DEVELOPMENT POLICY CENTRE

Discussion Paper 115
August 2025
Series ISSN 2206-303X

Assessing Australia's allocation of climate adaptation aid

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Abstract

Australia and other donors have promised to provide developing countries with new and additional funding to address issues associated with climate change. As most of Australia's climate finance currently comes from aid, "new and additional" climate finance would appear to require increased Australian aid flows. Yet, although reported climate aid has increased since 2018, overall Australian aid has not. In this paper we study this apparent discrepancy. Focusing on aid delivered to help countries adapt to climate change, we find there has been a rapid rise in the share of Australian aid projects claimed to be climate-adaptation related since 2019. Many of these projects were once viewed as not climate change relevant. We use multiple regressions to identify an important consequence of this change: prior to 2019, Australian projects in countries more vulnerable to climate change were more likely to be significantly adaptation focused than projects in less vulnerable countries. After 2019, this pattern reversed: vulnerability was associated with a lower probability of a significant adaptation focus.

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Assessing Australia's allocation of climate adaptation aid

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Wood, T Leng A, 2025, "Assessing Australia's allocation of climate adaptation aid," *Development Policy Centre Discussion Paper 115,* Crawford School of Public Policy, The Australian National University, Canberra.

The authors are very grateful to Associate Professor Jonathan Pickering and Dr Melanie Pill for their comments on an earlier draft of this paper. All errors and omissions remain the authors' alone.

This research was undertaken with the support of the Gates Foundation.

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1 Introduction

At various international fora Australia, along with most other OECD countries, has promised to give "new and additional" funding to developing countries to help them mitigate their own emissions and to adapt to climate change (for example, UNFCCC, 2009). This finance can come from a range of sources, a major one of which is Official Development Assistance (ODA; commonly referred to as aid). To date, ODA has been the most important source of Australian climate finance.

Although there has been some debate about the meaning of the term "new and additional", the most obvious, literal interpretation of the term is money above and beyond that already given. In the case of ODA, this would logically seem to require a rising aid budget (for discussion see, Kenny, 2021, 2024; Mitchell et al., 2021; Stadelmann et al., 2011). Over the last decade, Australia's public reporting has pointed to increased climate-related aid spending (Department of Foreign Affairs and Trade, 2025a). However, these promises and changes have occurred over a period in which, when inflation is taken into account, Australian aid first fell rapidly then flat-lined (Development Policy Centre, 2025). In this paper we investigate the apparent paradox: how can supposedly, "new and additional" climate aid be rising at a time in when overall aid is not?

Our research focuses on Australian aid provided to developing countries ostensibly to help them adapt to the effects of climate change. Our main findings are that Australian adaptation aid began to rise rapidly in 2019. This rise was driven by an increasingly large share of Australian aid projects being classified as adaptation related. The bulk of the change was driven by projects reported as "climate significant" in Australia's OECD reporting. Particularly in 2019, a significant share of this increase came from existing projects, which had once not been claimed to be adaptation related, being reclassified in Australian aid reporting.

This change in reporting has come with consequences. The sectoral composition of Australian climate adaptation aid has shifted. There are examples of individual projects claimed to be climate adaptation relevant that would seem to have little relationship to the problems caused by climate change. Most importantly, prior to 2019 Australian

climate adaptation projects in counties particularly vulnerable to the effects of climate change were more likely to reported as significantly focused on climate adaptation than projects in less vulnerable countries. However, post 2019 this pattern reversed: vulnerability became negatively correlated with the probability that a project was significantly focused on climate adaptation.

From here this paper proceeds as follows. It provides background information and a literature review. After that, we describe the data we worked with and the methods we have used. Then we present our results starting with high-level trends, sectoral patterns and the discussion of individual aid projects before reporting regression results. In the closing section we discuss the ramifications of our findings.

2 Background

In this section we provide an overview of climate finance, and particularly climate aid, explaining key terms. We also explain the particular aspects of climate aid that we have focused on, before providing a brief background on Australian climate finance. Then we review existing relevant academic and policy-related work on climate finance and climate aid.

2.1 Climate finance, climate aid and climate reporting

In 1992, in the United Nations Framework Convention on Climate Change (UNFCCC) the world's wealthier countries, including Australia, committed to providing, "new and additional financial resources" to assist developing countries in mitigating their own emissions, as well as to adapt to the effects of climate change (United Nations, 1992, p. 8). This commitment was reaffirmed and built upon in subsequent international fora in which Australia participated (for example, UNFCCC, 2009; United Nations, 2015). The resources promised came to be known as "climate finance".

Although climate finance can come from sources other than aid — specifically, private finance crowded in by donor country governments and so-called Other Official Finance, which typically comes in the form of non-concessional loans — the bulk of Australian

climate finance to-date, as well as the plurality of climate finance from all OECD donors, has come from ODA (Department of Foreign Affairs and Trade, 2025b; OECD, 2024a).[1]

Climate finance, including climate aid, can be given for two reasons: first to assist developing countries adapt to the effects of climate change; and, second, to help them reduce their own emissions. In the paper we focus on aid given to help developing countries adapt to the effects of climate change (hereafter climate adaptation aid or adaptation aid). We do this because the lion's share of Australian climate aid is focused on adaptation. In the most recent year with available data, 96 per cent of Australian climate aid was allocated to projects that had at least some adaptation focus (authors' calculations based on OECD, 2025a). While it would be possible to study mitigation projects separately, a significant share of Australian aid projects are claimed to have a mitigation *and* adaptation focus, and the nature of available data make it impossible to analyse the two foci together at the project level.[2] As a result, we focus solely on adaptation projects: they are by far the most common, as well as the most relevant for Australia, which gives the majority of its bilateral aid to the Pacific, a region where the need to adapt to climate change is particularly urgent.[3]

Along with most other donors, Australian climate aid totals are derived from project-level reporting to the OECD. This reporting includes donor self-assessment of whether projects fit with the so-called "Rio markers", indictors that reflect whether individual projects have a focus on certain environmental objectives (OECD DAC, 2017). Alongside other markers, there are Rio markers for both climate mitigation and climate

[1] Averaged over the four years that DFAT have published data for (2020/21 to 2023/24) 85% of Australian climate finance came from ODA. From a development perspective, it is good that, at present, most Australian climate finance comes from ODA. Thanks to OECD reporting and associated transparency, ODA is easier to scrutinise and analyse than other forms of climate finance. Because of the high-level of indebtedness in some developing countries, including Pacific countries, non-concessional loans given as part of OOF are problematic for obvious reasons. Private finance is typically untransparent and brings a risk of moral hazard: private companies accepting government support for projects they were always going to run. This risk is compounded by donor governments' haste to find private projects as they strive to boost their putative climate finance flows (for useful discussion see: Kenny, 2025).

[2] Somewhat implausibly, given the different nature of the two types of climate objectives, slightly over half of the projects said to have an adaptation focus in 2023 were also claimed to have a mitigation focus. For the purpose of our analysis we focus on projects that have an adaptation focus regardless of whether they have a mitigation focus as well. It is worth noting that projects that have dual focus on mitigation and adaptation are not double counted in aggregate climate finance reporting, meaning large number of dual purpose projects do not contribute to Australia claiming more climate finance than it ought to.

[3] Australia also claims a share of its non-earmarked funding to multilateral organisations as climate aid. This is done on the basis of standardised OECD calculations. Although processes may be changing, to-date this funding is counted neither as adaptation nor mitigation aid in OECD reporting. As a result, it is excluded from our analysis. On the basis of 2023 OECD data, in terms of dollar values, about 9 per cent of Australian climate aid took the form of core funding to multilateral projects.

adaptation. When donors report on projects to the OECD, they categorise each individual project as into one of the following four categories against the climate adaptation and mitigation markers:

1. Not screened – projects whose climate relevance has not been assessed.
2. Not targeted – projects that have been assessed and deemed to have no relation to climate adaptation or mitigation objectives.
3. Principal – projects in which adaptation or mitigation is: "explicitly stated as fundamental in the design of, or the motivation for, the activity…In other words, the activity would not have been funded (or designed that way) but for that objective" (OECD DAC, 2017, p. 5)
4. Significant – projects in which "the objective (climate change mitigation or adaptation) is explicitly stated but it is not the fundamental driver or motivation for undertaking [the project]. Instead, the activity has other prime objectives but it has been formulated or adjusted to help meet the relevant climate concerns" (OECD DAC, 2017, p. 5).

Like most other OECD donors, Australia uses adaptation and mitigation Rio markers from its OECD project-level reporting when it calculates the aggregate total amounts of climate aid it reports to the public and to the United Nations. Australia claims 100 per cent of the value of climate-principal projects and an undisclosed percentage of the value of climate-significant projects as climate finance.[4]

2.1 Relevant research

Internationally, a growing body of research has been devoted to studying climate aid. Two strands of this work are of particular relevance to our paper. The first is research focused on problems associated with the reporting of climate aid flows. The second is research focused on where donors spend their aid.[5]

[4] The default percentage claimed is 30 per cent; however, projects can be claimed at other rates. The Australian aid program does not make public the percentage claimed for individual projects nor does it reveal what share of its climate significant projects are claimed at specific rates.

[5] There is also a much smaller, and less conclusive literature on whether climate finance achieves its desired outcomes. Because this is of limited relevance to our paper we do not cover it here.

Much recent climate-aid-related analysis has focused on problems with the term "new and additional". Interpretations of this term have differed considerably amongst relevant actors. Donors have often strived to find interpretations of new and additional that do not necessitate actual increases in spending, including spending on ODA (for good discussion see, Roberts et al., 2021; Stadelmann et al., 2011; World Bank, 2010). At the other end of the spectrum, have been advocates and scholars who have contended that "new and additional" ought not just require increases in ODA, but increases in donor countries' aid effort as measured by the standard metric of aid generosity: ODA as a share of donor Gross National Income (GNI) (Kenny, 2023).

Although not all scholars have gone as far as stating that new and additional climate aid requires an actual increase in donor effort as measured by ODA/GNI, outside of donor governments there is near consensus amongst experts and practitioners that, if climate finance funding promises are to be meaningful, climate finance needs to be given on top of existing spending. In the case of climate aid, this would require an increase in ODA (for example, Kenny, 2021, 2024; Mitchell et al., 2021; Ryan, 2019; Stadelmann et al., 2011; Venner et al., 2024). This is also what aid recipient countries have suggested that "new and additional" should mean at the very least (Cutts, 2024). Such beliefs are logical: they fit with dictionary definitions of the words "new" and "additional". Moreover, other development issues remain pressing, meaning that, unless ODA is increased, aid will need to be diverted from other causes to focus on climate, or potentially dubious claims about projects advancing development and climate objectives at the same time will have to be made (Mitchell et al., 2021).

Another closely related problem described in the literature, and of particular relevance to this paper, stems from how climate aid is reported and counted. As noted above, when counting their bilateral climate aid, almost all donors draw upon their Rio marker reporting to the OECD. Like Australia, almost all donors claim the full value of projects coded as climate principal in OECD reporting as climate aid. Also in common with Australia, most donors claim a share of the value of projects coded climate significant as climate aid (Roberts et al., 2021). In principle, this Rio-marker-based approach appears a reasonable way to aggregate from individual aid projects to climate aid totals. There are, however, major issues in the way that most donors do this. The first is transparency. Donors are often insufficiently transparent when reporting the share of

individual climate significant projects' values that are being included in climate aid totals. Moreover, while Rio Marker coding is meant to follow OECD guidelines, the process involves self-reporting and provides donors with considerable leeway when it comes to claiming projects as climate aid (Weikmans & Roberts, 2019).

When empirical studies have been conducted, they have found major issues with donors claiming projects with no apparent relation to climate mitigation or adaptation as climate aid. Not only has work identified egregious individual examples, (for example, Edney-Browne, 2021; Kenny, 2025; Michaelowa & Michaelowa, 2011) but quantitative studies have found that miscoding is common (Michaelowa & Michaelowa, 2011; Ritchie & Tahmasebi, 2020; Weikmans et al., 2017).

The other body of international research relevant to our paper is work focused on the types of countries most likely to receive climate aid and, in particular, adaptation aid. The unit of analysis in this literature has typically been recipient countries (e.g. Betzold & Weiler, 2017), or recipient country-dyads (for example, Robinson & Dornan, 2017). Existing allocation research has tended to find that countries that are better governed are more likely to receive more climate aid (Betzold & Weiler, 2017; Robinson & Dornan, 2017; Weiler et al., 2018). Typically, the research has also found that more affluent developing countries are less likely to receive climate aid or receive less climate aid (Robinson & Dornan, 2017; Weikmans & Roberts, 2019; Weiler et al., 2018).

Both of these findings could be reasonably argued to reflect appropriate aid practice (i.e. targeting countries where need is greatest, as well as countries, such as well-governed countries, where climate aid might be put to better use). However, when it comes to an important attribute that one might expect would have an affect on climate adaptation aid — vulnerability to climate change — the existing literature has returned mixed findings. Some research has failed to find a clear relationship between vulnerability and the receipt of adaptation aid (for a good review paper summarising evidence of this sort see, Venner et al., 2024), while other studies have found that the relationship is complex and varies considerably across recipient, regions and donors (Santosh Kumar Rauniyar et al., 2025). Some studies have found that whether climate aid is focused on more vulnerable countries depends to an extent on the measure of vulnerability used (Robinson & Dornan, 2017). Still other studies have found that more

vulnerable countries are more likely to receive more adaptation aid (Betzold & Weiler, 2017; Garschagen & Doshi, 2022; Liu et al., 2024; Weiler et al., 2018). A reasonable reading of the existing research suggests that at least some donors take vulnerability into account when allocating climate aid, but the relationship is far from clear cut.

In addition to the broader international findings of potential relevance to our understanding of Australian climate adaptation aid, a small number of existing global studies provide results at the donor level and, when doing so, include information on Australia. Of most relevance to our work, in their analysis of 2012 OECD project reporting data, Weikmans et al. (2017) provide evidence that suggests that a significant share of the projects that Australia claimed were climate adaptation aid had little apparent relationship to climate change, although the study also found that Australia was not the worst offender among OECD donors.

In addition to international work, in recent years a smaller body of analysis has been produced focused specifically on Australian climate aid. Much of this has come in the form of short pieces of commentary. Ryan, in particular, has highlighted to the disconnect between stagnant Australian aid budgets and nominally rising climate aid (Ryan, 2023). Ryan has also provided trenchant critique of the way that Australia calculates the "new and additional" component of its climate aid, noting that the Australian government claims that, "all its climate finance is new and additional because it must be approved by parliament every year." And pointing out that:

> Every cent the government spends, whether for joint strike fighters or mowing public lawns, is new and additional under this definition, rendering it meaningless. (Ryan, 2019, p. 1)

Other analysis has also demonstrated that Australian climate finance promises amount to less in reality than appears to be the case (Wood, 2021).

Two longer, more substantive, reports on Australian climate aid have been produced by NGO researchers. The first of these, produced by Oxfam Australia, emphasised the inadequacy of Australian climate aid spending, questioning whether Australian climate aid was new and additional (Hardefeldt et al., 2022). The other report (Edney-Browne, 2021) was published by Greenpeace and, of particular relevance to this paper, found

that only a small share of climate adaptation significant projects mentioned "climate" in project descriptions. The paper also provided telling examples of supposed adaptation projects (specifically aid coded as climate significant in OECD reporting), which had no apparent relationship to climate change.

In additional analysis of this sort, one academic paper (Ledger & Klöck, 2023) has been published with a specific focus on Australian climate aid to the Pacific. This paper found that between 2009 and 2014, the apparent importance of climate aid, as reflected by the incidence of climate change in relevant aid program documents, fell rapidly, although it rose subsequently, particularly in 2019 (the most recent year with data). The paper also found that Australian climate-related development finance remained broadly stagnant from 2010 to 2018 followed by a small uptick in 2019.

3 Data and methods

In this section we detail the data used in our analysis as well as the process involved in tidying it. We then discuss the approach we have used to track overall Australian climate adaptation aid patterns before detailing the regression models and approach used in our analysis of climate aid allocation.

3.1 Data and data cleaning

The data underpinning our analysis come from Australia's project-level reporting to the OECD. These data are made available through the OECD's Creditor Reporting System (CRS) database (OECD, 2024b). The CRS dataset includes project information such as project names, project identification numbers, project sectors, project spending and where the project was implemented. CRS data also include Rio markers reporting, and of particular importance to us, whether projects were screened for climate relevance and, if so, whether they were classified as 'principally', 'significantly', 'not-related' to climate mitigation and adaptation. The unit of analysis in our work is project year (i.e. information on a particular project, such as how much was spent on the project, in a specific year). We focus on flows financed by Australia between 2011 and 2023. Prior to 2011 Australia did not reliably report on whether its aid projects were climate related. At time of writing, 2023 data are the most recently available.

Working with Australian CRS data brought two technical challenges. The first, comparatively minor, challenge was that Australia began providing the OECD with more detailed data on its project spending from 2021. The practical ramification of this was that some projects ended up with multiple entries in individual years. To account for this, and avoid any double counting, we aggregated at the project level in each affected year where there were multiple entries.

A larger challenge was that, although Australia uses project codes in its own internal tracking of projects over time and provides these codes in its OECD reporting, it changed its coding schema during the period our data cover. This means that some individual multi-year projects' codes changed over the years even though the projects themselves were unchanged. Also, in some instances the aid program used the same project ID for multiple projects that appeared to be different or to contain different components that differed in important ways (different countries, different climate codes etc.). These issues rendered donor ID codes of limited use to us when identifying distinct individual projects and tracking them over time.[6]

To overcome these limitations, we used project names to identify individual projects. Names were more consistent over time and varied less than project codes. However, project names themselves were not always consistently reported. Fortunately, when project names changed, the changes often stemmed from minor data entry inconsistencies such as use of acronyms in one year and not the next, or inconsistent use of punctuation, or changes in case. To maximise consistency over time in project names, we created a new variable in which we converted names to lower case and removed spaces, symbols and special characters from project names. We also removed some dates from project names – e.g. "Australia Awards 2016-17 intake" was transformed into "Australia Awards". We also standardised well-known acronyms and full words e.g. "PNG" vs "Papua New Guinea", "DAP" vs "Direct aid program", "NCP" vs "NGO cooperation program".[7]

[6] In our regression analysis we clustered standard errors at the project level. For this reason, among others, it was important to clearly identify individual projects.

[7] For the sake of replication and verification, when a project's ID did change between two years and its name did not, we created a variable identifying projects that changed ID codes.

Having done this, we then created new project ID codes. In the case of projects with donor ID codes that did not change over time, we used the original donor code. When projects had changed code over time we used the donor code used in the most recent year with data. An additional challenge was that some projects that had the same names despite being in different countries, or different sectors, or with different climate relevance scores (sometimes with the same donor codes, sometimes with different codes). Although it is possible for individual projects to operate across countries and sectors, it often appeared that certain types of projects were given the same name despite focusing on different activities in different countries. To correct for this, we appended 3-letter ISO codes and simplified sector codes to our project ID numbers as we created our unique project IDs. As one of the subjects of our analysis is the recoding by the aid program of projects that were once not considered climate-related to being climate related in subsequent years, we added this country/sector distinction out of an abundance of caution: we did not wish to conflate two separate projects, operating in two different years, which shared the same name, despite focusing on very different work, and then unfairly count them as having had their climate relevance recoded, when in reality the change stemmed from the fact the projects were different entities.

Our process could not address every potential issue stemming from Australian CRS reporting. Nevertheless, we were able to use it to more effectively track projects over time than would have otherwise been the case.

Using the cleaned data, we then sought to identify projects that had seen their climate adaptation status (i.e. principal, significant or not-related) change over the period in which they were in existence. Using the project ID codes that we created in the process described above, we sorted projects by year and checked if their climate adaptation code changed between years. We created a variable that identified the year in which changes had occurred.[8]

[8] When we did this, we did not code projects that changed from not screened to screened but not climate relevant as having changed codes.

Finally, we combined the data on Australian aid projects with country-level data from various sources for use on our regression models. These variables are detailed below in the methods section on regressions.

3.2 High-level trends in Australian climate adaptation aid

Our first analysis focused on high-level patterns in Australian climate adaptation aid over time. These findings were calculated by taking the tidied project data and using it to plot trends over time, or to compare between different types of projects (such as projects in different sectors).

We did this in one of two ways: we aggregated the annual spends (in million USD, adjusted for inflation) of projects in climate categories to track climate spending over time or to compare between sectors; and we assessed the share of all projects in a given year that fell into each of the possible climate adaptation categories. When doing this we focused on dollar values and adaptation projects as a share of all aid projects in a given year rather than project counts. This is because Australia's reporting to the OECD changed in 2021 in a way that appears to have increased both overall project numbers and climate adaptation project numbers somewhat, despite our efforts to overcome the issue. As a result, we avoided absolute project counts so as not to unfairly inflate the aid program's apparent adaptation focus.[9]

3.3 Regressions, equations and challenges

The second form of analysis we report on is the results of regression models focused on the types of projects and places in which aid projects are most likely to be coded as climate-adaptation related. To ascertain the likelihood that a project with various country and project characteristics was deemed to have a 'significant' or 'principal' climate adaptation focus, we estimated several versions of the following equation:

$$Y_{ict} = \beta_0 + \beta_c \cdot X_{ct} + \beta_{spend} \cdot spend_{it} + \beta_{sector} \cdot sector + \beta_z Z_t + \epsilon_{ic}$$

[9] Using project shares avoids inflation because both the numerator (climate projects) and the denominator (projects) in the calculation will have been affected to the same extent by reporting practice changes in 2021. Because spending data were aggregated at the total spend level each year they were not affected by changes in the number of project entries in a given year.

Where: Y_{ict} is an outcome variable that took the value of 0, 1 or 2 if project i in country c in year t was reported to be 'not targeted', 'significant' or 'principal'.[10] X_{ct} is a set of features associated with recipient country c at time t. The variable $spend_{it}$ refers to annual spending in constant (2023) USD associated with project i in year t. $Sector$ captures sector fixed effects for project i in year t. Z_t are year fixed effects for year t. In all regressions we clustered standard errors at the project level.[11]

The project and country variables we included were chosen on the basis of standard controls used in existing work on aid allocation generally and/or climate aid allocation (for example, Alesina & Dollar, 2000; Bayramoglu et al., 2023; Weiler et al., 2018). The set of recipient country features X_{ct} — i.e. a trait of country c at time t — included the vulnerability to climate change measure from the Notre Dame Global Adaptation Initiative Country Index (ND-GAIN, 2025)[12], as well gross domestic product (GDP) per capita from the World Bank World Development Indicators (World Bank, 2025a) and government effectiveness as measured in the Worldwide Governance Indicators (World Bank, 2025b). We also included total Australian aid flow data to individual recipient countries from the OECD (OECD, 2025b), and we used UN Comtrade data to measure Australian exports to aid recipient countries (United Nations, 2025) and United Nations voting alignment with Australia (Voeten et al., 2009). All of the country-level variables, except total Australian aid to the recipient country in question were lagged by one year. Project spending, total aid spending and GDP per capita were all measured in 2023 inflation adjusted USD.

[10] Projects that were not screened for their climate adaptation status were coded as missing.

[11] We ran regressions on the pooled data rather than use project fixed effects or similar panel models for three reasons. First, the number of projects (in the thousands) makes it very difficult to combine multinomial logistic regressions with project fixed effects. Second, many of our control variables are not gathered on an annual basis and are estimated for years where data are not gathered. As such, these variables will not tend to fluctuate annually in a manner that sheds much light on changes in the climate adaptation coding of projects. Third, models such as project fixed effects will only capture changes associated with the recoding of projects' climate status. Although, as we demonstrated in the paper, projects have been recoded, in any given year most projects are not. We included year fixed effects in some models to account for any changes or factors that affect all projects in a given year, e.g. any potential effects from the Covid-19 pandemic. We included sector fixed effects to our full regression models to account for any potential impacts associated with changes in the sectoral focus of Australian ODA.

[12] Specifically the Vulnerability variable quantifies the: "Propensity or predisposition of human societies to be negatively impacted by climate hazards", as measured by, "the vulnerability of a country by considering six life-supporting sectors: food, water, health, ecosystem services, human habitat and infrastructure." (ND-GAIN, 2025). We focused on the vulnerability indicator as opposed to the readiness indicator, as the latter is based off a number of country traits that we used separately as control variables in our regression analysis.

The country variable of most interest to us was vulnerability to the effects of climate change. A positive relationship between this variable and aid focused on climate change adaptation would suggest that Australia is focusing its aid where climate need is greatest. The existence, or lack of, a relationship in between vulnerability to climate change and the distribution of Australian climate aid has the potential to give a clear sense of how important the effects of climate change actually are in Australia's allocation of the aid it reports as being climate-related. Reflecting the importance of vulnerability to climate change, we report on both bivariate relationship between climate aid and vulnerability — which answers the simple descriptive question of whether Australia is more likely to focus aid projects on climate adaptation in places where they are needed most — and also the relationship with project and country controls included, as well as year and sector fixed effects.

Summary statistics for all variables can be found in Appendix 1.

Because our dependent variable was categorical, we used a multinomial logit approach to estimate the above equation, following the approach in Wood (2023).[13] For multinomial logit estimates to be valid, typically the key assumption is the independence of irrelevant alternatives (IIA). Specifically, the probability of choosing alternative *j* over alternative *h* is independent of what other alternatives are in or out of the choice set (Fry & Harris, 1998; Long & Freese, 2014; Mokhtarian, 2016) and consequently that changes in the characteristics of any new or different alternative should not affect the relative odds of choosing any other alternative (Woolridge, 2002).

In the context of this paper, the IIA assumption requires, for example, that the odds of a project being classified as 'principal' rather than 'significant' should be independent of the existence of the 'not-related' category, or even the introduction of a (hypothetical) 'somewhat-related' category. This assumption seems plausible as the categories considered in this paper are clearly distinct and dissimilar (Amemiya, 1981; Long & Freese, 2014; McFadden, 1973). Nevertheless, to account for the possibility that the IIA

[13] We choose a multinomial and not an ordinal logit approach due to the unlikeliness of satisfying the requisite proportional odds or parallel assumption for the latter. Given the lack of a clear definition of what constitutes a 'significant' project as opposed to the more well-defined rules around what constitutes a 'principal' project, it is unlikely that a one unit change in an independent variable would have an equal impact on the odds of a project being classified as 'significant' or 'principal'.

might be violated is violated, we also ran regressions using a multinomial probit approach – which relaxes the IIA assumption – as robustness tests.[14] These results (presented in Appendix 2) are reassuringly similar to those derived from the multinomial logit approach, providing confidence that the more interpretable and computable results from the logit model are reliable.[15]

4 Findings: trends in Australian climate adaptation aid

Figure 1 shows the total volume of bilateral Australian climate adaptation aid (in inflation adjusted USD) over time as calculated based on Australian project reporting to the OECD. The portion of each bar that is shaded in blue reflects spending associated with climate adaptation significant projects, the portion shown in red reflects spending associated with climate adaption principal projects.

The left panel shows climate adaptation aid as calculated on the basis of all projects, be they adaptation principal or adaptation significant, counted at face-value (that is, 100 per cent of their annual spend being included in the total for that year). Because Australia claims 100 per cent of climate principal projects as climate aid but a much smaller share of climate significant projects, the left panel overstates total bilateral Australian climate aid spending. For this reason, in the right panel we show estimated bilateral Australian climate adaptation aid spending based on the assumption that 100 per cent of the value of climate principal projects and 30 per cent of the value of climate significant projects are claimed as climate aid.

[14] We also applied one of the empirical tests that, in instances, can detect whether IIA has been violated. The findings from this test were mixed but tended to indicate that it the IIA condition was satisfied. However, given the limitations of these tests (Long and Freese, 2014), we also chose to double check our findings using probit models as described in the text.

[15] We used the logit over the probit distribution in the analysis presented in the body of this paper due to the ease of estimation associated with the former and susceptibility of weak identification in the latter (Dow and Endersby 2004).

Figure 1 – Australian aid for climate adaptation spending over time

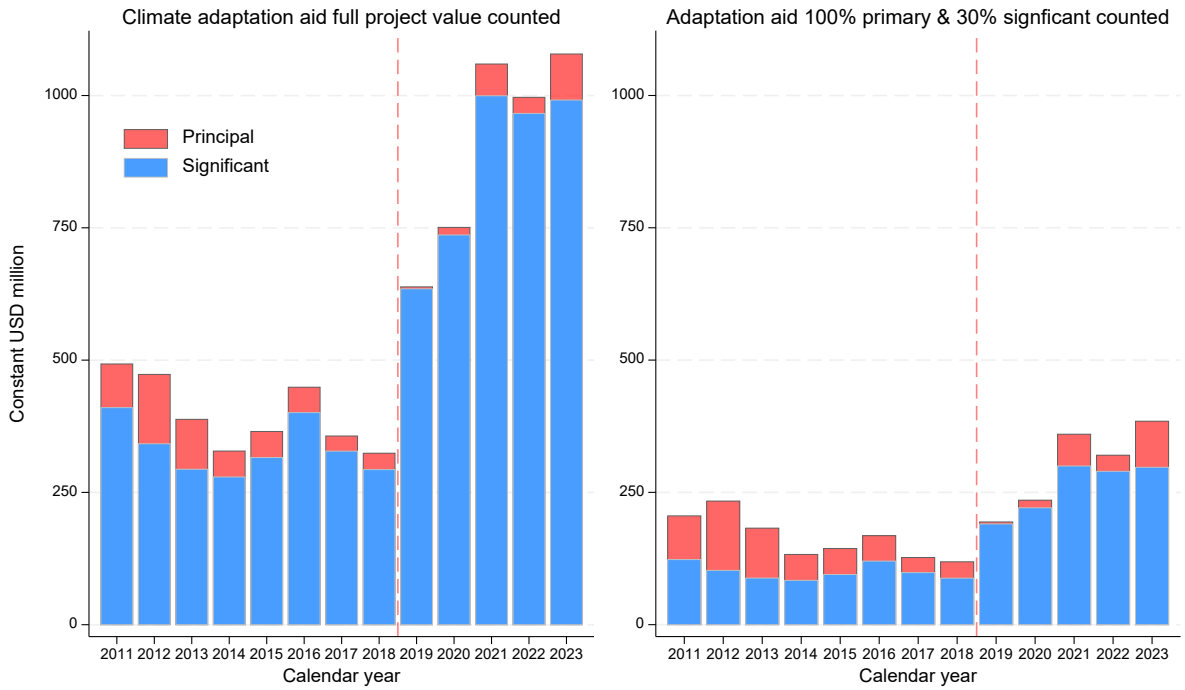


Chart notes: all data come from Australian reporting to the OECD. Reflecting OECD reporting, the years on the x-axis are calendar years not financial years. Values are in inflation adjusted USD (in millions). The left panel shows spending calculated on the basis of 100 per cent of the value of climate principal projects and 100 per cent of the value of climate significant projects being claimed as climate aid. The right panel is based on the assumption that 100 per cent of the value of principal projects are claimed as climate aid while 30 per cent of the value of significant projects is claimed. The 30 per cent contribution is an assumption. It is based on the default share of climate significant project spends that Australia counts towards climate aid totals. In practice it can claim more or less for each individual project. Unfortunately, actual shares have never been made publicly available.

Two features of both charts are worth noting. First, between 2011 and 2018 the contribution of climate principal projects to overall bilateral climate adaptation spending fell. Whereas in 2012, based on the figures in the right hand panel, it seems possible that as much as 50 per cent of adaptation aid came from the principal category, by 2019 and 2020 the share was trivial. The share has increased again somewhat since 2020, but even taking this into account, the clear majority of bilateral Australian climate adaptation aid post-2019 has come from projects coded as climate adaptation significant.

The second point is the break in the trend in 2019. Prior to 2019, bilateral climate adaptation aid had been falling. In 2019 spending lurched upwards and, with the exception of a dip in 2022, has increased ever since. Without access to policy documents it is impossible to state why climate aid increased so rapidly in 2019. But the break in

trend is so dramatic it must have reflected a policy decision.[16] From 2019 onwards, the climate adaptation objectives of the Australian government had clearly changed.

This rapid rise in Australian climate adaptation spending was not accompanied by a commensurate rise in overall Australian aid spending (Development Policy Centre, 2025). Rather, as Figure 2 shows, the increase was driven by a very rapid rise in the share of Australian aid projects that were coded as climate adaptation related and, in particular, a rapid rise in projects coded as climate adaptation significant.

Figure 2 – Adaptation projects as a share of all Australian aid projects

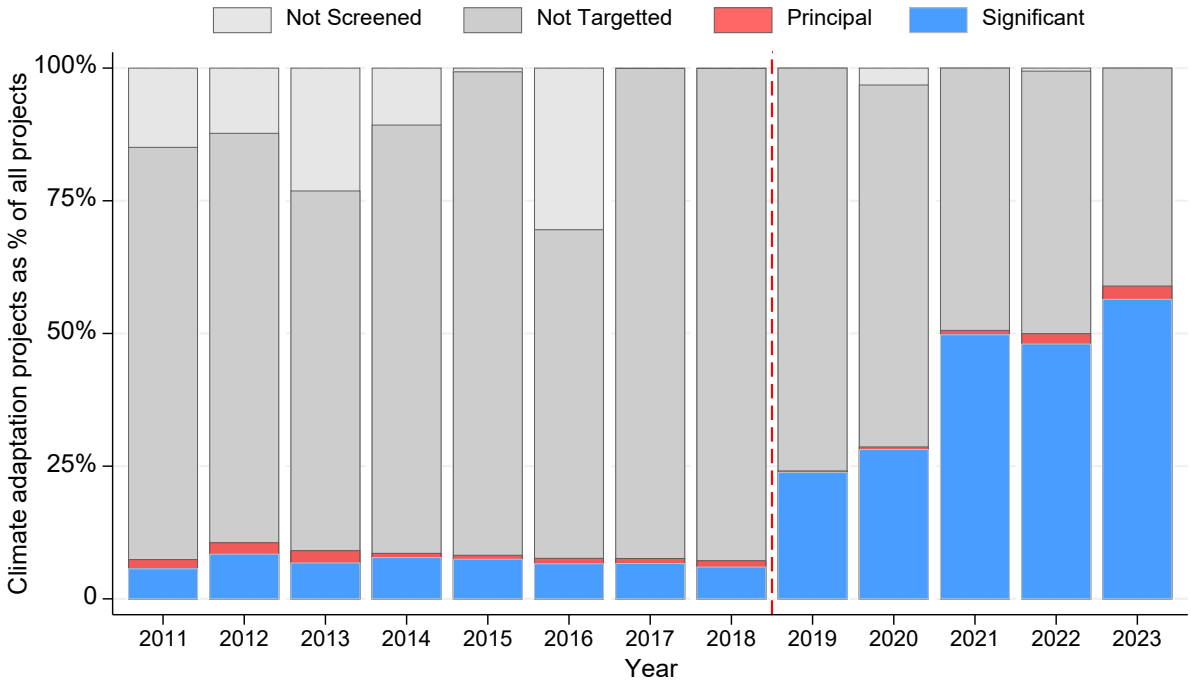


Chart notes: all data come from Australian reporting to the OECD. Reflecting OECD reporting, the years on the x-axis are calendar years not financial years. The denominator in the equation is the total number of all Australian aid projects (excluding core funding to multilateral organisations). The numerator is all projects coded as climate adaptation principal or adaptation significant.

[16] One possible explanation is that the increase was needed if Australia was to meet climate spending promises for the period 2016 to 2020. In subsequent years, the pressure on the aid program to increase climate adaptation aid would have increased further as subsequent governments' climate finance promises became ever more ambitious. Frustratingly, because climate finance can include private finance, OOF, bilateral aid and some multilateral aid, because there is an overlap between adaptation and mitigation aid, and because time series reporting that takes all of these issues into account has not routinely been provided publicly on an annual basis for all the years covered by our study, it is not possible to tell if this was the case. Although we have not been able to substantiate the claims, several aid workers from organisations tasked with implementing climate aid projects advised us that in 2019 they were specifically asked to identify existing projects that could in any way be linked to climate change. If correct, these claims also point to a turning point in Australian aid practice.

An increase in the share of aid projects that are categorised as climate adaptation related can occur in one of three ways:

1. Existing projects can be closed and replaced by projects related in some way to climate adaptation;
2. Projects that have reached the end of their life span can be replaced with new projects that are climate adaptation-related; or
3. Existing projects can be recoded so that they are recorded as adaptation related.

As Figure 2 shows, the large change in the share of Australian aid projects claimed to be climate-adaptation-related was driven almost entirely by changes in the share of aid projects deemed to be climate adaptation significant. Reflecting these facts, in Figure 3 we look at the share of climate-adaptation-significant projects in each given year that were climate adaptation significant because they had been recoded since the previous year. (In other words, these are projects were coded as not climate adaptation related in t-1, and recoded to be adaptation related in t.)

Figure 3 – Percentage of climate significant projects that were recoded

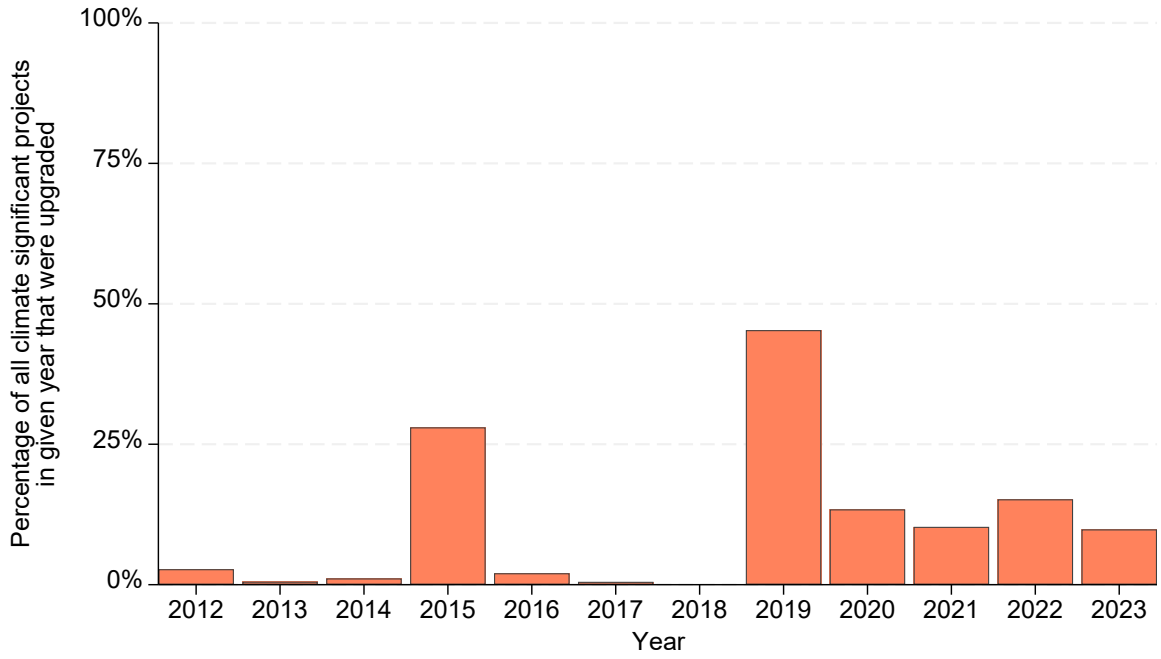


Chart notes: percentages calculated as number of projects upgraded to climate significant between the year prior and the year in question. The denominator is the total number of climate significant projects in the year in question. A very small number of projects with multiple transactions were recoded within years. These projects were excluded from analysis. Note that the denominator in calculations is not the total number of Australian aid projects; it is the total number of climate significant projects. The majority of all aid projects were not recoded in any year.

More so than any of the other analysis in this paper, Figure 3 should be treated as approximate not exact. Tracking projects over time was, as we discussed in the methods section, hard. When projects changed codes and names across the years their climate status was recoded, we may have missed their recoding, which could lead to Figure 3 understating the extent of recoding. A few projects became climate significant after downgrades from climate principal. Where this has occurred, our chart will have overstated recoding, although because changes of this nature were very rare, the impact will be largely immaterial. We also identified instances where projects coding was changed to significant in one year and then back to another category the next. This was not common and presumably reflects data entry errors and will add some noise to the chart, but it should not systematically lead to overstatement or understatement. Finally, in every year some projects were downgraded from climate significant to not-climate related or not-screened. Where this has occurred, this will offset the impact of upgrades shown in Figure 3. In most years there were very few downgrades. In years where there were more than a few downgrades, upgrades still clearly outnumbered downgrades. The only exception to this was 2014, when downgrades clearly outnumbered upgrades and 2023, when there were still more upgrades than downgrades, although the difference was much smaller than in previous years.

Two years stand out in Figure 3. The first is 2015: slightly over a quarter of climate adaptation significant projects in that year were classified as significant because their status had been upgraded. Although it is not possible to be sure, at least some of these upgrades may have been a product of a climate hostile prime minister, Tony Abbott, being replaced by Malcolm Turnbull who was supportive of climate finance. The other year is 2019. In 2019, the year in which Australian climate adaptation aid started rising rapidly, we estimate that 45 per cent of all climate adaptation significant projects were coded that way because they had been reclassified from not climate related in the previous year. In subsequent years, while a non-trivial share of climate significant projects were recoded, the share was much less than in 2019.

Both the increase in Australian climate adaptation spending in 2019 and the increase in the share of projects that were climate adaptation significant appear to be mainly due to projects being recoded. While it could possibly be the case that the projects were recoded in 2019 because they had been substantively modified to enable them to help

with climate adaptation, it seems implausible that so many projects could have been transformed in a meaningful way in such a short period of time.

The subsequent post-2019 rise in climate adaptation significant aid and the share of climate aid projects coded as climate significant despite recoding rates falling, is a product of the cumulative effects of recoding and non-climate projects closing and being replaced by projects that had at least some nominal relationship with climate adaptation.

Qualitatively, some of the projects that had their codes upgraded in 2019 or subsequent years appear to have a questionable relationship with climate change adaptation.

For example, a non-adaptation coded transport infrastructure project in Papua New Guinea, which began in 2016, was upgraded to climate significant in 2019. USD 229 million has been spent on it since the upgrade. While transport infrastructure can assist with adaptation to climate change impacts, there is no evidence in OECD project reporting data that the project changed in any way between 2018 and 2019. It did not change sectors, and throughout the period the project was described in its description in OECD reporting as providing, "capacity building and technical assistance for governance, providing support services for the transport sector coordination body… and Secretariat, policy advice, strategic direction, financial and procurement oversight for the program, monitoring and evaluation." When a project's links to climate adaptation are indirect and where reporting does not suggest any meaningful change in project focus, adaptation recoding seems hard to justify.

A similarly potentially concerning example of 2019 recoding was an education program in Solomon Islands, on which nearly USD 9 million was spent from 2019 onwards. Once again, nothing obvious changed about the project in 2019. Throughout its operation, the project was described in OECD reporting as aiming to, "promote economic growth, stability and poverty reduction in Solomon Islands through skills development. The program brings together three areas of intervention: foundation skills in literacy and numeracy through basic education, skills for economic growth through Technical and Vocational Education and Training…including trade and technological training, and scholarships..."

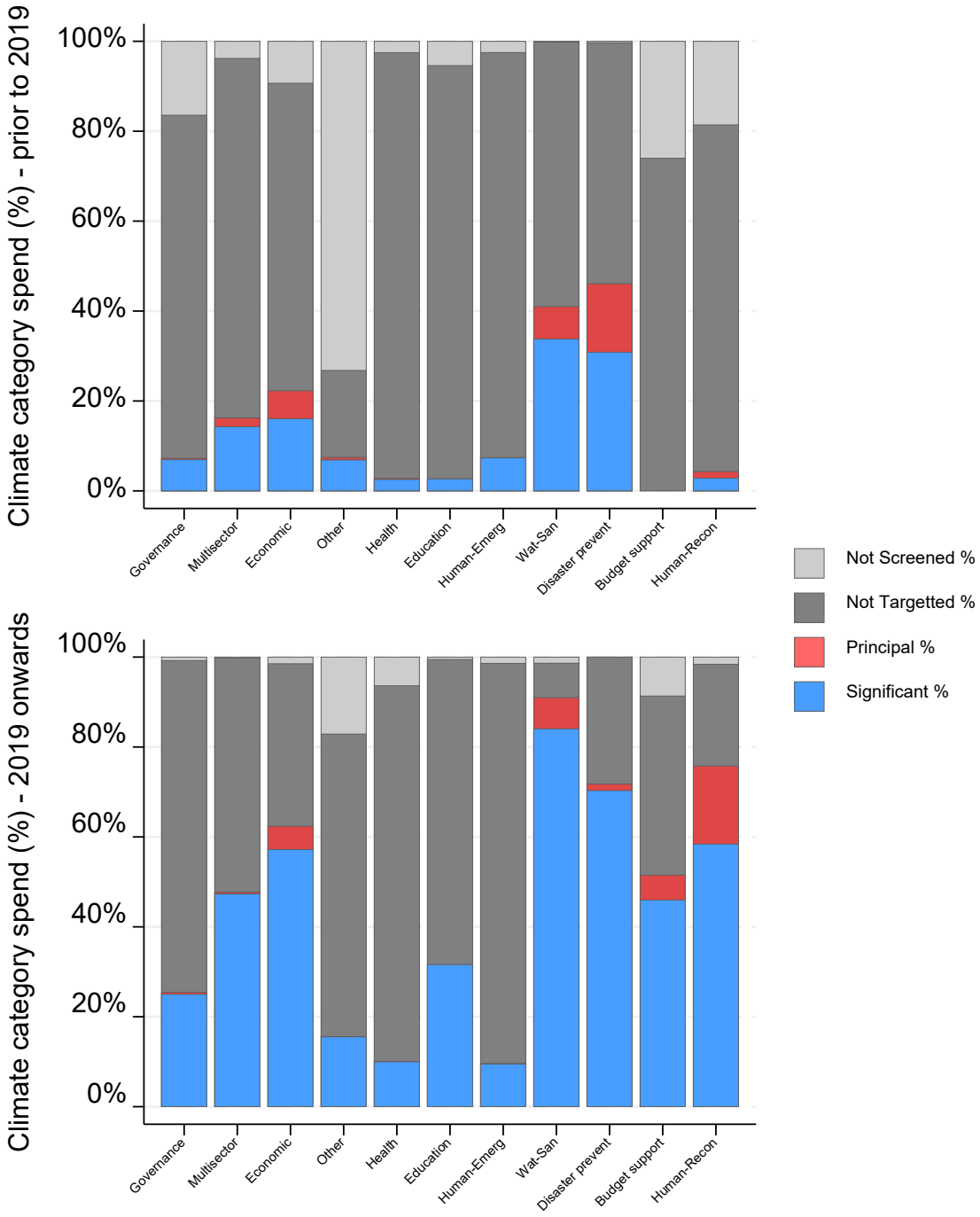
Another example of a 2019 recoded project comes from Fiji and a project designed to support, “the Government of Fiji's priorities of increasing private sector investment and creating better environment for private sector led growth. The partnership will work closely with business and governments to introduce significant direct investment into the economy and advise government on establishment and maintenance of the right regulatory environment for improved private sector performance.”

To be clear, it is not our claim that no climate adaptation projects have a meaningful relationship to climate change, and we are also not claiming that all instances of recoding are dubious. Indeed, it is possible to find other projects recoded in 2019 that seem to have more direct climate relevance. Nevertheless, the fact that examples of very questionable upgrades can be found in 2019, combined with the number of upgrades, and the effect this had on aggregate adaptation spending points to serious issues.

Other changes also occurred in the period from 2019 onwards, and some of these raise further questions about climate adaptation coding. Figure 4 splits our data into two periods, before 2019, which is shown at the top, and 2019 onwards, which is shown below. In it all projects are categorised by sector.[17] The two panels show the percentage of spending in each sector allocated to each of the climate adaptation categories. In almost all instances, the change between periods has been upwards.

[17] The sectoral schema is based on Australia’s OECD reporting but has been simplified for the sake of a legible chart. Arguably we could have simplified further. However, we have tried to keep sectors distinct where sectoral differences might be expected to be coupled with differences in climate relevance. This was particularly the case with different types of humanitarian spending.

Figure 4 – Climate adaptation spending by sector



Some of the changes do not necessarily seem problematic: increases in water and sanitation, disaster prevention and humanitarian reconstruction, for example. In other sectors — particularly health and humanitarian emergencies — the absence of dramatic changes is reassuring.

However, in other sectors there have been major shifts that do not obviously fit with an aid program refocusing rapidly on the effects of climate change. The share of economic development spending with a climate adaptation significant rating has more than doubled. Presumably some of this represents a genuine effort to build more seawalls, or roads more resistant to changing weather, or investment in new agricultural technology, but such a rapid change in such a short period of time raises questions. Likewise, the share of governance spending claimed to be adaptation significant also more than doubled. Certain types of governance projects might plausibly help with adaptation to climate change, but such a large share seems unlikely. Economic development and governance are of particular importance given they have often been the sectors receiving the most Australian aid.

One final area of concern is budget support, which in this chart reflects general budget support, not budget support focused on specific sectors. Pre-2019 no budget support spending was claimed to be climate adaptation related; from 2019 onwards more than half was. By its nature, general budget support ought not have a specific focus. It is hard, therefore, to understand just why so much of Australia's budget support was considered to be meaningfully related to climate change adaptation post 2019.[18]

5 Findings: does greater climate vulnerability correspond with projects being considered climate-relevant?

We now report on the types of projects and places where aid projects are most likely to be coded as climate adaptation related. Tables 1, 2 and 3 show the results of multinomial logit regressions run in which the dependent variable is whether any individual project in a specific year was coded as not climate adaptation relevant, adaptation significant or adaptation principal.[19] The first column in each table reports the results of a bivariate regression comparing country vulnerability with the likelihood that a project is coded adaptation significant or adaptation principal. The second and

[18] To add to the puzzle, although climate adaptation significant budget support was higher than it had previously been in all years from 2019 onwards, the aggregate change in this period was driven by just one year: 2021. It is not immediately clear why budget support was particularly closely related to climate change in that year but not others.

[19] Because some projects run over multiple years in all regressions we clustered standard errors at the project level.

third columns include additional country and project variables that might, on the basis of findings from other studies, affect adaptation coding.

The coefficients reported are logits. Because logits are not easily interpreted by non-specialist readers, Figures 5, 6 and 7 are margins plots that chart the probability of a project being coded as climate principal (red) or climate significant (blue) based on the climate vulnerability of the country that the project is run in. These charts display the results from bivariate models and the models with all controls included.

In all models and charts standard errors are clustered at the project level. In all models except the bivariate models, sector and year fixed effects are included.

Table 1 and Figure 5 cover the entire period for which we have data (2011 to 2023). Table 2 and Figure 6 cover the period prior to 2019. Table 3 and Figure 7 cover the period from 2019 onwards.

One pattern stands out particularly clearly in the results. In all periods there is a positive correlation between vulnerability and the likelihood a project will be climate principal, although the relationship is not always statistically significant in the period 2019 onwards. However, in the full sample (2011-2023) projects are, if anything, less likely to be climate significant in more vulnerable countries. This relationship varies a lot by time period though. Prior to 2019 the relationship between vulnerability and the likelihood that a project will be climate significant is positive, albeit not statistically significant in one model. However, from 2019 onwards the relationship reverses. In all models, projects become less likely to be coded climate adaptation significant as vulnerability increases.

In terms of the magnitude of the effects, across the full period from 2011 to 2023, the difference in the predicted probability that a project will be coded as adaptation principal changes from just under 1 per cent to 2 per cent between the lowest country vulnerability score and the highest country vulnerability score. This is unsurprising given just how few projects in the category, and the change is of a similar magnitudes in the pre-2019 and 2019 onwards periods too. At the other end of the spectrum, from 2019 onwards the predicted probability that a project will be coded as climate

significant falls from 55 per cent in a country where climate vulnerability is very low to 40 per cent in a country where vulnerability is very high.[20]

Some of the other results change little over time. In all three time periods larger projects (in terms of annual project spends) are more likely to be coded adaptation significant or adaptation principal than they are to be coded not adaptation related. Projects in countries where total Australian aid is higher are less likely to be climate significant, although there is no relationship between total country spend and the likelihood of projects being coded as climate principal.

Projects are less likely to be climate significant in more affluent recipient countries in all time periods. Projects are more likely to be climate principal in more affluent countries, although this relationship seems to be driven primarily by the period prior to 2019. At odds with some of the findings in existing research, we do not observe a statistically significant relationship between recipient country government effectiveness and the likelihood a project will be coded climate significant. However, there is a clear positive relationship between governance and the likelihood that a project will be climate principal in all periods.

In terms of variables that may be proxies of donor country interests, there is no relationship between Australian export flows and adaptation aid, inline with the findings of general research on overall aid allocation (Alesina & Dollar, 2000). Projects are, however, more likely to have a climate principal focus in countries that tend to vote alongside Australia in the UN. This finding is driven by the period prior to 2019 and it is unclear to us why shared geostrategic interests would increase the chance a project would be more likely to be adaptation principal.

[20] This prediction is the average marginal effect from the model with all controls, and year and sector fixed effects included.

Table 1 – Regression results full sample (2011-23)

	(1) Vulnerable	(2) Controls	(3) Donor Interest
Climate adaptation significant			
Climate vulnerability	-1.02***	-1.07**	-0.53
	(0.28)	(0.44)	(0.52)
GDP per capita (ln)		-0.30***	-0.28***
		(0.04)	(0.04)
Government effectiveness		-0.07	-0.07
		(0.05)	(0.06)
Total aid (ln)		-0.08***	-0.10***
		(0.01)	(0.01)
Project spend (ln)		0.08***	0.08***
		(0.01)	(0.01)
Exports (ln)			0.01
			(0.01)
Vote w Australia (UN)			-0.42
			(0.33)
Constant	-0.74***	0.28	0.01
	(0.14)	(0.46)	(0.55)
Climate adaptation principal			
Climate vulnerability	2.66***	4.23***	2.75**
	(0.82)	(0.93)	(1.14)
GDP per capita (ln)		0.27**	0.22**
		(0.11)	(0.11)
Government effectiveness		0.44***	0.42***
		(0.16)	(0.16)
Total aid (ln)		0.01	0.04
		(0.04)	(0.05)
Project spend (ln)		0.17***	0.17***
		(0.02)	(0.02)
Exports (ln)			-0.01
			(0.03)
Vote w Australia (UN)			1.89**
			(0.80)
Constant	-5.45***	-9.38***	-9.42***
	(0.44)	(1.13)	(1.39)
Year FE	No	Yes	Yes
Sector FE	No	Yes	Yes
Observations	38,331	38,226	38,057
Pseudo R2	0.00	0.25	0.25

Standard errors in parentheses. Standard errors are clustered at the project level.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Figure 5 – Margins plots results full sample (2011-23)

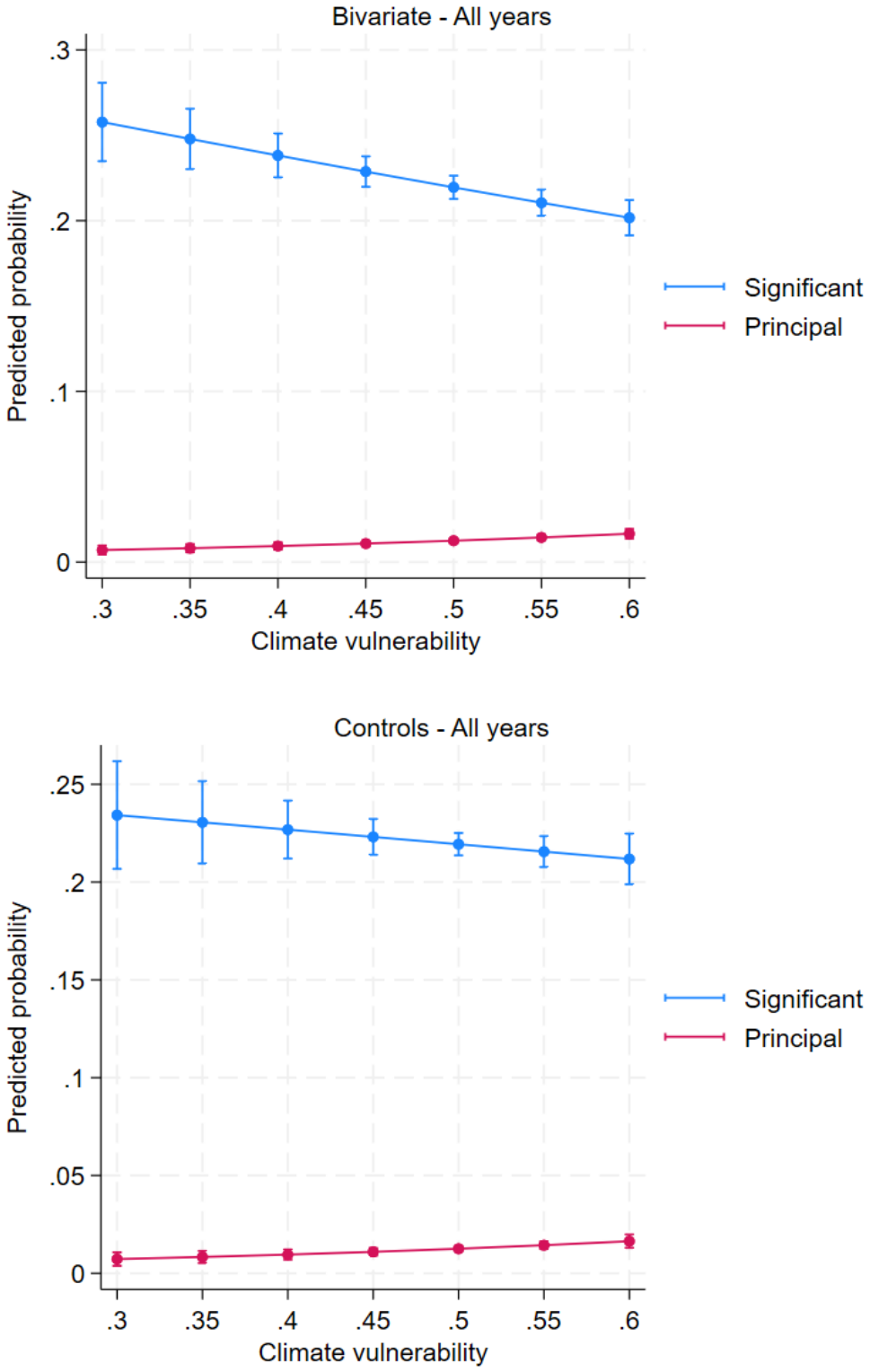


Chart notes: this chart shows the predicted probability of a project being categorized either significant or principal based on regressions with all controls and fixed effects included and with data from all years used.

Table 2 – Regression results 2011-2018

	(1) Vulnerable	(2) Controls	(3) Donor Interest
Climate adaptation significant			
Climate vulnerability	2.15***	0.97	1.38**
	(0.45)	(0.60)	(0.69)
GDP per capita (ln)		-0.16**	-0.15**
		(0.06)	(0.06)
Government effectiveness		0.05	0.04
		(0.09)	(0.09)
Total aid (ln)		-0.04**	-0.06**
		(0.02)	(0.02)
Project spend (ln)		0.15***	0.15***
		(0.01)	(0.01)
Exports (ln)			0.01
			(0.02)
Vote w Australia (UN)			-0.30
			(0.45)
Constant	-3.61***	-1.98***	-2.20***
	(0.24)	(0.62)	(0.74)
Climate adaptation principal			
Climate vulnerability	2.66***	3.91***	2.77**
	(0.96)	(1.13)	(1.37)
GDP per capita (ln)		0.26**	0.21*
		(0.12)	(0.12)
Government effectiveness		0.42**	0.40**
		(0.20)	(0.20)
Total aid (ln)		0.01	0.02
		(0.04)	(0.06)
Project spend (ln)		0.13***	0.13***
		(0.03)	(0.03)
Exports (ln)			0.01
			(0.04)
Vote w Australia (UN)			2.18**
			(0.97)
Constant	-5.50***	-10.05***	-10.85***
	(0.51)	(1.35)	(1.66)
Year FE	No	Yes	Yes
Sector FE	No	Yes	Yes
Observations	24,371	24,275	24,138
Pseudo R2	0.00	0.12	0.12

Standard errors in parentheses Standard errors are clustered at the project level.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Figure 6 – Margins plots period from 2011 to 2018

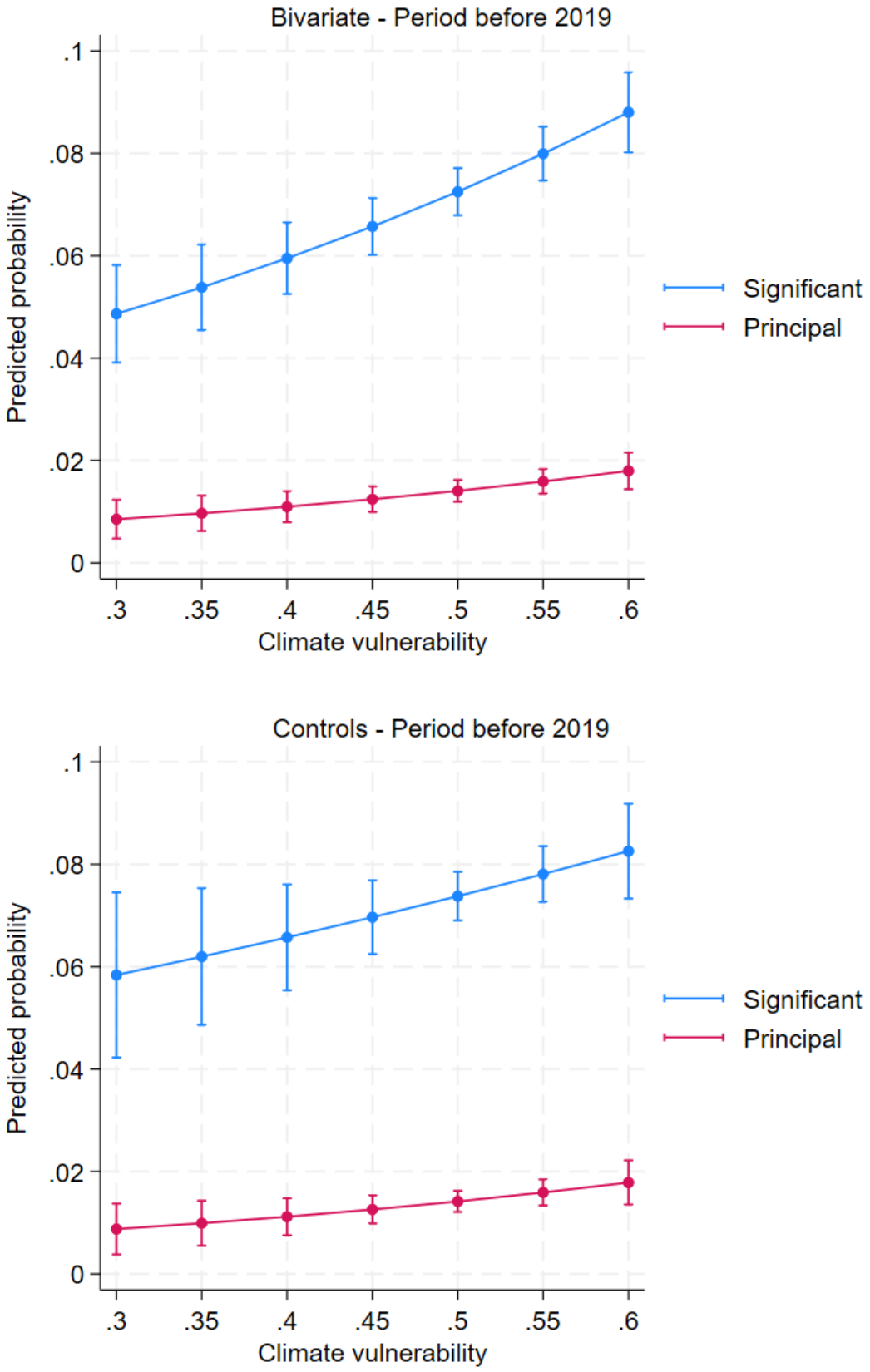


Chart notes: this chart shows the predicted probability of a project being categorized either significant or principal based on regressions with all controls and fixed effects included and with data from prior to 2019 used.

Table 3 – Regression results 2019-2023

	(1) Vulnerable	(2) Controls	(3) Donor Interest
Climate adaptation significant			
Climate vulnerability	-1.21***	-1.95***	-1.81**
	(0.43)	(0.57)	(0.73)
GDP per capita (ln)		-0.40***	-0.38***
		(0.06)	(0.07)
Government effectiveness		-0.07	-0.06
		(0.07)	(0.07)
Total aid (ln)		-0.11***	-0.11***
		(0.01)	(0.02)
Project spend (ln)		0.04***	0.04***
		(0.01)	(0.01)
Exports (ln)			-0.01
			(0.02)
Vote w Australia (UN)			-0.33
			(0.46)
Constant	0.50**	3.15***	3.26***
	(0.21)	(0.63)	(0.78)
Climate adaptation principal			
Climate vulnerability	2.75*	5.31***	2.70
	(1.52)	(1.64)	(2.22)
GDP per capita (ln)		0.25	0.18
		(0.27)	(0.29)
Government effectiveness		0.52*	0.51*
		(0.28)	(0.27)
Total aid (ln)		-0.02	0.04
		(0.06)	(0.08)
Project spend (ln)		0.26***	0.26***
		(0.04)	(0.04)
Exports (ln)			-0.07
			(0.07)
Vote w Australia (UN)			1.08
			(1.76)
Constant	-5.34***	-11.21***	-8.80***
	(0.80)	(2.53)	(3.09)
Year FE	No	Yes	Yes
Sector FE	No	Yes	Yes
Observations	13,960	13,951	13,919
Pseudo R2	0.00	0.09	0.09

Standard errors in parentheses Standard errors are clustered at the project level.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Figure 7 – Margins plots period from 2019 to 2023

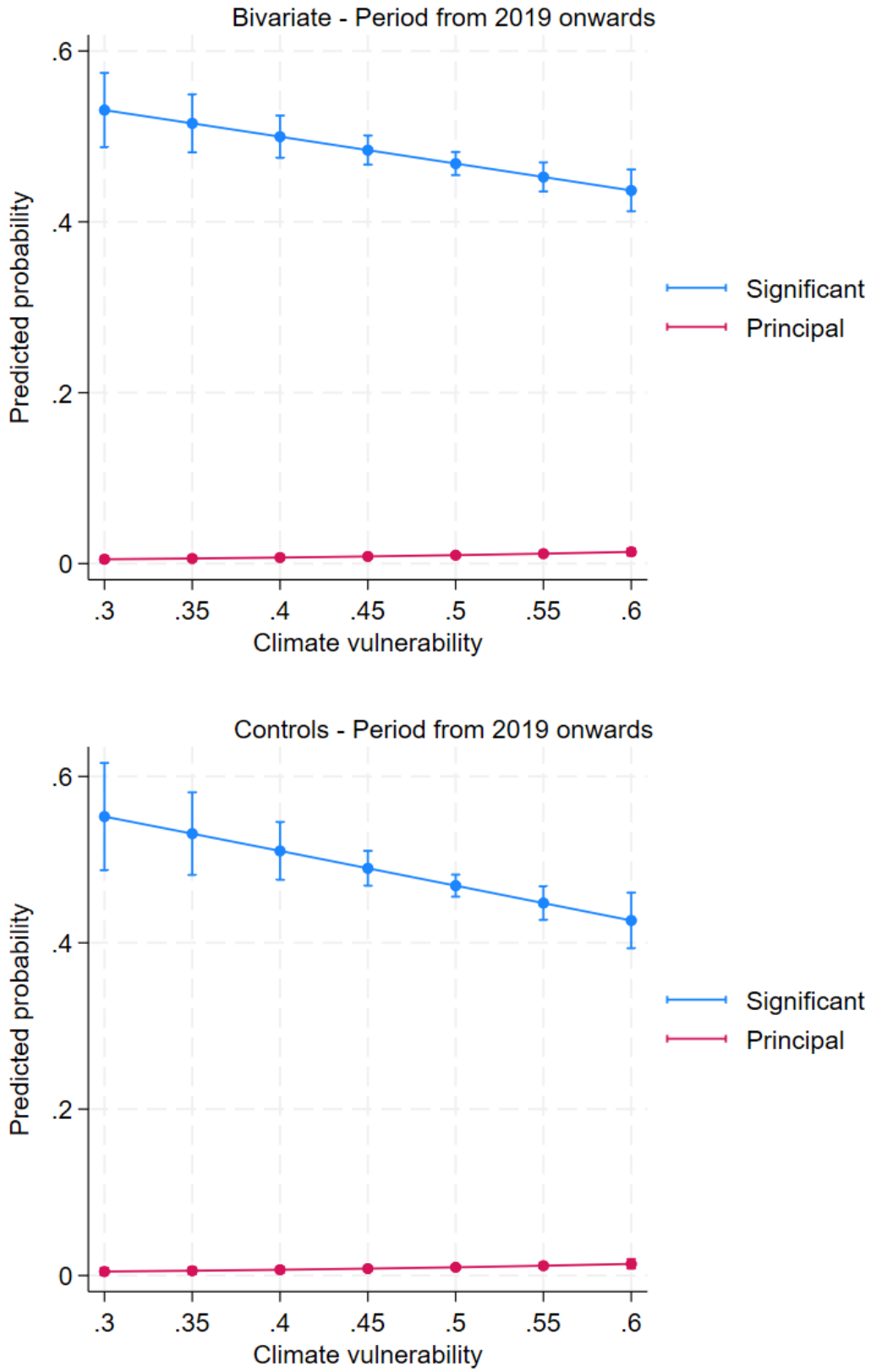


Chart notes: this chart shows the predicted probability of a project being categorized either significant or principal based on regressions with all controls and fixed effects included and with data from prior to 2019 used.

5 Discussion

In this paper we have shown that, in line with promises made in international fora, Australian climate adaptation aid has increased over time. However, the increase has not been driven by a rise in the overall volume of aid given by the Australian government. Rather it has been a product of Australia categorising an increasingly large share of its aid projects as climate adaptation related, and in particular it has been driven by a rise in the share of projects coded as climate adaptation significant. In 2018, just 6 per cent of projects were coded as climate significant. This rose to 24 per cent in 2019 and 56 per cent in 2023. Our best estimates suggest that the rise in 2019 was a product of about 45 per cent of projects being upgraded to climate significant.

It is very hard to see how such a rapid change in climate adaptation projects could have been driven by a major change in policy that saw projects dramatically re-oriented to focus meaningfully on climate adaptation. This is all the more so because numerous projects that were recategorised in this period appeared not to change in any meaningful way that might have led them to be more adaptation oriented. Similarly, the rapid rises in the share of spending in certain sectors, such as governance and budget support also appears problematic.

Our regressions also demonstrate a worrying by-product of the hurry to claim projects as adaptation aid: from 2019 onwards, projects were more likely to be adaptation significant in countries that were less vulnerable to climate change. Although the probability that Australian aid projects anywhere on earth were coded adaptation significant increased from 2019 onwards, this increase was most pronounced in countries where need was less. Taken together with the other evidence presented in this paper, the pattern appears likely to be a product of questionable reporting practices. To the extent that the observed changes actually reflect a real change in aid practice, rather than simply a change in reporting, this suggests more effort is being paid to climate change adaptation in places where it is least needed. Given that aid workers' time, and climate specialists' time, is finite, such a change could quite possibly dilute or undermine Australia's efforts to assist countries adapt to climate change.

One justification sometimes offered by practitioners for the rapid rise in the share of climate adaptation significant projects in a number of donor countries, is increasing mainstreaming, the process of ensuring that projects are designed to ensure that they do not worsen the effects of climate change and that projects' own efficacy is not undermined by subsequent climate change. Much like the mainstreaming of gender into aid work, this is good development practice. Aid will only be effective in improving people's quality of life if it does not exacerbate the effects of climate change or if its own efficacy is not undermined by the impacts of climate change. Moreover, DFAT aid programming guidelines indicate that the aid program is taking climate mainstreaming seriously (for example, DFAT, 2024).

While this is good practice, a number of serious questions remain. First, aid projects cannot be transformed overnight and meaningful mainstreaming cannot be the explanation for the extremely rapid recoding that took place between 2018 and 2019. Second, mainstreaming alone is not necessarily sufficient to qualify a project as adaptation significant if Rio-marker reporting is being seriously followed. Recall that the significant maker states that to be coded significant a project has to have, "been formulated or adjusted to *help meet* the relevant climate concerns" (emphasis ours). This is more than just designing a project to ensure that it will be more resistant to climate change; the project needs to actually work in a way that helps countries adapt to climate change. At times mainstreaming might meet this need, but it is not clear it will always do so.

Third, climate is not the only objective of Australian aid. Indeed, Australia's most recent development policy (DFAT, 2023) is ambitious in many different ways. Giving aid well is not easy and aid workers are often time pressured. As a result, adding climate as an objective to projects that are already intended to meet a number of other objectives runs the risk of undermining other goals or at the very least being tokenistic.

In terms of the promises made at the political level, Australia appears to be taking the task of helping countries adapt to climate change more seriously than it once did. However, in practice, the reality is more complex. None of the issues detailed in this paper were inevitable, and they could have been avoided if Australia had simply decided to increase its aid budget in line with its climate finance promises.

6 Appendices

Appendix 1: Summary statistics

All years

	%	Min	Max	Mean	Std. Dvn.	N
Climate adaptation						
Not targeted	71%					35,650
Significant objective	19%					9,531
Principal objective	1%					714
Not screened	8%					4,190
Climate vulnerability		0.31	0.66	0.51	0.07	41,917
GDP per capita (ln)		5.57	9.82	7.81	0.76	42,255
Government effectiveness		-2.44	1.26	-0.45	0.58	42,469
Total aid (ln)		-13.82	6.37	2.88	2.27	43,164
Project spend (ln)		-13.82	5.64	-3.10	2.93	50,085
Exports (ln)		7.02	25.48	18.11	2.86	42,566
Vote w Australia (UN)		0.23	1.00	0.64	0.09	42,124
Sector						
Other	40%					20,103
Humanitarian	5%					2,445
Economic	18%					8,833
Edn/Health/Wat-San	20%					9,914
Governance	18%					8,790

Pre-2019

	%	Min	Max	Mean	Std. Dvn.	N
Climate adaptation						
Not targeted	79%					26,580
Significant objective	7%					2,354
Principal objective	1%					493
Not screened	12%					4,090
Climate vulnerability		0.31	0.66	0.51	0.07	27,900
GDP per capita (ln)		5.63	9.78	7.79	0.80	28,096
Government effectiveness		-2.44	1.26	-0.49	0.56	28,220
Total aid (ln)		-13.82	6.25	2.79	2.30	28,757
Project spend (ln)		-13.82	5.64	-3.23	3.02	33,517
Exports (ln)		7.58	25.19	18.02	2.92	28,348
Vote w Australia (UN)		0.23	1.00	0.66	0.09	28,035
Sector						
Other	45%					15,091
Humanitarian	4%					1,448
Economic	18%					5,883
Edn/Health/Wat-San	15%					5,140
Governance	18%					5,955

2019 Onwards

	%	Min	Max	Mean	Std. Dvn.	N
Climate adaptation						
Not targeted	55%					9,070
Significant objective	43%					7,177
Principal objective	1%					221
Not screened	1%					100
Climate vulnerability		0.32	0.65	0.50	0.07	14,017
GDP per capita (ln)		5.57	9.82	7.85	0.68	14,159
Government effectiveness		-2.40	1.05	-0.36	0.60	14,249
Total aid (ln)		-9.94	6.37	3.07	2.22	14,407
Project spend (ln)		-13.82	5.32	-2.85	2.72	16,568
Exports (ln)		7.02	25.48	18.29	2.73	14,218
Vote w Australia (UN)		0.37	1.00	0.61	0.08	14,089
Sector						
Other	30%					5,012
Humanitarian	6%					997
Economic	18%					2,950
Edn/Health/Wat-San	29%					4,774
Governance	17%					2,835

Appendix 2: Multinomial Probit regression results

All years

	(1) Vulnerable	(2) Controls	(3) Donor Interest
Climate adaptation significant			
Climate vulnerability	-0.83***	-0.67**	-0.23
	(0.23)	(0.33)	(0.39)
GDP per capita (ln)		-0.22***	-0.20***
		(0.03)	(0.03)
Government effectiveness		-0.06	-0.06
		(0.04)	(0.04)
Total aid (ln)		-0.06***	-0.08***
		(0.01)	(0.01)
Project spend (ln)		0.07***	0.07***
		(0.01)	(0.01)
Exports (ln)			0.01
			(0.01)
Vote w Australia (UN)			-0.34
			(0.25)
Constant	-0.66***	-0.03	-0.27
	(0.12)	(0.34)	(0.41)
Climate adaptation principal			
Climate vulnerability	1.21***	2.29***	1.43**
	(0.42)	(0.54)	(0.67)
GDP per capita (ln)		0.11*	0.08
		(0.06)	(0.06)
Government effectiveness		0.22**	0.21**
		(0.09)	(0.09)
Total aid (ln)		0.00	0.02
		(0.02)	(0.03)
Project spend (ln)		0.11***	0.11***
		(0.01)	(0.01)
Exports (ln)			-0.01
			(0.02)
Vote w Australia (UN)			1.03**
			(0.47)
Constant	-3.36***	-5.49***	-5.45***
	(0.22)	(0.63)	(0.79)
Year FE	No	Yes	Yes
Sector FE	No	Yes	Yes
Observations	38,331	38,226	38,057
Pseudo R2			

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Period before 2019

	(1) Vulnerable	(2) Controls	(3) Donor Interest
Climate adaptation significant			
Climate vulnerability	1.55***	0.72*	0.96**
	(0.32)	(0.42)	(0.49)
GDP per capita (ln)		-0.10**	-0.10**
		(0.04)	(0.04)
Government effectiveness		0.04	0.03
		(0.06)	(0.06)
Total aid (ln)		-0.03**	-0.04**
		(0.01)	(0.02)
Project spend (ln)		0.11***	0.11***
		(0.01)	(0.01)
Exports (ln)			0.01
			(0.01)
Vote w Australia (UN)			-0.10
			(0.33)
Constant	-2.81***	-1.71***	-1.90***
	(0.17)	(0.43)	(0.52)
Climate adaptation principal			
Climate vulnerability	1.60***	2.27***	1.53*
	(0.52)	(0.67)	(0.84)
GDP per capita (ln)		0.12*	0.09
		(0.07)	(0.07)
Government effectiveness		0.21*	0.20
		(0.12)	(0.12)
Total aid (ln)		0.02	0.02
		(0.03)	(0.04)
Project spend (ln)		0.09***	0.09***
		(0.02)	(0.02)
Exports (ln)			0.00
			(0.02)
Vote w Australia (UN)			1.27**
			(0.59)
Constant	-3.74***	-6.02***	-6.38***
	(0.27)	(0.76)	(0.96)
Year FE	No	Yes	Yes
Sector FE	No	Yes	Yes
Observations	24,371	24,275	24,138
Pseudo R2			

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Period from 2019 onwards

	(1) Vulnerable	(2) Controls	(3) Donor Interest
Climate adaptation significant			
Climate vulnerability	-1.07***	-1.65***	-1.53**
	(0.38)	(0.49)	(0.62)
GDP per capita (ln)		-0.34***	-0.33***
		(0.05)	(0.06)
Government effectiveness		-0.06	-0.05
		(0.06)	(0.06)
Total aid (ln)		-0.10***	-0.10***
		(0.01)	(0.02)
Project spend (ln)		0.04***	0.04***
		(0.01)	(0.01)
Exports (ln)			-0.00
			(0.01)
Vote w Australia (UN)			-0.27
			(0.40)
Constant	0.44**	2.71***	2.80***
	(0.19)	(0.54)	(0.67)
Climate adaptation principal			
Climate vulnerability	1.08	2.54***	1.18
	(0.74)	(0.88)	(1.16)
GDP per capita (ln)		0.08	0.04
		(0.14)	(0.14)
Government effectiveness		0.27*	0.26*
		(0.14)	(0.14)
Total aid (ln)		-0.03	0.01
		(0.03)	(0.04)
Project spend (ln)		0.15***	0.15***
		(0.02)	(0.02)
Exports (ln)			-0.04
			(0.04)
Vote w Australia (UN)			0.63
			(0.89)
Constant	-3.02***	-5.86***	-4.68***
	(0.39)	(1.28)	(1.57)
Year FE	No	Yes	Yes
Sector FE	No	Yes	Yes
Observations	13,960	13,951	13,919
Pseudo R2			

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

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