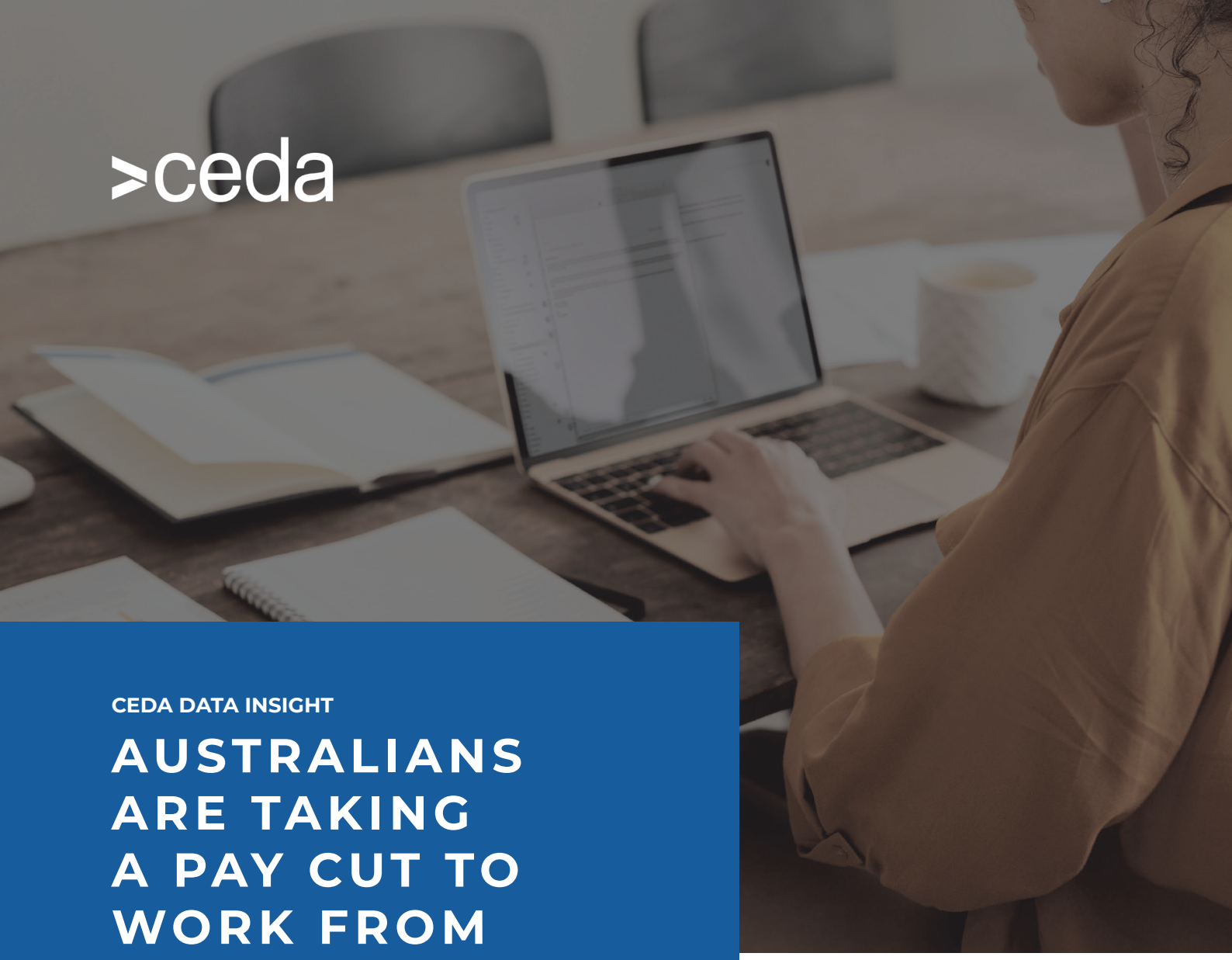

CEDA DATA INSIGHT

# AUSTRALIANS ARE TAKING A PAY CUT TO WORK FROM HOME

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## Workers say they highly value working from home, but are they willing to forgo some of their wage to do so?

A growing body of international research suggests they are, raising the prospect that employers who want staff to return to the office may need to pay higher wages to get what they want.

To understand whether this is also the case in Australia, we looked at detailed data from the Household Income and Labour Dynamics in Australia (HILDA) survey.

We found that since 2020, workers who have hybrid or fully-remote working arrangements earn nearly six per cent less than otherwise similar people who cannot or do not work from home.

These findings clearly reflect the value employees attribute to working from home (WFH).

Our analysis used statistical modelling that closely followed techniques used in recent UK research[1], which found that since the COVID-19 pandemic, remote workers in the UK have seen two to seven per cent lower wage growth than people who work fully onsite.

We compared the wages of those who stated they had formal working-from-home agreements with their employer or worked more than 12 hours per week from home, with those who did not. Our data covered 2017 to 2023.

Measuring the effect of WFH on wages is not necessarily straightforward. A range of factors, including hard-to-measure ones such as drive and ambition, may influence both a person's likelihood to work from home and their wage.

Because the pandemic forced all workers whose occupation could be done from home to do so, this allowed us to separate the impact of working from home from the other individual characteristics of a worker.

After accounting for these other factors that can influence a person's wage, our modelling found that since the pandemic, individuals who work from home have experienced 5.8 per cent lower wages than those who do not.

This would mean a worker on the average annual pay who works from home would earn around $4400 less than someone who does not.

Our results were consistent with the two to seven per cent lower wage growth in the UK study.

They were also consistent with the results of an Australian survey[2] in 2023 that found workers who have some capacity to work from home would take a pay cut of around $3000 to $6000 – or four to eight per cent of their salary – to work remotely some of the time.

> ***WFH provides greater choice for both employers and employees, allows greater access to the labour market for those who previously faced barriers and alleviates cost pressures for employers.***

## Average annual wages ($)


Source: HILDA survey | Created with Datawrapper

## Workers and employers have a choice

At a time when cost of living is front of mind, lower wages for some workers could be cause for concern.

But this kind of wage reduction is not necessarily bad news for all WFH employees.

It suggests that those who value working from home are making a trade-off between their wage and the benefits they see from the arrangement.

Employers can also make a trade-off, choosing either to accept the cost savings from WFH arrangements or to pay a premium to mandate office attendance.

In 2024, 36 per cent of Australians were working from home on a regular basis. They nominated flexibility or the ability to choose working hours as the top reason they use the arrangement[3].

But working from home isn't only allowing firms and employees to exercise more choice in their work and compensation arrangements, it's also helping to boost labour supply.

Previous CEDA research[4] found participation in WFH occupations has increased since the pandemic among carers, women with young children and those with impactful health conditions or a disability.

The growth in WFH has helped overcome participation barriers that previously made it harder for these groups to get a job, keep their job or increase their work hours.

Recent research by Stanford University Professor Nicholas Bloom and collaborators[5] found up to 80 per cent of the rise in full-time employment since the pandemic among people living with physical disability in the US was because of working-from-home arrangements.

Despite these benefits, the tussle between employers and employees over WFH continues to play out. Most recently, audio was leaked of JPMorgan Chase Chief Executive Jamie Dimon sharing some frank views about the arrangement.

But working from home shouldn't be an industrial relations battleground.

Employers and employees should work together to find solutions that work best for their circumstances, acknowledging these arrangements may require adapting over time based on individual team needs and work requirements.

Our results show employers should think twice before issuing blanket return-to-office mandates.

WFH provides greater choice for both employers and employees, allows greater access to the labour market for those who previously faced barriers and alleviates cost pressures for employers.

At a time of persistent skill shortages, this is surely a win-win.

And for those employers who insist on seeing staff back in person, they may find they need to put their money where their mouth is.

## Appendix: Method

We used a pooled linear two stage least squares (2SLS) model with individual fixed effects specification to estimate the causal impact of work-from-home status on individual wages. This approach closely replicates the UK study's[6] model. We define WFH status as an employee holding a formal working-from-home agreement with their employer, or working more than 12 hours per week from home (roughly equating to more than one day per week).

As part of the 2SLS model, we used an instrumental variable. This is the interaction between the Dingel Neiman work from home index and a post-pandemic dummy variable. This index classifies occupations by their feasibility to be done from home based on US data. This classification has then been transferred to the Australian 4-digit ANZSCO level by Melbourne University Professor Jeff Borland. The instrumental variable allows us to control for unobserved individual characteristics that may be time-variant, such as drive and ambition, and therefore we claim causality in the model.

In the first stage, WFH status is regressed on the instrumental variable and control variables. The model can be expressed as:

$$\widehat{WFH}_{it} = \nu_t + \gamma_1 DN_i \times PP_t + \gamma_2 X_{it} + \gamma_3 OCC_i + \nu_{it}$$

Where $\widehat{WFH}_{it}$ is the work-from-home binary equal to one if they have WFH status. $DN_i \times PP_t$ is the instrumental variable, with $DN_i$ being the Dingel Neiman work from home index and $PP_t$ the post pandemic binary equal to 1 if the year is 2020 or later. $X_{it}$ is a vector of individual characteristics and $OCC_i$ is a vector of occupational characteristics. $\nu_{it}$ is a person-specific error term.

The individual characteristics included were: age, sex, state of residence, marital status and whether the individual worked more than 40 hours a week. The occupational characteristics were: 4-digit level occupation classifications and 1-digit industry classifications.

In the second stage, the natural log of weekly wages is regressed on the predicted values for WFH status from the first stage and the same control variables. The model can be expressed as:

$$w_{it} = \beta_0 + \beta_1 \widehat{WFH}_{it} + \beta_2 X_{it} + \beta_3 OCC_i + \mu_i$$

Where $w_{it}$ is the natural log of weekly wages and $\mu_{it}$ is a person specific error term.

This model specification takes advantage of the panel structure of the HILDA dataset to control for time-invariant individual-specific fixed effects. The coefficients of interest are reported below.

### Two stage least squares regression results

| | 1st Stage: WFH | 2nd Stage: Log Wages |
|---|---|---|
| Constant | -0.041** | |
| Interaction | 0.294*** | |
| WFH | | -0.058*** |

*p < 0.1; **p < 0.05; ***p < 0.01

Created with Datawrapper

## References


1 Gianni De Fraja et al., “Remote Work and Compensation Inequality,” SSRN, September 20, 2024, https://doi.org/10.2139/ssrn.4962603.

2 Akshay Vij et al., “Employee Preferences for Working From Home in Australia,” Journal of Economic Behavior & Organization 214 (September 9, 2023): 782–800, https://doi.org/10.1016/j.jebo.2023.08.020.

3 Australian Bureau of Statistics. “Working Arrangements.” Data set, August 2024. https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/working-arrangements/latest-release#working-from-home.

4 CEDA. “More Than a Third of Australians Still Work From Home,” n.d. https://www.ceda.com.au/researchandpolicies/research/economy/2024wfh-data-update.

5 Nicholas Bloom, Gordon Dahl, and Dan-Olof Rooth, “Work From Home and Disability Employment,” September 1, 2024, https://doi.org/10.3386/w32943.

6 Gianni De Fraja et al., “Remote Work and Compensation Inequality,” SSRN, September 20, 2024, https://doi.org/10.2139/ssrn.4962603.

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