

IRU Submission – Research Block Grant reform

The Innovative Research Universities (IRU) appreciates the opportunity to provide feedback on the proposed reforms to boost incentives for university and industry collaboration through the Research Block Grant (RBG). With society transitioning to a post-Covid 19 environment, now is an opportune time to take stock and to examine how, as a nation, we can sustainably support our world leading higher education sector to most effectively drive the nation's research, innovation and economic agendas.

The Australian Government has made a commitment to an evidence-based and consensus-based Australian Universities Accord on key policy questions and national priorities. The IRU submits that this should include university research and as such, RBG reform would sit firmly within that mandate. Government should be cautious about making changes to the RBG in advance of this thorough review. There is limited urgency to implement the changes from January 2023, particularly when the impacts of other recent changes in the research system are yet to be properly evaluated. **The IRU recommends delaying reforms to the RBG formulae until after the Universities Accord process.**

The RBG is part of a “dual funding system” of direct public funding for research. Researchers compete on quality and impact for public competitive grants tied to specific projects, and universities receive flexible base research funding through the RBG to support systemic costs of research not directly funded through other means. Competitive grants do not cover the full cost of research, such as overheads for libraries, laboratories, buildings and infrastructure, and the salaries of support and technical staff. Competitive grants often do not cover the full project costs. For example, in 2021 the ARC provided only 87% of the funds requested for approved Linkage Projects and 71% of funds requested for Discovery projects, a collective shortfall of around \$110 million. The shortfall for approved competitive grants must be covered through RBG and other indirect funding sources, such as student fees, consultancies, investments and contract research.

The Australian Government has also strongly encouraged universities to increase the quantum of research undertaken under contract for industry, business, government and other end users. This has been part of an effort to drive the R&D intensity of Australia's economy by leveraging the relatively high share of research conducted by the higher education sector, as well as efforts to translate high quality research into social benefits for the nation. Some contract research covers its full costs and contributes towards overheads not covered by competitive grants. Government initiatives to support commercialisation and more effective management of intellectual property (IP) may increase this further over the longer term. However, universities also engage in contract research as part of their commitment to civic leadership, community engagement and social responsibility. This is also a university requirement under the Higher Education Standards Framework. Projects in areas such as preventative health and knowledge translation for evidence-based policy and professional practice generate economic benefits to society, but often do not contribute directly to research overheads.

A central feature of the RBG is the use of drivers that carefully balance the incentives to reward research excellence and engagement with business, government and other end users. The RBG does this by providing roughly equal weighting to competitive grant income – including the Australian Research Council (ARC), National Health and Medical Research Council (NHMRC) and the Medical Research Future Fund (MRFF) – and to income from other end users of research. This careful balance

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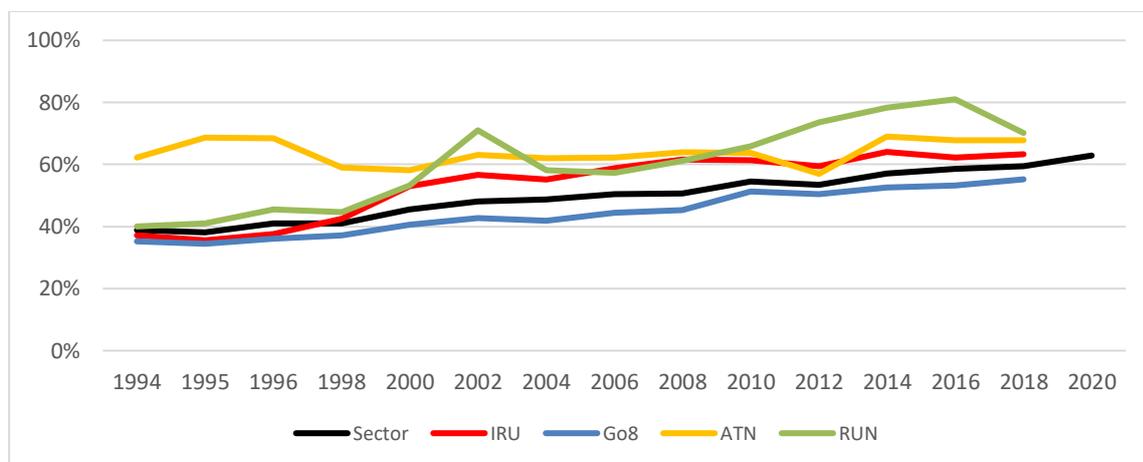
was the first recommendation of the 2015 Watt Review. It ensured equal support for the indirect costs of Australian competitive grants and research engagement. The Watt Review’s recommendations were carefully developed after extensive consultation, including roundtables and meetings with universities, research bodies and institutes, business and industry leaders and government. Any changes to the RBG formulae should follow a similar consultative process.

The proposed RBG reforms sit alongside a number of other Government-led initiatives targeting greater university-industry collaboration and commercialisation. These include the 2022 University Research Commercialisation Action Plan schemes, industry PhDs and internships, and industry fellowships. The 2020 Job Ready Graduates (JRG) package also included specific schemes for university-industry engagement, including the National Priorities and Industry Linkage Fund (NPILF), Strategic University Reform Fund and research capacity at regional universities. The effects of these initiatives on research support need to be carefully considered and evaluated before any changes to the RBG formulae.

The consultation paper correctly acknowledges that Australia’s research sector performs exceptionally well on research excellence and productivity. The importance of maintaining this is well understood. What is less often appreciated is the deepening engagement between Australian universities and industry on research, including application oriented “applied” research, industry collaboration and industry-funded research.

The proportion of higher education research and development (HERD) expenditure directed towards applied research or experimental development increased from less than 40% in the early 1990s, to half of all HERD by the mid-2000s and 58% by the mid 2010s. In 2020, the most recent year for sectoral data, it was 63% of HERD. This transformational shift away from basic research has been sector-wide, but particularly prominent in regional and outer metropolitan universities. In 2018, the most recent year with available data for individual universities, 70% of all Regional University Network member HERD and 63% of all IRU member HERD was directed towards applied research or experimental development. Australian Technology Network (ATN) members have historically high rates, up to 70% of HERD, but the rest of the university sector are now approaching these levels.

Figure 1. Applied research and experimental development as a % of total HERD, 1994-2020



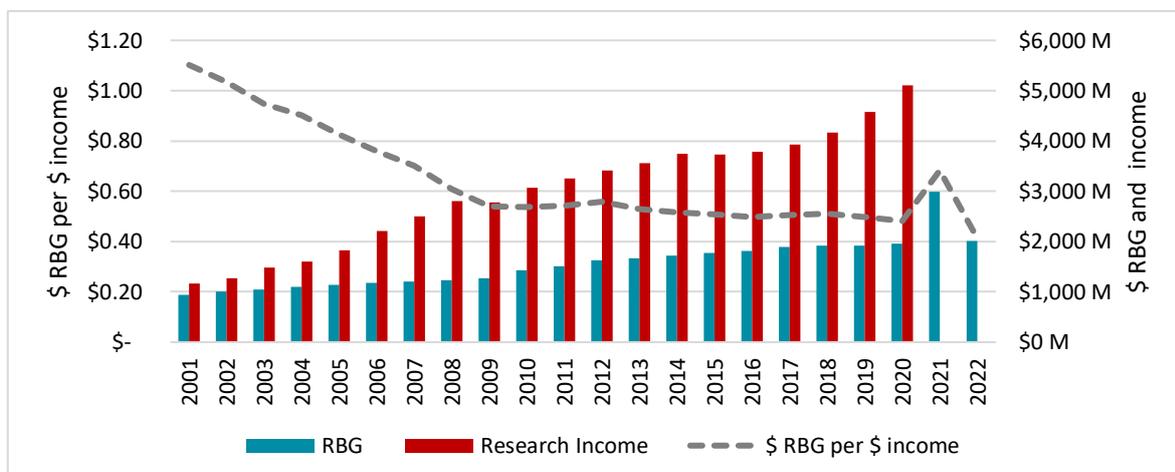
Sources: DESE Higher Education Expenditure on R&D; ABS Research and Experimental Development, Higher Education Organisations.

The flow-on effects for the role of the RBG to support the research mission needs careful consideration. Growth in research income, primarily for specific purpose applied research, has far outstripped growth in RBG. Whereas government competitive grants and the RBG have increased mostly through annual indexation, research income from industry sources and contract research has grown rapidly. In the early 2000s, the RBG was roughly equivalent to one year of research income. For every dollar of contract or competitive grant research income, universities received an additional dollar of RBG across the next two years to support the indirect costs of research, roughly half of which supported research training and PhD stipends. The ratio of RBG to research income has subsequently declined over the past two decades to less than \$0.50 since the mid-2010s.

The additional \$1B in RBG in 2021 via the Research Support Program (RSP) temporarily increased the ratio to \$0.68 in 2021 (RBG in 2022 was \$3.0B compared to an average of \$4.4B in research income in 2018 and 2019), but the expiration of this one-off measure saw it decline to a new low of \$0.41 in 2022. The additional \$1B in RBG in 2021 must also be understood in the context of long term budget cuts to the RBG. The 2021-22 RBG was \$149M below what was projected in Budget 2018 prior to the Australian Government’s 2018 mid-year Budget update which cut RBG by more than \$300M over the forward estimates. The growing imbalance between RBG and research income has stretched the capacity of the RBG to support theoretical and basic research, particularly in the humanities and social sciences. An additional \$500M in RBG would be required just to bring the level of indirect support back to its mid-2010s level of \$0.50 per dollar.

Public competitive grant income is also now more often targeted towards industry collaboration and application oriented research, such as through ARC Linkage and the MRFF. The MRFF, an ongoing research fund set up by the Australian Government in 2015, has only recently reached its \$20B capital goal with an annual disbursement of around \$650M to support research. The full effects on RBG are yet to be realised. The lagged impact of research income as an RBG input (research income from two years prior are used as inputs) means that only \$111M of MRFF income in 2019 and \$224M in MRFF research income in 2020 were inputs to the 2022 RBG. The MRFF is an important new part of the research funding system, but because the MRFF does not cover the full costs of research, it will stretch the capacity of the RBG to support the breadth of research once it reaches its full scale.

Figure 2. RBG per \$1 research income (in RBG reference years), 2001 to 2022



The diminishing capacity of the RBG to support research has been compounded by changes to domestic student funding as part of the JRG. The Commonwealth Grants Scheme (CGS) and domestic student contributions are driven by teaching load, but are intended to also support baseline research. Competitive grants and research engagement income typically fund limited-term research projects and contract staff, but CGS and student contributions support regular academic staff time for research. However, the costs of teaching per student in 2018 consumed roughly 90% of the combined CGS and student contribution funding (upfront contributions and HECS-HELP). JRG changes have reduced average student funding further, leaving universities with few sources of domestic funding to support research or hire staff on the traditional ongoing teaching and research contracts. The surplus from international student revenue is an important source research funding, but this cannot be the long term basis for a sustainable research system or research careers.

Overall, changing the formulae for the allocation RBG without increasing the quantum will, at best, lead to a trade-off between industry engagement and other research. IRU members conduct 11% of all engagement-based research for Australian governments (across all levels). The full spectrum of benefits associated with community and government engagement cannot be easily estimated, but the short-term revenue and costs are auditable. The proposed changes to aggregate all publicly funded research and prioritise industry funded research will reduce RBG earned through collaboration with government and community partners. This will effectively push universities away from public good research translation and punish institutions that have a strong track record of translational research that is not targeted at short-term commercial outcomes. The ARC's Engagement and Impact Assessment offers numerous examples of engagement-based research that contributes to society, environment and culture, as well as the economy. Such projects are at risk under the proposed changes.

There is also a risk that the proposed changes would be an administrative distraction while the Government undertakes its fuller Universities Accord process, which may in turn lead to further changes and transitional arrangements. Therefore, the IRU recommends delaying any changes to the RBG formulae and incorporating this as part of the Accord process.

The Government must also seek to reverse the decline in funding for basic research as part of the Universities Accord process. There is a strong need to increase the level of RBG to account for historical cuts in RBG and growth in research income, and the full-scale implementation of MRFF funding. The IRU estimates that an additional \$500M in RBG would bring the level of indirect support back to its mid-2010s level of \$0.50. Temporarily increasing the RBG by this amount during the Universities Accord consultative process would help reverse the decline in funding for basic research and maintain research capacity while the Government develops its sustainable long-term plan for supporting baseline research capacity.

Recommendation:

1. The proposed changes to the RBG should not proceed and reforms should be part of the broader Australian Universities Accord consultative process.