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DEATH OF A SALESPERSON: THE DECLINE IN SELF-EMPLOYMENT IN THE 21ST CENTURY

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Summary

Australia's self-employment rate has **fallen sharply since the early 2000s,** pointing to a **shift in how business activity is organised**. The decline is concentrated among unincorporated businesses that employ others, while solo self-employment has fallen only modestly, partly reflecting the expansion of gig work. Over the same period, the share of company owners has risen, pointing to a shift in the organisational form of business ownership rather than a uniform retreat from entrepreneurial activity.

Using the ABS Longitudinal Labour Force Survey and the HILDA Survey, **we show that the fall in unincorporated self-employment aligns closely with changes in labour market incentives.** We interpret these patterns as reflecting two broad trends:

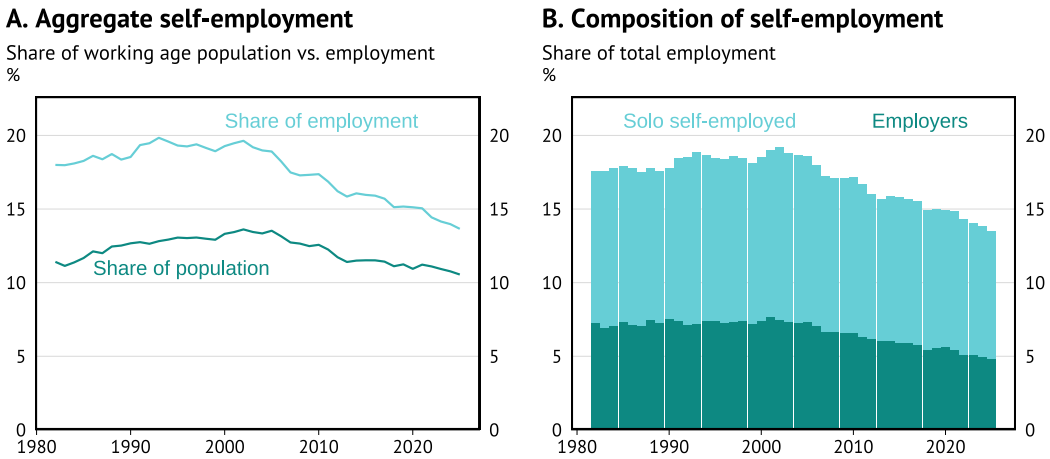
- **Technological change has increased the returns to non-routine cognitive skills**, such as problem solving, creativity and interpersonal skills, in wage jobs, raising the opportunity cost of running an unincorporated business for high-skill workers, and
- Wage employment has become more financially secure as **employee-linked benefits — including superannuation and paid leave — have risen as a share of labour income.**

These patterns are best interpreted as a **reallocation across forms of work and business organisation.** Lower rates of unincorporated business ownership may matter for pathways into employership and local job creation, but **they do not mechanically imply weaker productivity growth.** Understanding the barriers to growth for young companies appears to be a clearer path to explaining the productivity slowdown.

The self-employment rate has declined over the 21st century

Australia's self-employment rate has fallen steadily since the early 2000s (panel A of Figure 1) (Atalay et al., 2014).[1] The decline has occurred alongside weaker business formation and slower productivity growth in many advanced economies (Andrews et al. (2022); Decker et al. (2016)), but the self-employment trend itself is not uniform across types of business owners.

Figure 1: Decline in the share of self-employment*



* Self-employment includes all types of owner managers.
Sources: ABS Longitudinal Labour Force Survey; e61 Institute

1 We thank Michael Coelli, Ewan Rankin, Petr Sedlacek and Faisal Sohail for valuable feedback and Elyse Dwyer for sharing her estimates of occupational task intensity. We are solely responsible for errors.

The fall is concentrated among self-employed people who hire workers ('employers') (panel B of Figure 1). By contrast, solo self-employment — including forms of platform-mediated work — has declined only modestly. The headline decline therefore reflects a specific shift away from one traditional pathway into employership, rather than a broad fall in all forms of independent work.

This note examines why fewer Australians are starting and running unincorporated businesses. The analysis draws on worker-level data from the ABS Longitudinal Labour Force Survey (LLFS) and the Household Income and Labour Dynamics in Australia (HILDA) Survey, complemented by firm-level evidence. Definitions and data sources are summarised in Appendix A.

Our central finding is that the decline reflects structural changes in the labour market (Borland and Coelli, 2023). Skills that support running a business — judgement, problem-solving, and interpersonal capability — are increasingly rewarded within wage and salary jobs. As a result, many high-skill workers face stronger incentives to choose wage employment rather than operate unincorporated businesses.

Box 1: Self-employment is not the same as entrepreneurship

A falling self-employment rate is often interpreted as evidence of declining entrepreneurship. But self-employment is a noisy proxy for entrepreneurial activity (Glaeser, 2007; Levine & Rubinstein, 2017). It combines very different types of work, from small own-account activities with little intention to grow, to founders of businesses designed to scale.

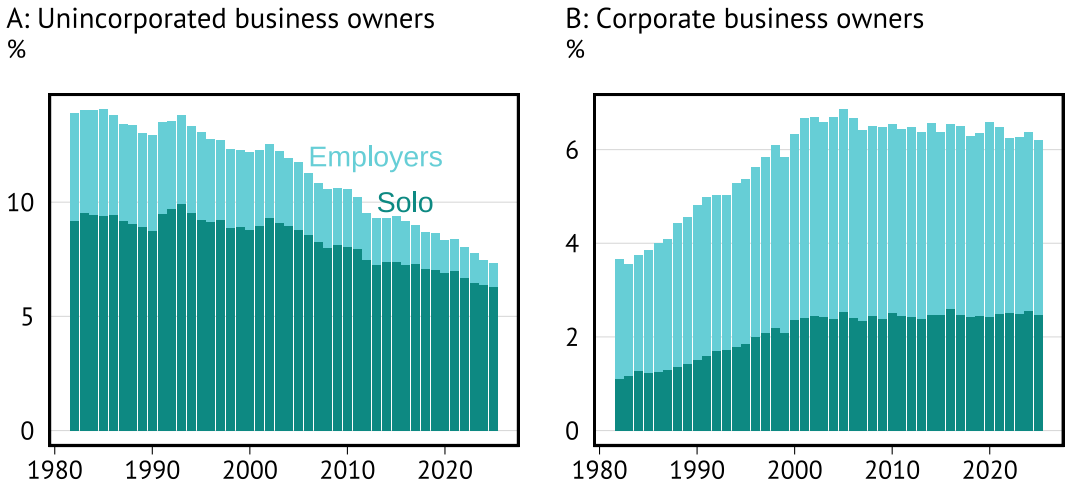
A useful distinction is organisational form. Owners of incorporated businesses face higher fixed costs and regulatory requirements, but benefit from limited liability and a separate legal identity. These features are especially valuable for larger, riskier, and potentially more growth-oriented ventures. Many unincorporated businesses, by contrast, operate at a smaller scale, tend to be less growth-oriented, and are often lifestyle or subsistence activities.

Owners of incorporated businesses face higher fixed costs and regulatory requirements, but benefit from limited liability and a separate legal identity. These features are especially valuable for larger, riskier, and potentially more growth-oriented ventures. Incorporation can also make it easier to raise outside capital by issuing equity to new investors, which may make the corporate form more amenable to scaling than unincorporated structures.[a]

Therefore, trends in self-employment need to be interpreted alongside changes in organisational form. A decline in self-employment concentrated among unincorporated businesses does not map one-for-one into a decline in growth-oriented entrepreneurship, but instead points to a shift in how business activity is organised.

a We flag this as a plausible mechanism; access to external equity is typically more straightforward under incorporation because ownership can be divided into shares, although unincorporated businesses can still raise finance through debt or new partnership arrangements.

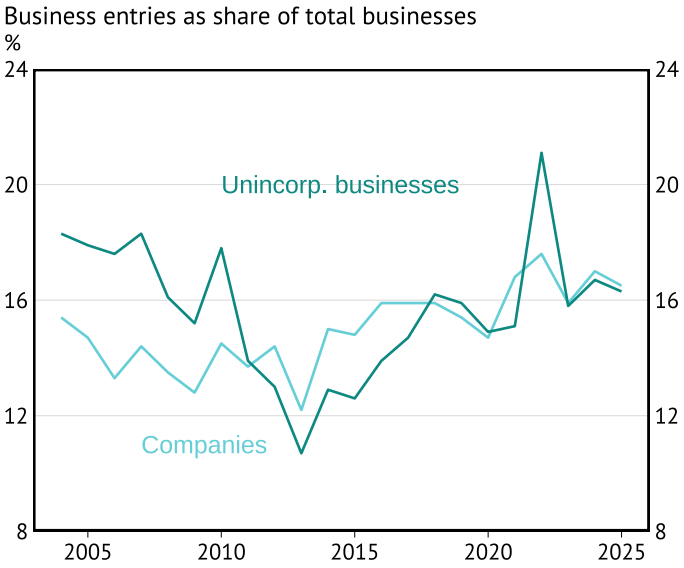
Figure 2: Decline in the share of unincorporated business owners*



Sources: ABS Longitudinal Labour Force Survey; e61 Institute

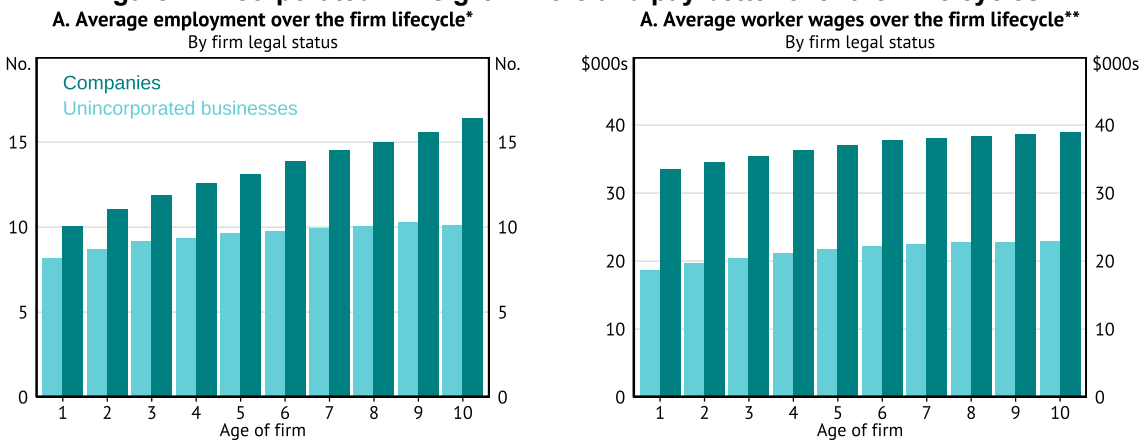
The shift in organisational form is also evident in firm entry data. Based on administrative business registers, overall business creation declined over the 2000s primarily because fewer unincorporated businesses were established, while entry among companies fell by much less (Figure 3). The decline in business formation is therefore concentrated in the same segment of the firm distribution as the fall in unincorporated self-employment.

Figure 3: Lower business creation during the 2000s was due to fewer unincorporated businesses



Sources: ABS; e61 Institute

Figure 4: Incorporated firms grow more and pay better over their life cycles



* Average employment measured by end-of-year headcount.
** Average worker wages measured on an annual basis and in 2011 dollars.
Sources: ABS; e61 Institute

This pattern suggests that the headline fall in business creation reflects a narrowing of small-scale, unincorporated entry rather than a broad-based decline in the formation of businesses. Instead, entry appears to have shifted across organisational forms, consistent with a reorganisation in how new business activity is structured.

Organisational form is also associated with different lifecycle patterns. On average, companies grow faster, pay higher wages, and operate at larger scales over time than unincorporated businesses (Figure 4). These differences persist when comparing firms at similar ages, suggesting that incorporated and unincorporated businesses tend to follow distinct growth trajectories.

Unincorporated businesses are more likely to remain small and exhibit limited employment expansion, whereas incorporated firms are more likely to scale. These averages do not imply that all incorporated firms are growth-oriented, nor that unincorporated businesses lack ambition; rather, they indicate that the two organisational forms occupy different parts of the firm-size and growth distribution.

Taken together with the entry evidence, the decline in unincorporated business formation should be interpreted as a contraction in one segment of the firm population, rather than a broad decline in firms with the capacity to scale.

The changing skill mix of wage jobs and self-employment

To interpret these trends, we examine how the task content of work has evolved across three groups: employees, unincorporated business owners, and incorporated business owners based on data from the Household Income and Labour Dynamics in Australia (HILDA) Survey. We combine information on occupational tasks with each group's occupational composition over time.

Box 2: The task content of occupations

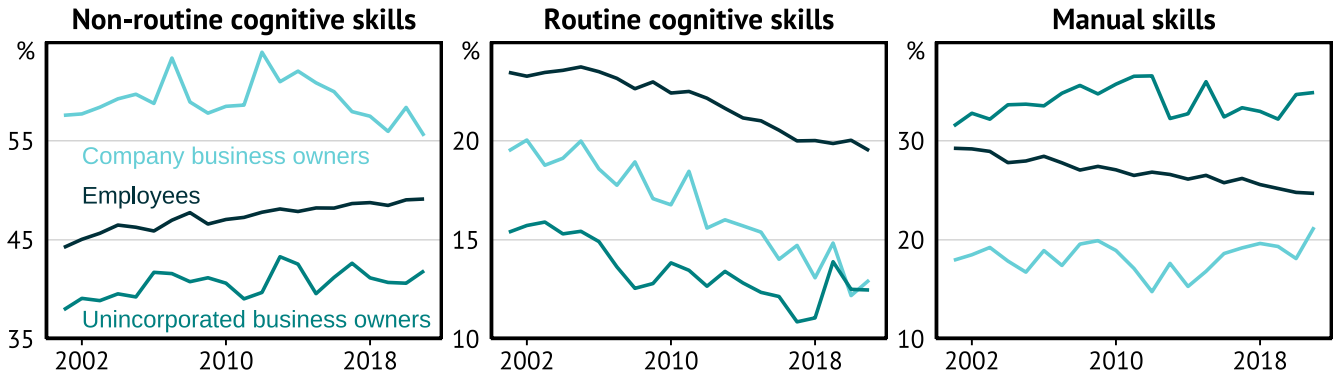
To measure tasks, we use the International Standard Classification of Occupations 2008 (ISCO-08) (Mihaylov and Tijdens, 2019). Around 3,000 occupation-specific tasks are classified into five clusters (non-routine analytic, non-routine interactive, routine cognitive, routine manual, and non-routine manual), based on whether tasks can be automated and whether they require cognitive or manual skills.

We estimate the share of each task cluster for every four-digit occupation (ANZSCO 2006), with task shares summing to one within each occupation. These task measures are matched to workers in household survey data at the four-digit occupation level. Task intensity for employees, unincorporated business owners, and incorporated business owners is then constructed by weighting occupations by their employment shares within each group and year.

Company owners perform very different tasks to both unincorporated business owners and employees. They display substantially higher non-routine cognitive and interpersonal task intensity (Figure 5). These are skills that are hard to automate and are central to complex decision-making, creativity, persuasion, and management.

Figure 5: Changes in the skill mix across types of employment

Share of skills; by type of employment



Sources: e61 Institute; HILDA Survey Release 21.0

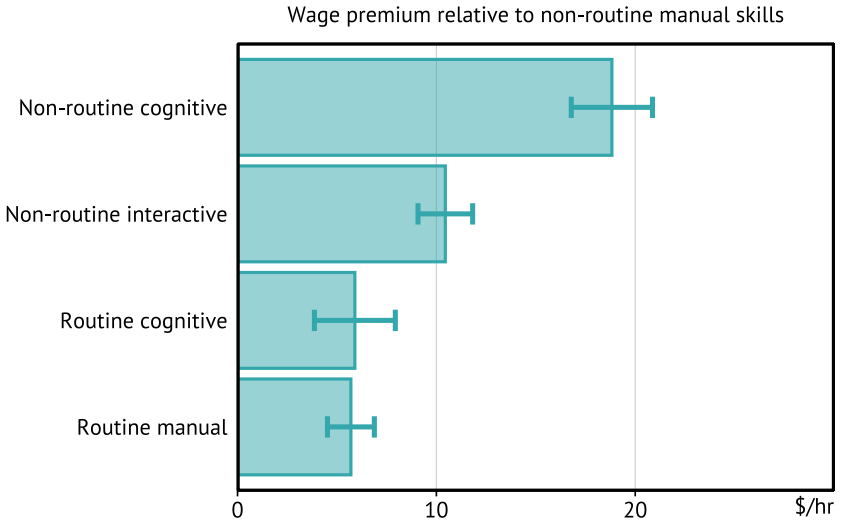
These non-routine skills attract a large earnings premium. Jobs with high non-routine cognitive intensity pay around $20 more per hour than jobs concentrated in non-routine manual tasks (Figure 6).

Why are fewer people choosing self-employment?

Choosing to start a business is an occupational choice between wage work and self-employment. A sustained decline in self-employment implies that operating a business has become less attractive relative to wage employment. This can occur if: i) the expected returns to business ownership fall, ii) the returns to wage employment increase, and/or iii) the expected costs or perceived risks of business ownership rise.

Previous research has emphasised declining returns to entrepreneurship. Skill-biased technical change (Acemoglu, 2002; Krueger, 1993) and a falling relative price of capital goods (Krusell et al., 2000) have been linked to lower self-employment (Salgado, 2020). Other explanations focus on demographic forces such as slower labour force growth (Hopenhayn et al., 2022; Karahan et al., 2019) and population ageing (Bornstein, 2019; Engbom, 2020). A related literature highlights policy and institutional frictions that increase the costs of starting and operating small firms (Decker et al., 2018), potentially favouring larger firms as regulation and technology evolve (Kozeniauskas, 2022).

Figure 6: The wage premium is highest for non-routine cognitive skills



* Estimated coefficients in a regression of hourly wage earnings on each type of skill. The regression includes controls for gender, age and job tenure. Vertical bars show 95% confidence intervals.
Sources: e61 Institute; HILDA Survey Release 21.0

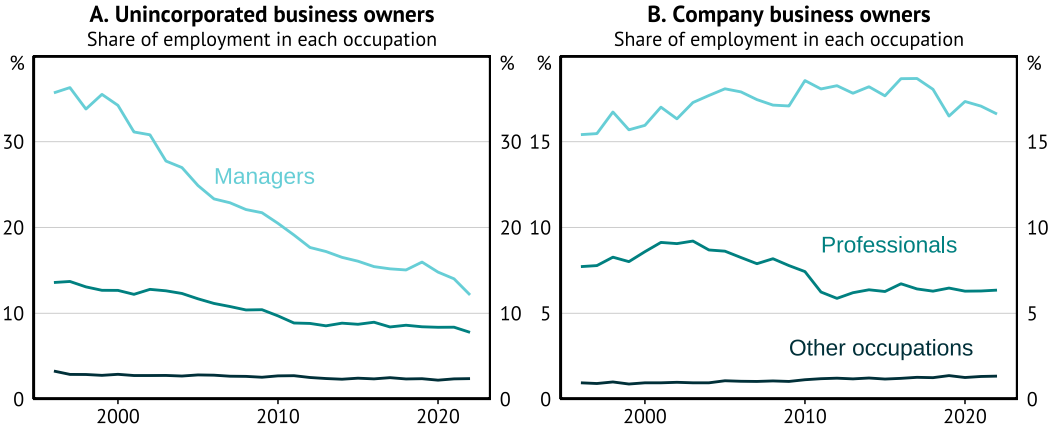
Our approach complements this literature by emphasising changes in labour market incentives. We adopt an occupational choice framework (Levine & Rubinstein, 2020), in which individuals compare financial and non-financial returns, risks, and constraints across work arrangements. In this setting, self-employment can fall not only when business returns decline or costs rise, but also when wage employment becomes more attractive — for example, because high-value skills are increasingly rewarded within wage jobs, or because wage jobs offer greater income security.

The expected benefits of self-employment have fallen

Comparing financial returns between self-employment and wage employment is difficult because we do not observe each individual's next-best alternative. Even so, the evidence points to a clear shift: operating an unincorporated business has become less financially attractive relative to wage employment.

The decline has been particularly pronounced among high-skill occupations, such as managers and professionals (Figure 7). Between 2000 and 2023, the share of managers operating unincorporated businesses fell from around 40 per cent to 15 per cent. This pattern suggests that the opportunity cost of running an unincorporated business has risen most for workers with skills that are increasingly valued in wage jobs.

Figure 7: Self-employment rates have fallen by more for managers and professional workers



Sources: ABS Longitudinal Labour Force Survey; e61 Institute

We quantify this opportunity cost by comparing the skill earnings premium — the earnings gap between high- and lower-skill workers — across self-employment and wage employment.[2]

Over the past two decades, the skill earnings premium has increased substantially in wage employment but not in self-employment (Figure 8). In 2001, high-skill wage earners earned around 10 per cent more than other workers; by the 2020s, this gap had widened to 25 per cent. In contrast, there is little evidence of a comparable rise in the self-employment premium for high-skill workers. Wage jobs increasingly dominate as the higher-return option for many high-skill workers. In other words, workers in professional occupations increasingly receive a higher wage than workers in non-professional occupations, but this is not true for business income.

Figure 8: Earnings for high-skill workers have increased more in wage jobs*

* Based on conditional estimates that control for gender, age and job tenure. Shaded areas show 95% confidence intervals.
Sources: e61 Institute; HILDA Survery Release 21.0

These patterns are consistent with skill-biased technical change reshaping where high-value tasks are performed and remunerated ((Salgado, 2020); (Kozeniauskas, 2022); (Jiang & Sohail, 2023)). As shown in Figure 5, capabilities often associated with entrepreneurship — problem solving, judgement, and complex interpersonal interaction — are increasingly embedded in wage employment, reducing the relative financial advantage of operating an unincorporated business ((Caplin et al., 2023)).[3]

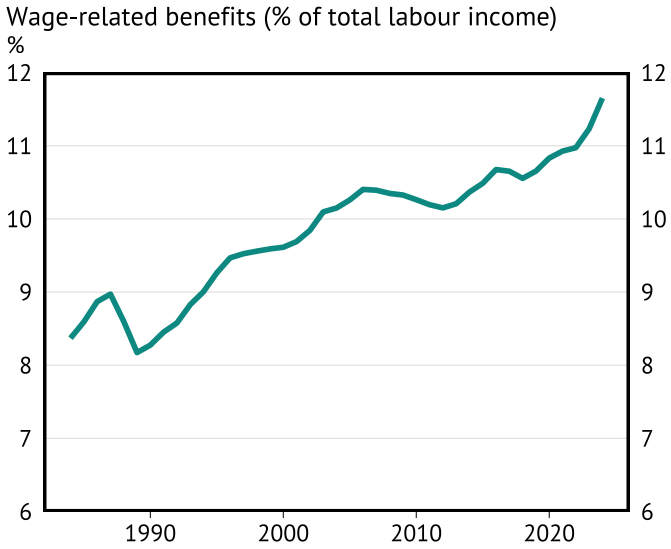
The expected costs and risks of self-employment have risen

A second force is the rising value of wage-linked benefits and income insurance. Employer superannuation contributions and other non-cash benefits have increased from around 8 per cent of total labour income in 1990 to nearly 12 per cent in 2025 (Figure 9).[4] These benefits raise the effective returns to wage employment and provide insurance that is less accessible in unincorporated self-employment. Beyond superannuation, employees typically receive other forms of risk protection and paid entitlements — such as workers' compensation coverage, paid annual and personal leave (or leave loading / casual loadings), and in many cases protections relating to termination — which further increase the relative security of wage employment.[5]

These changing incentives are apparent in household structure patterns. The fall in self-employment is concentrated within couple households, and is especially large for married couples and younger couples during child-rearing years (Figure 10). Additional breakdowns by age, gender and geography are shown in Appendix C.[6]

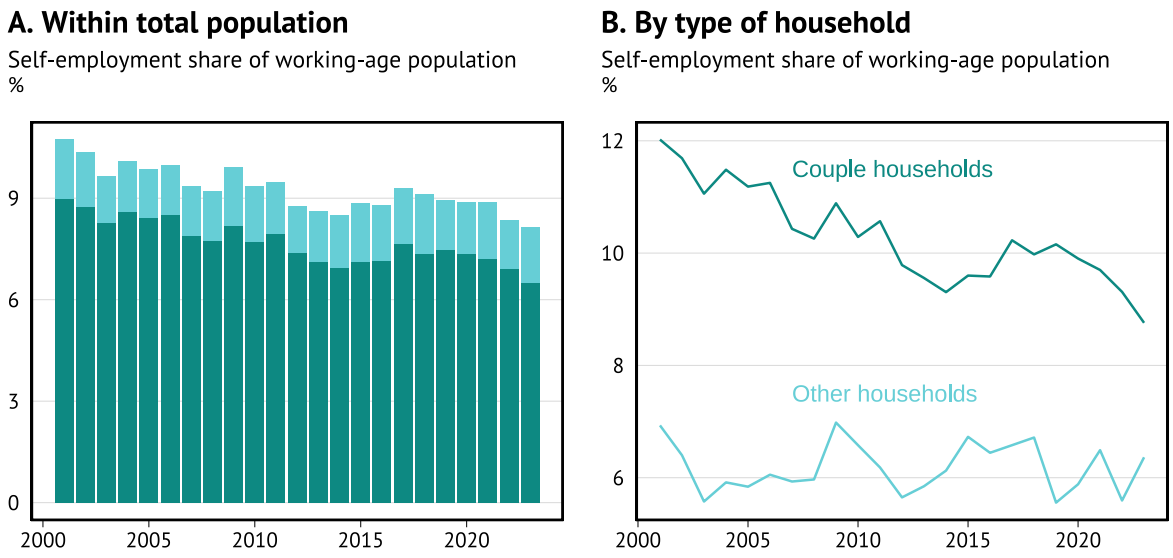
2 The skill earnings premium is estimated using an OLS regression of hourly earnings on an indicator for managers and professionals, controlling for worker characteristics such as gender, age, and tenure. Estimation details and evidence on education-based premia are in Appendix B.
3 By contrast, there has been little change in the Australian skill premium based on formal education (Appendix B), unlike in the United States. The widening premium appears more closely linked to experience and on-the-job learning than to tertiary qualifications.
4 Part of the rise in wage-linked benefits reflects statutory increases in employer superannuation contributions. Evidence on the extent of wage pass-through is mixed, so the figure should be interpreted with caution. Regardless of pass-through, measuring total employee compensation (including super) increases the effective return to wage employment relative to business income for many workers.
5 Many of these protections have existed for some time, but their relative value may have risen as the opportunity cost of income volatility and gaps in coverage for the self-employed has increased.
6 Wage-related benefits are disproportionately concentrated among professional workers, who have experienced the largest declines in self-employment. Industries with the largest increases in wage-related benefits also saw the steepest declines in self-employment.

Figure 9: Wage-linked benefits have risen as a share of total labour income



* Wage-related benefits are employer social contributions such as superannuation and workers' compensation payments.
Sources: ABS; e61 Institute

Figure 10: Self-employment has fallen most sharply within couple households



* Couple households include individuals living with a partner
** Other households include single-person, single-parent and other multi-adult households.
Sources: e61 Institute; HILDA Survey

Historically, self-employment often operated within a family business model, with one partner running the business while the other contributed part-time or unpaid labour. As labour markets deepened and employment-based protections expanded, second earners increasingly faced stronger incentives to take wage jobs, gaining access to superannuation, paid leave, and other benefits. Dual-earner households consequently became less risky than relying on business income alone.

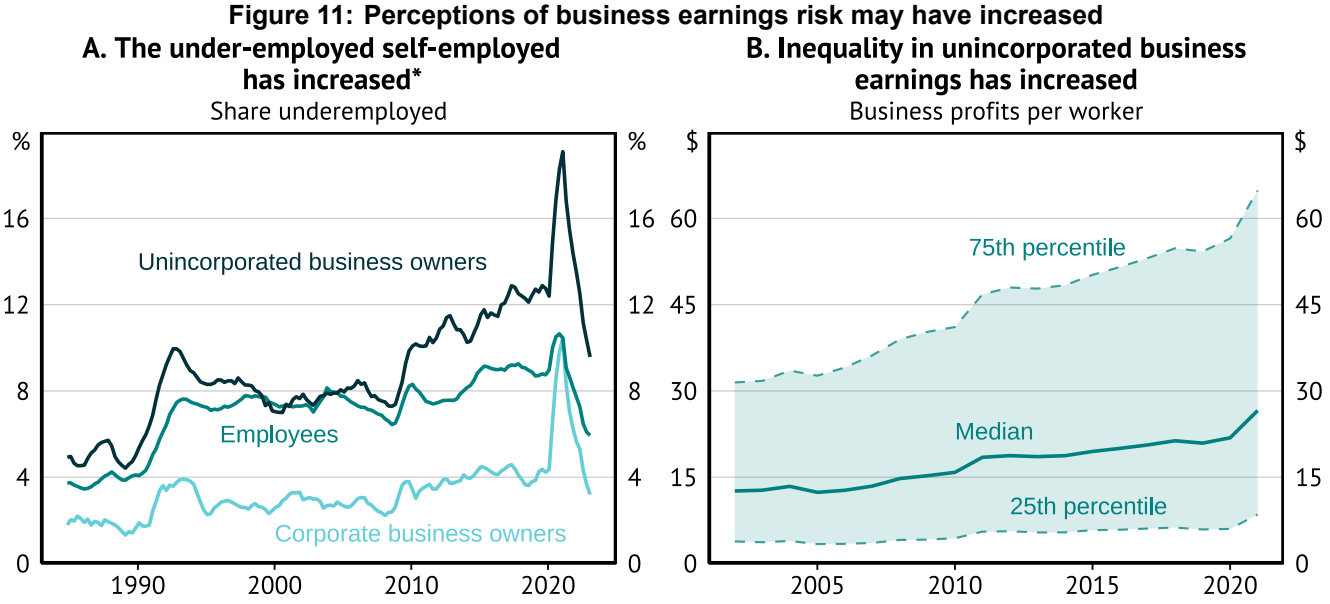
Institutional design reinforces these incentives. Many programs are tied to employee status or regular PAYG-style earnings records — including aspects of parental leave, some super-related incentives, and income-testing and reporting requirements for family payments — which can make access more complex and less predictable for self-employed households. In addition, before compulsory superannuation, small business ownership partly served as a substitute for formal retirement saving. With the universalisation of superannuation, wage employment offers a lower-risk and tax-advantaged pathway for wealth accumulation, while unincorporated business owners must fund contributions out of business income.

Fixed costs may have also risen for small employer businesses. Hiring and managing employees involves compliance, payroll systems, and workplace obligations that are largely fixed in nature. If these fixed costs increase over time — for example through more complex regulation, reporting requirements, or higher expected costs of resolving disputes — they will disproportionately discourage entry into employership among small unincorporated businesses. Incorporated firms may be less affected because they are more likely to operate at a scale where these fixed costs can be spread over a larger revenue base. e61 intends to further examine this issue in future work.

Finally, the decline may also reflect perceived increases in earnings risk among the self-employed. Underemployment among the self-employed has risen relative to wage earners (panel A of Figure 11), even though self-employed workers are often thought to have greater control over hours. One interpretation is compositional: growth in solo and platform-mediated work increases the share of self-employment where hours are demand-determined rather than chosen. In that setting, wanting more hours may reflect volatile demand and limited bargaining power, not a deterioration in the inherent flexibility of business ownership.

Selection effects matter for earnings risk too. Conditional on survival, unincorporated business earnings appear more dispersed, with a widening gap between highly profitable and less profitable businesses (panel B of Figure 11). Some of this may reflect changes in the composition of who remains in business ownership over time, rather than an increase in the underlying riskiness of comparable businesses.

Figure 11: Perceptions of business earnings risk may have increased



* 4-quarter moving average.
Sources: ABS Longitudinal Labour Force Survey; e61 Institute

Regression analysis supports these drivers of the decline in self-employment

To assess how far these mechanisms account for the aggregate trend, we estimate a linear probability model of individual self-employment:

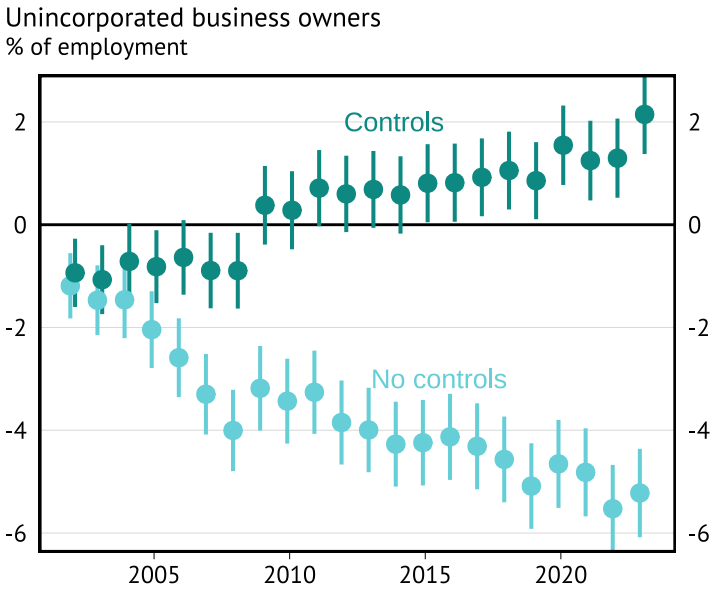
(1) $$SELFEMP_{it} = \beta CONTROLS_{it} + \theta_t + \epsilon_{it}.$$

The dependent variable, $SELFEMP_{it}$, equals one if individual i is self-employed in survey year t, and zero otherwise. The control variables capture key margins highlighted above: an indicator for working in a high-skill occupation (manager or professional), an indicator for living in a couple household, and total household labour income. Year fixed effects, θ_t, measure changes over time in the propensity to be self-employed after accounting for these observable characteristics.

The model is estimated using worker-level data from the HILDA Survey over 2001–2023, with more than 10,000 individuals aged 15–65 in each survey year.

Figure 12 plots the estimated year fixed effects from specifications with and without controls. The raw year effects show a clear decline in self-employment over time. However, once we control for occupation, household structure, and labour income, the estimated year effects flatten and even turn positive. With the control for household labour income, the year effects capture changes in self-employment net of rising household resources. The fact that the year effects disappear implies the decline is associated with rising household labour income, particularly among couple and professional households. It is not due to changes in the population shares of those groups.

Figure 12: Declining self-employment is accounted for by family type and household labour income



* This includes employers, employees of own business and unpaid family workers
** Year fixed effects relative to 2001 baseline
Sources: e61 Institute; HILDA Survey Release 23.0

Other explanations for the decline in self-employment

Several alternative explanations receive limited support in the data. First, the decline does not appear to reflect tightening financing constraints. Self-employment has fallen most among wealthier households and among homeowners, groups typically better positioned to access collateral and external finance (Appendix E). This pattern is inconsistent with a story in which reduced credit access is the primary barrier to business entry, though finance may still matter for subsequent growth.

Second, demographic and industrial composition shifts play only a limited role. A counterfactual decomposition holding age-specific self-employment rates fixed shows that population ageing has a small effect on the aggregate trend (Appendix F). Likewise, changes in industry structure explain little: self-employment has fallen within most industries, including traditionally self-employment-intensive sectors such as agriculture and construction. Nor is the decline driven by a deterioration in the non-financial attractions of self-employment. Self-employed workers report greater job flexibility than in the past and work fewer hours on average, suggesting that autonomy and lifestyle benefits have, if anything, improved (Appendix D). Together, these results point away from demographic, sectoral, or lifestyle explanations and toward changing relative returns and risk as the dominant forces.

A third possible explanation is rising regulatory or compliance costs associated with operating a business, particularly for firms that employ workers. If fixed costs of hiring and compliance have increased over time, this could disproportionately affect smaller or marginal unincorporated businesses, which may be less able to absorb these costs. Recent OECD evidence highlights that regulatory compliance can divert labour toward administrative tasks, potentially dampening productivity and business dynamism (OECD, 2025). The fact that the decline in business ownership appears more pronounced among employing unincorporated businesses is consistent with this interpretation (Figure 2), although we do not directly test this channel.

Conclusion and policy implications

Australia's self-employment rate has fallen sharply since the early 2000s, with the decline concentrated among unincorporated businesses that employ others, while the share of company owners has risen. Together, these trends point to a reorganisation in how work and business activity are structured rather than a uniform decline in entrepreneurial capacity.

The evidence in this note suggests that this shift reflects changing labour market incentives. Technological change has increased returns to non-routine cognitive skills within wage jobs, raising the opportunity cost of running an unincorporated business for high-skill workers. At the same time, employment-linked benefits — including superannuation and family-related entitlements — have increased the relative attractiveness and security of wage employment. These developments tilt the risk–return trade-off toward wage work and away from some forms of small-scale business ownership.

Interpreting the decline in self-employment as a broad retreat from entrepreneurship risks targeting the wrong margin. The adjustment is concentrated in unincorporated employer businesses, while company ownership has not fallen. Organisational forms differ in scale, governance, and risk-bearing. Companies are more likely to operate at larger scale and within formal employment structures, while many unincorporated businesses remain small and have limited growth ambitions. A fall in unincorporated employership may matter for pathways into hiring and local job creation, but it does not mechanically imply weaker productivity growth. If activity reallocates toward more capital-intensive or more scalable firms, aggregate productivity could be unchanged or even higher.

The relevant policy question is therefore not how to lift self-employment in aggregate, but how institutions shape entry, hiring, and growth across organisational forms. Three margins appear particularly important.

First, pathways into employership matter. If fixed compliance, payroll, and workplace obligations discourage small businesses from hiring their first employees, reducing these fixed costs can ease transitions into employer status.

Second, tax and transfer settings shape the relative attractiveness of wage employment and business ownership. Employment-linked benefits strengthen worker security, but also tilt incentives toward employee status. Clarifying and, where appropriate, neutralising these policy distortions can support business formation without weakening income insurance.

Third, transitions across forms of business organisation matter. Fewer solo self-employed workers move into employership, and the movement from unincorporated to incorporated structures appears limited. Simplifying incorporation and scaling processes as firms grow — thereby reducing unnecessary regulatory frictions — may improve business dynamism more than policies aimed at increasing own-account self-employment.

Overall, the decline in self-employment should be understood as a structural reallocation in how work and production are organised. The implications for productivity are ambiguous and depend on how activity shifts between types of firms. Designing policy around the margins that matter for hiring, scaling, and risk-sharing is therefore more important than targeting the self-employment rate itself.

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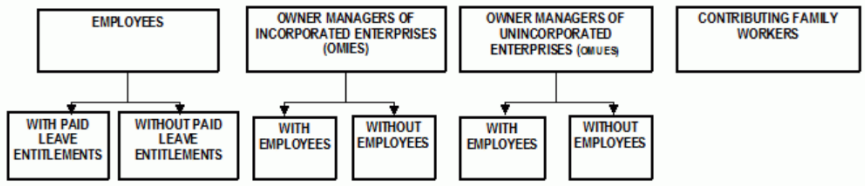
A.1. Definitions

The International Labour Organization defines self-employment as "engagement in a productive activity or the operation of an enterprise with the main purpose of generating income for oneself or for one's household, but without creating an employment relationship with another entity or person." This typically means that self-employed individuals work for themselves, set their own schedules, and assume the associated risks and responsibilities of their business or trade. Examples of self-employed workers include those who start a business, freelancers, consultants, gig workers, and independent contractors.

The definition used in the Labour Force Survey published by the Australian Bureau of Statistics (ABS) and the HILDA Survey closely follow international standards. Respondents are identified as employed if they undertook any paid employment during the 7 days prior to interview (or were away from work because of holidays, sickness, or some other reason). Among the employed, the surveys distinguish between the self-employed and employees (persons who work for a wage or salary). Among the self-employed, there are those that have employees working in their businesses (employers) and those that do not (own account workers). Self-employed workers are further divided into owner managers of companies, owner managers of unincorporated businesses, and contributing family workers. In this note, we treat all owner managers, regardless of the legal status of their businesses as self-employed whereas the ABS traditionally classifies owner managers of companies as employees (of their own business).

Figure A.1: ABS status in employment



A.2. Labour force data

Our analysis relies on two main sources of data - the Household Income and Labour Dynamics in Australia (HILDA) Survey, run by the Melbourne Institute, and the Longitudinal Labour Force Survey (LLFS), run by the Australian Bureau of Statistics.

The HILDA Survey is a longitudinal household-level survey that collects information about the economic and personal well-being of individual Australians, as well as labour market and other household characteristics. The survey is annual and covers about 20,000 individuals on average each year between 2001 and 2023.

The HILDA Survey allows us to identify self-employed workers, and because it is a longitudinal survey we can also identify when people become self-employed or cease to be self-employed (entries into and exits from self-employment).

The LLFS is a longitudinal individual-level survey that underpins the publication of headline labour force statistics, such as the unemployment rate and the labour force participation rate. The LLFS covers the months from October 1982 to April 2023. On average, each cross-section represents around 60,000 different people.

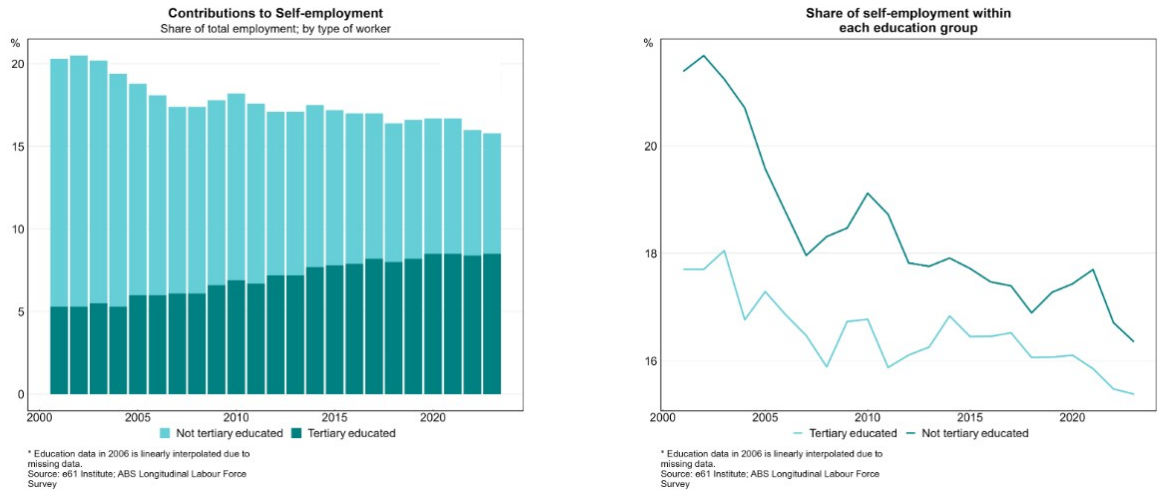
The LLFS can also identify self-employed workers each month, and because it is longitudinal in nature, we can track monthly entries and exits to self-employment.

APPENDIX B: ESTIMATION OF THE SKILL EARNINGS PREMIUM

The skill earnings premium for wage jobs is estimated as the coefficient in an OLS regression of log hourly wage earnings on an indicator variable for employed workers in either a manager or professional occupation ('high-skill occupation'). This indicator variable is interacted with year dummies to estimate the time-series of the skill premium. The skill earnings premium for self-employment is separately estimated in an OLS regression, but with the inverse hyperbolic sine of hourly business earnings as the outcome variable. The inverse hyperbolic sine function is used given that businesses can make losses. A log function would implicitly remove these observations from the model. Both regressions include indicator variables for sex, age and job tenure and year dummies (to capture the baseline trends for non-professional workers). The sample includes all workers aged between 18 and 64 in the HILDA Survey.

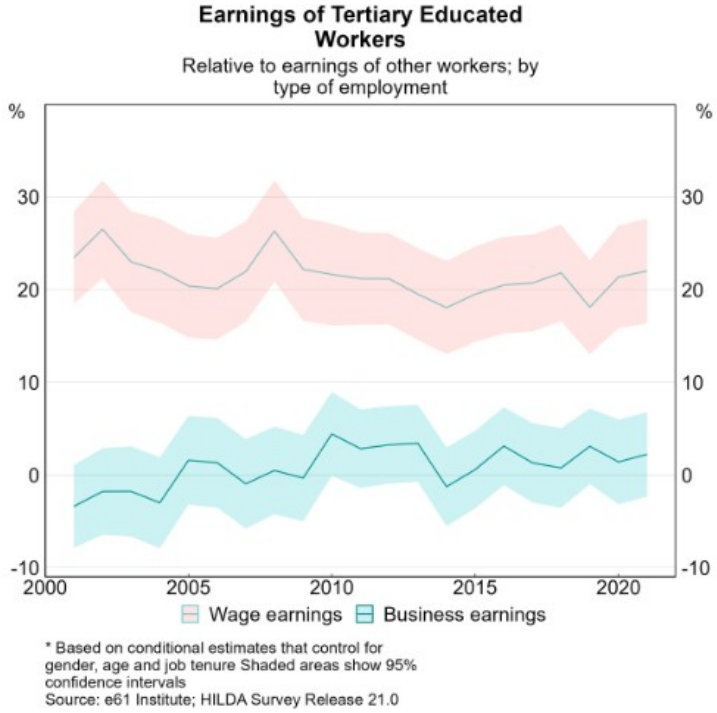
While self-employment has declined more sharply among managers and professionals, it has *not* fallen disproportionately among workers with tertiary education relative to those without (panel B in Figure B.1). At the same time, rising educational attainment means there are more tertiary-educated workers today than 20 years ago (panel A in Figure B.1). Taken together, these trends imply that the share of self-employed workers without tertiary education has fallen sharply.

Figure B.1: Rate of self-employment has fallen by less for tertiary educated workers



The skill earnings premium has also not increased for either tertiary-educated or non-tertiary-educated workers in Australia (Figure B.2). This holds for both wage employment and self-employment, and stands in stark contrast to the United States. One possible explanation is that rising skill premia in wage employment are more closely linked to on-the-job learning than to formal educational attainment. We leave a more detailed examination of the links between formal education, occupation, and skill earnings in Australia to future research.

Figure B.2: The earnings premium associated with tertiary education has not changed

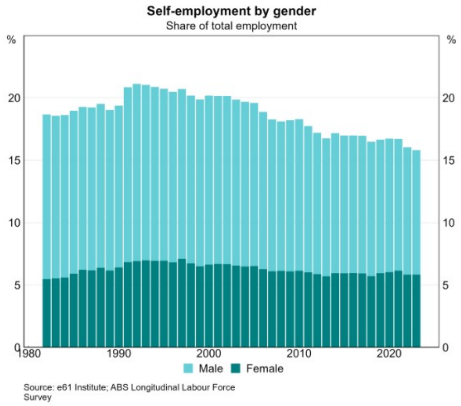


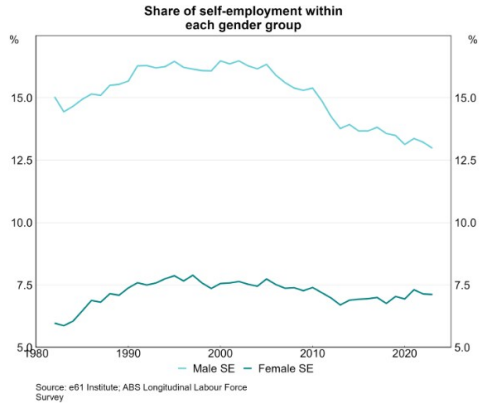
APPENDIX C: TRENDS IN THE RATE OF SELF-EMPLOYMENT BY HOUSEHOLD CHARACTERISTICS

In this Appendix chapter, we provide more breakdowns of the trends in the self-employment rate across various household characteristics.

1. Gender

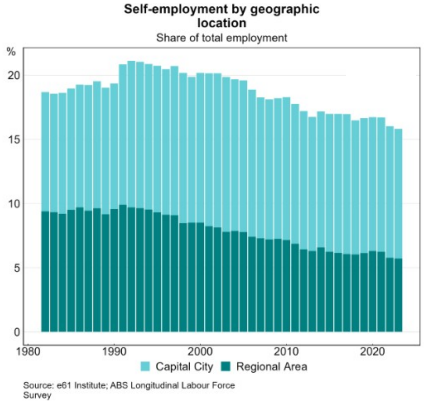
The self-employment rate has declined more for men, while rates for women have consistently been low. The decline has been larger among employers than among solo self-employed, regardless of gender.

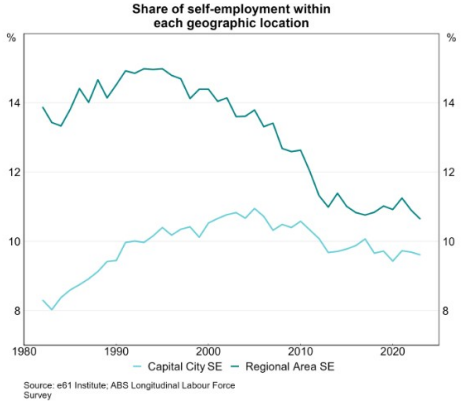




2. Capital cities and regional areas

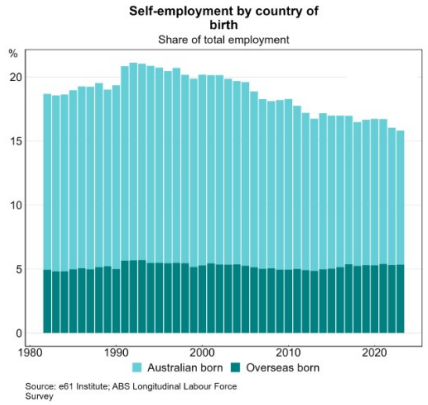
The rate of self-employment has fallen by more in regional areas than in the capital cities.

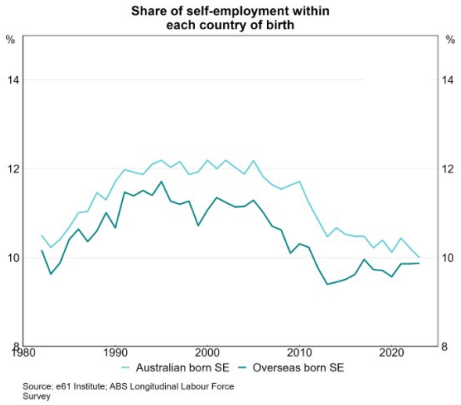




3. Country of birth

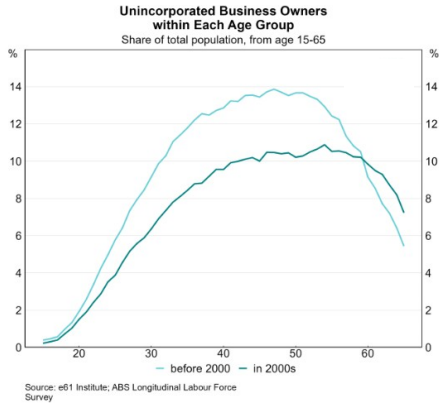
The decline in self-employment has been larger for Australian-born workers than for overseas-born workers.

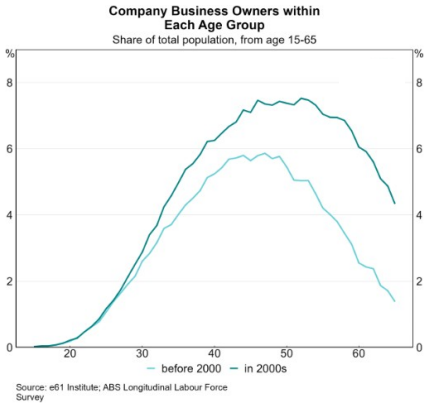




4. Age

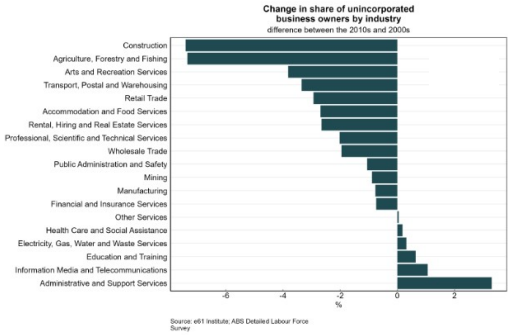
The decline in self-employment is concentrated within younger age cohorts, particularly those aged 30 to 45.

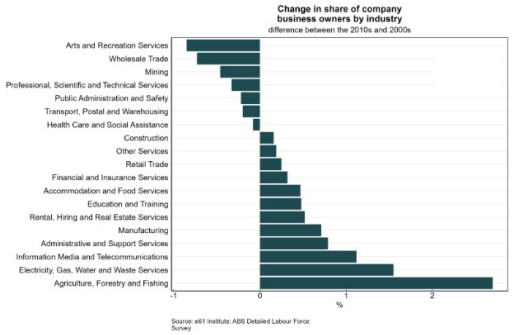




5. Industry

Falling self-employment rates have been apparent across most sectors of the economy. The sectors with the largest declines include construction, agriculture, and arts and recreation services.





APPENDIX D: THE NON-FINANCIAL BENEFITS OF BUSINESS OWNERSHIP

People may choose to become business owners for non-financial reasons. Indeed, most small businesses have little desire to grow big (Hurst & Pugsley, 2011). Instead, they may choose to be self-employed because they want, for example:

- to be their own boss,
- to work independently, or
- more job flexibility.

If these benefits decline, then we would expect fewer people to choose self-employment.

But we find the opposite.

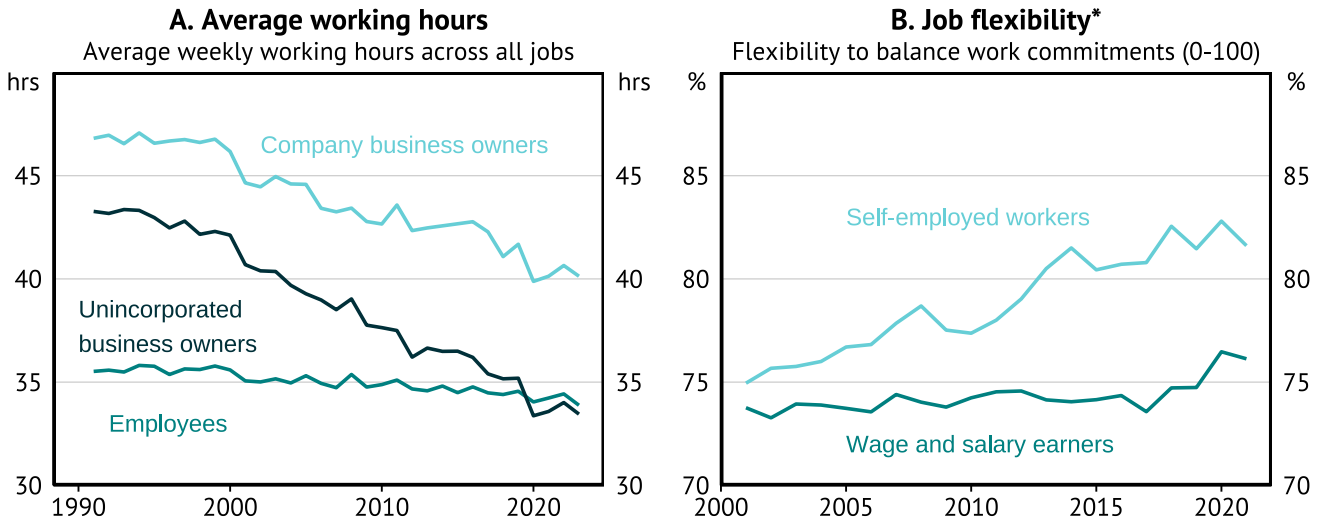
With respect to hours, the self-employed work less today than they did 20 years ago (panel A in Figure D.1).

- In the early 2000s, the self-employed worked close to 43 hours a week. Wage-earners worked about 36 hours per week.
- By 2023, both self-employed people and wage earners worked around 34 hours a week on average.

This suggests the leisure time of the self-employed has increased over the last 20 years. This increase in leisure time exceeds that gained by wage earners.[7]

In terms of flexibility, the self-employed report having more job flexibility than wage earners. Further, the gap between the two groups has increased over time (panel B in Figure D.1).

Figure D.1: Non-financial benefits to self-employment seem to have increased



* The self-employed include: employers, employees of own business and unpaid family workers.
Sources: ABS Longitudinal Labour Force Survey; e61 Institute; HILDA Survey Release 21.0

7 This decline in work hours aligns with the aforementioned rise in underemployment.

APPENDIX E: FINANCING CONSTRAINTS

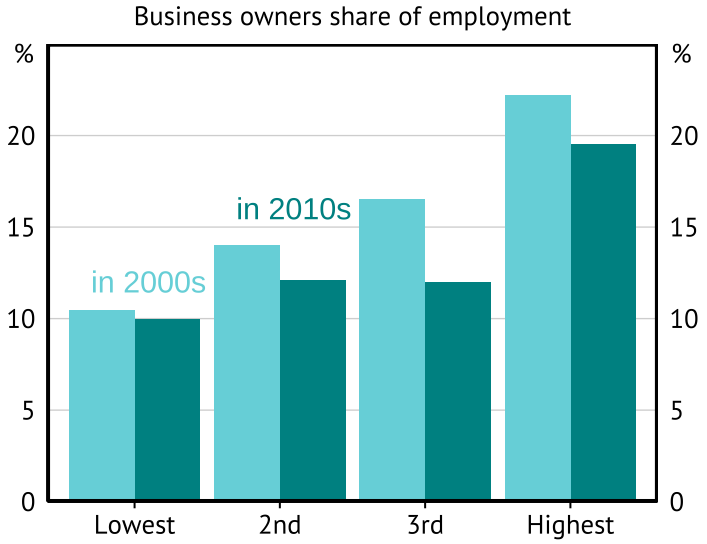
The cost of establishing a business can hold back potential entrepreneurial activities. Aspiring business owners may need to borrow and hold high-quality collateral to start a firm. Many startups are financed by the home equity of business owners (Connolly et al., 2015) and wealthy individuals are more likely to own businesses (Hurst and Lusardi, 2004).

Access to finance does not seem to explain the decline in self-employment over the past 20 years.

We find that:

- The share of people that are self-employed has fallen the most among wealthier households (Figure E.1). Yet we would expect that wealthy households are less subject to financing constraints.
- The rate of self-employment has fallen more among homeowners than among renters, suggesting that access to housing equity does not explain the fall (Figure E.2).

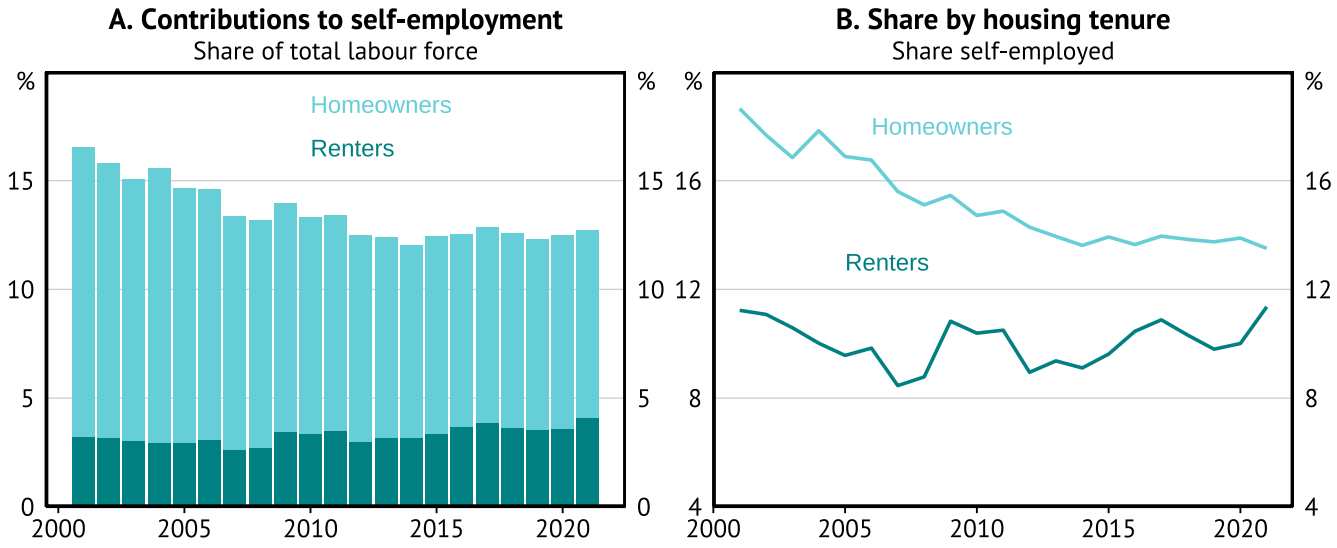
Figure E.1: The decline in self-employment is larger among wealthy households*



* The self-employed include: employers, employees of own business and unpaid family workers.
Sources: e61 Institute; HILDA Survey Release 21.0

These results on financing constraints are about the decision to *start* a business, and not necessarily about the *size* of a new business. Financing constraints, as well as hiring costs more generally, could restrain the potential growth of new firms. Fewer business owners are transitioning from solo self-employment to becoming employers, with adverse flow-on effects for job creation. Further, the probability of a business owner remaining an employer after transitioning from solo self-employment is very low (Cowling and Wooden, 2021). Future research could investigate the causes of the decline in *employing* businesses. Decisions about how many workers to hire are as important as decisions about firm entry for understanding the drivers of aggregate economic growth.

Figure E.2: The decline in self-employment is within homeowners*



* The self-employed include: employers, employees of own business and unpaid family workers.
Sources: e61 Institute; HILDA Survey Release 21.0

Self-employment has not declined because of population ageing or changes in Australia's industrial structure.[8]

Young people are much more likely to start new firms than older people. A shift towards an older population would thus reduce the share of people that are self-employed. Australia's population is ageing. We therefore test whether population ageing explains the decline in self-employment.

We can estimate the mechanical effect of ageing on the aggregate self-employment rate by comparing the aggregate self-employment rate to a 'counterfactual' in which only the age structure of the population is allowed to change over time. Under this decomposition:

- self-employment rates *within* age groups are fixed at their 2000 levels, and
- the shares of the different age groups change over time.

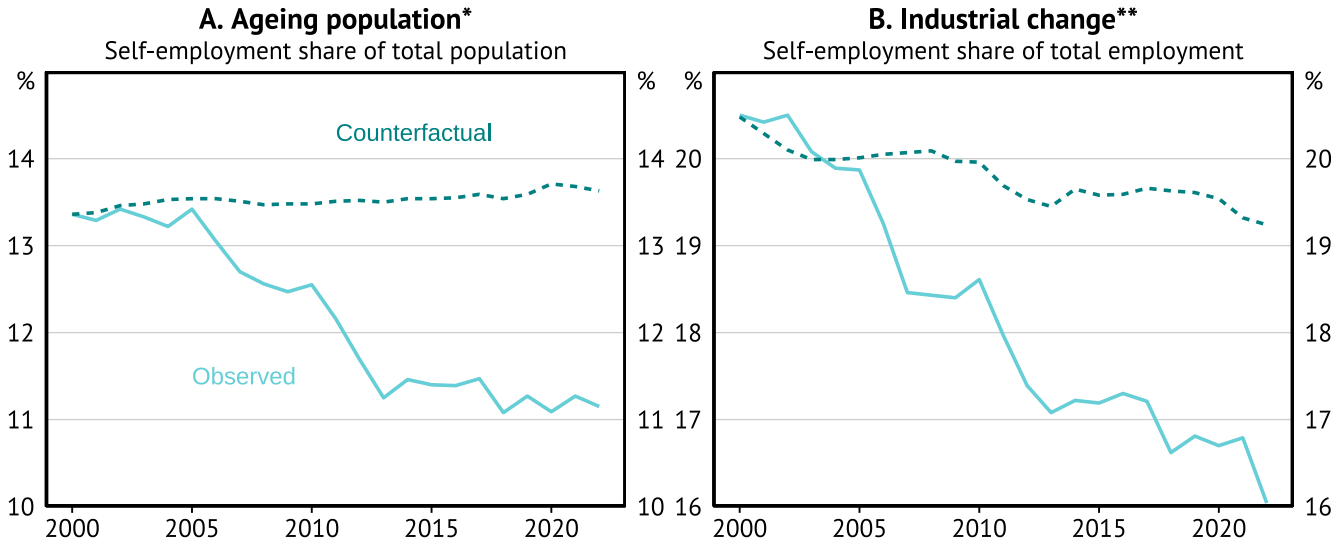
The analysis indicates that ageing has no effect on the rate of self-employment (Figure F.1). Population ageing is thus not contributing to the overall decline in self-employment.

Another possible explanation for falling self-employment is shifts in the industrial structure of the Australian economy.

We find that changes in industry composition account for about one percentage point of the total decline in the aggregate self-employment rate (Figure F.1). We measure the effect of changes in industry composition on the aggregate self-employment rate by:

- keeping the self-employment rate within each industry fixed at its 2000 level, and
- allowing the industry shares of employment change over time.

Figure F.1: The decline in self-employment is not due to ageing or industrial change



* Counterfactual self-employment rate is calculated by holding the self-employment rate within each age group at its 2000 level.
** Counterfactual self-employment rate is calculated by holding the self-employment rate within each 1-digit ANZSIC division constant at its 2000 level.
Sources: ABS Longitudinal Labour Force Survey; e61 Institute

The farm and construction sectors account for a large share of self-employed workers in Australia. But excluding these two sectors makes little difference to the trends in self-employment over the 21st century.

8 Econometric evidence based on the HILDA Survey further supports the idea that demographic change is not important to explain falling self-employment. However, declining self-employment is very strong among couple households, which points to some link to family labour supply decisions (Appendix C).

Business Longitudinal Analysis Data Environment (BLADE)

This paper uses unit record data held in the BLADE data environment which is hosted by the Australian Bureau of Statistics. The results are based, in part, on Australian Business Register (ABR) data supplied by the Registrar to the Australian Bureau of Statistics (ABS) under A New Tax System (Australian Business Number) Act 1999 and tax data supplied by the Australian Taxation Office (ATO) to the ABS under the Taxation Administration Act 1953. These require that such data are only used for the purpose of carrying out functions of the ABS. No individual information collected under the Census and Statistics Act 1905 is provided back to the Registrar or ATO for administrative or regulatory purposes. Any discussion of data limitations or weaknesses is in the context of using the data for statistical purposes, and is not related to the ability of the data to support the ABR or ATO's core operational requirements. Legislative requirements to ensure privacy and secrecy of this data have been followed. Only people authorised under the Australian Bureau of Statistics Act 1975 have been allowed to view data about any particular firm in conducting these analyses. In accordance with the Census and Statistics Act 1905, results have been confidentialised to ensure that they are not likely to enable identification of a particular person or organisation.

The Household, Income and Labour Dynamics in Australia (HILDA) Survey

The Household, Income and Labour Dynamics in Australia (HILDA) Survey was initiated and is funded by the Australian Government Department of Social Services (DSS), and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views based on these data should not be attributed to either DSS or the Melbourne Institute.