantly highlighting the substantial amount of electrical power required to support the technology across its key infrastructure of data centres. AI - based software is known to require approximately tenfold the electricity of traditional information retrieval systems, a majority of which is believed to be obtained for data centres through fossil fuels - among other concerns of electronic waste and water consumption during construction (UNEP, 2025).

Despite this, not only will this technology serve as a crucial tool for accelerating the scaling of sustainable practices which will instead promote environmental health into the future (WEForum, 2024), but the associated economic fallout of a burst, at this scale, spells a range of immediate, deteriorative limitations upon livelihoods, and subsequently hindering any environmentalist efforts by suppressing funding; effectively counteracting the aforementioned intentions of promoting sustainability by having the bubble burst. In addition, it must be considered the contrast in urgency between the burst of an economic bubble and manageable, long - term environmental sustainability; particularly if the technology's preservation will only aid efforts into the future.

Rather, the implementation of targeted governmental regulation in the form of macroprudential tools such as a monetary policy with higher interest rates, imposing credit limits within financial institutions, whilst also improving the transparency upon AI activity in the economy by diversifying and frequently updating critical metrics. These measures will allow for pre-emptive action in order to cautiously deflate the bubble (Stanford HAI, 2025).

References

8seneca. (2025, February 6). Big Tech is Quietly Taking Over AI Startups Without Buying Them . Retrieved from 8seneca: <https://www.8seneca.com/en/blog/all-articles/big-tech-is-quietly-taking-over-ai-startups-without-buying-them>

Australian Bureau of Statistics. (2025, August 22). AI now fastest growing area for business R&D. Retrieved from Australian Bureau of Statistics (ABS): <https://www.abs.gov.au/media-centre/media-releases/ai-now-fastest-growing-area-business-rd>

Capoot, A. (2025, November 6). Sam Altman says OpenAI will top \$20 billion in annualized revenue this year, hundreds of billions by 2030 . Retrieved from CNBC: <https://www.cnbc.com/2025/11/06/sam-altman-says-openai-will-top-20-billion-annual-revenue-this-year.html>

Cloudian. (N/A, N/A N/A). AI Infrastructure: Key Components and 6 Factors Driving Success . Retrieved from Cloudian: <https://cloudian.com/guides/ai-infrastructure/ai-infrastructure-key-components-and-6-factors-driving-success/#:~:text=What%20is%20AI%20Infrastructure?,training%2C%20and%20managing%20AI%20models.>

Crawford, D., Schallehn, M., Renno, P., Hanbury, P., & Cannarsi, A. (2025, September 23). How Can We Meet AI's Insatiable Demand for Compute Power? . Retrieved from Bain & Company: <https://www.bain.com/insights/how-can-we-meet-ais-insatiable-demand-for-compute-power-technology-report-2025/>

Edwards, J. (2025, October 3). Spending on AI is increasingly fueled by debt, Goldman Sachs says . Retrieved from Fortune: <https://fortune.com/2025/10/03/ai-is-increasingly-fuelled-by-debt-goldman-sachs-says/>

GO Markets. (2025, August 22). The Magnificent Seven's \$385 Billion AI War . Retrieved from GO Markets: <https://www.gomarkets.com/en/articles/the-magnificent-sevens-385-billion-ai-war>

Heath, A. (2025, December 15). What even is the AI Bubble? Retrieved from MIT Technology Review: <https://www.technologyreview.com/2025/12/15/1129183/what-even-is-the-ai-bubble/>

Hsu, J. (2025, December 5). When it all comes crashing down: The aftermath of the AI boom. Retrieved from The Bulletin (SASB): <https://thebulletin.org/2025/12/when-it-all-comes-crashing-down-the-aftermath-of-the-ai-boom/#:~:text=Tech%20skeletons.,to%207.9%20million%20by%202030.>

Hu, K. (2025, October 2). OpenAI hits \$500 billion valuation after share sale to SoftBank, others, source says . Retrieved from Reuters: <https://www.reuters.com/technology/openai-hits-500-billion-valuation-after-share-sale-source-says-2025-10-02/>

Islam, F., & Clun, R. (2025, November 18). Google boss says trillion-dollar AI investment boom has 'elements of irrationality' . Retrieved from BBC: <https://www.bbc.com/news/articles/cwy7vrd8k4eo>

Jr., T. B., & Steele, B. (2025, December N/A). Record-Breaking AI-Related Debt Issuance in 2025 . Retrieved from Mellon: <https://www.mellon.com/insights/insights/articles/record-breaking-ai-related-debt-issuance-in-2025.html>

Korinek, A., & Vipra, J. (2024, April 5). AI monopolies. Retrieved from Economic Policy: <https://economic-policy.org/79th-economic-policy-panel/ai-monopolies/>

Landymore, F. (2023, August 25). If AI Is a Gold Rush, Nvidia Is Selling Shovels. Retrieved from Futurism: <https://futurism.com/nvidia-ai-gold-rush>

Leswing, K. (2024, June 2). Nvidia dominates the AI chip market, but there's more competition than ever . Retrieved from CNBC: [https://www.cnbc.com/2024/06/02/nvidia-dominates-the-ai-chip-market-but-theres-rising-competition-.html#:~:text=Nvidia's%20AI%20accelerators%20have%20between,market%20cap%20to%20\\$2.7%20trillion.](https://www.cnbc.com/2024/06/02/nvidia-dominates-the-ai-chip-market-but-theres-rising-competition-.html#:~:text=Nvidia's%20AI%20accelerators%20have%20between,market%20cap%20to%20$2.7%20trillion.)

Lockwood, T. (2025, October 8). Bank of England warns of 'sharp market correction' if AI bubble bursts . Retrieved from CNBC: <https://www.cnbc.com/2025/10/08/bank-of-england-warns-of-sharp-market-correction-if-ai-bubble-bursts.html>

Lukan, E. (2025, August 29). AI Statistics 2025: Top Trends, Usage Data and Insights. Retrieved from Synthesia: [https://www.synthesia.io/post/ai-statistics#:~:text=\\$279.22%20billion%20in%202024.,%25%20compound%20annual%20growth%20rate.](https://www.synthesia.io/post/ai-statistics#:~:text=$279.22%20billion%20in%202024.,%25%20compound%20annual%20growth%20rate.)

Lynch, S. (2025, December 15). Stanford AI Experts Predict What Will Happen in 2026 . Retrieved from Human - centred Artificial Intelligence (HAI) Stanford: <https://hai.stanford.edu/news/stanford-ai-experts-predict-what-will-happen-in-2026>

M&A Worldwide. (2025, N/A N/A). How Generative AI Startups Are Becoming Prime M&A Targets. Retrieved from M&A Worldwide: [https://m-a-worldwide.com/how-generative-ai-startups-are-becoming-prime-ma-targets/#:~:text=Databricks%20acquired%20MosaicML%20\(2023\)%20for,direct%20operational%20and%20revenue%20impact.](https://m-a-worldwide.com/how-generative-ai-startups-are-becoming-prime-ma-targets/#:~:text=Databricks%20acquired%20MosaicML%20(2023)%20for,direct%20operational%20and%20revenue%20impact.)

MacroMicro. (2026, January N/A). US - S&P 500 Cyclically Adjusted PE Ratio. Retrieved from MacroMicro: <https://en.macromicro.me/collections/34-us-stock-relative/410/us-sp500-cyclically-adjusted-price-earnings-ratio>

Magubane, N. (2026, December 16). Is there an AI bubble and what happens if it bursts? . Retrieved from Penn Today (UPenn): <https://penntoday.upenn.edu/news/there-ai-bubble-and-what-happens-if-it-bursts>

Mendelsohn, S. (2024, September 23). AI is an accelerator for sustainability — but it is not a silver bullet . Retrieved from World Economic Forum (WEForum): <https://www.weforum.org/stories/2024/09/ai-accelerator-sustainability-silver-bullet-sdim/#:~:text=Collective%20efforts%20for%20an%20AI,profitability%20go%20hand%20in%20hand.>

Metz, C. (2025, December 29). What's next for AI and has its explosive growth in 2025 created a bubble? (N. Schifrin, Interviewer) Retrieved from PBS: <https://www.pbs.org/newshour/show/whats-next-for-ai-and-has-its-explosive-growth-in-2025-created-a-bubble#:~:text=A.I.,65%20increase%20in%20one%20year.>

Morabito, C. (2025, October 22). The S&P 500 is more concentrated with AI than ever. Here's how to manage your risk. Retrieved from CNBC: <https://www.cnbc.com/2025/10/22/your-portfolio-may-be-more-tech-heavy-than-you-think.html>

Newman, J. (2015, March 27). Right Now, The Internet Of Things Is Like The Internet Of The 1990s. Retrieved from Fast Company: <https://www.fastcompany.com/3044375/the-future-of-the-internet-of-things-is-like-the-internet-of-the-1990s/>

Nutt, D., & Chronicle, C. (2025, November 10). 'Roadmap' shows the environmental impact of AI data center boom . Retrieved from Cornell Chronicle: <https://news.cornell.edu/stories/2025/11/roadmap-shows-environmental-impact-ai-data-center-boom#:~:text=As%20the%20everyday%20use%20of,10%20in%20Nature%20Sustainability>.

Reuters. (2025, October 2). OpenAI generates \$4.3 billion in revenue in first half of 2025, the Information reports . Retrieved from Reuters: <https://www.reuters.com/technology/openais-first-half-revenue-rises-16-about-43-billion-information-reports-2025-09-30/>

Smith, D. (2025, September 28). Everyone's wondering if, and when, the AI bubble will pop. Here's what went down 25 years ago that ultimately burst the dot-com boom . Retrieved from Fortune:

<https://fortune.com/2025/09/28/ai-dot-com-bubble-parallels-history-explained-companies-revenue-infrastructure/>

Strategist and Architect. (2025, October 21). AI Circular Financing and the \$300B Problem . Retrieved from TSCS:

<https://tscsw.substack.com/p/ai-circular-financing-and-the-300b>

Thomson, J., & Smith, P. (2025, December 4). The AI bubble comes to Australia: What happens if it pops? Retrieved from AFR:

<https://www.afr.com/technology/the-ai-bubble-comes-to-australia-what-happens-if-it-pops-20251202-p5nkbn>

UN Environment Programme. (2025, November 13). AI has an environmental problem. Here's what the world can do about that. Retrieved from United Nations Environment Programme: <https://www.unep.org/news-and-stories/story/ai-has-environmental-problem-heres-what-world-can-do-about>

Highlights

“Nikhil’s examination of the artificial intelligence “bubble” stood out for its depth and clarity. By placing artificial intelligence within broader economic systems, the essay moved beyond surface-level tech commentary to offer a more considered and grounded perspective. An impressive range of well-integrated research supported the argument, while a confident and engaging writing style kept the piece moving throughout. These elements allowed Nikhil to make a strong and thoughtful response to a rapidly evolving economic issue.”

Interview

Question: What inspired you to write this?

Until a few months ago, I hadn't heard of the Young Economist's journal, yet having watched numerous documentaries, and read multiple articles regarding this field, the moment I was recommended to produce a submission, I saw it as a chance to create something of my own, for others to see. To remain consistent with this goal, I aimed to combine prior knowledge and a topic of relevance, which I could dissect and investigate. As a result, after scouring news pages, the recurring theme of AI investment concurred with my knowledge of economic bubbles, leading me to divulge into this potential economic crisis.

Question: How did you find the writing process? Was it rewarding? Was it challenging?

Writing my piece was a thoroughly enjoyable experience, despite it involving hours of research and literary framing, I remained greatly engaged and motivated throughout its creation. I owe this to the fact that I recognised how valuable this practice would be in expanding my knowledge upon economics within the modern world. As such, across my, initially daunting, amount of research I was introduced to many new economic concepts and interpretations of investment. Hence, aside from the clearly somewhat arduous nature of writing this piece, I believe this is vastly outweighed by its individually rewarding process.

THE ASX AS A DRIVER OF
WEALTH INEQUALITY



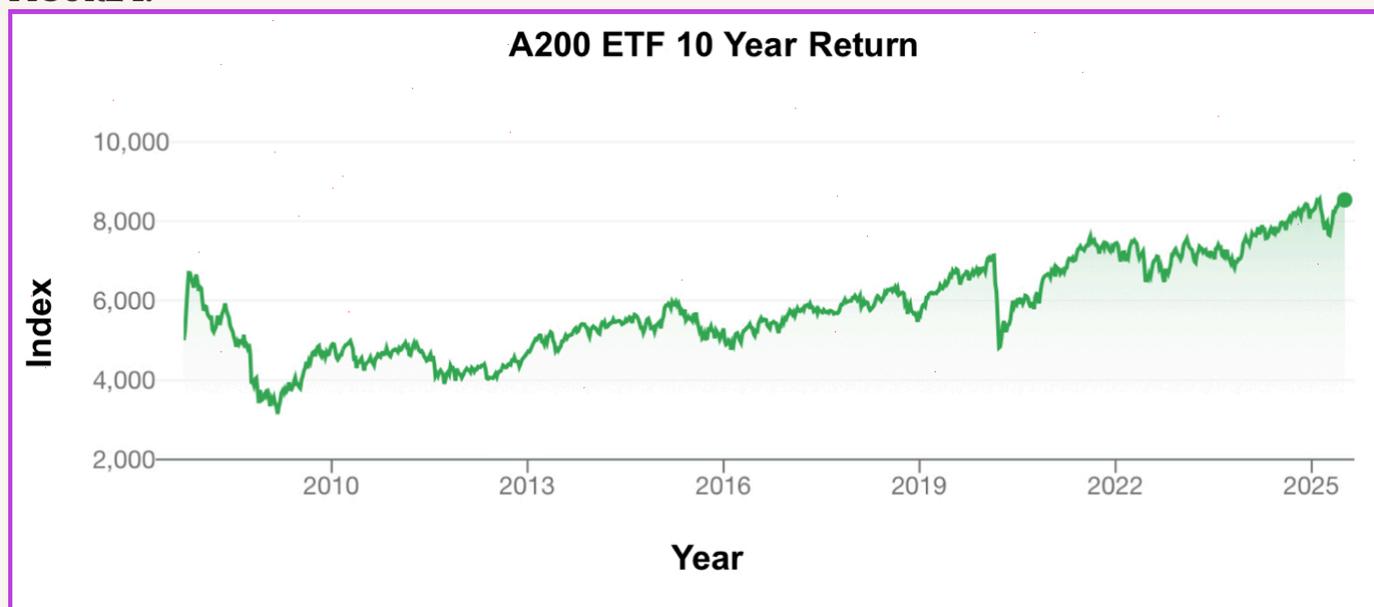
LUCAS BAUMWOL
THE HUTCHINS SCHOOL
TAS

Does the Australian Stock Exchange create and reinforce income and wealth inequality in Australia and if so, what can the Australian government do to address this issue?

Introduction

Market forces provide a net social welfare benefit to society by efficiently allocating resources according to what society demands. However, sometimes these market forces can provide outcomes that aren't favourable to society, one of these is the creation and reinforcement of income inequality. Income inequality is defined as the unequal distribution of income and wealth across society. There are many contributing factors to income inequality, such as education and discrimination. More specifically, the financial institution, the Australian Securities Exchange (ASX) is one of the factors that creates and maintains income inequality. The ASX is Australia's primary stock market where publicly listed companies can be traded between individuals. The ASX has recorded an average yield (including dividends) of 9.35% per annum over the last 10 years (Figure 1), making it one of the best wealth-building tools, comfortably beating out alternative investments such as term deposits which fluctuate between 2-5% returns (Bristow, 2024).

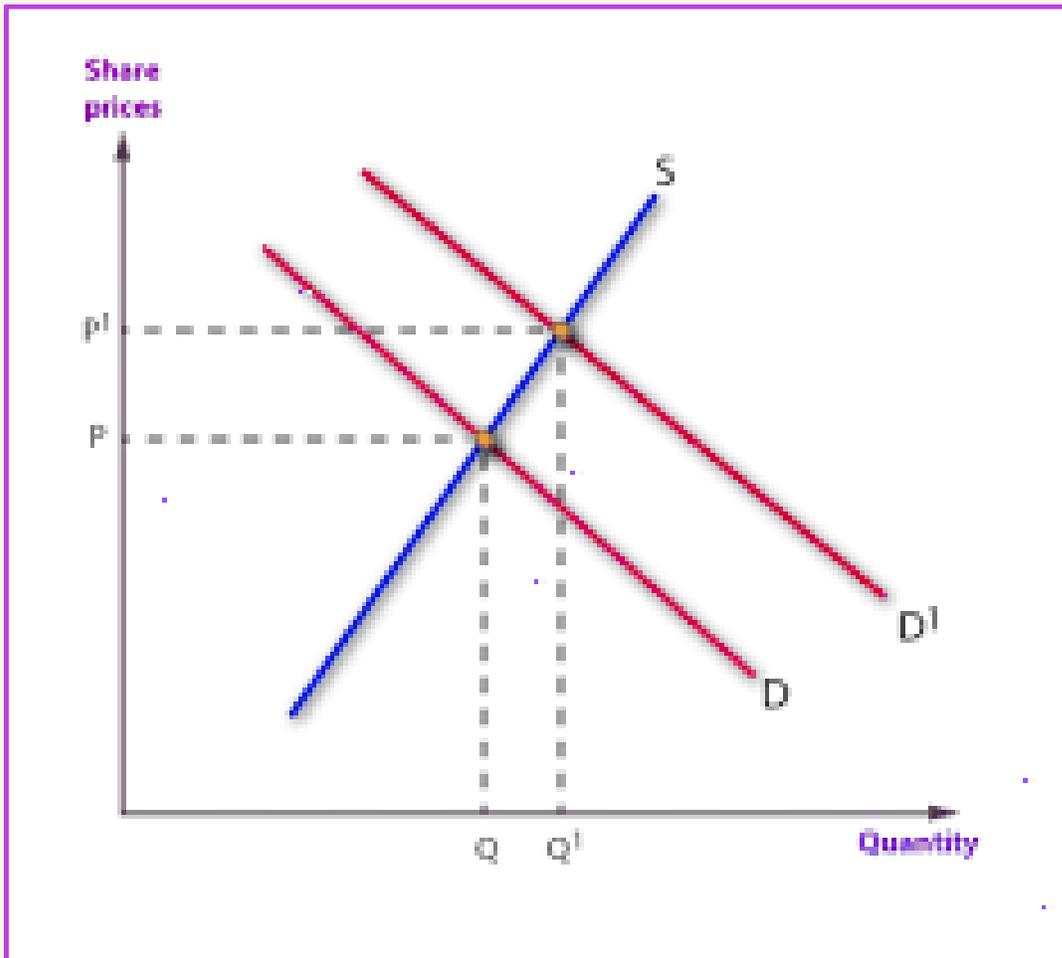
FIGURE 1:



(Bristow, 2024)

This leads the ASX to be one of the most popular investments in Australia, with 35% of Australians holding a listed company as of 2020 (ASX, 2020). Market forces are what generate the 9.35% p.a return on investment (ROI), as share prices are simply a product of supply and demand. If there is greater quantity demanded for the share, the price of it rises due to the law of demand where consumers bid up the price of a scarce good.

FIGURE 2: Increase in Demand of Share Price



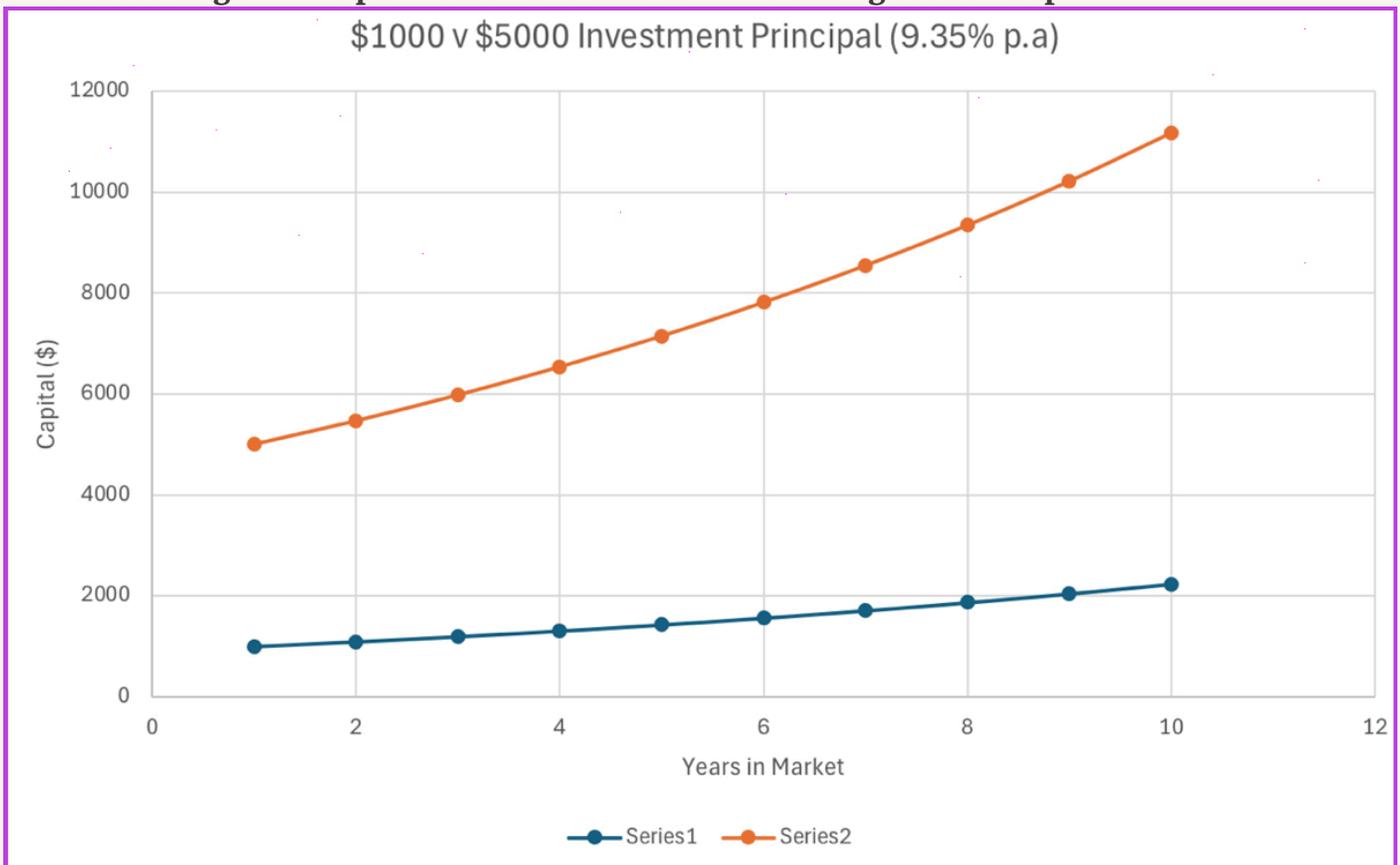
(Ansari, 2020)

How the Share Market Creates and Reinforces Quality

- Principal Investment and Compounding Returns

The ASX has consistently generated a ROI of 9.35% per annum over the last 10 years. Over 6.6 million Australian adults, or 35% of the population, hold a listed investment on the ASX (ASX, 2020). While the proportion of people who own shares is high, the concentration of the shares owned by high-income earners is far greater. The wealthiest 10% of investors, own nearly half of all wealth and 15 times more than the lowest 60% (Treloar, 2024). This highlights that although a third of the population is investing, it is misleading to conclude that everyone investing is getting a similar return. The longer that the top 10% of share owners stay in the market, the greater the gap of wealth between them and mum and dad investors becomes due to compounding returns and larger principal investments. Compounding grows the capital of investors with higher principal investments as future returns are based on a larger base amount, amplifying their returns over time.

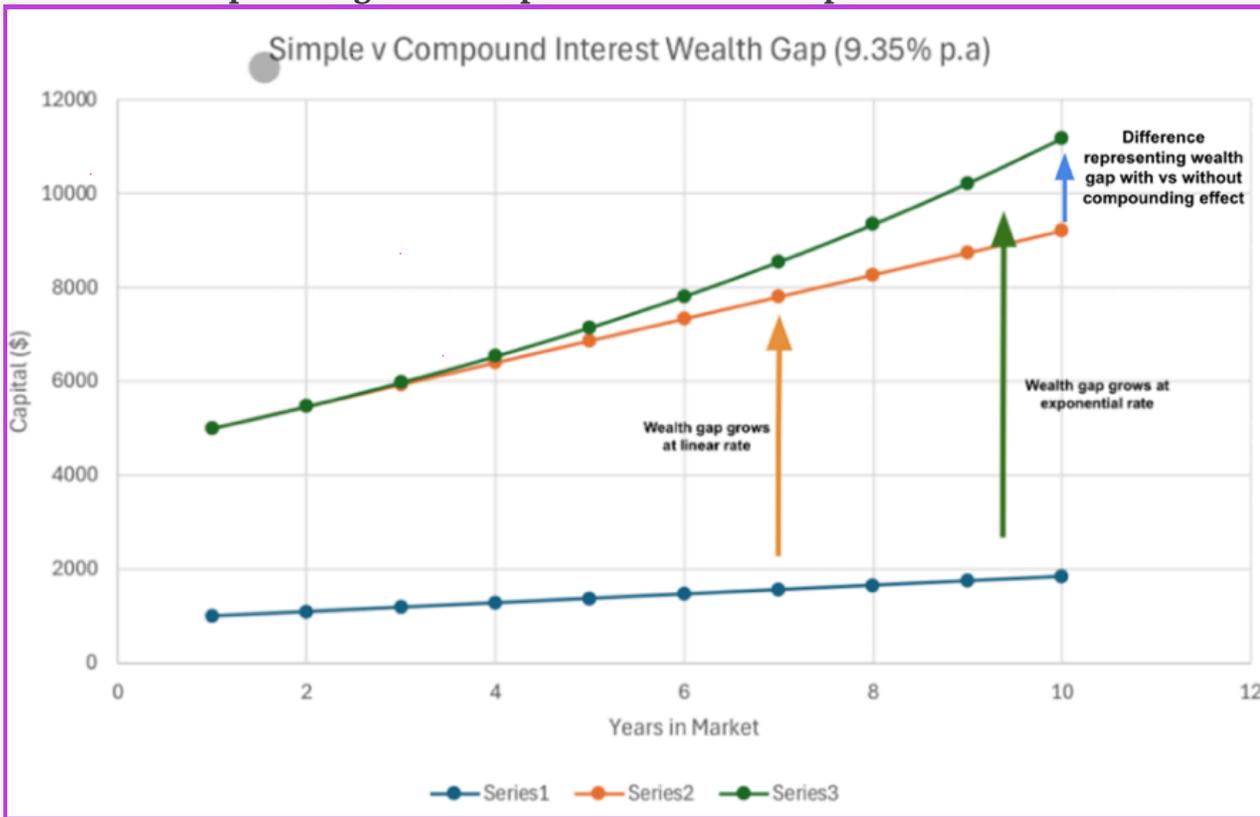
FIGURE 3: Larger Principal Investment Results in Increasing Wealth Gap



(Author's Own Work)

This graph shows that as time in the market increases, the wealth gap between a \$1000 and \$5000 principal loan increases, therefore exacerbating income inequality. Even though neither investor contributed more capital during the years, the investor with a \$5000 investment principal gained \$8942 more than the \$1000 investor, as they had a larger principal investment.

FIGURE 4: Compounding Effect Amplifies the Wealth Gap



(Author's Own Work)

When investors reinvest all profits back into the market, they amplify their base investment at an exponential rate (green vs orange Figure 4). This means that the wealth gap grows exponentially, worsening wealth inequality over time.

Capital Gains Tax VS Income Tax

There are numerous incentives to encourage long term investments in the share market, the most notable being the capital gains tax (CGT) discount. If an asset is held for over a year, investors are only required to pay tax on 50% of the capital gain. The capital gain is regarded as an income, so the tax rate is the same as the investors income tax rate. While the CGT discount helps all investors, it does so disproportionately, mainly benefiting wealthy investors as they have more capital. While the incentive was to encourage long term investment and economic stability, it has instead provided a large tax break for wealthy investors. Because high income earners already make up the largest proportion of all retail investor holdings, any tax breaks are going to mostly benefit them (McKim, 2025). The progressive tax system is supposed to aid income inequality by redistributing income to lower income earners by making higher income earners pay more tax. However, the CGT discount is counterintuitive to the progressive tax system as it incentivises wealthy individuals to reallocate their wealth into investments where CGT is paid instead of income tax. Furthermore, wealthier individuals are also more likely to invest to benefit from the tax break instead of paying tax on income, while lower income earners are more likely to pay tax on a wage. Since only capital gains have a discounted tax incentive, lower income earners with a wage are still required to pay the full amount of tax, thus worsening wealth inequality.

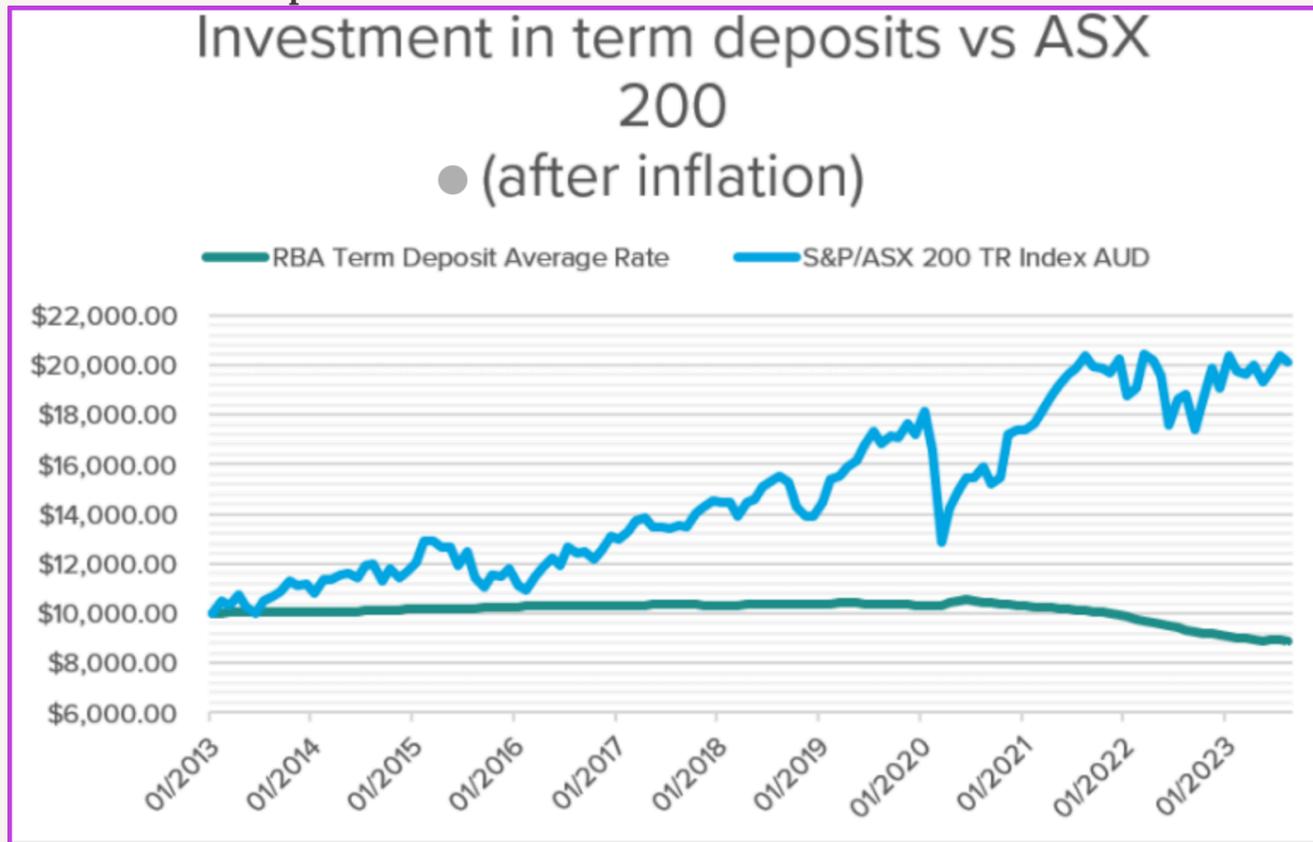
- **Unequal Financial Literacy**

To first-time investors, the ASX can be overwhelming to navigate and decide which of the 2000+ shares to purchase, acting as a barrier to entry. If brokers and markets are too complicated, some people may feel it is not worth their time. A study by Madeleine Hillyer found that 40% of people who choose not to invest, don't invest because they simply don't know how to (Hillyer, 2022). Furthermore, people with lower financial literacy are less likely to invest as they don't fully understand the benefits and ROI of investing in the share market. Alternatively, they may opt to invest in simpler, safer investments such as term deposits or savings accounts, which offer significantly lower ROI's. People with lower financial literacy may also make poor investments. Unlike a term deposit, the share market does not offer a fixed return. It fluctuates depending on the demand and value of the company. If the investor has chosen to invest in a singular, poorly managed, or poorly performing company, they may make less or even lose their initial capital.

- Market Volatility and Risk Aversion

While share markets provide a higher, long-term ROI than term deposits, they come with the trade-off of greater risk. Markets can swing daily due to economic factors such as interest rate hikes, international uncertainty such as Trump’s 2025 tariffs, and political factors such as a new party in government. This means that in the short term, investors can have lower or negative returns. To bear the ups and downs of the share market, investors must have enough excess capital to meet their immediate financial obligations, such as bills, food, healthcare services, and any other necessities. Because the share market has less exit flexibility, many Australians cannot enter the market as they are likely to need the capital in the short-term. For low-income earners, the immediate need for liquidity outweighs the potential for higher returns. They cannot afford the risk of a short-term capital loss, effectively locking them out of the 4-5% premium offered by the share market (Treloar, 2024).

FIGURE 5: Term Deposit VS A200



(Taylor, 2023)

Proposed Solutions

- Progressive CGT Discount

Capital gains tax discount (explained page 6) can be changed or removed to ensure wealthier investors have to pay more tax, which can then be redistributed to lower income earners, thus reducing wealth inequality. Removing the CGT discount altogether may have the impact of discouraging long-term investing, thus reducing the stability and smoothing of the business cycle. An alternative reform is an adjustable CGT discount based upon the holding period of the share, rather than holding for 12 months just for the tax benefit.

FIGURE 6: Proposed CGT Discount Reform

Holding Period	CGT Discount
6 months	10%
1 year	20%
2 years	35%
3 years	50%

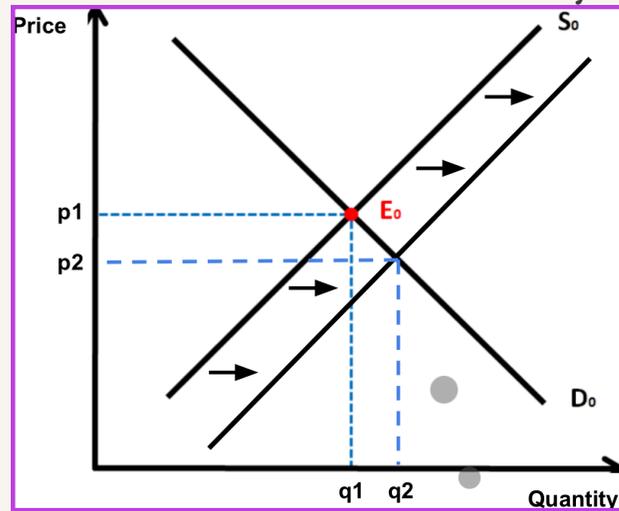
(Author's Own Work)

A system like this would ensure that wealthier investors who are only holding for the initial 12-month period must either pay 30% more capital gains tax or hold for an extra 2 years to receive the full 50%, thus further smoothing the business cycle as investment is more consistent and exiting is harder (Figure 6). This does come with the potential consequence that some wealthier investors may shift toward shorter-term investments if the lower tax discount is no longer seen as worthwhile. Another consequence is reduced market liquidity as there will be less investors looking to sell, making prices more volatile.

- Subsidy to Increase Financial Literacy

One of the primary causes of wealth inequality is the vast difference in financial literacy between Australians (explained page 6). An effective way the government can address this issue is to subsidise financial literacy in schools, so younger Australians have the basic knowledge required to manage and grow their own money. A subsidy for financial literacy would help by increasing supply of financial education, as the subsidy makes it cheaper for schools to provide financial literacy. This further results in the quantity demanded for financial literacy expanding from q_1 to q_2 (Figure 7), resulting in a net positive outcome of greater financial literacy and reduced wealth inequality for society. 70% of individuals who did not invest stated that they would be open to investing with expanded financial education (Treloar, 2024).

FIGURE 7: Market for Financial Literacy



(Author's Own Work)

However, this does come at the expense of the government, who have to fund the subsidies. While the subsidy would improve financial literacy, it could be argued that the opportunity cost is too high, as the government's subsidy might be better spent on super top-ups or increased welfare payments for low-income individuals which also reduce wealth inequality. However, subsidising financial literacy helps reduce long-term inequality by teaching future generations to manage money well, unlike welfare payments which may be poorly used by those lacking financial skills thus only addressing the issue in the short term.

- Super Top-Ups

Employers are required to contribute 11.5% of an employee’s wage into a superannuation account, helping workers build savings for retirement. Superannuation manages individuals’ money on their behalf, investing it in the share market and other assets, ensuring more people are exposed to greater returns. However, one of the key issues is that superannuation is a universal benefit, disproportionately benefitting wealthier individuals who receive larger contributions due to their larger wages. To counteract this issue, a government policy to introduce super top-ups to lower-income earners would help lower-income earners reduce the wealth gap. Additional super on top of the existing rate would allow for a greater degree of compounding for lower income earners when they reach retirement.

FIGURE 8: Proposed Superannuation Top-Ups Additional to Existing Rate

Yearly Salary	Gov Funded Super Top-Up
0 - \$18,200	10%
\$18,201 - \$45,000	7%
\$45,001 - \$135,000	2%
\$135,001 - \$190,000	0.5%
\$190,001 and over	none

(Author’s Own Work)

This reform helps ensure that lower-income individuals build long-term wealth by having additional money invested in superannuation, compared to welfare payments where lower income individuals can choose to spend the money irrationally. However, this does come at the expense of the government who must fund the top-ups, worsening the budget outcome (Investopedia, 2024). An increase in spending may mean that higher-income individuals must pay more tax, thus discouraging them from investing in capital goods and reducing productivity.

Course of Action

Implementation of the proposed CGT discount reform would allow the government to raise more tax revenue from investors and make short term investments a worse investment. Complimentary to the CGT discount reform, subsidising financial literacy would address the long-term implications that the discount fails to. Implementation of both solutions would aid wealth inequality in the short term while also ensuring more Australians in the long term are financially literate and knowledgeable to grow their own capital similarly to their high-income counterparts. Change is urgently required as the continuation of trend will exacerbate further issues such as housing affordability which the wealthy continue to dominate, as well as lower income earners being priced out of higher levels of education.

References

- ASX. (2020). ASX Australian Investor Study 2020. Australian Securities Exchange.
<https://www.asx.com.au/content/dam/asx/blog/ASX-Australian-Investor-Study-2020.pdf>
- Bristow, Z. (2024, December). The Motley Fool Australia. The Motley Fool Australia.
<https://www.fool.com.au/2024/12/02/heres-the-average-asx-stock-market-return-over-the-last-10-years-and-what-it-means-for-the-next-10-years/>
- Harper, D. (2024, October 10). Forces That Move Stock Prices. Investopedia.
<https://www.investopedia.com/articles/basics/04/100804.asp>
- Hillyer, M. (2022, August 4). New Study Finds Financial Education Gaps Are Primary Barrier to Retail Investing in Capital Markets. World Economic Forum.
<https://www.weforum.org/press/2022/08/new-study-finds-financial-education-gaps-are-primary-barrier-to-retail-investing-in-capital-markets/>
- Investopedia. (2024, February 28). Subsidies: Definition, How They Work, Pros and Cons. Investopedia; Dotdash Meredith.
<https://www.investopedia.com/terms/s/subsidy.asp>
- McKim, N. (2025, November 4). Greens secure Senate inquiries into unfair CGT discount and intergenerational housing inequality. The Australian Greens.
<https://greens.org.au/news/media-release/greens-secure-senate-inquiries-unfair-cgt-discount-and-intergenerational-housing>
- Saddique, A. (2020, January 29). The Stock Market. Economics Online.
https://www.economicsonline.co.uk/competitive_markets/the_stock_market.html/
- Treloar, C. (2024, April 18). Wealth Gap Widening. UNSW Sites.
<https://www.unsw.edu.au/newsroom/news/2024/04/wealth-gap-widening-new-report-acoss>

PRODUCTIVITY GROWTH
IN THE
CONSTRUCTION SECTOR



HAMISH SHARMA
SYDNEY GRAMMAR SCHOOL
NSW

For the last few decades Australia has experienced a productivity decline in the construction industry. This is both in terms of labour productivity, with dwellings per worker decreasing by 50% since the 1970s. This is not due to improvements in the size or quality of dwellings, as once these factors are accounted for there is an overall 12% decrease in labour productivity since 1994. This is in contrast to overall productivity growth of 49% in the same period. This is driven by a combination of a firm dominated by small firms which are unable to effectively take advantage of economies of scale, a low overall slow uptake of innovation, increased regulation of the sector and poor employment and training practices, dominated by highly restrictive EBAs (Enterprise-Bargaining Agreements).

Dominant smaller firms, unable to take advantage of economies of scale, leading to productivity loss. With over 98.5% of construction firms being small businesses (less than 20 employees) and 91% being microbusinesses (less than 5 employees), the inability of these firms to effectively utilise specialised land, labour and capital is critical to any analysis of declining productivity in the construction industry, as small businesses are less able to purchase expensive machinery or afford riskier investments in innovative machinery which may increase their productivity. The effect of these economies of scale are evident in the fact that firms with over 200 employees generate 86% more revenue per employee than those with fewer employees. The dominance of smaller firms within the industry is driven by a combination of the effect of the business cycle on construction, tax incentives benefiting small businesses at the expense of larger ones, and a decentralised regulatory system. The business cycle causes large fluctuations in the demand for construction, as it is often a large expense for both households and firms. Thus firms within the construction industry require additional flexibility, which they often achieve through the employment of subcontractors as they can easily decrease the quantity of labour while it also allows them to overcome the issue of sticky prices of labour in a downturn, discouraging vertical integration. As contractors and subcontractors are employed in place of employees, firms remain small.

Firms within the construction industry are also motivated to remain small due to tax incentives and regulatory settings which benefit small businesses. This includes the reduced rate of company tax charged to small businesses (aggregated turnover threshold below \$50 million), at 25% compared to the 30% charged to large businesses. Meanwhile this is also affected by state-based taxes, with small businesses often being exempt from or having deductions on payroll tax (NSW, Victoria and SA). Moreover, the taxation system acts to benefit self-employed people and sole-traders, as it is much easier for them to misrepresent their income, or use a trust structure to redistribute their income to family members, who may pay a lower marginal tax rate. This in turn means contractors are willing to work for less money than employees, as they receive similar remuneration after-tax. Meanwhile, the system of state-based licensing acts to prevent efficient firms from expanding interstate, as their employees must get new licenses. This in turn further acts to limit the growth of firms, limiting the exploitation of economies of scale to increase productivity, as small firms are unable to purchase expensive specialised capital. Thus, as the construction industry advantages small firms, productivity is limited, as economies of scale cannot be realised.

Furthermore, productivity has further decreased as a result of a low uptake of innovations. This low uptake of innovation is a result of a combination of regulation acting to stifle innovation, industry resistance, a lack of training, and a lack of direct benefit for innovative firms. Regulation is often tailored to traditional building practices, with innovative processes or designs costing more and taking more time to be approved by regulators. This can be examined through the example of prefabrication, which as a result of financing and regulation tailored to on-site construction, with regular inspections at certain stages, accounts for 5% of construction in Australia. This can be compared to a country with much weaker enforcement of regulations such as China, where prefabrication accounts for 30% of construction. However, this lack of innovation, with only 12% of firms seeking digital technology, can also be explained through an examination of industry culture, in which employees, fearing that new technologies will make their position redundant, resist its early implementation, making analysis of its benefits more difficult, as it may not be fully implemented. Meanwhile, this is also a result of skilled workers who can effectively implement innovative technologies, with 64% of firms reporting this as a problem when surveyed by the productivity commission. Furthermore, innovation is further discouraged as innovative firms often do not receive benefits from their innovation. As consumers cannot easily distinguish between the quality of different products, those delivering higher quality products often do not earn greater profits as a result of their innovation. Therefore, within the Australian construction industry, innovation is stifled, for a variety of reasons. This in turn prevents an extension of the production possibility frontier, due to better technology, thus limiting productivity growth. Therefore, the productivity decline in the Australian construction industry can be examined through the low uptake of innovative technologies.

Moreover, the productivity decline has also been driven by an increase in regulation, which adds additional societal costs, adds risk and extends project timelines. Several recent changes to the NCC (National Construction Code) were implemented while the RIA (Regulatory Impact Assessment) predicted net costs to the Australian economy, as the changes act to increase costs of building while not improving new construction enough to justify such a regulation. This is evident in the example of the 2022 Energy Efficiency Requirements, which were predicted to impose \$547 million in net costs to the Australian economy, thus affecting the amount of dwellings produced per worker. This net cost regulation can also be seen in the 2022 Liveable Housing changes, with an estimated net cost of \$4.1 billion, the 2018 Mandatory Sprinklers for Class 2 and 3 Residential Buildings Under 25m and At least Four Floors, with an estimated net cost of \$74.5 million and the 2013 Interconnected Fire Alarms in New Houses with a BCR (Benefit-Cost Ratio) of 0.13. Moreover, regulation increases risk, as time frames for approval are often highly inconsistent, both by individual regulators and between them, while as a result of Australia's highly decentralised approvals system (the most decentralised in the OECD), approvals are often inconsistently rejected or accepted. This increases the risk of projects, further discouraging innovation, as approval being delayed can greatly lengthen the timeframe of a project, increasing costs (as the land could be better deployed in other sectors). Meanwhile, highly proscriptive regulation helps to create a compliance culture that prioritises ticking boxes over innovation or consumer outcomes. This compounds to overall increase the amount of resources required to build each new building, thus decreasing productivity. Furthermore, the approvals process extends the timeline, with some major projects taking in excess of ten years to complete the approvals process, this in turn acts to decrease multi-factor productivity within the construction industry. Thus, the regulatory process, through its imposition of additional costs, additional risks and the extension of the timeframe in which projects are completed acts to decrease productivity.

Furthermore, productivity is limited by poor employment and training practices. Due to low pay for apprentices, only 54.1% of apprentices complete their apprenticeships. This leads to a reduction in skilled labour, resulting in less productive labour, thus causing a decrease in productivity. Moreover, as a result of falsified and inadequate training, the quality of labour within the construction industry is lower, thus resulting in decreased productivity. Moreover, inflexible EBAs (Enterprise Bargaining Agreements) which specify RDOs (Rostered Days Off), and shutdown weeks, overtime hours, act to enhance cascading failures as it means labour is unable to be used when it is most necessary, acting to decrease productivity. The effect of EBAs on productivity is most evident through the BPIC (Best Practice Industry Conditions), a set of regulations which are predicted to have increased costs by 10 to 25% and impose a net cost of between \$5.7 billion and \$20.6 billion, if continued to 2030, which despite their suspension, due to their integration into EBAs have been difficult to unwind. This further acts to decrease productivity as a result of the continued implementation of inefficient regulation. Therefore, productivity is further decreased by poor employment and training practices, which act to hurt the overall quality of labour, resulting in lower productivity, and strict union rules, and agreements, which act to decrease flexibility, thus creating cascading failures, which act to further limit productivity.

To fix these issues, various approaches can be taken, a particularly salient one being to ensure that regulatory bodies meet approval timeframe targets. This is a result of increases in the regulatory load undertaken by councils, without an increase in resources, as council rates are capped, and developer charges are restricted. This means that councils take longer to determine whether applications should be approved or rejected, especially for approvals later on in the development process. This includes titling land and strata, which due to its position, after development has already concluded, means that it is the point at which the project is under the maximum debt. To attempt to alleviate this issue, states have introduced co-ordination bodies, such as the New Housing Delivery Authority in NSW, which either determine approvals for large or significant projects or work with industry to attempt to alleviate issues. However, this strategy faces its own issues. Most significantly, as many of these only handle the approvals process, it means that projects still face delays later on in the project, meaning that cascading failures still pose a large risk to a project.

Other approaches include attempts to reform the National Construction Code. This would include a review of the scope of the National Construction Code, as it currently covers health, safety, amenity, and sustainability, which may be able to be better covered through separate regulations. It would also importantly involve not implementing future changes which impose a net cost on society and which can be achieved through non-regulatory measures. Moreover, this is likely an attempt to remove impediments to performance-based solutions, as at current these often take much longer to be approved and implemented, delaying the project. However, such a review is likely to take significant time to ensure it does not further increase delays, thus decreasing productivity further.

Therefore the construction industry has faced declining productivity since the 1970s. This is because it is an industry dominated by small firms unable to utilise economies of scale, slow innovation uptake, meaning labour and time saving capital equipment is not used and is limited by regulations, strict union rules and poor training practices, as this decreases labour quality, decreasing productivity.

References

ATO. (2024). Changes to company tax rates. ATO.

<https://www.ato.gov.au/tax-rates-and-codes/company-tax-rate-changes>

China State Construction International Holdings Limited. (2016). Csci.com.hk.

https://www.csci.com.hk/en/bus_pref.php

Exemptions: Payroll Tax Employer Guide. (2025, August 3). Western Australian Government.

<https://www.wa.gov.au/government/multi-step-guides/payroll-tax-employer-guide/exemptions-payroll-tax-employer-guide>

Ferenczy, D. A. (2024, May 27). Friend or Foe: Unions and the Australian Construction Industry.

Realestatebusiness.com.au; Real Estate Business.

<https://www.realestatebusiness.com.au/property-management/27995-friend-or-foe-unions-and-the-australian-construction-industry>

for, C. (2023). Overall apprentice and trainee completion rates down in 2023. Ncver.edu.au.

<https://www.ncver.edu.au/news-and-events/media-releases/overall-apprentice-and-trainee-completion-rates-down-in-2023>

Gillespie, E. (2024, November 14). What Queensland government's suspension of Best Practice Industry Conditions, or BPIC, means for the construction industry. Abc.net.au; ABC News.

<https://www.abc.net.au/news/2024-11-14/best-practice-industry-conditions-bpic-explained-union-workers/104601464>

Housing construction productivity: Can we fix it? (2025).

https://assets.pc.gov.au/research/completed/housing-construction/housing_construction.pdf

NSW, R. (2024, May 8). Thresholds and rates. Revenue NSW.

<https://www.revenue.nsw.gov.au/taxes-duties-levies-royalties/payroll-tax/lodge-and-pay-returns/thresholds-and-rates>

Payroll tax (current rates) | State Revenue Office. (2025, July 10). State Revenue Office of Victoria.

<https://www.sro.vic.gov.au/about-us/rates-and-statistics/current-rates/payroll-tax-current-rates>

Payroll tax exemptions - Queensland Revenue Office. (2025, October 8). Queensland Revenue Office.

<https://qro.qld.gov.au/payroll-tax/exemptions/>

Proposal to include minimum accessibility standards for housing in the National Construction Code Decision Regulation Impact Statement Prepared for The Australian Building Codes Board. (2021).

https://www.abcb.gov.au/sites/default/files/resources/2022/Final-decision-RIS_accessible-housing.pdf

Queensland Productivity Commission OPPORTUNITIES TO IMPROVE PRODUCTIVITY OF THE CONSTRUCTION INDUSTRY Interim report. (n.d.-a).

<https://qpc.qld.gov.au/docs/construction-productivity/Interim%20Report%20-%20Opportunities%20to%20improve%20productivity%20of%20the%20construction%20industry.pdf>

Queensland Productivity Commission OPPORTUNITIES TO IMPROVE PRODUCTIVITY OF THE CONSTRUCTION INDUSTRY Interim report. (n.d.-b).

<https://qpc.qld.gov.au/docs/construction-productivity/Interim%20Report%20-%20Opportunities%20to%20improve%20productivity%20of%20the%20construction%20industry.pdf>

S O W E A K 2 0 2 5. (n.d.).

<https://doi.org/10.26193/J4NSZO>

Ting, M. (2010). Building on Shaky Ground: Quality and Safety in China's Construction Industry in the Wake of the Wenchuan and Yushu Earthquakes. *Construction Economics and Building*, 10(3), 62–75.

<https://doi.org/10.5130/ajceb.v10i3.1712>

THE AUSTRALIAN HOUSING
AND
WEALTH INEQUALITY CRISIS



NEAL DHAMSANIA
THE ROCKHAMPTON GRAMMAR SCHOOL
QLD

Introduction

As of today, Australia’s housing market has shifted significantly away from the ladder of opportunity it once was to a wall of hyperinflation, where owning a home has become a luxury rather than a basic human right. Consequently, the difference between the household wealth of the high net wealth property investors and the low net wealth individuals without properties has become substantial. In most places in Australia, house prices are accelerating upwards faster than wages are, meaning that only wealth can obtain wealth in this positive feedback loop, and yet the government is taking minimal meaningful action towards preventing this inequality. This report will analyse the current state of wealth inequality in Australia and contrast it with income inequality to prove how wealth growth is exponential compared to income. This wealth growth will be linked to the housing crisis in Australia to demonstrate how housing has turned into a high-return business rather than a basic necessity. The limitations of monetary and fiscal policy in tackling the housing crisis will also be examined, followed by proposed solutions to control house prices and hence wealth inequality in Australia.

Australia’s Wealth Inequality

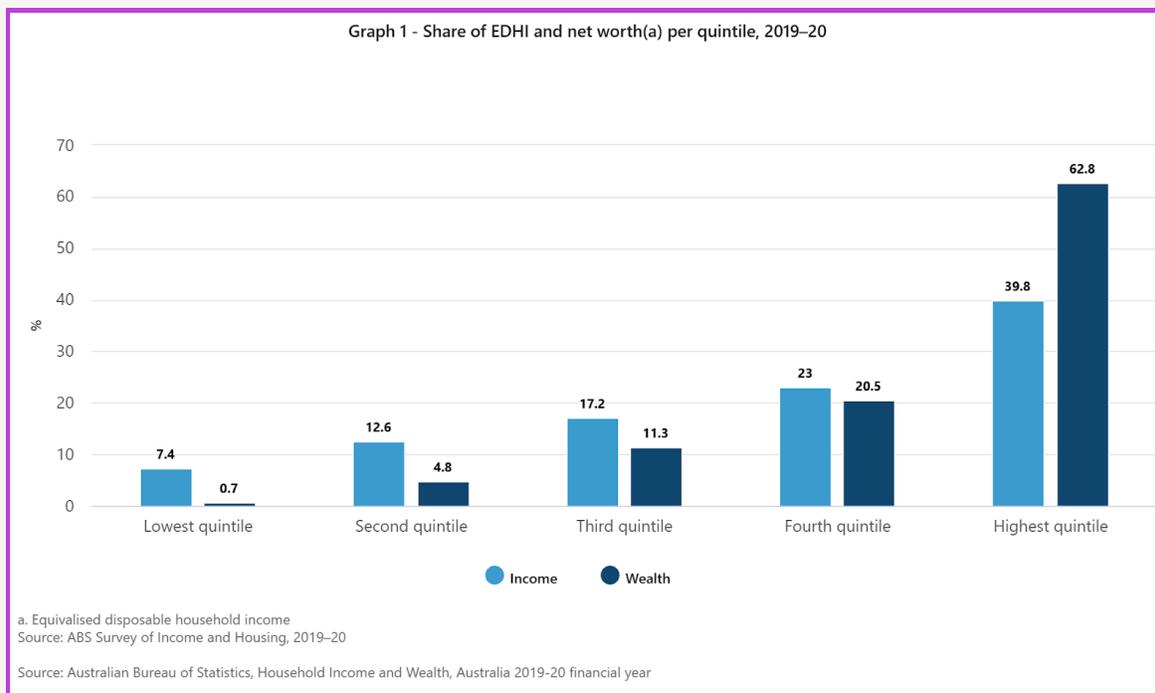


FIGURE 1: Distribution of Equivalised Income and Wealth in Australia per Quintile, 2019-20 (Australian Bureau of Statistics, 2019a)

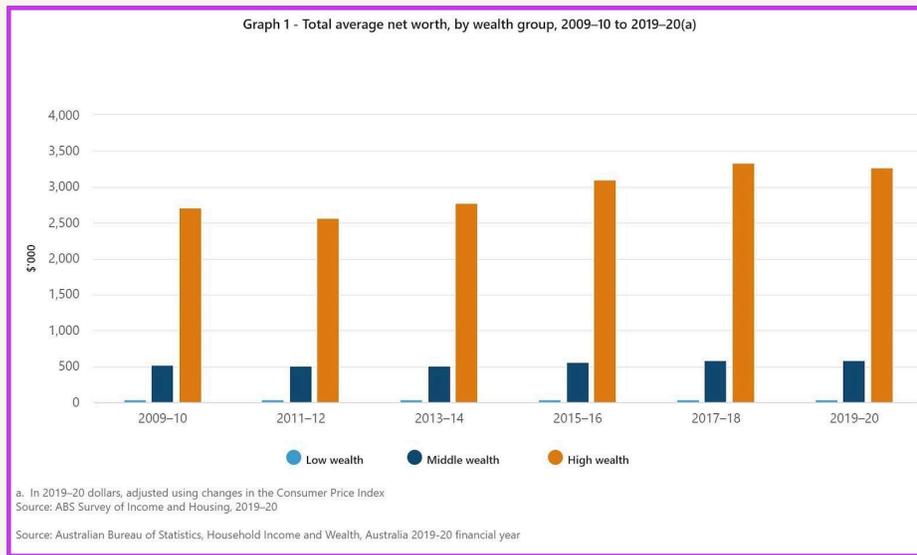


FIGURE 2: Low, Middle and High (Quintile) Adjusted Wealth from 2009-10 to 2019-20 (Australian Bureau of Statistics, 2019b)

Australia's wealth inequality is extreme, with significant gaps between the quintiles. This is shown in Figure 1, where the highest quintile controls 3 times as much wealth compared to just the second highest quintile, and a staggering 90 times more wealth compared to the lowest. This is further evident in Figure 2, which depicts how in the last decade, the wealth of the highest quintile increased by approximately \$500,000 (18%) whereas the wealth of the middle quintile increased by only approximately \$50,000 (10%) and lowest quintile remained virtually unchanged. This demonstrates the exponential nature of wealth growth. The fixed cost of living disproportionately affects people in the lower households, which must overcome this barrier before investing any disposable income, whereas for higher wealth households, this is a much smaller constraint and are able to invest proportionately more. Figure 2 also visualises the sheer difference in wealth between quintiles.

Appendix 1 shows the shift in the Lorenz curve for wealth inequality from 2003-04 (Australian Bureau of Statistics, 2015) to 2019-20 (Australian Bureau of Statistics, 2019a). From (Desmos, 2025), the Gini coefficient in 2003-04 was approximately 0.549 and in 2019-20, it was approximately 0.595. This illustrates the increasing wealth gap in Australia, given the 8.38% increase in the wealth Gini coefficient in less than 20 years. Appendix 2 shows the shift in the Lorenz curve for income inequality from 2003-04 to 2019-20. In 2003-04, the Gini coefficient for income was 0.302, just above half that of wealth during the same time; however, in 2019-20, it increased by only 4.97% to 0.317. This demonstrates how income inequality is not the sole cause for an increase in the wealth gap and wealth Gini coefficient. The other factor that is affecting this increasing gap is the same principle that explains how wealth is built by capital wealth.

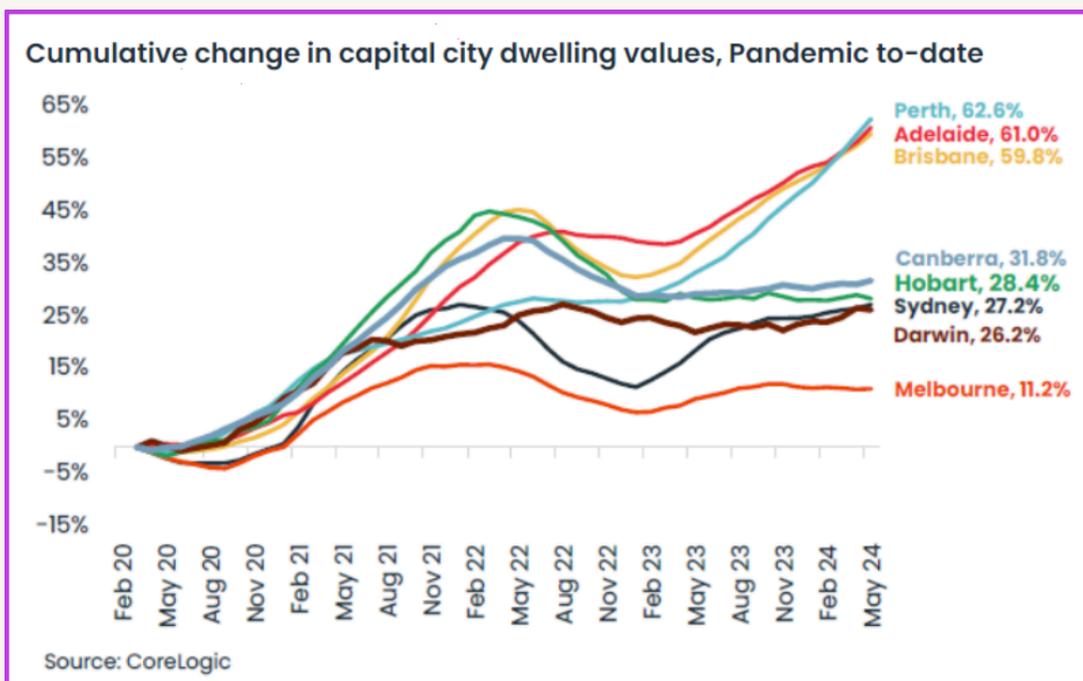


FIGURE 3: Cumulative change in capital city dwelling values since 2020 (Jennison, 2024)

Index results as at 30 June, 2024						
	Change in dwelling values				Median value	
	Month	Quarter	Annual	Total return		
Sydney	0.5%	1.1%	6.3%	9.6%	\$1,170,152	
Melbourne	-0.2%	-0.6%	1.3%	4.9%	\$783,205	
Brisbane	1.2%	3.7%	15.8%	20.5%	\$859,240	
Adelaide	1.7%	4.7%	15.4%	20.0%	\$767,974	
Perth	2.0%	6.4%	23.6%	29.5%	\$757,399	
Hobart	0.1%	-0.3%	-0.1%	4.0%	\$645,850	
Darwin	0.0%	1.0%	2.4%	9.0%	\$504,687	
Canberra	0.3%	0.8%	2.2%	6.4%	\$870,071	
Combined capitals	0.7%	1.8%	8.3%	12.3%	\$878,414	
Combined regional	0.6%	1.9%	7.0%	11.8%	\$627,872	
National	0.7%	1.8%	8.0%	12.2%	\$793,883	

FIGURE 4: Change in dwelling values as at June 30, 2024 (Jennison, 2024)

Population change by capital city				Download
Capital city	ERP at 30 June 2024	2023-24 (no.)	2023-24 (%)	
Sydney	5,557,233	107,538	2.0	
Melbourne	5,350,705	142,637	2.7	
Brisbane	2,780,063	72,930	2.7	
Adelaide	1,469,163	22,125	1.5	
Perth	2,384,371	72,742	3.1	
Hobart	254,930	946	0.4	
Darwin	152,489	1,367	0.9	
Canberra	473,855	7,496	1.6	
Total capital cities	18,422,809	427,781	2.4	

FIGURE 5: Population Change in Capital Cities, 2023-2024
(Australian Bureau of Statistics, 2025)

Australian Property Prices

The increase in wealth in Australia has been assisted by uncontrolled property prices since 2020. Figure 3 shows the magnitude of property price increases in Australian capital cities. Brisbane, Perth and Adelaide have all increased by around 60% in the last 5 years, and Darwin, Sydney, Hobart and Canberra have increased by around 25-30%. This shows around 10% to 4.5-5.5% cumulative annual growth, respectively, which does not consider rental income. Rental income alone would account for around 30% of the original value of the home in the 5 years, assuming an average of 4.92% annual rental yield (Global Property Guide, 2025); however whether the rental revenue can be considered a profit or used just for paying back interest on the loan depends on whether the house's gearing. Regardless, given this extremely high return on investment for property in Australia, investors have increased the demand for property, increasing the average price and the quantity of properties sold. However, this has made buying property for residence a significant struggle for relatively low-wealth households who require higher savings for an increasing deposit value as time progresses, as well as having to compete with investors and overinflated prices.

Figure 2 shows how the annual return for Brisbane, Adelaide and Perth are above 15%, with Perth being above 20%, all outperforming the average annual return of the Australian share market, which is 13% (Market Index, 2024), again not including potential rental income. While these major cities show significant growth, other cities have not increased by as much, with Sydney at 6.3% and all other cities at less than 3%; however, Sydney's median house price is around \$300,000 or 34.5% above the next highest city's median house price, Canberra, at \$870,071. The reason that house prices in Hobart, Darwin and Canberra are not demonstrating the same growth as Perth, Brisbane and Adelaide, and values such as in Sydney, is because of the sheer difference in population and change in population (Figure 5). Figure 3 shows how the high growth cities also have the highest populations, all above or around 1.5 million people; however, Darwin, Hobart and Canberra have populations of less than 0.5 million. Additionally, the populations of the 5 most populated cities in Australia are increasing by around 2% annually, except for Adelaide at 1.5% whereas the lower populated cities are increasing at less than 1% except for Canberra at 1.6%. All in all, the housing market follows the same law of supply and demand, where when demand increases and supply remains stable, the price also increases. Now more than ever, demand is increasing rapidly; however, only the highest net health households can afford the consequently higher prices due to the higher capital requirement, further increasing the wealth gap.

Monetary and Fiscal Policy on Wealth Inequality and House Prices

Monetary policy involves the modification of interest rates by changing the supply of money to affect inflation, employment and aggregate demand in the economy (Reserve Bank of Australia, 2025).

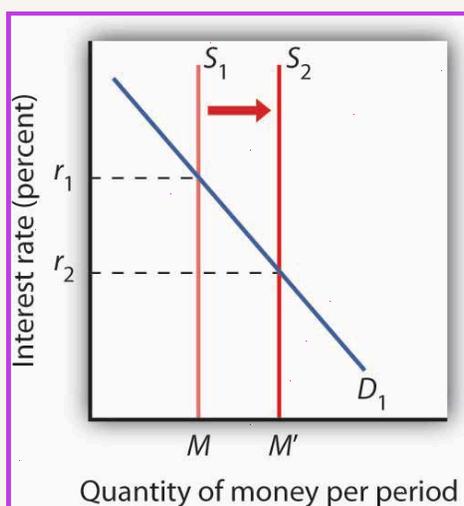


FIGURE 6: Supply and demand of money (Schmitz, 2012)

While modifying the cash is effective for controlling inflation, it is poorly affecting the property market. For example, when the interest rates are increased, borrowing becomes more expensive and lower wealth/income households are excluded from the market, leaving behind investors and high wealth households, further increasing the wealth gap. However, when interest rates are decreased, borrowing becomes cheaper, and therefore everyone can borrow more money. This increases the demand for property, driving up the prices and leading to less purchasing power for that extra available cash (Redman, 2025). Monetary policy is also applied equally to everyone in the economy, which means lower and higher wealth households are affected by the same amount absolutely, but differently relatively, which is why monetary policy is not adequate to provide a solution to the housing crisis.

Fiscal policy is the government's approach to taxation and spending to achieve a particular economic objective (Australian Department of Finance, 2019). Because of the lack of effectiveness of the central bank in managing house prices, the Australian people are reliant on the government to ensure balance within the economy. The government does this by adopting different policies that influence the way the market behaves. The main policies the government has in place regarding equity in the housing market are the 5% deposit scheme (Housing Australia, 2025), the first homeowner grant (Suncorp Bank, 2023), and the first homeowner stamp duty exemption (Spresser, 2025). While these policies seem to address the issue at the surface level, the practical effects are either unnoticeable or counterintuitive.

For example, by introducing the 5% deposit scheme, there are more buyers in the market as obtaining a loan has become easier, and an increase in demand with a stagnant supply leads to an increase in price. Therefore, new buyers are not only having to pay extra interest due to their lower deposit, but they are paying a more inflated price as well, reducing the value of their spent money and further increasing the wealth gap. Therefore, the house is not any cheaper for them to purchase, relatively.

The Improved Policies

The core issue with the current policies is that they are only enabling the low-net-wealth individuals from entering the market, saturating the market with buyers and causing the prices of houses to increase. Instead, the government should be focusing on disabling the high-net-worth individuals from entering the market. Therefore, the number of buyers in the market would naturally decrease, which would also decrease property values and allow low-net-wealth individuals to purchase property. This issue can be solved by making owning a second home less profitable so that investors are less inclined to put their money into property and instead into other markets. This can be done by taxing investors rather than subsidising first home buyers, such as by implementing a land tax and increasing stamp duty when purchasing additional residential properties.

Land tax is already implemented in Victoria, where people must pay a land tax proportional to the value of the land on property that is not exempt from the land tax, such as the owners' primary place of residence, primary production land such as farms, rooming houses and charitable organisations (State Revenue Office Victoria, 2026). This adds an extra cost to investors while not affecting first home buyers who want to purchase the property for residential purposes and therefore don't have to pay the land tax. This has proven to be extremely effective at controlling house prices, as Figure 4 shows how Melbourne has a median house price lower than the national average, despite being a major capital city and having an annual growth rate of only 1.3%. By implementing this in all Australian states as a national policy, the rapid housing growth will be slowed as the opportunity cost to invest in property will increase significantly.

Additionally, the first homeowners grant is also mildly effective in reducing the housing crisis, as an additional \$10,000 to \$15,000 (unless in QLD between 20 November 2023 and 30 June 2026 or in the Northern Territory buying or building a new home, where it is \$30,000 and \$50,000 respectively) (Suncorp Bank, 2023), to everyone causes a further decrease in the value of money as sellers can increase their house prices by that value since around one third of Australians are eligible for that bonus (Australian Institute of Health and Welfare, 2025). The first homeowners' grant was first introduced to offset the impact of GST on house prices; however, when it was introduced in 1964, it accounted for only 3.94% of the median Australian house price (Joseph, 2014; Williams, 2021), valued at \$500. Now at \$15,000 in QLD and SA and \$10,000 everywhere else, the grant only accounts for around 1.5% of the median dwelling value (Yardney, 2024; Suncorp Bank, 2023). GST in Australia is 10% (Australian Taxation Office, 2023), so this policy never fully offsets GST from the value of a property and now covers an even lesser portion. The stamp duty exemption for first home buyers has the same effect as the first homeowners grant, where more money increases demand, which pushes up the price.

Additionally, increasing stamp duty can be applied to investors purchasing additional investment properties. Stamp duty is a one-time transaction for the transfer of ownership from one party to another (NAB, 2024). By increasing the stamp duty cost for parties who already own residential properties, it will dig into their net investment returns, decreasing the attractiveness of investing in housing and property. Overall, this will decrease investor participation in the housing market due to the increased opportunity cost, leading to a decrease in demand and hence a decrease in house prices which is to the benefit of first home buyers who are not affected by the higher stamp duty.

It is clear that a negative demand-side intervention will be the most effective and efficient way to make housing affordable again, as increasing the opportunity cost for investors only will result to them flocking to other mediums to increase their wealth, such as the stock and crypto market which were established for generating wealth, unlike the housing market.

Finally, not all people will still be able to afford to buy a home despite these indirect aids, which is why it is important to ensure that rent prices do not increase significantly due to the increased liquidation of property (decrease in supply) that will follow the implementation of these policies. This can be done by subsidising investment houses that are accommodating low-SES households who cannot afford to buy property as of yet, by easing the land tax for example. However, since many renters will now purchase a house due to reasonable house prices, theoretically, rental demand will also decrease, which means rental prices should remain the same, depending on the participation of renters in the new housing market.

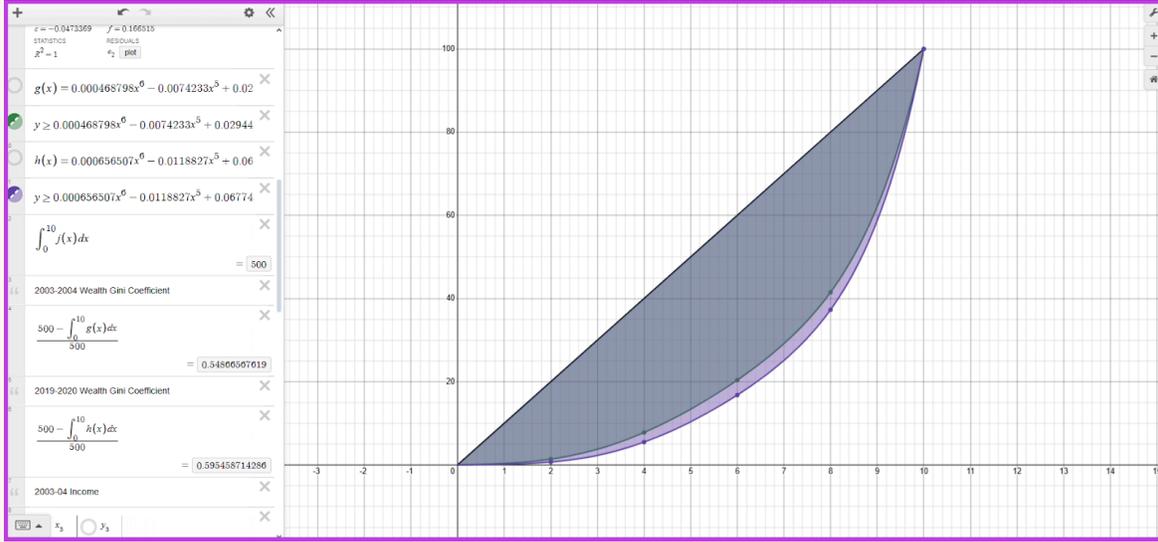
Conclusion

The wealth inequality of Australia is increasing rapidly, faster than income inequality, suggesting that high wealth households are maximising their wealth while lower wealth households are missing out. One significant contributing factor to this is the Australian housing crisis and uncontrolled house prices, which are only accessible to wealthy households. Despite this extreme inequality, the current monetary and fiscal policies are not contributing positively to the market, especially monetary policy, which is blunt and rigid in nature; this is why new fiscal policies are required. These include increasing taxes for the wealthy rather than subsidies for the less wealthy, such as land tax, which is already implemented and effective in Victoria, and additional stamp duty for multi-homeowners. These policies will decrease demand from investors and reduce the real house price for first-home buyers. While these new policies are not all-encompassing, they provide a logical foundation for the government to act on to reduce the housing crisis in Australia.

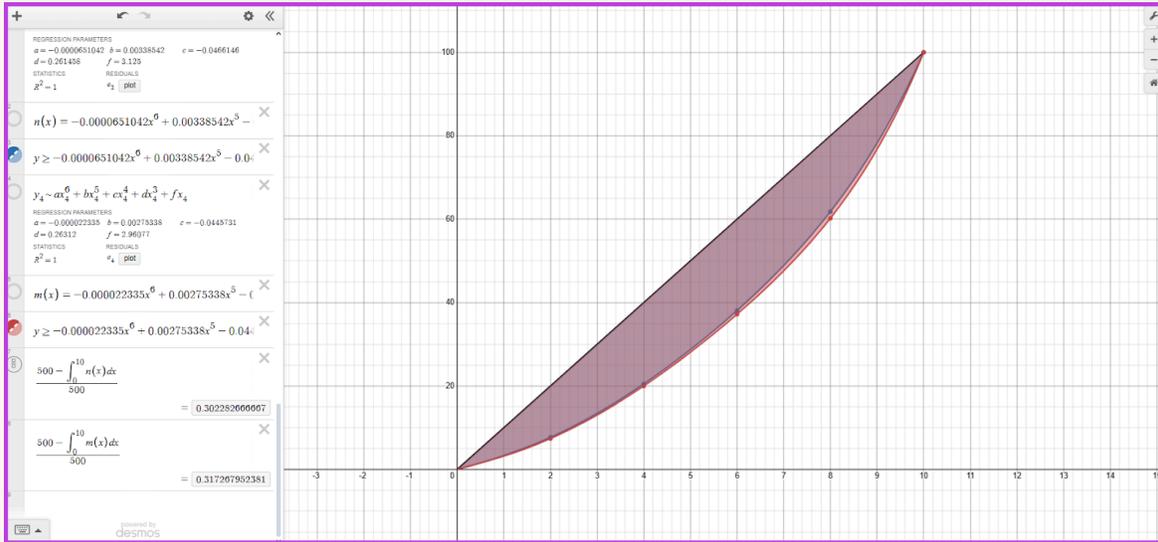
References

- Australian Bureau of Statistics. (2015, September 4). Household Income and Wealth, Australia, 2013-14. Abs.gov.au; Australian Bureau of Statistics.
<https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6523.02013-14?OpenDocument>
- Australian Bureau of Statistics. (2019a, December 7). Household Income and Wealth, Australia, 2017-18 financial year | Australian Bureau of Statistics. www.abs.gov.au.
<https://www.abs.gov.au/statistics/economy/finance/household-income-and-wealth-australia/latest-release#household-income-and-wealth>
- Australian Bureau of Statistics. (2019b, December 7). Household Income and Wealth, Australia, 2017-18 financial year | Australian Bureau of Statistics. www.abs.gov.au.
<https://www.abs.gov.au/statistics/economy/finance/household-income-and-wealth-australia/latest-release#low-middle-and-high-income-and-wealth-households>
- Australian Bureau of Statistics. (2025, March 27). Regional Population. Australian Bureau of Statistics.
<https://www.abs.gov.au/statistics/people/population/regional-population/latest-release>
- Australian Department of Finance. (2019, August 7). Fiscal policy | Department of Finance. Finance.gov.au.
<https://www.finance.gov.au/about-us/glossary/pgpa/term-fiscal-policy>
- Australian Institute of Health and Welfare. (2025, October 16). Home ownership and housing tenure. Australian Institute of Health and Welfare; Australian Government.
<https://www.aihw.gov.au/reports/australias-welfare/home-ownership-and-housing-tenure>
- Australian Taxation Office. (2023, June 21). How GST works. www.ato.gov.au.
<https://www.ato.gov.au/businesses-and-organisations/gst-excise-and-indirect-taxes/gst/how-gst-works>
- Desmos. (2025). YEJ gini coefficients. Desmos.
<https://www.desmos.com/calculator/ftl2oq19nv>
- Global Property Guide. (2025, August 7). Gross rental yields in Australia: Sydney, Melbourne and 6 other cities. Global Property Guide.
<https://www.globalpropertyguide.com/pacific/australia/rental-yields>
- Housing Australia. (2025, September 30). Expanded Australian Government 5% Deposit Scheme to support more Australians into home ownership. Housingaustralia.gov.au.
<https://www.housingaustralia.gov.au/media/expanded-australian-government-5-deposit-scheme-support-more-australians-home-ownership>
- Jennison, M. (2024, July 7). Brisbane property market update June 2024. Smartpropertyinvestment.com.au; Smart Property Investment.
<https://www.smartpropertyinvestment.com.au/hotspots/25920-brisbane-property-market-update-june-2024>
- Joseph, D. (2014, April 1). The History of the First Home Owner's Grant. Blue Wealth Property.
<https://www.bluewealth.com.au/the-research-blog/the-history-of-the-first-home-owners-grant/>
- Market Index. (2024). Australian Sharemarket 124 Years of Historical Returns Negative years 24 (19%) Positive years 100 (81%). In Market Index.
<https://files.marketindex.com.au/files/statistics/historical-returns-infographic-2024.pdf>
- NAB. (2024). What is stamp duty? Nab.com.au.
<https://www.nab.com.au/personal/life-moments/home-property/buy-first-home/what-is-stamp-duty>
- Redman, E. (2025, December). How home buyers are getting \$55,000 extra cash, but less value for money. The Sydney Morning Herald.
<https://www.smh.com.au/property/news/how-home-buyers-are-getting-55-000-extra-cash-but-less-value-for-money-20251201-p5njtu.html>
- Reserve Bank of Australia. (2025). What is Monetary Policy? Reserve Bank of Australia.
<https://www.rba.gov.au/education/resources/explainers/what-is-monetary-policy.html>
- Schmitz, A. (2012, December 29). Demand, Supply, and Equilibrium in the Money Market. Lardbucket.org.
<https://2012books.lardbucket.org/books/macroeconomics-principles-v1.1/s13-02-demand-supply-and-equilibrium-.html>
- Spresser, C. (2025, July 2). How Much Is Stamp Duty for First Home Buyers? Youi.
<https://www.youi.com.au/you-connect/articles-and-guides/how-much-is-stamp-duty-for-first-home-buyers>
- State Revenue Office Victoria. (2026). Understanding land tax | State Revenue Office. State Revenue Office of Victoria.
<https://www.sro.vic.gov.au/owning-property/land-tax/new-land-tax/understanding-land-tax>
- Suncorp Bank. (2023). What you need to know about the First Home Owners Grant. Suncorp.
<https://www.suncorpbank.com.au/shine-blog/first-home-buyers/first-home-owners-grant-by-state.html>
- Williams, S. (2021, July 13). Blast from the past: Inside Sydney's nostalgic period homes. Domain; Domain.
<https://www.domain.com.au/news/blast-from-the-past-inside-sydneys-nostalgic-period-homes-1071724/>
- Yardney, M. (2024, April 7). The Latest Median Property Prices in Australian Cities. Property Update.
<https://propertyupdate.com.au/the-latest-median-property-prices-in-australias-major-cities/#what-you-need-to-know-about-median-house-prices>

APPENDIX



APPENDIX 1: Gini coefficient for wealth calculations (Desmos, 2025) (Australian Bureau of Statistics, 2015), (Australian Bureau of Statistics, 2019a)



APPENDIX 2: Gini Coefficient for Income calculations (Desmos, 2025) (Australian Bureau of Statistics, 2015), (Australian Bureau of Statistics, 2019a)

THE ENDURING LEGACY
OF
GOLD



NIKHIL SINGH
SYDNEY GRAMMAR SCHOOL
NSW

Introduction

Amidst the rapidly growing global economy, gold has recaptured the spotlight with a generational run over the past few years, highlighting its role as one of the best-performing asset classes during unprecedented geopolitical and economic volatility. By examining the enduring legacy of gold, its role as a financial asset, and the key drivers of its growth, we can uncover the truth of gold's rally being not merely short-term cyclical fear but a structural issue within the global economy.

Historical Context

Gold has held a sense of monetary value throughout humanity's history, being treasured by all cultures around the world. The earliest records of gold date back to ancient Egypt, where it was culturally believed to be 'the flesh of the gods', quickly transitioning into a medium of exchange in the form of coins, illustrating its immediate value among people. This status continued throughout the Roman Empire, with gold coins circulating across Europe and Africa, cementing gold as the foundation for imperial commerce. As colonisation began to take control over the world from European nations, large deposits of gold were discovered across the Americas and Australia, catalysing gold rushes, creating mass migration and furthering global integration between cultures. With the rise of national currencies in the 19th century, the gold standard was introduced, linking the value of currencies to a fixed amount of gold. Conversion rates between currencies were established, and the flow of gold enabled global trade to occur by automatically settling imbalances within trade values. Furthermore, the existence of fiat money (money not backed by a physical commodity) was severely limited within economies due to currencies being backed by gold, leading to stronger price stability and public trust in currencies. However, as a specific ratio of gold to currency had to be maintained, a nation's reserve bank's ability to implement monetary policy was severely inhibited, as money could only be printed if it had the gold reserves to back it. This, paired with fixed exchange rates, caused financially struggling nations in Europe to be unable to afford US exports, heavily contributing towards extreme levels of deflation, amplifying the Great Depression and ultimately the establishment of the US dollar as the new reserve currency in 1944. This has remained to our present day, where gold is a reserve currency in some nations, but it is more commonly presented as a metal for jewellery and a safe haven asset for investors.

Why Gold

Despite gold's enduring value and significance throughout all time, the question remains, why gold and not any other rare earth metals? Gold holds its value for both its physical and spiritual attributes. Its position as a noble metal (one that does not corrode), as well as its malleable nature, enables it to be a medium of wealth that can be stored easily long-term with little management. Furthermore, its lustrousness attracts human attention, allowing gold to stand out from other metals and giving the perception of value. Most importantly, the scarcity of gold is in a narrow sweet spot of being rare enough to be valuable yet common enough to act as a medium of exchange, making it a viable currency and pivotal in the global economy. Furthermore, it has had continuous significance within cultures, especially those of China and India, acting as a symbol of wealth and auspiciousness. This cultural demand transitions towards structural demand-side pressure, hence the continuous retention of gold's value, reflected by China and India purchasing 36 and 57.5 tonnes of gold, respectively.

Gold As An Asset

A major contemporary role of gold has been as a financial asset for individuals, offering a form of protection against market and geopolitical instability by diversifying investment portfolios and mitigating risk. It is also viewed as a strong investment due to its high liquidity and consistent long-term returns, making it a valuable hedge against inflation. However, gold doesn't produce any dividend yield and also has a high opportunity cost during bull markets, where securities will typically outperform gold, but it is important to note that correlation doesn't guarantee causation. Despite being believed to be only available in bars/coins, the availability of gold has increased with the development of ETFs (Exchange Traded Funds), which track the price of gold, SGBs (Sovereign Gold Bonds) and futures/options.



Figure 1

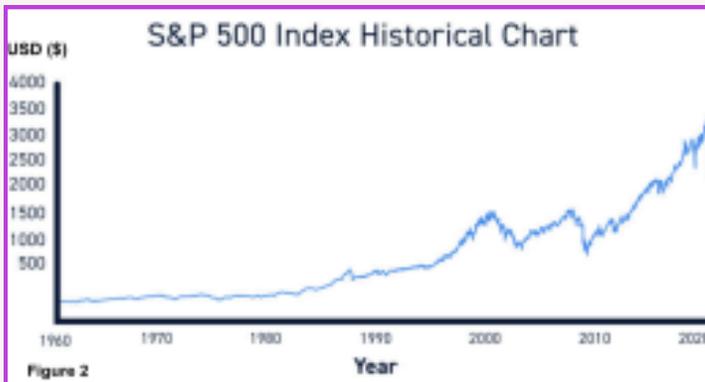


Figure 2

Gold has offered an average return of 5.8% in the past 40 years, but when shortening the time span, its returns rise to the likes of 13.7% in the last 10 years. As mentioned prior, as the epitome of haven assets, rallies for gold occur during economic and geopolitical instability, as seen in both figures 1 and 2. Within the early 2000s, the US economy suffered a recession as a result of the dotcom bubble, a phase of highly speculative investment in anticipation of the newly invented internet. As a result, the S&P 500 index, a representation of the top 500 stocks in the US, dropped by 49%.

On the other hand, gold prices reached an all-time high of approximately \$20,000/kg. As a result, the notion that gold offers high security and steady returns, particularly during economic downturns, is likely due to the increasing demand for gold as a means of financial security, hence illustrating the correlation between its price growth and economic stability.

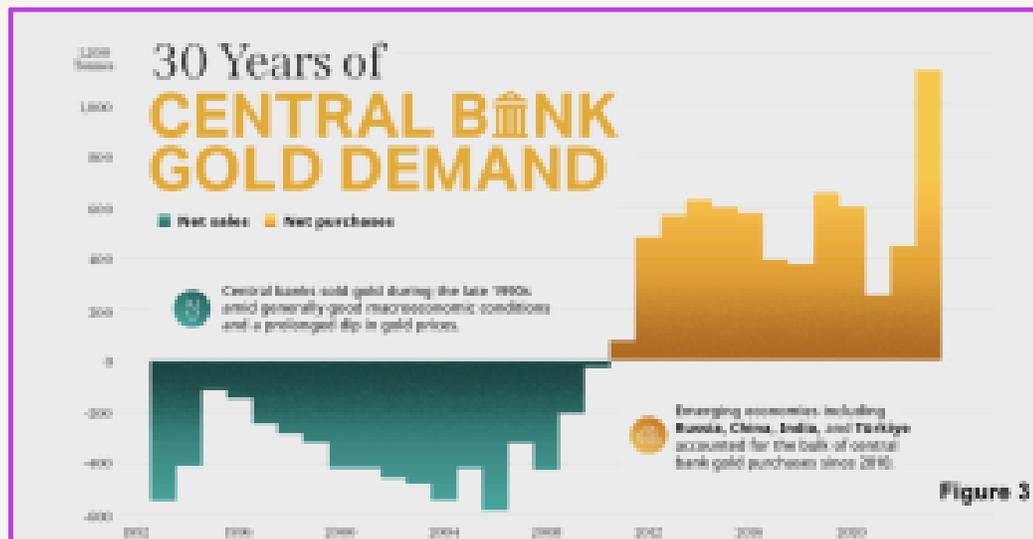
This trend is further evident during geopolitical instability, as seen during the initial Trump tariffs in 2018, which sparked a gold rally that continued into 2020, resulting in gold rising to \$65,000/kg. On the other hand, the S&P 500 growth remained stagnant within this time period with the WtUI (World Trade Uncertainty Index), a degree used by the IMF to track the frequency of the word 'uncertainty' or variants within the EIU (Economist Intelligence Unit) spiking to 12,500, far greater than its average of 2,228. As a result, there exists a clear correlation between the growth in gold's value and geopolitical instability, reinforcing its significance as a financial asset.

Gold's Recent Performance

Since 2023, gold's price has doubled, and within 2025 alone, it has grown 69.7%, making it one of the fastest-growing assets within the financial market. However, the recent market performance demonstrates a break from historical patterns as an economic recession has not occurred despite an immense gold rally, seen with the S&P's growth being stronger than ever, recording 16.06% growth during 2025. So, what is the reason for gold's extreme growth in value?

Geopolitical Instability

Gold's level of growth has been driven by the reshaping nature of the power dynamic in the global economy, most notably affected by the growth of BRICS nations, especially China. Despite their difference of \$11.2 trillion in GDP, China's rapid growth has begun to undermine the USA's significant dominance of the global economy.



As a result, they have begun to reduce their reliance on the US by promoting trade within the Yuan instead of the USD, and have successfully shifted 30% of their bilateral trade to be settled in the Yuan. This has caused the USD to begin to lose its stature as a safe-haven currency by reducing its significance within global trade, increasing volatility, and hence hindering the safety of USD reserves within the central banks, incentivising them to switch to a safer asset being gold.

Furthermore, the G7's seizure and freezing of the Russian reserve assets contributed to the growing price of gold by further highlighting geopolitical instability through the erosion of trust between nations. This act demonstrated that one's wealth could be seized, prompting nations to seek more security in their financial assets, hence inspiring the intake of gold, as it is a less confiscatable form of value compared to currencies. As a result, central banks, especially those of emerging economies, have re-evaluated their holdings and have resulted in a shift from a dollar/euro-based reserve to one more centred around gold. As central banks, on average, are responsible for 20% of gold purchases, their desire to reallocate resources has heavily influenced an increase in gold's demand. Within Figure 3, the increasing demand for gold is evident as gold purchases reached an all-time high in 30 years of approximately 1100 tonnes of gold purchased in 2025. This surge in demand, paired with gold being relatively inelastic as gold supply is finite unless more reserves are discovered, demand is unable to be satisfied, has resulted in an increasing equilibrium price for gold, hence heavily contributing to 2025's unprecedented gold rally.

High Levels of Inflation

As mentioned previously, gold is a valuable asset to an investor as it provides a safe hedge against inflation. Coming off the back of Covid 19, the average global inflation rate over the past 5 years has been 4.94%, much greater than the average of 3-4%. This is due to the high levels of expansionary monetary and fiscal policy employed in an attempt to minimise the impact of an economic recession. The use of conventional monetary policy, with a low cash rate, as well as unconventional monetary policy in quantitative easing, enabled greater liquidity within economies by encouraging buying and spending, hence facilitating greater rates of inflation. This is evident within Australia, as the RBA bought \$281 billion AUD in bonds between 2020 and 2022, stimulating economic activity, enabling the government to employ greater fiscal policy, as seen through Australia spending \$101.3 billion AUD on Jobkeeper. The large amount of spending through fiscal policy influenced a great amount of expectation-driven inflation, hence pushing investors to seek an asset that would minimise the depreciation of their money. This lowered the opportunity cost of buying gold as it has no yield, hence income doesn't depreciate, and as it was experiencing a major rally in a bear market, its returns would outpace inflation, hence increasing investor demand. As discussed before, greater demand, along with gold being relatively inelastic, results in a greater price. These high interest rates have continued with a slow decreasing trend, hence leaving gold as an attractive investment, heavily influencing its major growth across the past couple of years.

What Does This Suggest About the Future of the Global Economy?

With unprecedented market growth and volatility, only amplified by ongoing geopolitical uncertainty, there is variability about what gold's performance suggests for the future of the global economy.

Despite no economic recession occurring, I do not believe that the cycle of gold rallies occurring during economic hardship has been diminished, but only delayed. This is most likely caused by the excitement surrounding the AI industry, evident in the rapid growth of OpenAI and Nvidia, which has led to significant investment and optimism for the future of the global economy, driving growth and disrupting the cycle. This is evident in the USA, as the AI sector contributed towards 37% of real GDP growth in 2025, and the private sector invested \$109.1 billion into AI in 2024. However, I believe the excitement over the AI wave has been largely driven by speculation about the future possibilities of AI. When analysing a company's P/E (Price/Earnings) ratio, one can view its share price relative to earnings, demonstrating how much the investor is paying per dollar of the company's earnings. For example, a P/E ratio of 20 suggests that one is paying \$20 per \$1 of annual earnings. The current world leader in AI, Nvidia, has a P/E ratio of 46.23 and has held an average of 74 over the past 5 years. Compared to the technology industry average of 34.57 and the S&P's 29.46, this suggests that AI company prices are being driven by expected future profits rather than their current earnings, but it is important to note that the productivity gains from AI may justify the greater valuations.

This speculative investment comes with large amounts of volatility and risk, reflected within gold's price, ultimately suggesting that a bubble may have occurred, similar to the 2001 dotcom bubble. If the expected growth and revenue are not achieved in due course, it is possible that major panic selling would occur, causing prices to crash and even the bankruptcy of major businesses. If this were to occur, it would inspire unemployment, lower disposable income and spending, hence pushing towards an economic recession in the US, fulfilling the dynamic between gold and economic growth. Through the contagion effect, this can spread to the global economy by reducing net trade, capital losses from overseas investors and reduced FDI (Foreign Direct Investment) from the US, hence influencing economic recessions within other countries, causing a downturn in the global economy.

Conclusion

In conclusion, gold has played a pivotal role in the financial world, acting as a medium of exchange in ancient civilisations and further evolving into a safe haven asset in our modern day. It typically performs its best during times of geopolitical and economic uncertainty, heavily contributing to its recent surge in price, but this offers a new perspective to economists, as no major economic downturn has occurred. Personally, I believe this has occurred due to the revolutionary developments in AI propping up the global economy, however, if expectations are not met, an anticipated economic recession could surface.

References

- (No date) *Ai bubble and Gold Price Consolidation: Navigating 2025's Market Dynamics*. Available at: <https://discoveryalert.com.au/ai-bubble-gold-price-consolidation-2025/> (Accessed: 31 January 2026).
- (No date) *China is ditching the dollar, fast*. Available at: <https://www.economist.com/china/2025/09/10/china-is-ditching-the-dollar-fast> (Accessed: 01 January 2026).
- (No date) *S&P 500 PE ratio charts, data*. Available at: https://www.gurufocus.com/economic_indicators/57/sp-500-pe-ratio (Accessed: 01 January 2026).
- CHALLA, N. (2024) *History of gold, SimTrade blog*. Available at: https://www.simtrade.fr/blog_simtrade/history-of-gold/#:~:text=Gold%20as%20a%20currency%20in,economic%20stability%20across%20the%20Mediterranean.&text=Later%2C%20ancient%20Egypt%20accumulated%20vast,to%20Egypt's%20wealth%20and%20power. (Accessed: 01 January 2026).
- Gold Price (2025) *Gold price, Gold Price*. Available at: <https://goldprice.org/> (Accessed: 01 January 2026).
- The Gold Standard System* (no date) *World Gold Council*. Available at: <https://www.gold.org/history-gold/the-classical-gold-standard> (Accessed: 01 January 2026).
- Gratton, P. (no date) *Why has gold always been valuable?*, *Investopedia*. Available at: <https://www.investopedia.com/articles/investing/071114/why-gold-has-always-had-value.asp> (Accessed: 01 January 2026).
- Home - World Uncertainty index* (no date) *World Uncertainty Index -*. Available at: <https://worlduncertaintyindex.com/> (Accessed: 01 January 2026).
- j87as6 (2021) *The S&P 500 - A complete guide for active traders*, *CenterPoint Securities*. Available at: <https://centerpointsecurities.com/sp-500/> (Accessed: 01 January 2026).
- NVIDIA P/E Ratio 2012-2025: NVDA* (no date) *Macrotrends*. Available at: <https://www.macrotrends.net/stocks/charts/NVDA/nvidia/pe-ratio> (Accessed: 01 January 2026).
- Policy responses to covid19* (2020) *IMF*. Available at: <https://www.imf.org/en/topics/imf-and-covid19/policy-responses-to-covid-19#A> (Accessed: 01 January 2026).
- Russia's Central Bank says gold demand driven by G7 attempt to get Moscow's Frozen Assets* (no date a) *Yahoo! Finance*. Available at: <https://uk.finance.yahoo.com/news/russias-central-bank-says-gold-124049080.html> (Accessed: 01 January 2026).
- Russia's Central Bank says gold demand driven by G7 attempt to get Moscow's Frozen Assets* (no date b) *Yahoo! Finance*. Available at: <https://uk.finance.yahoo.com/news/russias-central-bank-says-gold-124049080.html> (Accessed: 01 January 2026).
- This is how the AI bubble bursts* (2025) *Yale Insights*. Available at: <https://insights.som.yale.edu/insights/this-is-how-the-ai-bubble-bursts> (Accessed: 31 January 2026).

THE HIDDEN COST
OF
CONNECTION



HELEN LIU
WESLEY COLLEGE, MELBOURNE
VIC

Introduction

The new age of digital saturation presents the paradox of being one of the most technologically connected generations in history but with the most overwhelming unprecedented cases of social isolation and disconnection. With many of us having grown alongside the developments of the internet, often exposed to the media at very young ages understand the neologism, the “Loneliness Epidemic” all too well, which now represents an increasingly profound market failure within the Australian economy. Specifically, with the digital economy prioritising algorithmic engagement over authentic human interaction, it has created a significant negative consumption externality that depletes social capital and imposes a multi-billion dollar hidden burden on national productivity and the public health system.

Negative Externalities

In a perfectly competitive market, prices determined by buyers and sellers reflect the true social value of a product. However, the digital social market fails to reach this equilibrium due to several structural distortions.

Digital platforms don't rely on such price signals, they instead maximise profit by exploiting psychological mechanisms for private gain. How many of us have been trapped in the cycle of doom scrolls, most of the time not even by choice! The constant feedback dopamine rewards of likes, comments, reposts, infinite scroll, speed up options and constant notifications, all too grasp users to stay engaged for as long as possible. The average person now spends over 2.5 hours a day on social platforms, with Gen Z and teenagers often exceeding 3 to 4 hours per day, where globally (Kemp, 2024). Higher engagement of social media users in the past 30 days also had higher self-reported anxiety/depression than non-users from 21.2% vs. 17.6%, while also a 24% increased odds of reporting anxiety/depression relative to non-users (Ranabhat et al., 2025). Furthermore 40% of people report feeling lonelier or more isolated due to social media use, and with adolescents who spend more time online showing higher rates of psychological distress (Liebhaber, 2022). This results in the very erosion of real world social, motor, neural skills and mental health crises, relentlessly externalised onto the individual, and public health system.

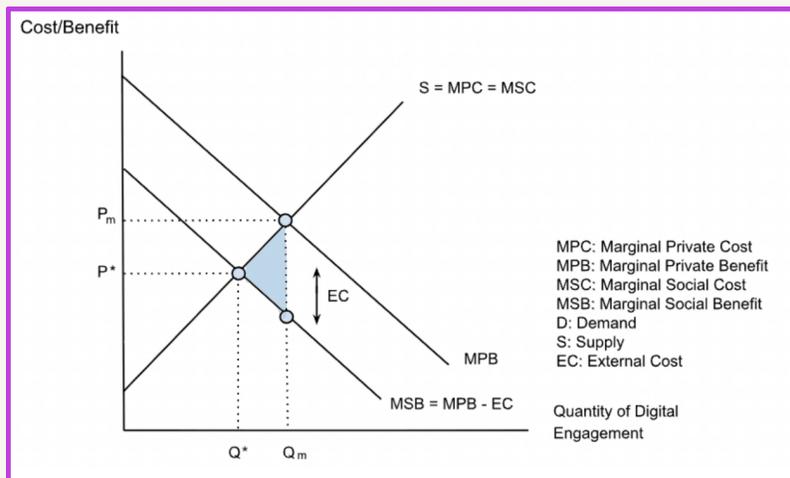


FIGURE 1: Negative consumption externality due to excessive social media use

This significant negative externality of the digital economy optimises for "efficiency" through remote learning, automated retail, and algorithmic socialising, leaving us to inadvertently design out the incidental human interactions that build social capital. Resulting in more than one in seven Australians experiencing persistent isolation lasting two years or more (*More than 40 Percent of Young Aussies Are Lonely, as Experts Call for National Loneliness Strategy*, 2025). The free market equilibrium occurs where $MPB = MPC$, as the individual consumer's marginal satisfaction is exactly equal to the cost they pay for it. Although social media is free at the point of use, it is not a public good, as it is excludable and partially rivalrous. However, it has a new zero MPC, consisting almost entirely of the opportunity cost of time rather than a physical monetary repercussion, encouraging high levels of oversubsumption relative to the socially efficient level. Overall, creating a deadweight loss between $Q^* - Q_m$, where the platform's private gain fails to account for the broader social cost of an increasingly disconnected population that bears its effects onto countless costs to third parties.

In Australia, the fiscal impact is measurable and severe, with loneliness estimated to cost the economy approximately \$2.7 billion annually in direct healthcare expenditure for conditions like cardiovascular disease and depression (*The Prevalence, Causes and Impacts of Loneliness in New South Wales*, 2025). These are costs borne by third parties such as the government and taxpayers rather than the dominant digital platforms. This economic depletion extends to the workplace where loneliness costs employers approximately £2.5 billion (\$4.8 billion AUD) annually due to increased staff turnover and "presenteeism", which is where employees are physically present but cognitively disengaged (*Costs of Loneliness*, n.d.). For students, this manifests as a 22% higher likelihood of receiving lower grades, effectively devaluing the national investment in their schooling (Vilcarino, 2025).

Asymmetric Information

Additionally, Asymmetric Information occurs in the market. Consumers, particularly young adolescents, often do not know the long-term psychological and physiological price of digital consumption. While the immediate private benefit of consumption is visible through digital indicators of validation, the long term effects of eroded social skills, motor skills and mental health issues such as chronic isolation (Bonsaksen & Ruffolo, 2023) are hidden from the user at their point of consumption, making fully informed decisions impossible.

Bounded Rationality

Second, the market has Bounded Rationality. Neoclassical economics assumes consumer sovereignty, where users make rational choices to maximise utility. In reality, dominant digital platforms operate by weaponising our very own attention spams, that consistently exploit cognitive biases (Philosopheasy, 2025). This is because digital platforms don't rely on such price signals, they instead maximise profit by exploiting psychological mechanisms for private gain such as the dopamine-driven feedback loops. So even if a user chooses to spend four hours on a platform, this choice is often a result of addictive design rather than a rational pursuit of wellbeing.

Merit and Demerit Goods

Furthermore, we must distinguish between Merit and Demerit Goods. Authentic social connection is a merit good, however is underconsumed by the free market because people underestimate its long-term benefits. Conversely, excessive social media use functions as a demerit good, as is over-consumed because the private benefit is immediate, while the social costs are only consequences that become apparent over time and are externalised.

Missing Markets

Furthermore, a second Market failure occurs because many individuals do desire genuine social connection, however are only provided with the low quality substitutes for high quality social interactions by the digital economy. Platforms like Instagram and TikTok maintain existing connections, but are not designed to facilitate the meeting of new people in physical environments. In fact, they encourage performance and comparison, which perpetuate and intensify feelings of loneliness rather than resolving them. This creates the missing market where demand for authentic connection is high, but supply is dominated by distracted, curated personas, which manifests into real life when someone approaches a potential peer, but the perceived risk of social rejection or an awkward encounter becomes too high. Ultimately creating a disequilibrium where most people want connection, but stay isolated because starting contact feels too difficult.

Evaluative Policy Solutions

Though it is also factual that digital platforms have increased social accessibility. Especially for smaller communities, those who live in remote locations or individuals with social anxieties, the internet performs as a positive externality that provides connection to those who previously had not.

However we must understand the underlying evaluation of quantity versus quality. We have already established that countless social media platforms offer us with increasing volumes of interactions, but at their core do not represent the same form of emotional synchrony experienced in physical real world interactions. Compounded by their prioritising and optimising for engagement, not wellbeing, and therefore can never internalise the long-run social cost without regulation.

Given the significant negative externalities generated through social isolation, government intervention must be used to alleviate them.

For example regulation on all digital platforms. Such as adding restrictions onto the many features of excessive notifications, infinite scroll, autoscroll and algorithms that amplify emotionally provocative content and enhance the addictive nature of social media. Mandatory features of screen time or chronological feeds could be used, which would reduce the compulsive usage and internalise some of the psychological costs associated with overconsumption, directly targeting the source of the externality by raising MPC of excessive engagement.

Governments may also use Pigouvian taxes or levies on dominant digital platforms, where revenue could be linked to screen time of individual users. In theory, such a tax would force firms to internalise part of the social cost they impose, shifting output closer to the socially efficient level. Yet, accurately calculating the external cost of loneliness is extremely difficult, and firms may pass the tax burden onto consumers or smaller creators. As a result, taxation may reduce harm at the margin but cannot independently resolve the structural absence of meaningful social alternatives. They could also undergo information provision, such as mandatory digital wellbeing education courses or teachings in schools, educational posters and transparency to ensure all consumers are aware of algorithmic practices. These would act as a low cost, easy to implement way to target information asymmetries and improve consumer rationality. However, the 2025 NSW Parliament report emphasises that education must go beyond "digital safety" to include the active building of social literacy as education (The Prevalence, Causes and Impacts of Loneliness in New South Wales, 2025) as they rely heavily on self verdicts on behavioural change and self control, which are precisely what has been weakened in this case by technology. Consequently, effectiveness may be limited.

The recent policy for all children under the age of 16 facing the social ban represents a shift from simply nudging behaviour to a total market intervention aimed at internalising the Negative Consumption Externality. Since MSC has become so high that the only way to eliminate the resulting Deadweight Loss is to restrict market access entirely for the most vulnerable demographic.

However the risk of Government Failure and the Substitution Effect take effect, as If a ban is implemented without a concurrent investment in Social Infrastructure, young people may simply substitute one form of isolated consumption for another, such as unregulated gaming or dark web forums, where Information Asymmetry regarding safety is even higher.

The Optimal Solution

The ultimate goal for our modern economy should be the embracing an all in one academic social ecosystem, where social connection is treated as a public good. This is why as said in the NSW 2025 government report, we should invest into social infrastructure (The Prevalence, Causes and Impacts of Loneliness in New South Wales, 2025), specifically third places, a term referring to spaces such as libraries, study cafes and community spaces to facilitate the organic formation of social capital. This fosters a more resilient, productive, and innovative workforce, where every \$1 invested in preventative interventions in the effects of loneliness, the economy can see a return of up to \$22.65 (Stelmach et al., 2022)

Conclusion

Ultimately, the loneliness epidemic reminds us of the limitations of GDP as a measure of national success. GDP ignores wellbeing externalities with loneliness acting as a structural threat to long-run economic growth. Our responsibility as a developing society must move beyond GDP centric quantified success to realise a healthy and prosperous economy cannot be built upon a foundation of lonely individuals, and create a framework that values how we connect.

References

- Bonsaksen, T., & Ruffolo, M. (2023). Associations between social media use and loneliness in a cross-national population: do motives for social media use matter? *Health Psychology and Behavioral Medicine*, 11(1), 1–18. National Library of Medicine. <https://doi.org/10.1080/21642850.2022.2158089>
- Costs of Loneliness. (n.d.). Campaign to End Loneliness. <https://www.campaigntoendloneliness.org/costs-of-loneliness/>
- Kemp, S. (2024, January 31). The time we spend on social media. DataReportal. <https://datareportal.com/reports/digital-2024-deep-dive-the-time-we-spend-on-social-media>
- Liebhaber, L. (2022, November 19). Young Adults Are the Most lonely, Data Shows | Charlie Health. [www.charliehealth.com. https://www.charliehealth.com/research/young-adults-are-the-most-lonely-data-shows](https://www.charliehealth.com/research/young-adults-are-the-most-lonely-data-shows)
- More than 40 percent of young Aussies are lonely, as experts call for National Loneliness Strategy. (2025). The University of Sydney. <https://www.sydney.edu.au/news-opinion/news/2025/08/04/more-than-40-percent-of-young-aussies-are-lonely-as-experts-call-for-national-loneliness-strategy.html>
- Philosopheasy. (2025, July 27). The Infinite Scroll. Philosopheasy.com; Philosopheasy. <https://www.philosopheasy.com/p/the-infinite-scroll>
- Stelmach, R., Kocher, E. L., Kataria, I., Jackson-Morris, A. M., Saxena, S., & Nugent, R. (2022). The global return on investment from preventing and treating adolescent mental disorders and suicide: a modelling study. *BMJ Global Health*, 7(6), e007759. <https://doi.org/10.1136/bmjgh-2021-007759>
- The prevalence, causes and impacts of loneliness in New South Wales. (2025).
- Vilcarino, J. (2025, August 5). Teens Are the Loneliest People in the World, a New Report Finds. Why? Education Week. <https://www.edweek.org/leadership/teens-are-the-loneliest-people-in-the-world-a-new-report-finds-why/2025/08>

THE NARRATIVE OF AUSTRALIA'S
ECONOMIC MANAGEMENT



AND ITS EFFECTS ON
UNEMPLOYMENT AND INFLATION

XINYI HE
PARRAMATTA HIGH SCHOOL
NSW

The Australian economy is a considerably well managed one. During the COVID-19 pandemic, it was a period of aggravating fear towards unrepairable levels of unemployment for workers, economists and policymakers. The already historically low cash rate target of 0.75% prior to the pandemic left little room for the RBA to use Monetary Policy to effectively manipulate the strength of demand in the economy. Consumer confidence already stood at a low point due to the decades-long secular stagnation from the post mining boom era, along with low levels of labour productivity. According to the ABS 'Economic gains and losses over the COVID-19 pandemic', Households spent \$148 billion less than a continuation of their pre-pandemic spending trajectory would have implied, resulting in Real GDP falling by 1.1% in 2020. A change in policy instrument was needed to mitigate further losses. Consequently, fiscal policy began to play the dominant role in the short-term stabilisation of the economy, successfully directing the levels of aggregate demand, interest rates and unemployment and remarkably reversing the massive budget deficit to a surplus. This account will highlight the effects of the events and decisions made to support the changing economic conditions, particularly their impact on unemployment and inflation in the economy in recent years.

Fiscal policy measures, targeted to reduce unemployment with a shorter impact lag, began to promote employment, business and consumer confidence, where the \$70 billion JobKeeper wage subsidy scheme and the \$13 billion JobSeeker supplement were extremely effective in allowing businesses to retain their workers and in supporting unemployed individuals. As such, the fiscal policy measures, along with the closing of our borders to immigrants and other factors, dragged the unemployment rate down from its peak of 7.5% in June 2020 to a record low of 3.4% in October 2022, creating the tightest labour market in decades. The strongly positive rebound that followed the huge fiscal stimulus of more than \$300 billion was extensively felt after the lockdown restrictions were lifted, allowing stimulus-enhanced normal economic activity to resume. Consequently, the budget deficit of \$134 billion in 2020-21 was reduced to just \$32 billion in 2022 due to this increased economic activity and growth, causing the automatic stabilisers of tax receipts to grow strongly and reverse the deficit, clearly indicating the positive response to the Treasury's decisions.

The success of Australia's economy following the COVID-19 pandemic demonstrated the effectiveness of the coordinated economic management by the RBA and the government's policy instrument implementation. At the end of 2021, the Australian economy had grown 3.4% in GDP, exceeding its pre-pandemic level. This greatly improved consumer confidence, and the 0.1% cash rate as well as the increase in disposable income from the government support caused household spending and consumption to surge, substantially increasing aggregate demand. Inflation was undoubtedly on the rise.

The headline inflation rate quietly but rapidly rose to 5.1% in March 2022 from its pre-COVID yearly averages of less than 2% since 2015, and peaked at 7.8% by the end of 2022. The major factors that fuelled this skyrocketing jump were the strong growth in demand, global supply-side shocks and increased mortgage rates from the RBA's consistent increases in the cash rate from 0.1% to 4.35% in November 2023 to begin withdrawing some of the extraordinary Monetary support during the pandemic as well as to slow the growth of demand. Consequently, a cost of living crisis was created, and began to escalate as a large majority of Australians struggled with mortgage and rent payments caused by the jump in interest rates, as well as increases in the prices of petrol and gas caused by Russia's invasion of Ukraine. These factors put increasing pressure on the stability of the economy, pushing for swift economic management to address the growing cost of living crisis.

The cost of living crisis formed the basis of the election fight, reflected in the various budget measures introduced and extended to help ease the cost-of-living pressure in a way that does not add to the inflation outlook. This includes the 2024-25 Budget's tax cuts to provide all taxpayers, particularly low to middle-income taxpayers with greater protection against bracket creep and to increase labour supply by around 930,000 hours per week, as well as the \$300 rebate on their electricity bills for all households. The 2025-26 Budget delivered further tax cuts to increase disposable income, and extended the Energy Bill Relief Fund where an additional \$150 rebates were provided. These fiscal policy measures have allowed for increased household incomes, driving economic growth to the RBA's estimates of 2% year ended growth for 2025.

The unemployment rate was 4.5% as of September 2025 in seasonally adjusted terms, the highest it has been in 3 years compared to 3.5% in 2022. The Reserve Bank had previously predicted that unemployment would not go above 4.3% — which it had slightly decreased to in November — until at least 2028, hence making this seemingly unprecedented rise worrying for the economic outlook. Moreover, inflation in the September quarter has surged with consumer prices rising at an annual pace of 3.2 per cent, up from 2.1 per cent in the June quarter. Despite only three quarters of the year having passed, the headline rate of inflation has already exceeded the RBA's target to keep annual consumer price inflation between 2 and 3 per cent. These unprecedented increases in conjunction presented greater uncertainty, likely inevitable flow on effects from the government's fiscal stimulus during the COVID-19 pandemic that drove inflation.

The current high unemployment rate along with slow employment growth seen in the first half of this year where growth slowed to just 1.25% compared to 2.7% in the last 6 months of 2024 is mainly due to weak domestic demand, reflecting the weakening labor market and economy as global conflicts create uncertainties in the economic outlook. Michele Bullock has previously noted that “when you’ve got a very tight labour market, that can put upward pressure on inflation”, but current labour market conditions where 1.2 million people are looking for work and a lack of effective growth in high priority areas indicate otherwise. As a result, the RBA has been attempting to loosen the labour market through maintaining the high cash rate of 3.60% instead of lowering it to bring inflation below 3%, likely fuelling the increasing long term trend of unemployment. This can be demonstrated through a Phillip’s curve, where the RBA’s determination to keep inflation low using macroeconomic policies has led to unsatisfactory increases in unemployment, possibly raising the NAIRU. This could lead to permanently higher unemployment without a reduction in inflation, highlighting the growing challenge for the RBA in sustaining full employment, estimated at 4.5% in the RBA Phillips Curve Models. However, a finding in an Economic Society of Australia poll of 51 leading economists believe that Australia can sustain an unemployment rate as low as 3.75%, suggesting that the actions taken in response to the seemingly tight labour market may be unnecessary. Nevertheless, the NAIRU is influenced by various domestic and global economic factors, and cannot solely be used to judge the labour force of an economy.

Ultimately, the high rate of unemployment will lead to lower standard of living, GDP growth and wage growth, worsening the weak labour market growth. Of the large group of unemployed people in the ABS Labour force participation statistics, the main difficulties reported for finding work were the lack of necessary training, qualifications or experience required by the job and the oversupply of applicants for available jobs. Fiscal stimulus may be required to address the perceived lack of job vacancies, but shortages in areas such as healthcare, construction, trades, education, and technology argues the need for microeconomic policy reforms such as labour market reforms in order to prevent further increases in structural, hidden and long term unemployment, and help revive our labour market that may be gradually losing momentum.

When considering the wider economy and its indicators, the Australian economy is again, a considerably well managed one. The 2025-26 budget reveals that the Government's responsible fiscal management has delivered back-to-back budget surpluses for the first time in nearly two decades, and almost halved the budget deficit in 2024-25. Numerous Fiscal Policy measures are in place to build a stronger economy, with key initiatives of funding wage increases for jobs crucial for social infrastructure, strengthening Medicare to improve the health of Australians and investing in education and key industries that experience shortages. The latest statement on Monetary Policy states that 'leading indicators point to a broadly stable outlook' and is focused on its mandate to deliver price stability and full employment.

References

- AI Group. (2023, September 28). Factsheet: Inflation in Australia. AI Group.
<https://www.aigroup.com.au/resourcecentre/research-economics/factsheets/factsheet-inflation-in-australia/>
- Australian Bureau of Statistics. (2022, July 9). Economic gains and losses over the COVID-19 pandemic | Australian Bureau of Statistics. www.abs.gov.au.
<https://www.abs.gov.au/articles/economic-gains-and-losses-over-covid-19-pandemic#household-income-and-saving>
- Australian Bureau of Statistics. (2025a, November 5). Barriers and Incentives to Labour Force Participation, Australia, 2024-25 financial year. Australian Bureau of Statistics.
<https://www.abs.gov.au/statistics/labour/employment-and-unemployment/barriers-and-incentives-labour-force-participation-australia/2024-25>
- Australian Bureau of Statistics. (2025b, December 11). Labour Force, Australia, November 2025. Australian Bureau of Statistics.
<https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia/nov-2025>
- Australian Government. (2024). Budget 2024–25. [Budget.gov.au](http://budget.gov.au).
<https://archive.budget.gov.au/2024-25/>
- Bishop, J., & Greenland, E. (2021). Background on the Phillips Curve and the RBA's Modelling Approach | RDP 2021-09: Is the Phillips Curve Still a Curve? Evidence from the Regions. Research Discussion Papers, 2021-09 (August).
<https://www.rba.gov.au/publications/rdp/2021/2021-09/background-on-the-phillips-curve-and-the-rbas-modelling-approach.html>
- Commonwealth of Australia. (2025). Budget 2025-26 Building Australia's Future.
<https://budget.gov.au/content/overview/download/budget-overview.pdf>
- Gittins, R. (2020, July 21). The Australian government's economic response to the coronavirus. Rossgittins.com.
<https://www.rossgittins.com/2020/07/the-australian-governments-economic.html?authuser=0>
- Gittins, R. (2021, May 1). Fiscal policy v Monetary policy in our weak economy. Rossgittins.com.
<https://www.rossgittins.com/2021/05/fiscal-policy-v-monetary-policy-in-our.html?authuser=0>
- Gittins, R. (2024, May 29). The budget, inflation & unemployment. Rossgittins.com.
<https://www.rossgittins.com/2024/05/the-budget-inflation-unemployment.html?authuser=0>
- Hutchens, G. (2025, October 29). Annual inflation surges to 3.2pc in September quarter, up from 2.1pc in June. ABC News; ABC News.
<https://www.abc.net.au/news/2025-10-29/september-quarter-inflation-2025-australia/105946244>
- Janda, M. (2025, October 29). Inflation data kills November rate cut chances as RBA faces headache. ABC News; ABC News.
<https://www.abc.net.au/news/2025-10-29/september-quarter-inflation-kills-interest-rate-cut/105946770>
- Jericho, G. (2025a, July 17). The latest unemployment figures show the RBA has failed Australians. The Australia Institute.
<https://australiainstitute.org.au/post/the-latest-unemployment-figures-show-the-rba-has-failed-australians/>
- Jericho, G. (2025b, October 22). Australia's surprise unemployment spike suggests an economy not overheating but in need of stimulus. The Guardian; The Guardian.
<https://www.theguardian.com/business/grogonomics/2025/oct/23/australias-surprise-unemployment-spike-suggests-an-economy-not-overheating-but-in-need-of-stimulus>
- Martin, P. (2023, August 13). We can and should keep unemployment below 4%, say top economists. The Conversation.
<https://theconversation.com/we-can-and-should-keep-unemployment-below-4-say-top-economists-211277>
- Reserve Bank of Australia. (n.d.). The COVID-19 Pandemic: 2020 to 2021. Reserve Bank of Australia. Retrieved January 11, 2026, from <https://www.rba.gov.au/education/resources/explainers/the-covid-19-pandemic-2020-to-2021.html#>
- Reserve Bank of Australia. (2025, November). Overview | Statement on Monetary Policy – November 2025. Reserve Bank of Australia.
<https://www.rba.gov.au/publications/smp/2025/nov/overview.html>

WHEN MACHINES DECIDE



AI, ALGORITHMS, INEQUALITY
AND THE ECONOMY

ZAINAB ABDUL WAJID
THE PONDS HIGH SCHOOL
NSW

An Introduction

A research direction provided by the Oxford University Press begs the following question, 'To what extent can artificial intelligence facilitate or disturb access to economic opportunities' (PNAS Nexus, 2024). As algorithms and AI increasingly determine access to jobs, markets, and information, the answer carries significant implications for opportunity, inequality, labour markets and the distribution of economic power and attention.

In 2016, an American report was published by the executive office of the president. "Artificial Intelligence, Automation, and the Economy." The anxieties surrounding artificial intelligence in 2025 were already anticipated in the report a decade earlier. It warned explicitly that 'automation has the capability to widen existing income and opportunity gaps,' while simultaneously asserting that "AI should be welcomed for its economic benefits,' a direct contradiction.

So, which one is it? Is artificial intelligence to be welcomed into the economy or to widen inequality?

This essay argues that although algorithms offer significant economic efficiencies, its underlying mechanics mean that it disproportionately benefits those already advantaged. Without substantial reform and intervention, AI will continue to widen inequality.

AI and Algorithms are Allocative Mechanisms

The core economic function of AI and algorithms are their ability to act as allocative mechanisms. An allocative mechanism is a system or method of deciding how scarce resources and factors of production are distributed across different uses (Cambridge 3rd edition). In the context of AI, algorithms function in this way through infiltrating employment, opportunity, audiences, and potential consumers.

So, what does this mean in practice today?

Section one: Algorithms in Employment

In labour markets, algorithms stand between workers and opportunity. According to the World Economic Forum, over 90% of employers use 'some form' of AI in their recruitment process (WEF, 2025). A key example of such 'forms' is the platform Indeed, which voluntarily explained its AI screening system just as of December 2025. Indeed's system parses resumes and job seeker profiles, extracting data such as skills, qualifications, employment history, keywords and prior engagement. This data is then compared against job descriptions to generate ranked lists of "matched candidates" through its tools 'Talent Scout' and 'Smart Sourcing'. Instead of presenting all applicants equally, the algorithm prioritizes those whose profiles most closely "align" with the employer's criterion, effectively allocating visibility and attention within the hiring process. As a result, access to employment is shaped by how legible an applicant's experience is to the platform's AI system.

From an economic perspective, this system lowers search and matching costs for firms by narrowing large applicant pools into shortlists, increasing efficiency and reducing time required to hire. This is known to be a gamechanger, as large TNCs receive hundreds of thousands of applications annually and must sort through serious contenders. For example, Google's HR head, Laszlo Bock, reported they receive over 3 million applications annually, and generally hire less than 1% of applicants. For job seekers, recommendations powered by AI increase the likelihood of engagement, as candidates surfaced by the algorithm are more likely to apply when prompted. But this efficiency relies on standardization. Resumes that do not follow traditional formats or use different terminology will be ranked lower by a confused algorithm that is unable to scan its text, despite the applicant possessing the relevant skills for the role. Although Indeed emphasises that final hiring decisions are made by employers, the initial distribution of opportunity is largely automated. Job seekers have limited insight into how rankings are determined or how weighting is assigned to different attributes, creating information asymmetry between platforms, employers and workers.

Looking past the improvements to efficiency such mechanisms provide, there is one fundamental fault in the application of AI: the promise of impartial machines is only as good as the data that feeds them. In October of 2018, BBC headlined “Amazon scrapped ‘sexist’ AI tool”, after discovering it ‘did not like women’ (Reuters). Programmed on collecting resume data from a male dominated tech workforce, the system taught itself to prioritize male candidates as ‘preferable’. In effect, it penalized applications that referenced the word “women’s” or “woman” despite female candidates being equally qualified to their male counterparts. John Jersin, the VP of LinkedIn Talent Solutions himself, seized on the case as evidence that algorithmic hiring is not inherently objective, “I certainly would not trust any AI system today to make a hiring decision on its own” (The Guardian).

Even after advancements to such technologies, 65% of adults in the United States state they would not apply for a job if AI made the hiring decisions (SIAI, 2025). This declining trust is and will continue having clear economic consequences. If qualified members of the labour force self-select out of markets due to algorithmic bias, the supply of the labour force will reduce economic output. Bias in, bias out. Rather than matching the most productive workers to jobs, biased systems misallocate human capital, increasing frictional unemployment* and lowering overall productivity. Systemically filtering out certain groups reduces workforce participation, widens inequality, and lowers overall productivity, Algorithmic bias is therefore not just an ethical concern but an economic one.

Section two: Algorithmic Visibility, Market Access, and the Survival of Businesses

- According to DataReportal, there were 5.6 billion active social media identities as of 2025.
- Over 90% of businesses connect with their audience on social media. Around 71% of SMEs use social media platforms to advertise. (NMS, 2025)

Social media has quickly become the number one way of marketing. Businesses, large and small, have ditched traditional advertising methods for the cost-effective alternative these platforms provide. According to Paula Pessagno, a digital marketing strategist, consumers crave connection with “real people behind brands” and no longer want to engage with “faceless companies”, making social media the perfect outlet for humanising your business through authenticity (PIXELD, 2023). Yet algorithms continue to push only certain types of companies, while drowning others. Why is it this way?

To understand the algorithms involved in social media, it is imperative to learn a few key concepts. According to Socially Inclined, social media algorithms operate as rule-based allocation systems that determine the distribution of 'visibility' and attention by ranking content according to engagement metrics, relevance, content type, and recency rather than chronological ordering, and every platform has a unique algorithm. Platforms such as Facebook, Instagram, and Twitter analyse user interaction histories (likes, comments, shares, saves, and viewing time) and use it to predict which content is most likely to maximize engagement. This content is then prioritized within users' feeds. In simpler terms, this means that content (videos, posts, reels) generating higher interaction is systemically amplified, while low-engagement content is suppressed regardless of quality (*Digital Marketing Institute, 2023*). To get technical is to see these algorithmic functions also as allocative mechanisms, distributing the scarce resource of user attention towards firms and creators that best align with platform incentives. Because algorithmic visibility is endogenous to past engagement, businesses with existing audiences (followers) or higher engagement are more likely to continue receiving exposure on people's feeds. This creates feedback loops that advantage some businesses while constraining market access for all others.

Facebook business pages now reach only 2.1% of their own followers organically, making it much harder for small brands to connect with audiences without paying for ads (Socialeum, 2025). Another alarming statistic is that while 77% of small businesses use Facebook as a primary 'marketing tool', only 14% of their posts are receiving any engagement (likes, comments, or shares) as of 2023 (Pew Research Center 2023). The platform's advertising algorithm itself also systemically benefits larger brands by leveraging the greater volume of data they generate. A 2023 analysis was able to deduce that businesses which spent over \$10,000/month on Facebook ads experienced a cost per click 25% lower than the CPC faced by businesses spending under \$1,000. This is a structural disadvantage to small businesses, over half of which (55%) report ad budgets of below \$500 a month (Pew Research Center, 2023).

Therefore, social media is a necessary alternative to traditional advertising, offering brands a marketing tool that is both cost effective and also provides potential access to engage with large audiences. However, although social media offers a low-cost marketing channel, the evident bias concentrates attention and opportunity among already established business firms, reinforcing economic disparities between TNCs and SMEs. Thus, while effective for marketing, these systems highlight how this technology can simultaneously welcome opportunity and widen inequity.

Welcome or Widen?

Artificial intelligence and algorithms occupy a paradoxical position in our modern economy. They deliver on efficiency, access and opportunity, yet simultaneously possess the capacity to entrench inequality further. In the world labour market, AI is already significantly involved in the recruitment and hiring process for over 90% of employers, yet the tool has been proven in the past to produce outputs based on bias. In digital marketing, algorithms are the perfect solution to reach millions of potential consumers in a cost-effective manner, yet day-by-day, small businesses are unable to gain any engagement on their posts. Across sectors, AI functions as an allocative mechanism that distributes resources, whether that be jobs, attention, visibility, but the rules governing that distribution are neither neutral nor transparent. The question is no longer whether AI has the capacity to benefit the economy, it clearly can. The real question is how society manages these systems to ensure that the promise of opportunity is not really the perpetuation of inequality.

References

- EXECUTIVE OFFICE OF THE PRESIDENT. (2016). Artificial Intelligence Automation Economy. <https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/Artificial-Intelligence-Automation-Economy.PDF>
- Capraro, V. (2024). The impact of generative artificial intelligence on socioeconomic inequalities and policy making. *PNAS Nexus*, 3(6). <https://doi.org/10.1093/pnasnexus/pgae191>
- Cook, T., Zasheva, M., & Wilby, A. (2022). Cambridge International AS/a Level Economics Study and Revision Guide Third Edition. Hodder Education.
- How Indeed Uses AI: Employer Tools and Responsible Use. (2025). Indeed.com. <https://www.indeed.com/hire/resources/howtohub/how-indeed-uses-ai>
- Sheard, D. N. (2025, May 15). Discrimination by recruitment algorithms is a real problem. Unimelb.edu.au; The University of Melbourne. <https://pursuit.unimelb.edu.au/articles/discrimination-by-recruitment-algorithms-is-a-real-problem>
- BBC. (2018). Amazon scrapped “sexist AI” tool. BBC News. <https://www.bbc.com/news/technology-45809919>
- Amitabh, U., & Ansari, A. (2025, March 28). Hiring with AI doesn't have to be so inhumane. Here's how. World Economic Forum. <https://www.weforum.org/stories/2025/03/ai-hiring-human-touch-recruitment/>
- Dastin, J. (2018, October 11). Amazon scraps secret AI recruiting tool that showed bias against women. Reuters. <https://www.reuters.com/article/world/insight-amazon-scrap-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK0AG/>
- AI Hiring Discrimination Is a Design Choice, Not an Accident. (2025, November 26). Swiss Institute of Artificial Intelligence. <https://siai.org/memo/2025/11/202511284324>
- Pessagno, P. (2023, August 8). 5 Reasons Why You Should Humanise Your Business on Social Media | Pixeld. Pixeld. <https://www.pixeld.com.au/5-reasons-why-you-should-humanise-your-business-on-social-media/>
- Team, S. I. (2025, June 23). Understanding Social Media Algorithms for Small Businesses. Socially Inclined. https://sociallyinclined.com/blogs/marketing-minute-blog/understanding-social-media-algorithms-small-businesses?srsltid=AfmBOoo8DvGtvlvxUe6gYiOaYoeviR_ICxFivtxc_Eu3SM5ZSEv0NL
- O'Brien, C. (2023, April 28). How Do Social Media Algorithms Work? Digital Marketing Institute. <https://digitalmarketinginstitute.com/blog/how-do-social-media-algorithms-work>
- Datareportal. (2025, July). Global Social Media Statistics. DataReportal – Global Digital Insights. <https://datareportal.com/social-media-users>
- How Many Businesses Use Social Media? Learning The Importance Of Social Media In Business Success. (2025, June 27). New Media Services. <https://newmediaservices.com.au/how-many-businesses-use-social-media/>
- Writer, S. (2025, May 27). Facebook Algorithmic Impact on Small Business Reach. Socialeum. <https://socaleum.com/facebook-algorithmic-impact-on-small-business-reach/>
- Lampe, C., Ellison, N. B., & Olmstead, K. (2016, June 22). Social Media and the Workplace. Pew Research Center: Internet, Science & Tech; Pew Research Center: Internet, Science & Tech. <https://www.pewresearch.org/internet/2016/06/22/social-media-and-the-workplace/>

WHY ARE BILLIONAIRES FACING
PUBLIC BACKLASH FOR BEING
RICH IN 2025?



SATHINI MONARAWILA
THE PONDS HIGH SCHOOL
NSW

What is a billionaire in the first place? The name is quite straightforward as dictionary.com describes it as “a person who has assets worth a billion or more dollars, euros, etc.” Becoming a billionaire was a common dream for many individuals, yet the economic impact of being one was quite an ignored topic. However, recently the media is resurfacing the significant economic impact that billionaires create. Now more than ever, individuals are starting to realise how their way of life is impacted by billionaires, causing immense public backlash where billionaires are being called to be ‘cancelled’. This article will explore and highlight the negative contribution billionaires make for the global economy.

The backlash against billionaires isn't a foreign concept; it's simply becoming more popular due to constant social media publication of the USA's current economic situation. Currently in the USA, there is high rates of wealth inequality and a growing wealth gap. The total wealth of billionaires has increased significantly whereas many ordinary Americans are struggling with basic amenities. Many people are emphasising that there is nothing inherently wrong with having wealth, however it's the extent of wealth where the issue lies. Elon Musk's net worth alone in 2025 was 726 billion dollars. His net worth is worth more than Belgium which is at 716 billion dollars as of 2025 according to Forbes. A single individual having that much money alone can crucially impact the overall economy that they contribute to, further impacting the global economy. From wealth inequality, monopoly power, tax avoidance, housing and social costs, and job displacements billionaires have the power to control these factors either positively or negatively. Many lives are impacted by billionaires who hold significant power to change the economy compared to an average individual.

Wealth Inequality and Monopoly Power

In the USA, the top 1% holds approximately 30% of the country's overall wealth. Globally, the top 1% of the world currently has a wealth of 125 trillion dollars, which is half of the world's wealth according to Credit Suisse. This statement is an eye-opening statistic that truly shows wealth inequality. Wealth Inequality refers to the "unequal distribution of assets and financial resources among individuals or groups within a society" (EBSCO). As mentioned before, Elon Musk belongs to the top 1% globally, meaning there are more individuals who all contribute to 30% of the USA's wealth. Billionaires have the ability to dictate the average American's life by having the power to control the economy. Monopoly power is a method that is utilised by large corporations for their advantage. Corporations that are led by billionaires control the markets by being able to set the terms of exchange with other companies and succeed in setting higher prices without losing any revenue. According to Oxfam, 18% of the world's billionaire's wealth is from utilising monopoly power. An example of a billionaire's wealth being accumulated by using monopoly power is Jeff Bezos who built Amazon. Amazon was allegedly revealed to have illegally maintained its monopoly power (FTC), leading to the Federal Trade Commission to sue

Amazon in 2023. Amazon used strategies including preventing rivals and sellers from lowering their prices, stopping rival companies from competing against their company fairly, lowering the quality for their consumers according to the Federal Trade Commission. This demonstrates how Amazon is a clear example of a monopoly and how it is a very powerful method that can crucially impact the market.

Monopoly power is harmful for the economy due to a multitude of reasons. When a business is able to set prices as high as they desire, the lack of competition leaves consumers with no other choice but to buy from them. This creates barriers for new businesses to enter the market, because when a company controls the entire market, the new business will struggle to compete and survive creating slow economic growth and will remain unbeneficial to consumers. Furthermore, monopolies are known to create market failures due to inefficiency. In an efficient market, the prices are constantly adjusting so that supply and demand will be in balance or in other words, meet market equilibrium. Whereas in a monopoly, businesses control the prices of their own products to favour their own profit, rather than allowing markets to determine the suitable price. Globally, monopoly power impacts the prices on goods and services by creating higher prices, economic inefficiencies, lack of global competition, and a weak economy. If 18% of the world's billionaire's wealth is from monopoly power, aren't they directly contributing to negatively impacting the economy?

Tax Avoidance

Billionaires have been known to pay significant low amounts of tax for income they make. Many reports have been published proving this statement. According to a 2025 article by the National Bureau of Economic Research (NBER) "How Much Tax Do US Billionaires Pay? Evidence from Administrative Data", the top 0.0002% wealthiest group of American households only paid an average tax rate of 24% between 2018-2020 compared to the top 45% labour income earners and 30% of the full population. These statistics highlight the wealth inequality, and how an average American must pay more tax compared to the top 0.0002%. Billionaires being taxed less results in loss of government revenue that is needed for economic growth. In result, workers and small businesses will experience an increase in the amount of income tax they have to pay. This causes higher levels of inequality resulting in weaker aggregate demand as the average person will have to spend more of their income due to the vast majority of it being cut off by tax. Thus, causing money to circulate slower throughout the overall economy, reducing overall demand. If billionaires were to pay the appropriate amount of tax, that would significantly help the global economy. More tax revenue will allow governments to have more money for growth, creating long-term economic growth that will benefit households and businesses. Taxing appropriate amounts for billionaires, allows for wealth inequality to fall, further strengthening the overall economy as more households will be spending more money thus, benefiting the economy. An example of increasing tax on wealthier individuals has already been proposed by Zohran Mamdani, mayor of New York City. According to the Wall Street Journal it states that Mamdani has proposed a, "2% tax increase on incomes over 1 million dollars, which would produce 4 billion dollars in tax revenue." By implementing this, the economy can significantly improve as that money will be used to fund public services in New York City. This goes on to prove how appropriate taxations on the wealthy will increase tax revenue and benefit the economy. When billionaires are finally paying the appropriate amount of tax on their income, it can strengthen and benefit everyone within the economy.

Housing and Social Costs

Housing and social costs are important factors for people's way of life, and an indicator on how an economy is performing. Globally, housing is known to be an existing issue, due to inflation and unaffordability. In countries like Australia and America housing is often unaffordable for the average citizen, billionaires play a key role in this issue. In Australia, the housing crisis is one of the most prevalent issues that has been affecting the economy since the early 2000s. Housing has become unaffordable in many parts of Australia. According to Anglicare Australia's 2025 Rental Affordability Snapshot "only 0.7 per cent of rental listings are affordable for someone earning a full-time minimum wage." The number of Australian billionaires has doubled between 2015 and 2025 according to Oxfam Australia's analysis of the rich showing the leap from 74 to 161 billionaires in the span of 10 years. Billionaire wealth has reportedly grown to 137 million dollars a day (SBS). Billionaires use real estate as an asset, by buying property, which continues to drive up prices of property and reducing the amount of affordable housing for average people. The United States is home to the largest number of billionaires in the world, additionally global billionaires purchase many properties in the United States; however, these properties are majority left vacant. They contribute to a large investment in the US markets and are often used for luxury housing schemes. According to inequality.org, in America there are 16 million vacant homes. To simplify, that is 28 vacant homes for every unhoused person. With over 900 billionaires in America, they hold a combined wealth of 6.9 trillion dollars. A huge amount of their wealth is used on investing in land, houses and property. Globally there are around 3000 billionaires that all have a combined wealth of 16.1 trillion dollars. This significantly contributes to the issues with social costs. Billionaires are also facing immense backlash for high carbon emissions rates. Every individual contributes some sort of carbon emission to the world; however, billionaires contribute a million times more carbon to the atmosphere than the average person. Many billionaires are known to be taking their private jets constantly for personal use, making them key contributors to climate change. According to Oxfam, "The richest 1 percent of the world's population produced as much carbon pollution in 2019 as the five billion people who made up the poorest two-thirds of humanity." The Social cost of carbon (SCC) "is an estimate, in dollars, of the economic damages that results from emitting an additional ton of carbon dioxide into the atmosphere" (Resources for the Future). The SCC aims to measure the damage per tonne of CO₂, by seeing how high the levels of carbon emissions from the top 1% is. It is proven that they contribute heavily to the total cost of climate change. Billionaires are actively negatively contributing to the housing and social costs proving how having a significant amount of wealth negatively impacts the average person's daily life.

Job Displacements

With artificial intelligence dominating businesses and markets, many companies rushed to incorporate AI given its cost effective nature and promising improvements for efficiency. More profit is being generated at a faster rate for businesses that prioritise AI instead of humans, causing an increase in loss of jobs across the job market. Billionaires are making major investments in AI for their companies, in the future it is expected to see many more jobs becoming replaced by AI, leaving many people unemployed. Gregory Hinton, godfather of AI stated, "What's actually going to happen is rich people are going to use AI to replace workers," he also stated "It's going to create massive unemployment and a huge rise in profits. It will make a few people much richer and most people poorer." Unemployment is a crucial indicator that an economy is becoming weaker. In the future, if billionaires with big companies start to lay off more people so they can be replaced with AI, it will reduce consumer spending and lower the overall GDP, ultimately leading to a declining global economy.

Conclusion

An individual who is a billionaire, has the ability to impact the global economy significantly. The public backlash for billionaires is a reasonable response to how the average individual lives are slowly becoming more expensive and difficult. While average citizens are beginning to notice the strains of how they live their daily lives, the wealthy continue to thrive; "let them eat cake". This immense amount of economic imbalance and wealth inequality will only continue to negatively impact the global economy if nothing changes. If billionaires have more power than the average individual to impact the economy the amount of disadvantages will far outweigh the benefits.

META COMPANY CURRENT STATUS



**AND METAVERSE
TRANSFORMATION AND RESEARCH
BUSINESS REPORT**

LEVI WANG
THE SCOTS COLLEGE
NSW

In 2026, Meta is confronting a challenge that will have profound implications for its current fiscal year and long-term future: how to maintain a balance between its mature core business and explosive emerging technologies while strengthening its overall growth momentum. Meta's primary revenue has long been derived from advertising on its social media platforms, to the extent that Meta has effectively become synonymous with social media advertising. However, the company is now reallocating significant resources toward artificial intelligence (AI) and augmented reality (AR) technologies. This strategic shift clearly demonstrates that Meta's leadership has recognized the substantial long-term potential within the AI and AR domains. Although Meta's advertising revenue has continued to grow—from US\$1.868 billion in 2010 to nearly US\$150 billion in 2024—the pace of growth has noticeably slowed in recent years, influenced by the combined effects of the pandemic and Apple's IDFA (Identifier for Advertisers) privacy policy changes. This slowdown has simultaneously created both pressure and opportunity: it compels Meta to safeguard its dominant existing revenue stream while simultaneously pursuing diversification of its business lines and capturing high-potential opportunities in emerging frontier technologies. This report examines Meta's current corporate overview, its valuation potential, the underlying rationale for its strategic transformation, and the broader societal implications that this transition may bring.

Meta Platforms dominates as the world's largest social media system, where it systematically matches advertiser supply with consumer demand in a two-sided platform market through extensive use of user data. Over the past five years, advertising revenue has consistently accounted for more than 90% of total revenue. At the same time, Meta has further expanded its advertising inventory through strategic acquisitions and cooperation with Google's advertising alliance. The company acquired Instagram in 2012; according to Meta's disclosures, Instagram reached 1 billion monthly active users (MAU) by 2019. Even as overall advertising growth at Meta slowed, Instagram continued to deliver strong revenue increases. According to eMarketer data, Instagram's share of Meta's total advertising revenue reached 50.7% in 2021.

Furthermore, Meta has capitalized on its substantial traffic advantage by integrating advertising demand and supply resources to launch proprietary ad placement platforms and advertising alliances, thereby driving additional growth in advertising revenue. The broader advertising industry itself remains in a phase of relatively stable expansion. Global advertising expenditure grew from US\$403.6 billion in 2011 to nearly US\$920 billion in 2024, representing a compound annual growth rate (CAGR) of 5.46%—a notably solid performance. Within this context, the share of advertising expenditure in global GDP has increased, providing structural support and cyclical resilience to the industry. In the United States, a mature benchmark market, advertising spending as a percentage of GDP rose from 1.0% in 2011 to approximately 1.4% in 2024. This structural uplift can be directly attributed to the rightward shift in both demand and supply curves resulting from the digital transformation of the advertising market. As a result, Meta has been able to maintain above-average revenue elasticity within a mature advertising landscape.

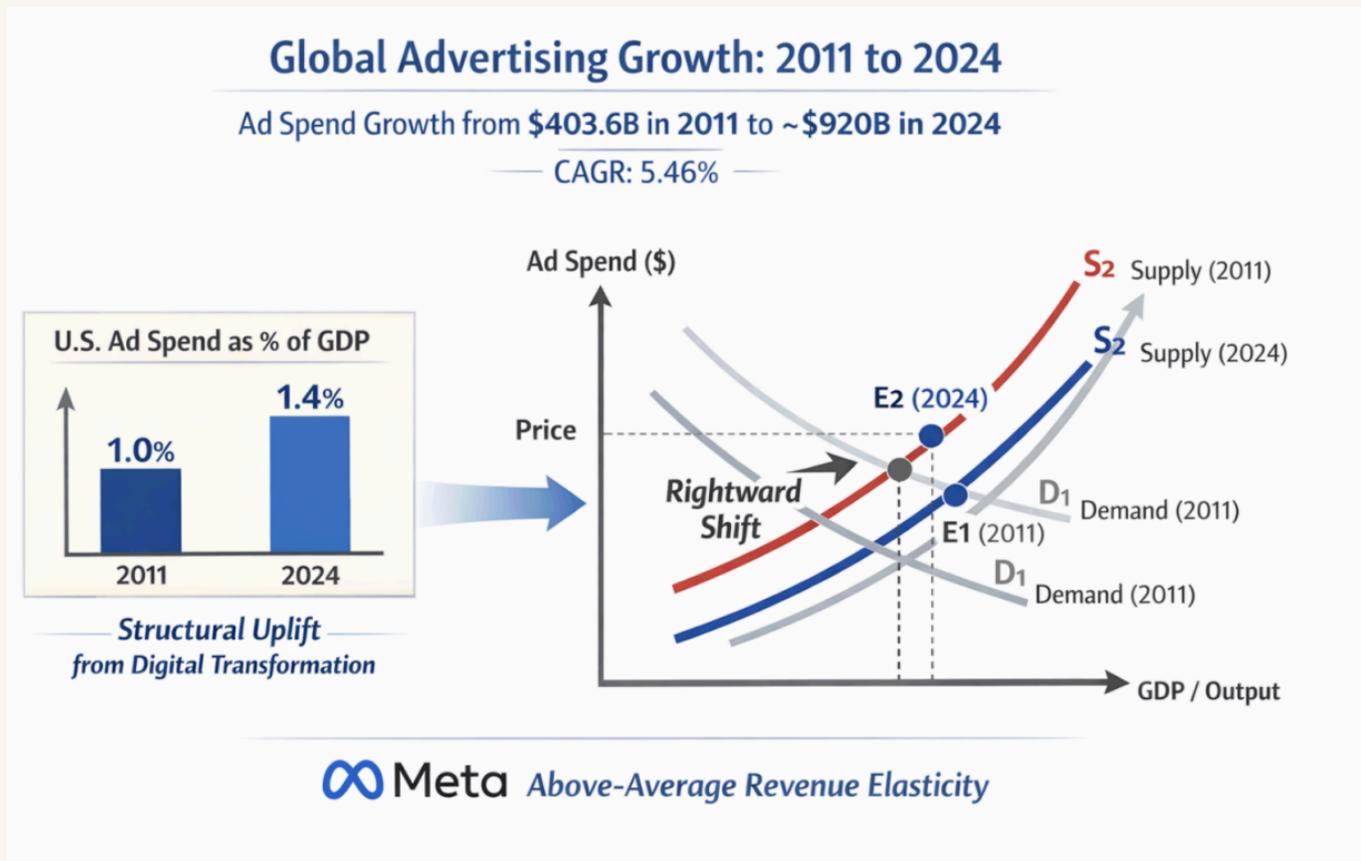


FIGURE 1: Global advertising growth from 2011 to 2024. Source: Meta Platforms, Inc. (n.d.).

Concurrently, Meta is increasing its investment in artificial intelligence (AI) and metaverse-related technologies, albeit with a more nuanced approach following recent adjustments. Capital expenditure for 2025 has been raised to US\$70–72 billion, with even higher spending anticipated in 2026, primarily directed toward AI infrastructure and talent acquisition. This includes a strategic shift from open-source models such as LLaMA toward proprietary AI systems, with the aim of internalizing innovation incentives and reducing dependence on external models and infrastructure.

In the metaverse domain, Meta has undertaken a significant restructuring. The company announced the layoff of more than 1,000 employees in Reality Labs focused on VR development technologies related to the broader metaverse vision. Compared with the expansive metaverse concept and traditional virtual reality business, Mark Zuckerberg now appears to favor integrating these efforts with wearable devices (such as the latest Meta Ray-Ban Stories smart glasses), AI technologies, and mobile platforms. This pivot is closely related to Reality Labs' long-standing operating losses; in the most recent quarterly earnings report (October of last year), Meta reported a US\$4.4 billion loss for the division. Despite the contraction in certain VR initiatives, Meta has not abandoned the metaverse vision. Nevertheless, significant risks continue to confront the company in the current environment. Over the long term, Apple's IDFA privacy policy changes have materially reduced the precision of targeted advertising on Meta's platforms, contributing to downward pressure on advertising revenue. The competitive landscape has also deteriorated further. The rapid and powerful rise of TikTok has created direct and intense competitive pressure on Meta, with the potential to exert greater-than-expected negative impact on advertising revenue across Meta's family of social media applications.

Meta's strategic pivot toward integrating artificial intelligence (AI) with augmented reality (AR) and virtual reality (VR)—commonly referred to as the metaverse—stems from efforts to move beyond the maturity of its advertising-driven business model, motivated by the prospect of securing first-mover advantages in emerging markets. Meta established an early presence in the metaverse space, most notably through its acquisition of the virtual reality company Oculus in July 2014, which demonstrated Mark Zuckerberg's long-standing vision and strategic commitment to what he perceived as the next generation of digital experience. The metaverse, as a novel form of social community, holds the potential to become Meta's next major growth curve. Social interaction constitutes a core element of the metaverse, and it is expected to generate meaningful synergies with Meta's existing social graph. The metaverse concept itself originates from Neal Stephenson's 1992 science fiction novel *Snow Crash*, which envisioned a "new world" constructed within persistent virtual space—an early literary anticipation of the next evolution of the internet.

From a social perspective, the metaverse enables the delivery of diverse functionalities such as gaming, fitness, and other immersive experiences. As the world's largest social media company, Meta possesses a deep understanding of social dynamics and maintains the most extensive social graph globally, providing the company with a decisive competitive advantage in shaping the metaverse. During the third-quarter 2021 earnings call, Zuckerberg announced the rebranding of the company from Facebook to Meta Platforms, Inc., and reorganized its business into two primary segments: the Family of Apps and Reality Labs. Artificial intelligence and related functions were placed under Reality Labs to fully support the development of the metaverse business, capitalizing on network effects inherent in virtual economies.

By integrating AI with AR/VR technologies, Meta has established a notable advantage on the hardware front. In the AR domain, the company offers the lightweight Ray-Ban Stories smart glasses, developed in partnership with Ray-Ban, which support functionalities including calls, photography, and music playback. In the more advanced AR space, Meta continues development of Project Nazare (now evolved into subsequent initiatives), which aims to deliver higher-dimensional intelligence through features such as eye tracking, facial tracking, hand-gesture recognition, and expressive avatar communication.

Crucially, Meta has explored the integration of advertising into the metaverse as a foundation for future revenue streams. Given that the metaverse is inherently a highly social virtual environment, it presents numerous opportunities for innovative advertising formats. In May 2021, Meta announced a test of AR headset advertisements within its metaverse application ecosystem (then branded as Oculus), collaborating with Resolution Games to introduce the first in-game AR advertisement in the title *Blaston*.

At the same time, Meta has undertaken a significant strategic recalibration in its metaverse efforts, directly addressing the central challenge introduced at the beginning of this report: how to maintain a sustainable balance between its mature, advertising-driven core business and high-growth emerging technologies while reinforcing overall long-term growth momentum. The company has reduced the budget for its VR-focused Reality Labs division by as much as 30%, redirecting capital toward AI infrastructure—including multi-billion-dollar investments in data centers and the training of Llama models. This reallocation aims to lower development costs and enhance the immersive quality of VR content, thereby creating a more cost-efficient foundation for future metaverse monetization. The shift also reflects rising demand elasticity in emerging markets: evolving consumer preferences for virtual interaction have driven an outward shift in the demand curve, while rapid advancements in AI technology have propelled a rightward movement in the supply curve, enabling more efficient production and distribution of metaverse experiences. By strategically prioritizing AI capabilities to accelerate and de-risk metaverse development, Meta not only optimizes the cost structure of its frontier initiatives but also positions these technologies as complementary drivers of revenue diversification—directly mitigating the slowdown in traditional advertising growth and ensuring the company continues to strengthen its overall growth trajectory amid the maturity of its core operations.

Meta's strategic transformation toward the metaverse likewise generates significant societal implications. From a positive standpoint, this shift produces substantial positive externalities with spillover effects across the broader economy. Investments in artificial intelligence significantly accelerate overall productivity growth in the digital economy, with the potential to deliver incremental gains to global GDP while stimulating innovation ecosystems and accelerating the adoption of AI tools by small and medium-sized enterprises.

At the same time, by reinforcing the social dimension of the metaverse, Meta delivers a more convenient and accessible global social networking infrastructure. However, the transition also generates negative consequences. It exacerbates structural unemployment: recent Reality Labs layoffs have accelerated the flow of technical talent from virtual reality into artificial intelligence, creating immediate skill mismatches and labor-market frictions. Technological change reduces demand for specialized VR roles while creating new demand in AI-related fields, yet short-term skill gaps lead to transitional unemployment, wage pressures, and high reallocation costs, imposing hardship on affected workers. Additionally, intensified AI-driven personalization and large-scale data collection heighten privacy risks, including unauthorized data misuse. Users often underestimate the cumulative harm of aggregated data, resulting in over-exploitation of personal information—a digital equivalent of the tragedy of the commons. Addressing these market failures requires systematic government regulation. Frameworks such as the EU's Digital Markets Act illustrate proactive steps to impose obligations on gatekeepers, curb anticompetitive practices, and prevent unauthorized acquisition or misuse of personal data.

References

- GoPractice. (n.d.). Apple's attack on Meta. <https://gopractice.io/shorts/apples-attack-on-meta/>
- eMarketer. (n.d.). Instagram contributes over half of Facebook US ad revenues. <https://www.emarketer.com/content/instagram-contributes-over-half-of-facebook-us-ad-revenues>
- Meta. (2025, October 29). Meta reports third quarter 2025 results. Meta Investor Relations. <https://investor.atmeta.com/investor-news/press-release-details/2025/Meta-Reports-Third-Quarter-2025-Results/default.aspx>
- CNBC. (2026, January 13). Meta lays off VR employees, underscoring Zuckerberg's pivot to AI. <https://www.cnbc.com/2026/01/13/meta-lays-off-vr-employees-underscoring-zuckerbergs-pivot-to-ai.html>
- CNBC. (2024, October 30). Meta's Reality Labs posts \$4.4 billion loss in third quarter. <https://www.cnbc.com/2024/10/30/metass-reality-labs-posts-4point4-billion-loss-in-third-quarter.html>
- Facebook (Meta). (2024, September 10). Introducing Orion: Our first true augmented reality glasses. <https://about.fb.com/news/2024/09/introducing-orion-our-first-true-augmented-reality-glasses>
- Road to VR. (n.d.). Blaston in-game VR Facebook advertising reverse course. <https://www.roadtovr.com/blaston-in-game-vr-facebook-advertising-reverse-course>
- Yahoo! Finance. (n.d.). Meta Platforms lost \$73 billion. <https://finance.yahoo.com/news/meta-platforms-lost-73-billion-165823364.html>

Final Remarks

Thank you for reading **Issue One of The Young Economist's Journal**. I hope the articles in this edition have offered meaningful insight and encouraged deeper economic thinking.

I would also like to extend my sincere thanks to our authors for their thoughtful analysis and dedication to rigorous inquiry.

If you have any questions for MADE or any of the authors, or would like to provide feedback regarding the journal, feel free to get in touch through **econ.made@gmail.com**.

Details regarding submissions for the next issue will be released in due course. The format will remain consistent, and prospective contributors are encouraged to begin refining their ideas in preparation for the upcoming call for submissions. Feel free to write articles that challenge or build upon the articles presented here.

– Gabriel Song, President, MADE

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