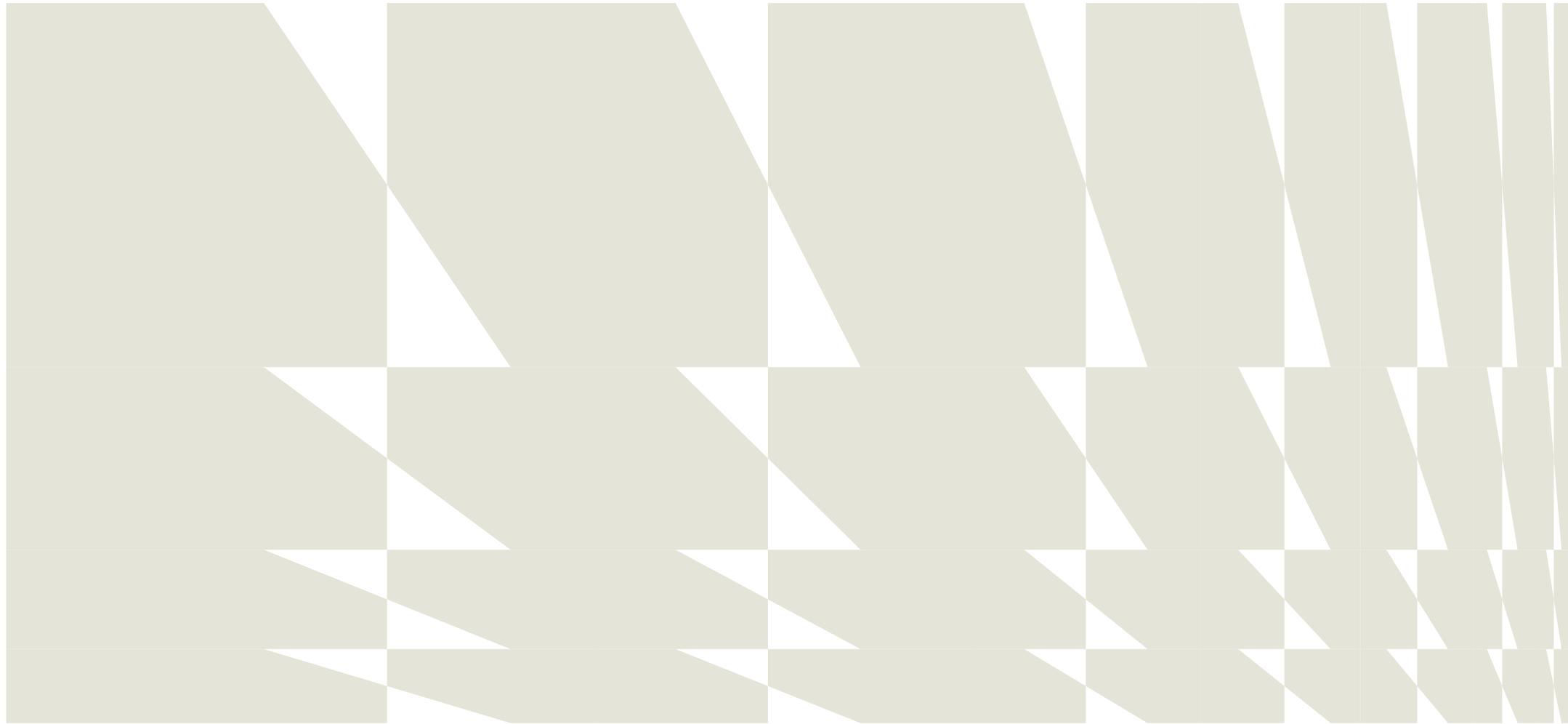


# Accelerate:

# Reframing culture's role in productivity



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# About A New Approach

## A New Approach (ANA) is Australia's leading think tank focused on arts and culture.

Through credible and independent public leadership, ANA helps build an ambitious and innovative policy and investment environment for arts, culture and creativity.

We work to ensure that Australia can be a great place for creators and audiences, whoever they are and wherever they live.

ANA acknowledges the cultures of Aboriginal and Torres Strait Islander peoples in Australia and their continuing cultural and creative practices in this land.

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Rupert Myer AO (Chair), Sue Cato AM, Cass O'Connor, Catherine Liddle, Craig A. Limkin PSM and Genevieve Lacey. Board Associates 2023: Astrid Jorgensen OAM and Daniel Riley.

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Genevieve Lacey (Chair), Ben Au, Julian Canny, Jane Curry, Professor John Daley AM, Damien Miller, Rupert Myer AO, Alison Page and Dr Mathew Trinca AM.

### ANA Partners

ANA is supported by a unique collaboration of 11 philanthropic organisations across the country. This national coalition comprises:



**Aranday Foundation**



# About this report

## **ANA Paper No. 2023–03, November 2023**

A New Approach (ANA) produced this report. CEO Kate Fielding provided the overall direction; Director of Research Dr Angela Vivian led authorship; and Researcher Dr Sari Rossi led data analysis.

Saul Eslake: Principal, Corinna Economic Advisory and Vice-Chancellor's Fellow at the University of Tasmania and Ben Au provided expert advice on early drafts of this report. However, any errors are our own. If you notice any, please get in touch using the contact details below.

ANA thanks all the people who generously reviewed this paper for their time and feedback, including members of ANA's Board and Reference Group.

The opinions in this Insight Report do not necessarily represent the views of ANA's funding partners, the individual members involved in governance or advisory groups or others who have provided input.

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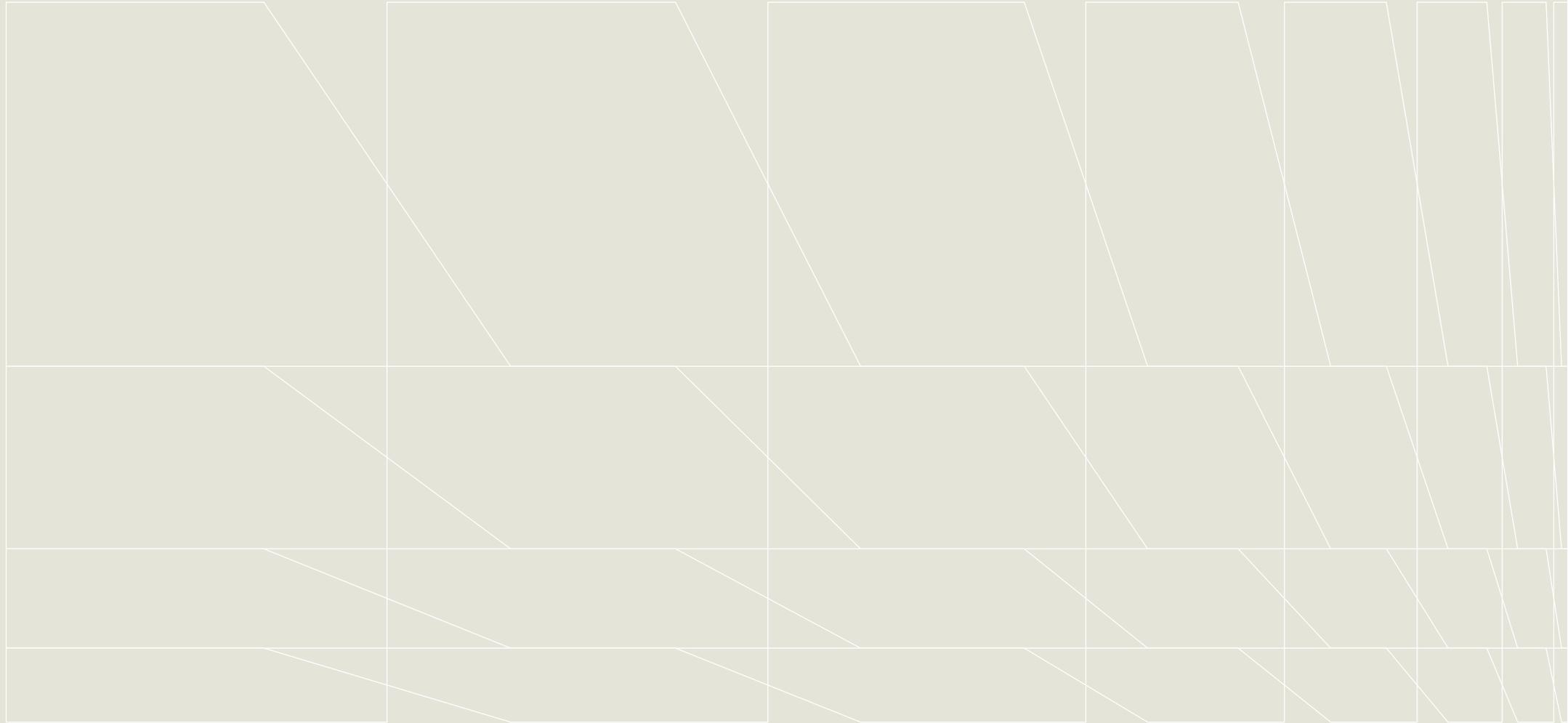
## **The Insight series**

This paper is the 11th in ANA's Insight series. Our Insight Reports provide a deep dive into research and analysis of a particular arts and cultural policy topic or other area of interest.

Find all our previous work at [www.newapproach.org.au](http://www.newapproach.org.au).

Contact us about this work via [hello@newapproach.org.au](mailto:hello@newapproach.org.au).

# Executive Summary



Understandably, productivity continues to rivet nations of the Organisation for Economic Co-operation and Development (OECD), including Australia.

Growing productivity is critical to Australians' quality of life and wages according to the *5-year Productivity Inquiry: Advancing Prosperity (Advancing Prosperity)*<sup>1</sup> and *Working Future: The Australian Government's White Paper on Jobs and Opportunities (Working Future)*.<sup>2</sup> Productivity will also influence how Australians choose to spend their time in 40 years, according to the 2023 Intergenerational Report.<sup>3</sup>

Productivity also raises many important questions among policy-makers, researchers and the public. These questions, which cannot be dismissed, regard distributing productivity's benefits within the community; under-measuring true productivity; and attempting to predict the future.<sup>4</sup>

With Australia's measured productivity growing at its lowest rate in 60 years,<sup>5</sup> A New Approach (ANA) has boldly asked **'Can arts, culture and creativity make a contribution towards solving Australia's productivity predicament?'**

The answer to this question is 'yes'. Arts, culture and creativity can contribute to solving Australia's productivity challenge and can do so through both broad-based 'cultural and creative engagement'<sup>6</sup> by the Australian population and within the organisations, businesses and people focused on cultural and creative activities.

This report, *Accelerate: Reframing culture's role in productivity (Accelerate)*, outlines international and Australian evidence for this contribution, providing local examples and opportunities for strengthening this contribution.

Our objective is to unlock productivity knowledge that supports the vibrancy of all industries. Grappling with productivity in arts and culture, or 'what you get out for what you put in',<sup>7</sup> can also empower our cultural industries and firms to reach the global frontier and help Australia reach its potential as a cultural powerhouse.<sup>8</sup> Pursuing improved productivity in tandem with cohesion and inclusion's social benefits will position arts, culture and creativity and its industries as a future beneficiary of – and positive contributor to – Australia's National Cabinet productivity priorities.<sup>9</sup>

Productivity is a far-reaching social, economic and political concept.<sup>10</sup> Despite productivity commonly being linked with ideas of creativity and innovation, limited explicit research attention has been paid to productivity benefits of creative and cultural participation and expression within the broad population. Neither has there been a specific focus on the productivity of the 'cultural and creative industries' – a large group of businesses and their activities that government, industry and academia refer to and that the Australian Bureau and Statistics (ABS) has delineated based on industry scope.

This knowledge gap is addressed in a handful of recent publications by international organisations and by ANA's new report, *Accelerate*, which

- synthesises research on productivity and 'arts, culture and creativity' (defined below), highlighting relationships (or their lack thereof) among sources
- draws on official statistics of labour productivity in the cultural and creative industries
- outlines potent opportunities, policy settings and examples to grow productivity

Informed by research on the determinants of Australia's future productivity, *Accelerate* classifies the relationship between the cultural and creative industries and future productivity into four themes:

1. Creative skills and cultural organisations in innovation diffusion
2. Trade and investment in cultural and creative goods and services
3. Cultural and creative employment, workplaces and labour supply
4. Cultural and creative engagement by the public

Overall, the research finds positive contributions by arts, culture and creativity to productivity within these four themes, as well as opportunities for strengthening these contributions.

**Exhibit 1** illustrates these themes with relevant examples.

**The Productivity Commission's *Advancing Prosperity* focuses on five key themes that will determine Australia's future productivity, which are**

1. 'Building an adaptable workforce'
2. 'Harnessing data, digital technology and diffusion'
3. 'Creating a more dynamic economy'
4. 'Lifting productivity in the non-market services'
5. 'Securing net-zero at least cost'

The Australian Government reinforced these broad themes through *Working Future*; the *2023 Intergenerational Report* and, most recently, through the *Productivity Commission Statement of Expectations*.

Productivity features in intergovernmental priorities of Australia's National Cabinet.

**ANA's *Accelerate* summarises the relationship between cultural and creative industries and productivity in four themes that reflect its positive contributions, which are**

1. Creative skills and cultural organisations in innovation diffusion
2. Trade and investment in cultural and creative goods and services
3. Cultural and creative employment, workplaces and labour supply
4. Cultural and creative engagement by the public

The OECD, UNCTAD, UNESCO and, to a lesser extent, ILO and WHO provide a range of evidence and examples on the relationship between cultural and creative industries and productivity.

**Examples of productivity determinants and benefits of cultural and creative engagement across these themes are**

- Development of 'higher-order' skills and human attributes through arts and culture education and training
- Upskilling and reskilling, as part of Australia's 'culture of lifelong learning'
- Exposure to new ideas and innovation through cultural and creative services trade and international linkages
- No-cost or low-cost access to ideas that have large public good value
- Use of digital and non-digital platforms in the gig economy
- In best practice, cross-sectoral responses to age-related illness and the social determinants of health
- Cultural tourism approaches adapted for climate change
- Cross-sectoral behavioural change programmes tackling climate change
- Generating data for use by businesses and government in new products and services
- Supporting service users' experiences, across sectors

This report also examines:

- **What is the existing evidence on the productivity impacts of the cultural and creative industries?**
- **How can arts, culture and creativity lift and be lifted by Australia's productivity agenda at *no or low cost*?**
- **How productive are the cultural and creative industries according to official statistics?**

To do so, we build on the latest international research; illustrative industry examples; and evidence on the determinants of future productivity published by Australia's Productivity Commission, many of which have been reinforced in recent governmental policies and by New Zealand's Productivity Commission.

We situate the role of arts, culture and creativity in proposed reforms, including in approaches to lift the productivity growth of 'non-market services' (such as programs and services of government-funded or government-operated cultural institutions), and in recommendations to strengthen the diffusion of innovation in the Australian economy (such as through the public's access to ideas that have large public good value).

The research's overarching opportunity is substantive: decisions taken about arts, culture and creativity generally and the cultural and creative industries specifically can influence Australia's productivity and deliver value and returns to investors, businesses, workers and Australians.

ANA will work with governments and industry on a path to accelerate productivity growth through this cultural and creative lens.

#### For context<sup>11</sup>

- **ABS** finds 32% of Australian adults 'participated' in at least one cultural activity and 64% of Australian adults 'attended' at least one cultural venue or event in 2021-22 (statistics that may have been impacted by the COVID-19 pandemic).
- **UNCTAD** finds global exports of creative goods 'increased by more than 2.5-fold over the past two decades, while those of creative services also doubled over the last decade'.
- **BCARR** finds non-market output of market producers in cultural and creative industries was \$97 million in 2019-20, an increase of \$19 million compared to 2010-11.

#### **ANA finds:**

- Labour productivity growth varies across the cultural and creative industries, with 'publishing' exhibiting notable productivity growth.
- Non-COVID-19 government expenditure on arts and culture across the three levels of government was \$7.2 billion in 2020-21 (also showing an increase, in adjusted terms, compared with five years earlier).
- A diverse range of governmental and non-governmental sources of finance exist in arts, culture and creativity (e.g. debt and equity finance, crowdfunding).

**ANA uses the term 'productivity' in this report consistent with the following definitions:**

- *'The ratio between output and the total input of factors required to achieve it'.<sup>12</sup>*
- *'The end result of a complex social process including: science, research and development, education, technology, management, production facilities, workers and labour organisations'.<sup>13</sup>*
- *'Productivity growth occurs when more output is generated per unit of input [ . . . ]' and 'In reality, the change in productivity - productivity growth - reflects not only the quantity of goods and services produced but also changes in their quality over time. It also reflects the invention and introduction of entirely new products'.<sup>14</sup>*
- *'True productivity can differ from measured productivity [ . . . ]'<sup>15</sup> and 'A productivity measure is an indicator of the efficiency or effectiveness of production, that is, how much production (or output) is achieved given a certain amount of resources (or input)'.<sup>16</sup>*

**ANA describes arts, culture and creativity across our work as follows:**

- Creating, experiencing and consuming arts and culture through activities such as attending cultural events, visiting cultural venues, creating or performing something and engaging with cultural and creative content in your home. ANA has provided a visual of this definition in **Appendix 2**.
- Making and attending work by organisations of all scales, including our best-known cultural institutions - such as the Australian War Memorial, the Australian Broadcasting Corporation and Bangarra Dance Theatre - as well the nation-wide ecosystem of creative organisations and individuals in remote, regional and metropolitan Australia.

**ANA defines the cultural and creative industries as follows:**

- All industries treated as 'cultural' or as 'creative' - or as both 'cultural and creative' - within the 'satellite accounts' based on a supply chain approach to their activities, and classified in accordance with the 2006 edition of the Australian and New Zealand Standard Industrial Classification.<sup>17</sup>
- Example businesses within these industries are involved in the above definition of arts, culture and creativity as well as in activities that may be less obvious, such as advertising, computer system design and architecture and education and training that develops performance artists.

# Summary of findings

## Finding 1

Positive examples exist of cultural and creative engagement supporting the determinants of Australia's future productivity, including our 'adaptable workforce', 'dynamic business environment' and 'data, digital technology and diffusion'.

There is also evidence of existing cross-sectoral initiatives in response to climate change, ageing population and healthcare.

## Finding 2

Australia's cultural and creative industries contribute to productivity growth by inventing, introducing and embedding new and improved products in the economy. Prominent examples exist in fashion, technology and music. 'Skills', 'industry associations' and, to a lesser extent, 'place' are identified as channels for diffusing innovation in Australia's cultural and creative industries.

## Finding 3

Digital infrastructure, the productivity of the next generation (human capital) and regulatory settings promoting market openness influence Australia's competitive position in the future trade of cultural and creative services.

## Finding 4

Artificial intelligence and platform work are productivity tools in the cultural and creative industries, but the 'net impact' of these tools on all employment remains 'ambiguous'.<sup>18</sup>

## Finding 5

Australia's five-year productivity inquiry does not measure productivity in the cultural and creative industries. The inquiry's findings on Australia's broader 'non-market sector' (schools, hospitals, childcare and defence) are relevant to parts of the cultural and creative industries.

# Summary of opportunities

These opportunities seek implementation through the architecture of National Cabinet.<sup>19</sup>

## Opportunity 1

Harness the proven benefits of cultural and creative engagement and strengthen the public investment logic for culture and creative activities.

Australia's National Cabinet and relevant ministerial councils across portfolios should consider

- cultural and creative engagement to build an adaptable workforce; harness data, digital technology and diffusion; and create a more dynamic economy
- cultural and creative initiatives that tackle productivity headwinds and specific challenges (climate change, ageing population and healthcare costs)

## Opportunity 2

Consider arts, culture and creativity when developing productivity policy and innovation, trade and employment initiatives.

This will require coordination of Australia's three levels of government and the following:

- identification of innovation diffusion channels in the cultural and creative industries (e.g. peak bodies, industry groups, regulatory organisations and code reviewers; see Opportunity 3)
- identification of productive investment needs to support the cultural and creative services trade (see Opportunity 4)
- consultation with platform workers of the cultural and creative industries on any proposed reforms to workplace entitlements and protections, including those relating to safety

## Opportunity 3

Strengthen the diffusion of innovation within and from the cultural and creative industries.

An early step for progressing this opportunity within the architecture of Australia's National Cabinet is to make the meeting of Cultural Ministers a Ministerial Council that reports annually to National Cabinet.

## Opportunity 4

Bolster Australia's competitive position in the trade of cultural and creative services by identifying productive investments in human capital and digital infrastructure alongside regulatory settings supporting global trade and investment flows.

Explore investment options 'where the private sector is unwilling or unable to invest'<sup>20</sup> including in

- skills that combine technical mastery, broad capabilities and adaptability
- cost-effective provision of digital infrastructure in regional Australia
- work-from-home infrastructure

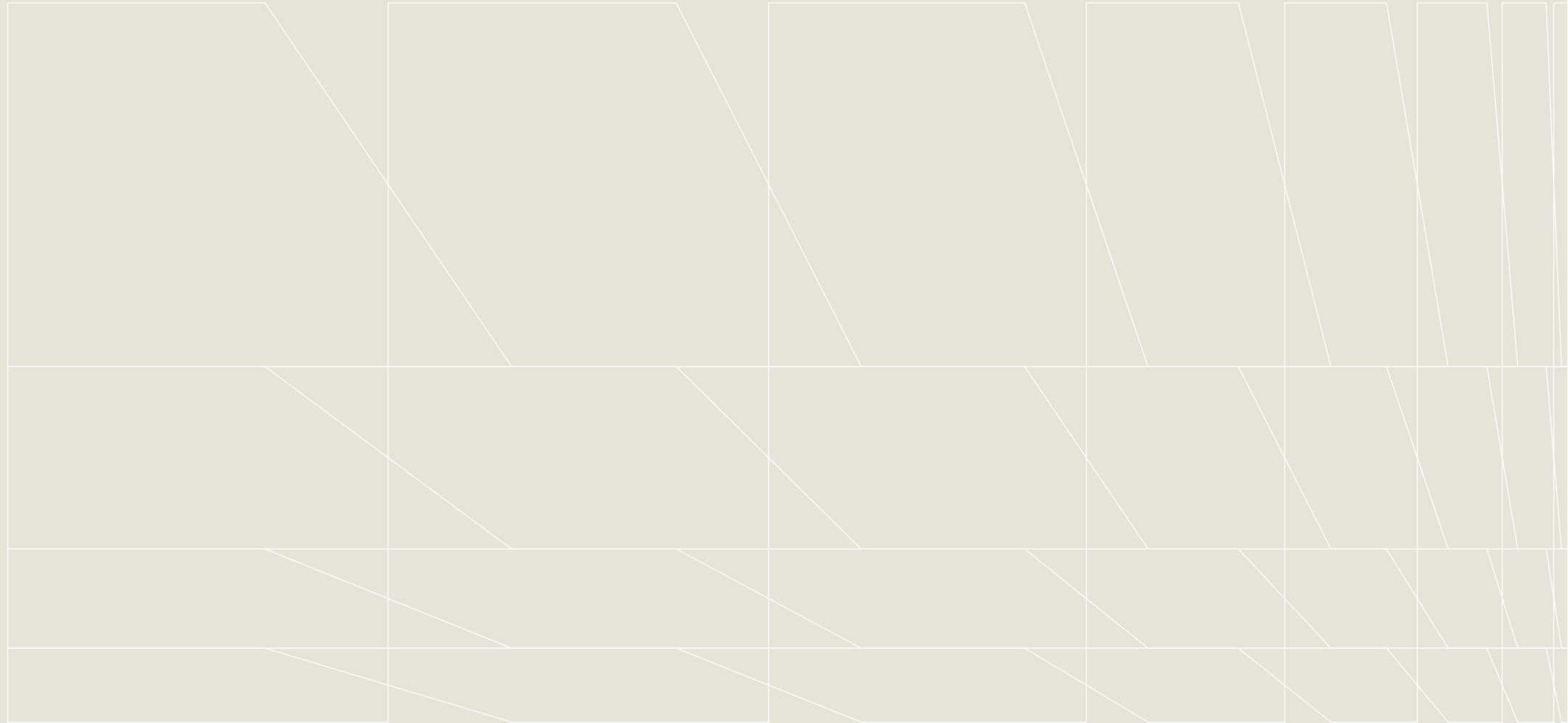
Two existing groups for exploring such investments are the Skills & Workforce Ministerial Council and the Council on Federal Financial Relations under Australia's National Cabinet.

## Opportunity 5

To foster productivity gains, providers of free-of-charge (or well-below-cost) cultural and creative services (such as government-funded or government-operated cultural institutions) should consider

- adopting 'flexible', 'blended' and 'shared' approaches to financing<sup>21</sup>
- using and reporting benchmark results
- making data-led improvements in the quality and variety of goods and services

# Introduction



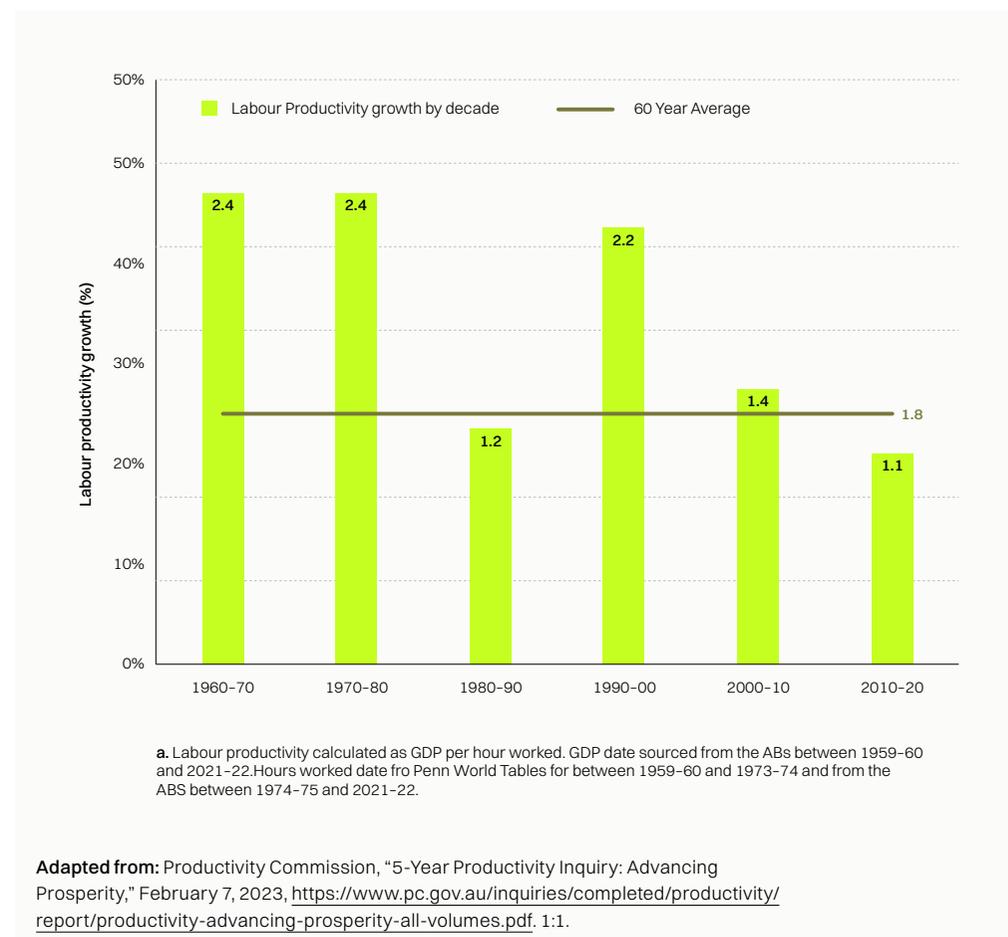
# Introducing this report

Australia can be a cultural powerhouse whose compelling creativity is locally loved, nationally valued and globally influential. This ambition drives A New Approach's (ANA) work to help strengthen Australia's broad public policy settings, improve our arts and cultural investment environment and contribute to the vibrancy of Australia's cultural and creative industries.

ANA is conducting this research because measuring and growing productivity will be the public policy topic that defines the next decade. Governments prioritise productivity in policy, research and annual economic forecasts as a way of driving sustainable wage growth<sup>22</sup> and lifting future living standards.<sup>23</sup> 'Productivity-enhancing priorities' feature in agreed priorities for Australia's National Cabinet – an intergovernmental forum for the Prime Minister, Premiers and Chief Ministers to meet, work collaboratively and progress a range of priority cross-jurisdictional issues.<sup>24</sup>

Internationally and in Australia, governments increasingly associate productivity with wellbeing and sustainability.<sup>25</sup> However, Australia's productivity is growing at its lowest rate in 60 years, consistent with a broad-based slowdown in productivity growth among advanced economies (see **Figure 1**). New Zealand's productivity growth has also declined, for instance.<sup>26</sup>

Figure 1 Australia's labour productivity growth has slowed



ANA's study on financial inflows identified 'increased productivity' as a medium-term outcome in our returns on investment (ROI) conceptual framework.<sup>27</sup> This research expands on achieving that outcome at the business, national and industry levels, beginning with an assumption that productivity knowledge can be used at practical levels and notwithstanding its seemingly intimidating complexity.

Although many primers are available to introduce readers to the topic of productivity, this report explores specific research questions:

- What is the existing evidence on productivity impacts of the cultural and creative industries?
- How can arts, culture and creativity lift and be lifted by Australia's productivity agenda, at *no* or *low* cost?
- How productive are the cultural and creative industries, according to official statistics?

#### **The report explores these questions by reviewing a curated body of literature.**

- In the 'productivity literature', we focus on the findings of Australia and New Zealand's productivity commissions. Australia's Productivity Commission is an advisory body that is independent from the government (i.e. its powers, protection and guidance are derived from its own legislation, *The Productivity Commission Act 1998*). Its outputs include public inquiries and research studies requested by the government (e.g. the two five-year productivity inquiries) and Commission-initiated research and annual reporting on productivity, industry assistance and regulation.<sup>28</sup> The New Zealand Productivity Commission is also an independent research and advisory body and an independent Crown Entity that does 'not run nor implement policies or programmes', as its website notes.<sup>29</sup>

- In the literature on arts and culture, we focus on synthesising literature reviews and research by ANA and international organisations. These include recent publications about arts, culture and creativity from international organisations including the OECD, United Nations Conference on Trade and Development (UNCTAD), United Nations Educational, Scientific and Cultural Organization (UNESCO) and, to a lesser extent, the International Labour Organization (ILO) and World Health Organization (WHO).

This report is presented in two parts, with opportunity statements throughout:

#### **Part 1: Themes of productivity and arts, culture and creativity**

#### **Part 2: Empirical estimates of productivity within cultural and creative industries**

# How to use this report

We recommend using this report to understand arts, culture and creativity through a 'productivity lens', including channels of productivity growth, measurements and indicators of productivity and language used in productivity debates.

## **For elected members and policy advisers**

Use this report to assist you in making high-value and implementable recommendations for supporting Australia's productivity growth through the cultural and creative industries. This report may assist you in conducting strategic discussions about productive investment and policy settings and in exploring new opportunities with your stakeholders.

## **For cultural and creative organisations and individuals**

Use this report to better understand the expectations of some investors and your work as it is understood from cross-sectoral and national and international perspectives. This may assist you in preparing grant applications and advocacy documents as well as in participating in discussions about investment with your peers and political representatives.

## **For philanthropists and sponsors of arts, culture and creativity**

Use this report to understand policy-relevant impacts of Australia's arts, culture and creativity, which may help inform your investments and donations. It may also assist you in discussions about how to strategically partner with other investors based on Australia's key productivity headwinds.

## **For researchers and educators**

Use this report as a resource on the existing literature exploring arts, culture and creativity and productivity. This may provide you with data and references to add to reports, peer-reviewed research and presentations as well as to assist you in identifying productive areas of further inquiry. It may also be valuable as an accessible introduction to this literature for students in cultural and creative industries courses.

## **For the media, content creators and platforms for creative content**

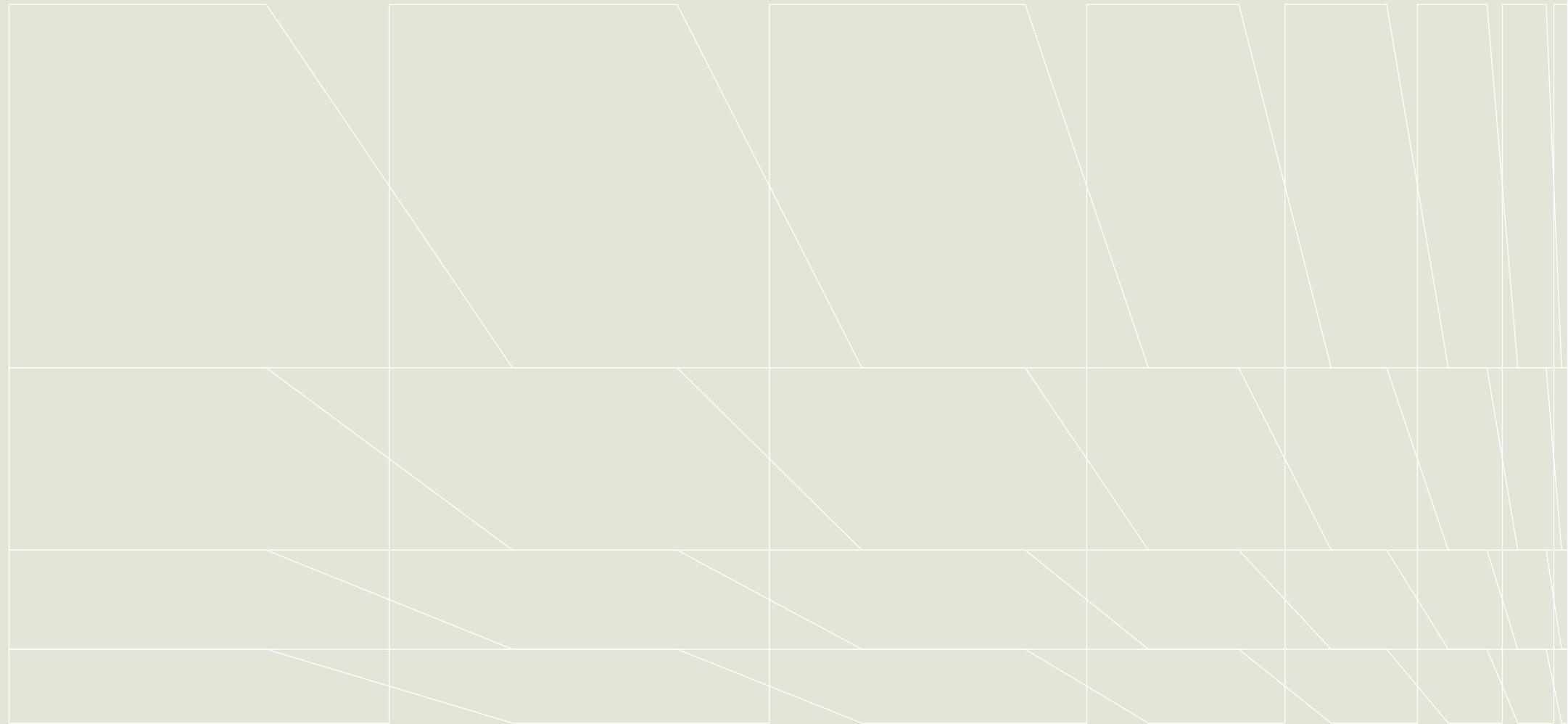
Use this report to better understand the industries, activities and benefits of Australian arts, culture and creativity. Contact ANA about media opportunities using the details on page 2.

## **For international audiences**

Use this report to compare Australia's arts, culture and creativity investment environment with that of your own country.

# Part 1

# Themes of productivity and arts, culture and creativity



In 2023, the Australian Productivity Commission's outgoing Chair noted the importance of 'concrete instances of what productivity growth really means and how it differs in specific cases', adding that 'we should talk less about macro aggregates like GDP [gross domestic productivity] per hour, capital deepening and multifactor productivity'.<sup>30</sup>

Inspired by these remarks, **Part 1** of this report explores productivity through international organisations' recent publications. We pair this review with research on Australia and New Zealand's future productivity across sectors, that is, the 'cross-sectoral enablers of productivity'.

**The resulting themes of the literature reviewed in this section are as follows:**

1. Creative skills and cultural organisations in innovation diffusion
2. Trade and investment in cultural and creative goods and services
3. Cultural and creative employment, workplaces and labour supply
4. Cultural and creative engagement by the public

**Four key findings arise from the review:**

|  |  |  |  |
|--|--|--|--|
| <p><b>Finding</b></p> <p>Australia's cultural and creative industries contribute to productivity growth by inventing, introducing and embedding new and improved products in the economy. Prominent examples exist in fashion, technology and music. 'Skills', 'industry associations' and, to a lesser extent, 'place' are identified as channels for diffusing innovation in Australia's cultural and creative industries.</p> | <p><b>Finding</b></p> <p>Digital infrastructure, the productivity of the next generation (human capital) and regulatory settings promoting market openness influence Australia's competitive position in the future trade of cultural and creative services.</p> | <p><b>Finding</b></p> <p>Artificial intelligence and platform work are productivity tools in the cultural and creative industries, but the 'net impact' of these tools on all employment remains 'ambiguous'.<sup>31</sup></p> | <p><b>Finding</b></p> <p>Positive examples exist of cultural and creative engagement supporting the determinants of Australia's future productivity, including our 'adaptable workforce', 'dynamic business environment' and 'data, digital technology and diffusion'.</p> <p>There is also evidence of existing cross-sectoral initiatives in response to climate change, ageing population and healthcare.</p> |
|--|--|--|--|

# Creative skills and cultural organisations in innovation diffusion

Many new-to-the-world or new-to-the-firm production techniques, ideas and technologies originate in Australian cultural and creative industries. Creative skills, labour mobility and an existing architecture of industry associations can embed and diffuse innovations in the industries and across the economy.

Innovation is one of the underlying determinants of productivity growth according to *Advancing Prosperity* (by Australia's Productivity Commission) and *Productivity by the Numbers* (by New Zealand's Productivity Commission). Innovation relates to the activities of the cultural and creative industries in a number of ways and is a crucial and constantly evolving research strand in advanced economies such as New Zealand and Australia.

For instance, a headline finding of the OECD about activities of the cultural and creative sectors - namely, that 'CCS innovate and support innovation in other sectors [...] through new products, services and content, new business models and ways of co-production, and through skills mobility'<sup>32</sup> - closely resembles *Advancing Prosperity's* definition of innovation itself:

*[. . .] the process whereby businesses, governments and other organisations and individuals generate or maintain value by creating, adapting or using available knowledge and technology to introduce new or improved products (goods and/or services) or internal business processes.*<sup>33</sup>

Certainly, Australian businesses and people are keen innovators of new and improved products. For example, a recent list of '50 Australian Inventions Changing the World' in *The Weekend Australian* magazine and previous ANA research considered the following examples:

- **Design** (the puffer jacket, Speedos, the International Woolmark Prize, the modern cutaway dress, Marc Jacobs Heaven, departure lounge seating by Derlot)
- **Technology** (Linktree, JigSpace, Canva<sup>34</sup>)
- **Music and performance** (sound and albums by Sampa Tembo [stage name: Sampa the Great]; audio equipment by Rode Microphones; cine-theatre of Kip Williams [e.g. adaptation of *The Picture of Dorian Gray* seen by 145,000 Australians and New Zealanders], Causeway Films, Queensland's Virtual Holocaust Museum)

## Key quotes in the literature

*'Productivity growth relies on innovation and new technology. Across the world, considerable policy attention and public funding has focused on how to generate new breakthrough ideas. But this leaves out an important element of the innovation story. Fewer than 2% of Australian businesses actually engage in 'new-to-the-world' innovation. This is not a criticism — just a reality.'*<sup>35</sup>

*'Diffusion increases the productivity of those organisations that adopt and adapt existing, but new-to-the-business technologies and processes. This changes the relative proportions of low versus medium versus high performing organisations in the economy, raising national productivity.'*<sup>36</sup>

*'The need for innovation and its effective diffusion will grow over the next 50 years in managing climate change, the growing burden of chronic disease, and population ageing, among many other issues.'*<sup>37</sup>

Broader empirical research cited by the OECD covers about 250 regions across Europe, finding a high correlation between labour productivity (measured as the regional GDP per person) and the proportion of people employed in some cultural and creative sectors. The authors of that research suggest that around 90% of this relationship is not due to higher productivity in cultural and creative sectors, but rather the generative nature of spillovers from them to other sectors of the economy.<sup>38</sup> In summary, the OECD notes that 'cultural and creative sectors contribute to 'place making' by making cities and regions more attractive to work and live, encouraging inward investment, inward labour flows, higher productivity and increased tourism'.<sup>39</sup> The authors also note cultural and creative sectors' contributions to innovation are 'under-represented in official data'.<sup>40</sup>

We did not identify any similar modelling of generative spillovers from Australia's cultural and creative sectors, although understanding these complex dynamics in Australia's cities and regions could help inform innovation policy-making. In the interim, this discussion raises a policy question:

### How can the creative and cultural industries' 'innovativeness' strengthen and be strengthened by Australia's productivity agenda right now?

To consider this question, it is important to understand that *Advancing Prosperity* deprioritises place-based approaches to driving innovation - 'firms learn from their neighbours, but place-based programs are unlikely to yield a large diffusion dividend'.<sup>41</sup> *Advancing Prosperity* also deprioritises 'new-to-the-world innovations' in its five reform focus areas. It recommends, instead, that governments focus on diffusing innovations that businesses, not-for-profits, and government organisations have already generated. This includes supporting diffusion through 'no-cost or low-cost access to ideas that have large public good value', such as open access to research that governments principally fund.<sup>42</sup>

This recommendation for productivity growth is relevant to arts and culture in the following examples:

- A spectrum of public and privately funded cultural institutions - ranging from libraries to museums, galleries, venues and broadcasters - facilitate access and disseminate ideas across remote, regional and metropolitan areas of Australia.

- New and old cultural and creative ideas are found in intellectual property. These ideas are also sometimes found beyond the 'traditional' research outputs of journal articles, books, chapters, conference papers, in 'non-traditional' research outputs, such as original creative works and live performances of creative works to website exhibitions and festivals. For university reporting purposes, these tend to fall into four categories: (1) original creative works, (2) live performance of creative works, (3) recorded/rendered creative works and (4) curated or produced substantial public exhibitions and events.
- Guidelines and peer review processes exist in Australia for assessing cultural and creative ideas against formal criteria. These guidelines, for instance, those of universities or grant-making bodies, can shed light on the public good value of an idea, notwithstanding 'all the ambiguity that term entails'.<sup>43</sup> For example, they can help assess the value of an architectural design documentation that challenges disciplinary conventions, or of a live theatrical performance of new and original work that extends knowledge by introducing new methodologies, creative approaches, and techniques.

**Box 1** focuses on two further channels of innovation diffusion within *Advancing Prosperity*: skills (supported by labour mobility and education) and industry associations. Further, although the discussion that follows explores the theme of trade of goods and services in greater detail, trade is also considered relevant to innovation diffusion. Both *Advancing Prosperity* and *Productivity by the Numbers* note that Australia's trade supports diffusion through access to overseas ideas and technologies and through international linkages among firms, contributing to a more dynamic and productive economy.

### Opportunity

Strengthen the diffusion of innovation within and from the cultural and creative industries.

An early step for progressing this opportunity within the architecture of Australia's National Cabinet is to make the meeting of Cultural Ministers a Ministerial Council that reports annually to National Cabinet.

## Box 1: Innovation diffusion and knowledge transfer across the cultural and creative industries and other sectors

Two specific channels of diffusion – industry associations and the mobility of skills and labour across the economy – as they relate to arts, culture and creativity are uncharted in *Advancing Prosperity* and *Productivity by the Numbers*. Identifying these channels of diffusion beyond those set out below, and any necessary productive investments for strengthening them (see **Box 2**), is critical to embedding innovation in the cultural and creative industries and the broader economy.

### Mobility of skills and labour across the economy

OECD's<sup>44</sup> evidence on creative skills and cultural and creative engagement in innovation processes includes

- access to culture in improved educational performance in students
- familiarity with challenging cultural experiences that help entrepreneurs develop lateral-thinking and problem-solving skills
- importance of cultural and creative skills in corporate environments, health systems, social services, and research and development (R&D) labs
- creativity and critical thinking, which have been identified as the most important skills distinguishing 'innovators' from 'non-innovators'

Returning to determinants of Australia's productivity, *Advancing Prosperity's* stance on necessary skills for an adaptable workforce is broader than the OECD's focus on cultural and creative skills. It argues that 'higher-order' skills and distinctively human attributes (interpersonal skills, synthesis, judgement and critical thinking) are vital for an adaptable workforce. Relatedly, it argues that, in recent years, job mobility has been falling in Australia, as have overall investments in capital with 'brains'<sup>45</sup> (the scope of this spending includes artistic works), disrupting these beneficial sources of innovation and their diffusion. As a result, *Advancing Prosperity* identifies relevant reforms, including those across the four parts of the education system (schools, higher education, vocational training and lifelong learning).

A cultural and creative perspective on this productivity determinant reveals the following examples of contributions that draw on the contribution of arts, culture and creativity:

- Prominent innovators with creativity helping manage climate change, including Sam Elsom, a former high-end fashion designer, whose business now grows commercial quantities of Asparagopsis to reduce greenhouse gas emissions.<sup>46</sup>

- Artistic, creative and cultural activity in schools for building an adaptable workforce.<sup>47</sup> For instance, ANA's research, *Transformative*, provides a snapshot of the evidence that engaging with arts and culture during school helps build social and personal capabilities that aid young people throughout their lives, is particularly valuable and beneficial for students who are at risk of disengagement and helps prepare students for their future careers in our rapidly changing labour market.
- Creative thinking and creativity as employability skills 'for enabling productive workplaces'. These skills are listed in *Working Future* alongside the foundational skills of language, literacy, numeracy and digital literacy that the Australian government believes 'make a critical contribution to productivity'.<sup>48</sup>
- Australian cultural organisations being approached by organisations in other sectors – such as mining, banking and finance, health, IT, government, education and law – to help up-skill their workers in innovation and creativity.

### Industry associations (and other bodies)

ANA also identified the following examples of cultural and creative industry associations involved in transferring knowledge and more broadly seeking to spread new technology and best practices. By following *Advancing Prosperity's* reasoning for harnessing data, digital technology and diffusion, these types of associations and intermediaries can contribute to future productivity:

- Interactive Games & Entertainment Association, which enhances the capabilities of smaller, resource-constrained firms through short courses and education summit.<sup>49</sup>
- The Advisory Board for the Arts (ABA), which produces benchmarking analysis papers.<sup>50</sup>
- Indigenous Art Code Ltd (IartC), which administers the voluntary industry Code of Conduct and sets rules and guidelines to promote fair and ethical trade between Aboriginal and Torres Strait Islander Artists and art dealers.<sup>51</sup>
- Australia's independent reviewer of compliance with the Code of Conduct for Copyright Collecting Societies, a voluntary framework of best practice for copyright collecting societies, which is intended to facilitate efficient and fair outcomes for members and licensees.

# Trade and investment in cultural and creative goods and services

Openness to trade and investment is central to recommendations for 'creating a more dynamic economy' according to *Advancing Prosperity*. These policies could also influence the finances of Australia's cultural and creative industries. Globally competitive creative exports also require human capital and digital infrastructure according to international indicators.

UNCTAD quantifies the global trade in creative goods and services. It finds the following:

- **Creative services<sup>52</sup> exports** (e.g. research development and software) vastly exceed those of creative goods (e.g. art and craft goods such as paperware and performing arts goods such as musical instruments).<sup>53</sup> Creative services exports were more resilient during the COVID-19 pandemic than other services sectors.<sup>54</sup>
- **Creative goods exports** were down by 12.5% in 2020, whereas exports of all goods were down by only 7.2%.<sup>55</sup> Exports of creative goods began to recover in 2021.

According to UNCTAD, Australia was in the top 10 countries with cultural and creative trade deficits in 2015.<sup>56</sup> As noted in ANA's previous analysis of this trade deficit, 'This means that we import a lot more, especially when it comes to creative goods, than we export'.<sup>57</sup>

The distinction between creative goods and services is important in discussions about Australian productivity for three reasons. First, the majority of Australia's output (by value) lies in the services sector. Second, services sector productivity has lagged behind that of the goods sector (particularly in government services). Third, Australia's performance relative to that of other economies is typically weaker in services than in goods.

Additionally, *Advancing Prosperity* predicts that global trade in services is likely to increase in scale.<sup>58</sup> It highlights four possible modes of trade in services<sup>59</sup> and many policy levers for Australia to better participate in the growth of trade (and reduce barriers to trade), from tax regulations, foreign direct investment regulations, to recognition of overseas qualifications and temporary migration settings.

Despite all this, *Advancing Prosperity* cautions against overstating the relationship of investments with productivity growth, noting that 'investment can be the proximate cause of productivity growth. But interventions to simply boost investment levels directly cannot be guaranteed to boost productivity'.<sup>60</sup>

## Key quotes in the literature

*'As a small, open, advanced economy, trade and foreign investment will continue to shape Australia's exposure to competition and innovation. Both will influence the structure of Australia's economy. The state of global trade and investment will be an overarching determinant of productivity growth in both the short and long term.'*<sup>61</sup>

*'International linkages are important for productivity and economic performance, because they support the flow of knowledge from overseas, help foster business relationships, provide markets for exports, as well as knowledge about these markets, and they support the import of technology embodied in new equipment.'*<sup>62</sup>

ANA's recent research has considered these proximate causes of productivity growth. *To Scale: Mapping Financial Inflows in Australian Arts, Culture and Creativity* maps the financial inflows from sources including foreign investment and a range of tax concessions.<sup>63</sup> It also recommends that regulators, businesses, and policymakers together assess the impacts of local content rules alongside the intersecting issues of global trade barriers, international competition in sector-specific tax incentives and Australia's requirements from foreign investors.<sup>64</sup>

Finally, the productivity inputs of human capital, on the one hand, and physical and digital infrastructure, on the other, are relevant to the theme of trade of creative services, according to UNCTAD's comparison of top creative service exporters. Its comparison brings into sharper focus *Advancing Prosperity's* guidance for exploring these areas of productive investment (**Box 2**).

## Box 2: Additional cross-sectoral levers to support openness to global competition and investment in the cultural and creative industries

According to UNCTAD's comparison of the share of creative services from each country's total services exports, the world's most significant exporters of creative services are Ireland, Israel, Sweden, Japan and the United States.<sup>65</sup> Australia does not feature on this list.

The UNCTAD analysis finds that these high exporter countries also score high in internationally comparable indexes<sup>66</sup> of **human capital** and **digital infrastructure**, indicating a role for these inputs in improving a country's competitive advantage.

*Advancing Prosperity* and *Productivity by the Numbers* provide guidance on these cross-sectoral productive investments, actions and challenges as follows.

### Human capital inputs

- *'[...] a productivity lens sees the role of human capital differently. Skills that combine technical mastery with broad capabilities and adaptability are critical, as is the flexibility to apply those skills in ever-evolving ways. Education policy, migration settings and labour market regulation should be designed with that focus.'*<sup>67</sup>

- *'Education plays a key role in boosting productivity through the quality of 'human capital' (the collective skills of the workforce) applied to the production of goods and services. Arguably, education is the most profound general-purpose technology ever developed – the ability to transfer knowledge from one individual to another in an accelerated way, simultaneously building the capability for further learning.'*<sup>68</sup>
- *'Investment in our people is one of the most important things that, as a society, we can make. Human capital is fundamental to prosperity and well-being, and an important explanation of differences in productivity across countries, industries and firms [ . . . ].'*<sup>69</sup>

### Digital infrastructure inputs

- *'Better and more cost-effective provision of digital infrastructure will be important in raising productivity for Australians living and working in the regions.'*<sup>70</sup>
- *'Businesses may also increase their investments in digital infrastructure, its maintenance and training in its use, to enable remote working to continue in tandem with activity at a workplace.'*<sup>71</sup>
- *'Any potential improvements in digital goods and services will be challenging to measure because it is difficult to identify standardised outputs and prices.'*<sup>72</sup>

## Opportunity

Bolster Australia's competitive position in the trade of cultural and creative services by identifying productive investments in human capital and digital infrastructure alongside regulatory settings supporting global trade and investment flows.

Explore investment options 'where the private sector is unwilling or unable to invest'<sup>73</sup> including in

- skills that combine technical mastery, broad capabilities and adaptability
- cost-effective provision of digital infrastructure in regional Australia
- work-from-home infrastructure

Two existing groups for exploring such investments are the Skills & Workforce Ministerial Council and the Council on Federal Financial Relations under Australia's National Cabinet.

# Cultural and creative employment, workplaces and labour supply

Platform work, artificial intelligence (AI) and various other changes in labour supply contribute to productive cultural and creative employment. Consultation about any reforms in these complex social processes could support more organisations to approach the 'frontier of performance'.<sup>74</sup>

A skilled and flexible workforce is a widely recognised factor of future productivity growth. It underpins the recommendations in *Advancing Prosperity* and *Working Future* for 'building an adaptable workforce'. As we have already seen within the discussion of innovation, skills developed through cultural and creative careers and activities play a role in this important determinant of productivity in Australia as well as in 'harnessing data, digital technology and diffusion'. This section continues the discussion of themes in the literature, and our assessment of evidence on productivity impacts of arts, culture and creativity, by exploring a broader set of productive characteristics of cultural and creative employment, workplaces and labour supply.

The literature we found that explicitly discusses the future productivity of the cultural and creative workforce includes the following:

- Analysis of survey data from 40 OECD member countries have led researchers to characterise creative and cultural jobs as 'future proof' (10% at high risk of automation vs. 14% in the general workforce).<sup>75</sup>

- 'People' feature in a framework of productivity channels developed for UK Arts, Heritage and Museums.<sup>76</sup>
- In Australia, the total number of new artists is 'an indicator of the future productive capacity of art centres', and Productivity Commission estimates indicate the number of new artists have declined in recent years.<sup>77</sup>

Research on AI complicates simplistic characterisations about the future of employment broadly and in the cultural and creative industries specifically.<sup>78</sup> Although the productivity business case for AI notes possibilities of augmenting human input and generating scale, and although *Advancing Prosperity* recommends that governments address the factors limiting further adoption of these types of technologies,<sup>79</sup> OECD's review of empirical evidence of impacts summarises the net impact on employment as 'ambiguous':

*AI will displace some human labour (displacement effect), but it can also raise labour demand because of the greater productivity it brings (productivity effect). AI can also create new tasks, resulting in the creation of new jobs (reinstatement effect) particularly for workers with skills that are complementary to AI.*<sup>80</sup>

## Key quote in the literature

*'A key motivation for employers to adopt AI is to boost productivity, and workers may gain as well [ . . . ] Policy should be evidence-based, yet little is currently known about the impact of AI on workers, the workplace, and the labour market more generally.'*<sup>81</sup>

ANA has also published research on the evolving and tangible impacts of AI on arts, culture and creativity (e.g. AI in content moderation, content recommendation and search engines and generative AI in music, choreography and games). That paper foresees these specific examples continuing to affect cultural and social inclusion as well as incentives to create works.<sup>82</sup>

Beyond AI developments, *Advancing Prosperity* describes how changes in all labour supply and related policy settings can contribute to productivity. Changes can include the supply of valued skills (or of employees with the needed characteristics); the upgrading of the workforce, including through training and education; and labour market matching between the existing supply of employees and the firms' demands.<sup>83</sup>

An ILO<sup>84</sup> paper on 'full and productive employment and decent work for workers and enterprises' in arts and entertainment touches on labour supply by foregrounding the following positive characteristics of productive employment in the industry:

- Arts and entertainment workers valuing flexible work patterns as a way of diversifying their careers
- Flexibility in the types of contracts and the organisation of work in the arts and entertainment sectors, including employee sharing, job-sharing, ICT-based mobile work, portfolio work and collaborative employment.
- Self-employed cultural workers' tendency to have greater opportunities for autonomy, creativity and learning experiences
- The vital role of highly flexible (and skilled) workers hired under short-term and part-time contractual arrangements, such as an employment or a service-provision contract
- Strong reliance on informal cultural networks and institutions
- The tendency to 'moonlight' and the portability of benefits linked to frequent transitions in and out of the sector.

*Advancing Prosperity's* whole-of-economy recommendations to governments on the workplace system are broadly relevant to these characteristics, as are the policy options within *Productivity by the Numbers* (e.g. greater 'income smoothing', increased access to training and labour-market programmes when people lose their jobs, targeted employment laws).<sup>85</sup> However, the former's recommendations for calibrated government coordination on regulatory gaps of platform work, and a fit-for-purpose framework in respect of safety, insurance and dispute resolution, are particularly pertinent to explore in the context of cultural and creative employment.

**Box 3** outlines the particular parts of the cultural and creative industries that should be consulted as a priority if current or future reforms in these areas proceed.

### Box 3: Platform workers and workplace entitlements and protections focused on safety in the cultural and creative industries

Ridesharing and food delivery are prominent platform work examples of the gig economy.<sup>86</sup> Cultural and creative employees also exist on digital platforms (e.g. Etsy or Freelancer) and non-digital platforms (e.g. a market or a fair) of this gig economy. These types of platforms may contribute to productivity, according to *Advancing Prosperity*, by improving matching efficiency in service markets, triggering technological innovation by platforms (and their competitors), delivering better quality services and convenience for consumers and introducing competition into otherwise stagnant markets. *Advancing Prosperity* also argues that imposing employee status in all cases of platform work would 'effectively erode many of the productivity benefits and flexibility for workers that arise from platform work as currently arranged'.<sup>87</sup>

*Advancing Prosperity's* proposed fit-for-purpose framework in respect of safety may also consider the safety risks of arts and entertainment occupations mentioned in the ILO<sup>88</sup> paper, which include the following:

- Occupational risks of fall or injury in the **dance subsector**
- Hazards of **live performances** in the layout of premises, the stage, scenic environments, sound levels and rehearsal spaces

- Requirement to work in remote locations, particularly in the **film sector**, and safety hazards experienced by workers during work in isolation
- Violence and harassment for **online workers** (and consumers)
- Occupational safety and health risks facing **computer programmers** due to the number of hours they work and the ergonomics of their workspace
- The level of sound for **sound programmers**
- Risks to children in the entertainment sector from digital exploitation and '**kidfluencers**' (children with large social media followings)

This discussion illustrates some of the complex dynamics of the gig economy as it relates to productivity (e.g. productivity benefits to firms can impose costs for workers). It suggests the importance of testing whether potential reforms genuinely raise the economy's productivity, including by consulting employees of cultural and creative industries about platform work, from performing artists to sound and computer programmers. To date, most reporting on these reforms has focused on the views of workers in ridesharing, food delivery and construction.

### Opportunity

Consider arts, culture and creativity when developing productivity policy and innovation, trade and employment initiatives.

This will require coordination of Australia's three levels of government and the following:

- identification of innovation diffusion channels in the cultural and creative industries (e.g. peak bodies, industry groups, regulatory organisations and code reviewers; see Opportunity 3)
- identification of productive investment needs to support the cultural and creative services trade (see Opportunity 4)
- consultation with platform workers of the cultural and creative industries on any proposed reforms to workplace entitlements and protections, including those relating to safety

# Cultural and creative engagement in the public

Innovative policy design is needed to tackle Australia's productivity challenges including costly healthcare, an ageing population and climate change. The evidence on specific arts and culture initiatives, such as arts interventions in healthcare, highlights opportunities for harnessing Australians' cultural and creative engagement in this design and in our public investment logic.

The OECD finds that 'cultural participation underpins both the supply of and demand for cultural and creative goods and services, and generates important social benefits',<sup>89</sup> including social inclusion and boosting wellbeing. Crucially, that report also positions this participation as providing 'new routes for innovative policy design' even in 'weakly related areas'.<sup>90</sup>

In Australia, while the wellbeing and cohesion benefits of arts, culture and creativity are increasingly acknowledged,<sup>91</sup> productivity provides a new avenue for acknowledging arts and culture benefits and, it follows, for designing policies across portfolios.

This lens is not explicitly explored in *Advancing Prosperity* or in *Productivity by the Numbers*. However, as we have already seen, cultural and creative engagement in the general population can positively contribute to the determinants of Australia's future productivity, including to 'building an adaptable workforce', 'harnessing data, digital technology and diffusion' and 'creating a more dynamic economy'.

Examples of the contributions emerged in all themes of the literature that we have synthesised thus far – for example,

creative skills developed in a range of educational settings under the theme of 'Creative skills and cultural organisations in innovation diffusion'; international linkages and investments within the theme of 'trade in cultural and creative goods and services' and characteristics of the arts and entertainment workforce under the theme of 'Cultural and creative employment, workplaces and labour supply'.

**Figure 2** summarises these contributions and provides further examples to consider in cross-portfolio policy design to harness arts, culture and creativity. These examples are discussed in more detail next.

In this section, we set out how cultural and creative engagement relates to challenges for Australia's future productivity performance

- in future healthcare
- in climate change policy design
- in response to an ageing population

Because these debates and policy areas are congested and significant, the synthesis of this literature highlights the following broad opportunity:

## Opportunity

Harness the proven benefits of cultural and creative engagement and strengthen the public investment logic for culture and creative activities.

Australia's National Cabinet and relevant ministerial councils across portfolios should consider

- cultural and creative engagement to build an adaptable workforce; harness data, digital technology and diffusion; and create a more dynamic economy
- cultural and creative initiatives that tackle productivity headwinds and specific challenges (climate change, ageing population and healthcare costs)

Figure 2 ANA's new report, *Accelerate*, synthesises existing research on productivity and 'arts, culture and creativity'

**The Productivity Commission's *Advancing Prosperity* focuses on five key themes that will determine Australia's future productivity, which are**

1. 'Building an adaptable workforce'
2. 'Harnessing data, digital technology and diffusion'
3. 'Creating a more dynamic economy'
4. 'Lifting productivity in the non-market services'
5. 'Securing net-zero at least cost'

The Australian Government reinforced these broad themes through *Working Future*; the *2023 Intergenerational Report* and, most recently, through the *Productivity Commission Statement of Expectations*.

Productivity features in intergovernmental priorities of Australia's National Cabinet.

**ANA's *Accelerate* summarises the relationship between cultural and creative industries and productivity in four themes that reflect its positive contributions, which are**

1. Creative skills and cultural organisations in innovation diffusion
2. Trade and investment in cultural and creative goods and services
3. Cultural and creative employment, workplaces and labour supply
4. Cultural and creative engagement by the public

The OECD, UNCTAD, UNESCO and, to a lesser extent, ILO and WHO provide a range of evidence and examples on the relationship between cultural and creative industries and productivity.

**Examples of productivity determinants and benefits of cultural and creative engagement across these themes are**

- Development of 'higher-order' skills and human attributes through arts and culture education and training
- Upskilling and reskilling, as part of Australia's 'culture of lifelong learning'
- Exposure to new ideas and innovation through cultural and creative services trade and international linkages
- No-cost or low-cost access to ideas that have large public good value
- Use of digital and non-digital platforms in the gig economy
- In best practice, cross-sectoral responses to age-related illness and the social determinants of health
- Cultural tourism approaches adapted for climate change
- Cross-sectoral behavioural change programmes tackling climate change
- Generating data for use by businesses and government in new products and services
- Supporting service users' experiences, across sectors

## In future healthcare

In 2016, Australian researchers<sup>92</sup> produced the world's first dose-response style study of arts and mental health. They showed that two-hour 'doses' of creative activities per week could enhance mental wellbeing in the general population.<sup>93</sup> Since then, the movement dedicated to recognising the added health value of engagement with the arts in Australia has continued. For example, recent research has recommended revisiting the National Arts and Health Framework.<sup>94</sup>

The productivity challenge of tackling the future cost of mental ill-health and suicide (\$200 to \$220 billion per year)<sup>95</sup> and the benefits of a best practice system (calculated at \$20 billion annually) provide a useful cross-sectoral lens through which to revisit the evidence on cultural and creative engagement's benefits in healthcare.<sup>96</sup> WHO offers evidence on the proven impacts of arts-based interventions.<sup>97</sup> In fact, the WHO review identifies 'a major role for the arts in the prevention of ill health, promotion of health, and management and treatment of illness across the lifespan' and includes studies on innovative approaches existing in all types of health services.<sup>98</sup>

Three specific studies in the 2019 WHO review hold relevance for the implementation of *Advancing Prosperity's* Recommendation 3.1: 'that health insurers should have the discretion to fund out of hospital services that lower the likelihood of hospitalisation'. These studies have found the following:

1. Music reduces the average length of hospital stay for people with dementia, increases hospital discharges, reduces falls and decreases the need for antipsychotic drugs<sup>99</sup>
2. Music listening reduces the length of hospital stay following surgery for cancer<sup>100</sup>
3. Singing decreases visits to the doctor and hospital admissions for respiratory disease<sup>101</sup>

The WHO has also announced a forthcoming Lancet Global Series on the health benefits of the arts.<sup>102</sup> The focus in that series on noncommunicable diseases may provide additional evidence on the interventions that countries have found effective in the management of chronic disease. It builds on the evidence within a local context, such as Productivity Commission case studies about innovative initiatives that prevent people's chronic health conditions from deteriorating or improve their management.<sup>103</sup>

Whereas health reform was a key focus of the previous five-year Productivity Inquiry (*Shifting the Dial*), with aspects of that reform reinforced in *Advancing Prosperity*, climate change and securing net-zero carbon emissions at least cost are central to *Advancing Prosperity, Working Future*, and the *2023 Intergenerational Report*. The next section briefly synthesises how cultural and creative engagement relates to these themes and objectives.

## In climate change policy design

Australian cultural and creative initiatives are directly tackling community resilience to climate change and addressing trauma caused by extreme weather events.<sup>104</sup> ANA's middle Australia series also finds that the role of arts and culture in assisting with resilience and recovery is commonly referred to, understood and valued.<sup>105</sup> Notwithstanding these examples, arts, culture and creativity's potential roles and benefits regarding tackling climate change are unclear in the productivity literature.

Two reform areas in *Advancing Prosperity* to secure net-zero carbon emissions and adapt to a changing climate at least cost for the economy and productivity overlap with the literature on arts, culture and creativity reviewed for this report.<sup>106</sup>

1. Considering cultural tourism and the places on the National Heritage List, for example, in the implementation of **the recommendation to inform people and businesses** about what regions, sectors, and occupations they are best placed to transition into from exposed industries<sup>107</sup>
2. Exploring cultural participation's role – and specific cultural and creative projects – in behavioural change and pro-social emotions and climate change in **the recommendation to help people and businesses** make informed decisions (while avoiding policy settings that inadvertently constrain them).<sup>108</sup>

In implementing these recommendations, policy-makers could consider Australia's *100 Climate Conversations*.<sup>109</sup> Described as a climate-focused cultural project, the series of conversations between journalists and innovators, held between March 2022 and December 2023, is a resource on actions and innovations to secure net-zero emissions and adapt to a changing climate.

Crucially, the conversations consider businesses and occupations from across the economy (e.g. chemical engineering, clothing production, transport, farming, manufacturing) and regions and environments across Australia (e.g. urban landscapes, the Great Barrier Reef, coastlines).

Policymakers could consider the format of and engagement with this project as an example of how cultural and creative engagement can help people and businesses make informed decisions. The talks were recorded live at Sydney's Powerhouse Museum. Videos and transcripts were uploaded to the project website; a podcast, produced in partnership with Spotify, was released weekly; and this material was archived as part of the museum's collection. In these ways, the project showcases the potential role of cultural projects in the reform directive of securing net-zero emissions at least cost, which *Advancing Prosperity* considers a key determinant of Australia's productivity performance.

## In response to an ageing population

The *2023 Intergenerational Report*<sup>10</sup> finds the following:

- Australia's population will continue to age over the next 40 years.
- The number of Australians aged 65 and over will more than double and the number aged 85 and over will more than triple.
- The number of centenarians is expected to increase six-fold.

*Advancing Prosperity* also considers the ageing population. It finds that the demand for several non-market services, including healthcare and aged care, is one of the five main explanations for the increased share of the services sector in measured productivity output and employment. In other words, Australia's ageing population is one of the key demographic factors posing a challenge to future productivity.

Evidence in the WHO scoping review<sup>11</sup> on the impacts of arts interventions is also relevant for developing our response to Australia's ageing populations. It ranges from evidence of cultural and creative engagement lowering the incidence rate of dementia to evidence relating this engagement with fewer doctor visits, fewer falls, reduced risk of late-age depression and greater well-being and higher quality of life. It also includes international evidence on effective arts approaches, specifically to palliative or end-of-life care.

A productivity lens demands we not impose costs or inefficiencies. In practice, this can mean targeting government expenditure towards 'what works', for instance, by improving the quality of the user experience and user design considerations to meet customer needs. As new programs and policies are developed and refined for an ageing population, ANA's research on attitudes among 'Baby Boomer middle Australians'<sup>12</sup> provides clues about what some refinements might look like for cultural and creative engagement of an ageing population. These include reflecting their view that cultural and creative engagement helps them 'defy age' and build intergenerational connection; avoiding the language (but not the concept) of 'ageing well'; and continuing to reduce barriers to engagement with arts and culture, including time, cost, class and safety concerns.

# Part 2

# Empirical estimates of productivity within cultural and creative industries



Productivity can be measured for an individual entity, an industry or sector or the economy as a whole. **Part 2** of this report explores labour productivity within 'the cultural and creative industries' using the scope and definition of industries in the cultural and creative activity satellite accounts.<sup>113</sup>

To develop these estimates, we draw on statistics published by the Australian Bureau of Statistics (ABS) relating to 'labour productivity' (defined in **Box 4**). We also discuss non-market services in the cultural and creative industries (defined below), drawing primarily on *Advancing Prosperity's* insights about schools, hospitals, childcare, defence and the Australian Public Service.

**The following finding summarises our analysis of this literature and data:**

**Finding**

Australia's five-year productivity inquiry does not measure productivity in the cultural and creative industries. The inquiry's findings on Australia's broader 'non-market sector' (schools, hospitals, childcare and defence) are relevant to parts of the cultural and creative industries.

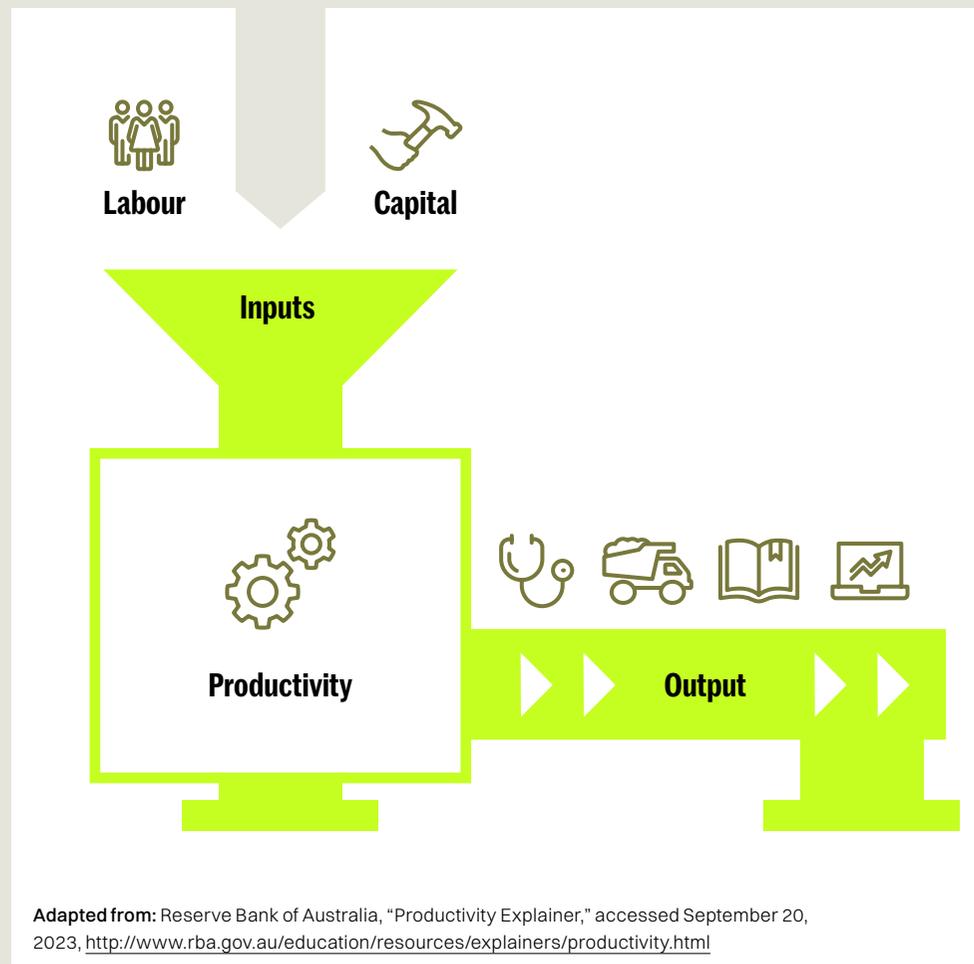
#### Box 4: Productivity measures from an economics perspective

The two common productivity indicators are (1) labour productivity, which is most frequently calculated for international comparability purposes and (2) multifactor productivity. The ABS publishes these statistics and measures of output and inputs that can be used for analysing the productivity of various industries.

Labour productivity uses either the hours worked or the quantity of employees as the input. A typical output at a national or industry level is either gross domestic product or gross value added (GVA).<sup>114</sup> Another output at the industry level is industry value added (IVA), which is considered conceptually similar to GVA. However different methodologies for capturing GVA and IVA make precise comparison of these two outputs difficult.<sup>115</sup>

The Reserve Bank of Australia (RBA) defines multifactor productivity as the 'output per unit of combined inputs',<sup>116</sup> and the OECD defines it as reflecting 'the overall efficiency with which labour and capital inputs are used together in the production process'.<sup>117</sup>

Figure 3 RBA productivity explainer



As well as labour and capital inputs, additional inputs could include physical capital such as buildings and machinery or intangible assets relevant to production such as intellectual property assets. The presence of technical efficiency and organisational change can also be included in a labour productivity calculation.<sup>118</sup> Increasingly, intangible assets are important productivity indicators; however, they also present measurement challenges, especially when accompanied by, for example, large transfers of income to another country (e.g. due to profit shifting to low tax jurisdictions).<sup>119</sup>

The 2023 *Intergenerational Report* concludes that despite challenges of productivity measurement (e.g. data and digital technologies; the difficulty of valuing increasingly prevalent fee-free services and platforms; and the absence, in conventional productivity measures, of adjustments for changes in the emission intensity of production), there is still value in such measurements:

*While measurement challenges are unlikely to explain a large proportion of the observed productivity slowdown to date, understanding them is likely to become more important in future decades.*<sup>120</sup>

# Labour productivity in the cultural and creative industries

Within the cultural and creative industries, 'publishing (except internet and music publishing)' and 'creative and performing arts activities' have experienced the largest growth in labour productivity in the 10 years up to 2022. These statistics take a broad view and are limited in revealing variations such as volatility as well as the changing performance of sub-sectors and particular entities.

Because *Advancing Prosperity* does not canvass the labour productivity of the cultural and creative industries specifically, we analyse official ABS statistics to consider changes across 10 years against the longer-term story of productivity over 60 years (refer to **Figure 1** in the Introduction).

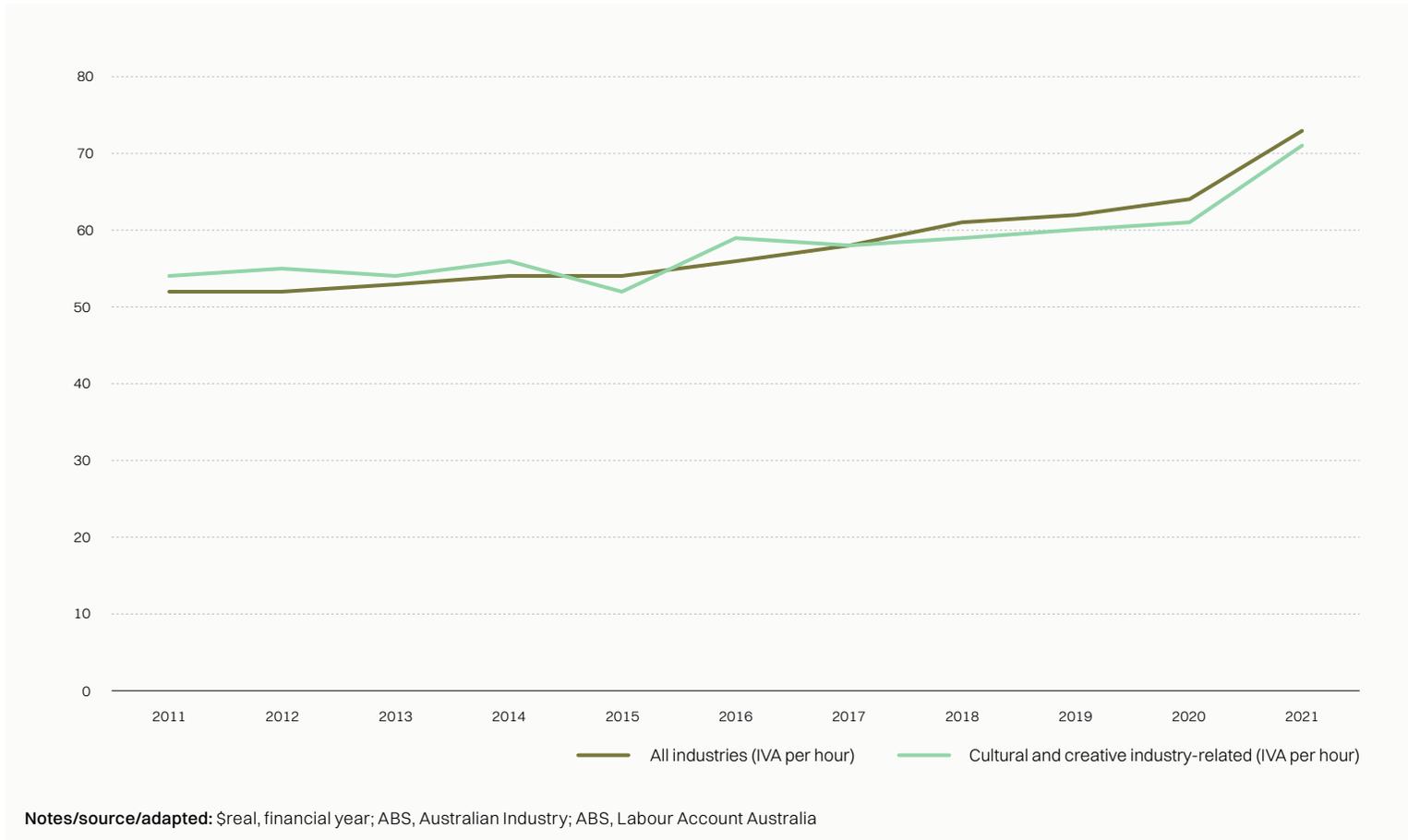
For a range of economic measurement purposes, and as mentioned in previous ANA research,<sup>121</sup> 12 'domains' – that is, industry groupings – underpin the government research by the ABS and the Bureau of Communications, Arts and Regional Research about Australia's cultural and creative activity. These domains draw on, but do not directly refer to, the 2006 Australian and New Zealand Standard Industrial Classification (ANZSIC) codes. Readers may be more familiar with these domain names (e.g. design, fashion, museums), but given limitations in the granularity of labour productivity data, our analysis references ANZSIC industry code names.<sup>122</sup>

Similarly, of the range of available measurements of productivity (see **Box 4** above), the most reliable indicator and the most reliable data on labour productivity growth of the cultural and creative industries consider changes to the industry value added (IVA) per hour worked.<sup>123</sup>

## Key quote in the literature

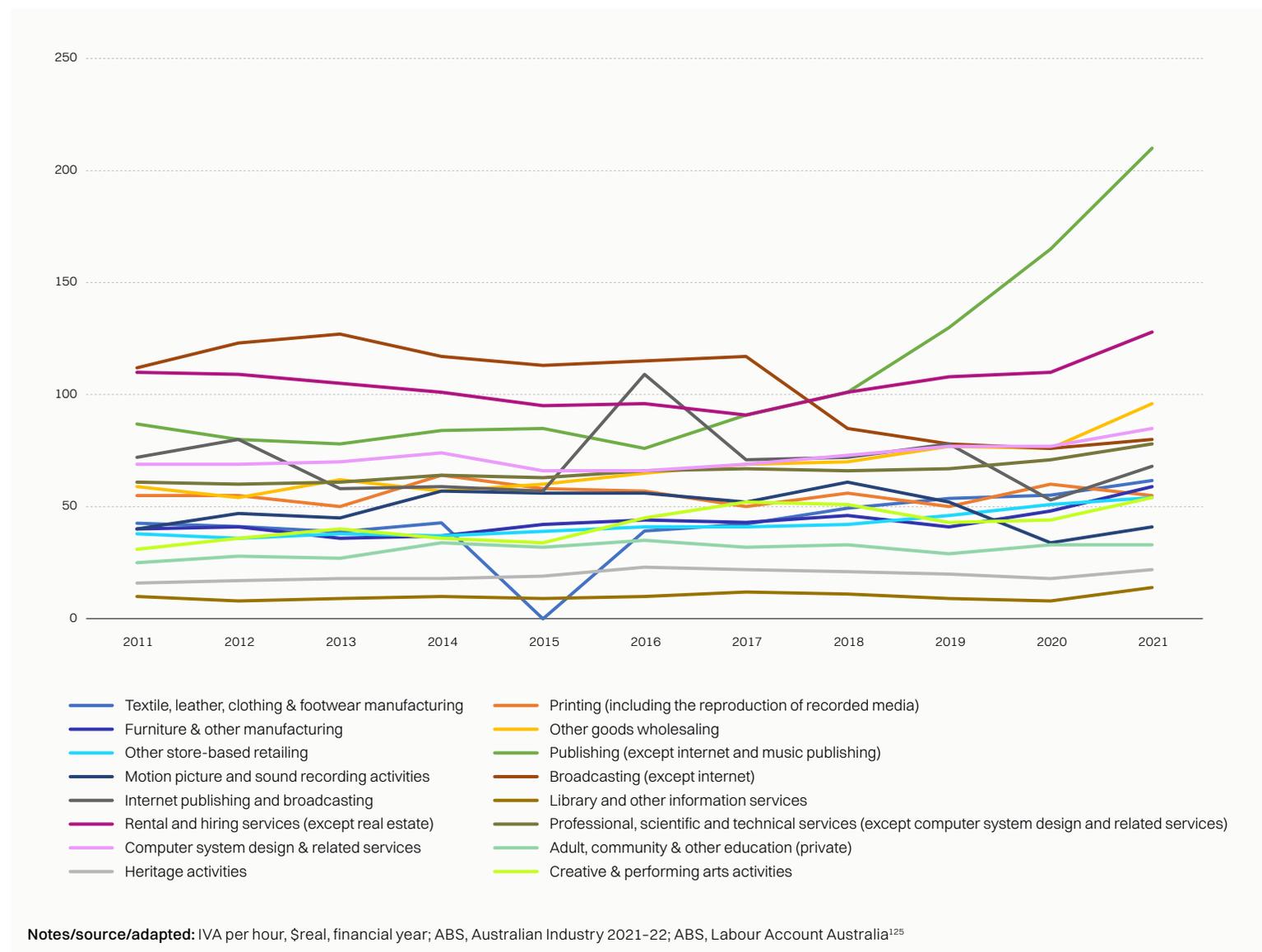
*'Lifting Australia's productivity growth will involve a combination of economy-wide and structural reforms, in addition to targeted policies in particular sectors to push Australian industries closer to the global frontier'.<sup>124</sup>*

**Figure 4** Labour productivity growth of cultural and creative industries is broadly consistent with labour productivity of all industries



Noting all of the above, our analysis indicates that labour productivity growth of the cultural and creative industries across 10 years (see **Figure 4**) is broadly consistent with labour productivity of all industries.

**Figure 5 Labour productivity growth varies across the cultural and creative industries, with 'publishing' demonstrating notable productivity growth**



Drilling in, we examine changes to each industry grouping that includes cultural and creative activity (see **Figure 5**).<sup>126</sup> While some industry groupings exhibited labour productivity growth across the last 10 years, other industry groupings experienced a slowdown in productivity growth.

The two industry groupings that demonstrated notable labour productivity growth over the last 10 years up to 2022 are as follows:

- 'Publishing (except internet and music publishing)' (141%)<sup>127</sup>
- 'Creative & performing arts activities' (74%)

The industry groupings that demonstrated the largest slowdown in labour productivity growth across 10 years are as follows:

- 'Broadcasting (except internet)' (-28%)<sup>128</sup>
- 'Internet publishing and broadcasting' (-6%)

It is beyond the methodological scope of the research - and the granularity of the official statistics - to explore these changes in greater detail and consider key influences of technology on the changes. However, given *Advancing Prosperity's* findings and agenda, it is necessary to give specific attention to Australia's non-market economy.

# Non-market services in the cultural and creative industries

Another of *Advancing Prosperity's* five themes determining future productivity growth in Australia is 'lifting productivity in the non-market sector'. Recommendations and evidence under that theme are, in some cases, relevant to specific parts of Australia's cultural and creative industries.

In *Advancing Prosperity*, the 'non-market sector' refers to services that are typically provided free of charge, or at prices that are well below cost because, usually, the government is the key funder (and often the provider) and regulator. Familiar examples of non-market services are education, health and defence. Some non-market services are partially funded by governments, but they are delivered by private businesses or not-for-profits under a broad range of funding models and regulatory settings. In simpler terms, 'prices, competition and entry and exit are less salient (if at all) than within market services'.<sup>129</sup> The sector is also referred to as the 'non-market economy'.

Lifting productivity in the non-market sector is one of the five focus areas of *Advancing Prosperity* because of non-market services' expansion relative to these services' rate of productivity growth. They represent over 25% of Australia's economic activity and employment, with measured productivity growth 'effectively zero since the turn of the century'.<sup>130</sup>

*Productivity by the Numbers* describes the non-market sector as one the areas of difficult productivity measurement but notes that the three industries with the highest share of non-market provision in New Zealand are healthcare and social assistance, education and training, and public administration and safety.<sup>131</sup>

Then, why do we care about this particular part of the economy in arts, culture and creativity? Although *Advancing Prosperity* focuses on schools, hospitals, childcare, defence and the Australian Public Service (see **Box 5**), *Advancing Prosperity's* definition of the non-market sector recalls parts of the cultural and creative industries, as follows:

- First, the federal government is a key funder and regulator of **National Cultural institutions**.<sup>132</sup> State and territory governments also invest in and regulate cultural institutions. They manage cultural heritage collections and provide services and programmes throughout Australia.
- Second, while **not-for-profit organisations** with a cultural purpose are only a small part of the cultural and creative industries, they rely more heavily on financial inflows from government and philanthropy.<sup>133</sup>

- Third, there is a relationship between the UNESCO declaration of culture as a **global public good**<sup>134</sup> and the broader goal of the public sector described in *Advancing Prosperity*, where 'the objective is to improve the public good with all the ambiguity that term entails'.<sup>135</sup>
- Finally, *Advancing Prosperity's* definition of the non-market economy calls to mind the valuations of cultural and creative industries' **non-market output** – goods and services provided free of charge or at prices that are not economically significant. Government research valued the 'non-market output of market producers of the cultural and creative industries'<sup>136</sup> at \$97 million in 2019–20, an increase of \$19 million compared to 2010–11 but still the smallest of the four components of cultural and creative activity's contributions to the economy.<sup>137</sup>

*Advancing Prosperity's* overarching approach to lifting productivity in the non-market sector is to 'deliver high quality services at the lowest cost, by changing incentives and culture'.<sup>138</sup> For instance, it encourages not-for-profit organisations across sectors to use data to research and develop improved products and services for Australians, highlighting the role of governments in giving these organisations access to data and the role of norms and regulations in discouraging innovation across the public sector.<sup>139</sup>

To consider these different views on innovation across the public sector, *Advancing Prosperity* draws on the reported Australian Public Service census results. The results of this survey for several national cultural institutions, including the National Film and Sound Archive, National Museum of Australia and National Library of Australia, are publicly available.<sup>140</sup>

*Advancing Prosperity's* ideas on enhancing productivity and related examples from ANA's research about non-market services in the cultural and creative industries are summarised **in the following table**.

**Table** Enhancing productivity in non-market services: Channels of impact and examples

|                               | Approaches to lifting productivity in non-market services  |   |   |
|-------------------------------|--|---|---|
|                               | 'Shared' and 'flexible' investment approaches  | Benchmarking approaches   | Approaches focused on improving quality and variety of goods/services   |
| Channel of productivity gains | <ul style="list-style-type: none"> <li>Sharpens incentives to produce higher-quality outcomes</li> <li>Spurs coordination between different services</li> <li>Creates a growing knowledge base about 'what works'</li> <li>Provides a more efficient way to deal with unexpected events and transactional contracting</li> </ul> | <ul style="list-style-type: none"> <li>Promotes diffusion of best practice among jurisdictions and among service providers</li> <li>Can help businesses identify areas of under-performance (compared with similar businesses across a set of relevant performance indicators)</li> </ul> | <ul style="list-style-type: none"> <li>Productivity gains in services may take the form of quality improvements and greater variety<sup>141</sup> of novel products rather than real cost reductions.</li> </ul>  |
| Examples <sup>142</sup>       | <ul style="list-style-type: none"> <li>See OECD typology of funding sources for cultural and creative businesses and organisations<sup>143</sup></li> <li>The National Agreement on Closing the Gap<sup>144</sup></li> </ul>   | <ul style="list-style-type: none"> <li>Report on Government Services <sup>145</sup></li> <li>UN sustainable development goals<sup>146</sup></li> <li>European Union Cultural and Creative Cities Monitor</li> <li>APS census survey results</li> </ul>                                    | <ul style="list-style-type: none"> <li>Convenience and variety of the online experiences (e.g. streaming replacing bricks and mortar stores, availability of goods and services at any time without having to wait, e-commerce reducing location-related restrictions on competition)</li> <li>Service user experience improvements measured against well-being indicators</li> </ul> |

### Box 5: Insights from the Productivity Commission into the non-market sector's productivity

*'[. . .] If productivity growth in an expanding non-market sector remains in line with its measured historical average of zero, it would represent an increasingly large drag on overall economy-wide productivity growth'.<sup>147</sup>*

*'It is important to note that the non-market sector does suffer from measurement issues, and in particular, it is likely that quality improvements in, for example, healthcare and education, are under counted [. . .]. But even accounting for these quality improvements, it is likely that non-market productivity growth as a whole lags the market sector'.<sup>148</sup>*

*'In addition, non-market services that are government funded and require additional tax revenue to fund their expansion, place an increasing burden on the economy'.<sup>149</sup>*

*'The systems within which non-market services are delivered are often highly complex. This complexity, and the heterogeneity across the non-market sector, means productivity policy in the non-market sector is context-dependent, painstaking, and incremental'.<sup>150</sup>*

*'Uncoordinated actions of governments and agencies that share overlapping roles, siloed services, clashing funding incentives and risk-averse cultural norms tend to work against experimentation. Few publicly-operated services fear that poor performance will lead to their closure'.<sup>151</sup>*

*'If we are to focus attention on the hard areas, then there are none harder than the non-market economy. Productivity growth in this sector could look different – perhaps it will manifest more in better quality services than in cheaper ones. But in the absence of productivity growth, the “cost disease” will worsen and spread. Government services will expand as a share of the economy, requiring ever faster productivity growth elsewhere to “fund” it'.<sup>152</sup>*

### Opportunity

To foster productivity gains, providers of free-of-charge (or well-below-cost) cultural and creative services (such as government-funded or government-operated cultural institutions) should consider

- adopting 'flexible', 'blended' and 'shared' approaches to financing<sup>153</sup>
- using and reporting benchmark results
- making data-led improvements in the quality and variety of goods and services

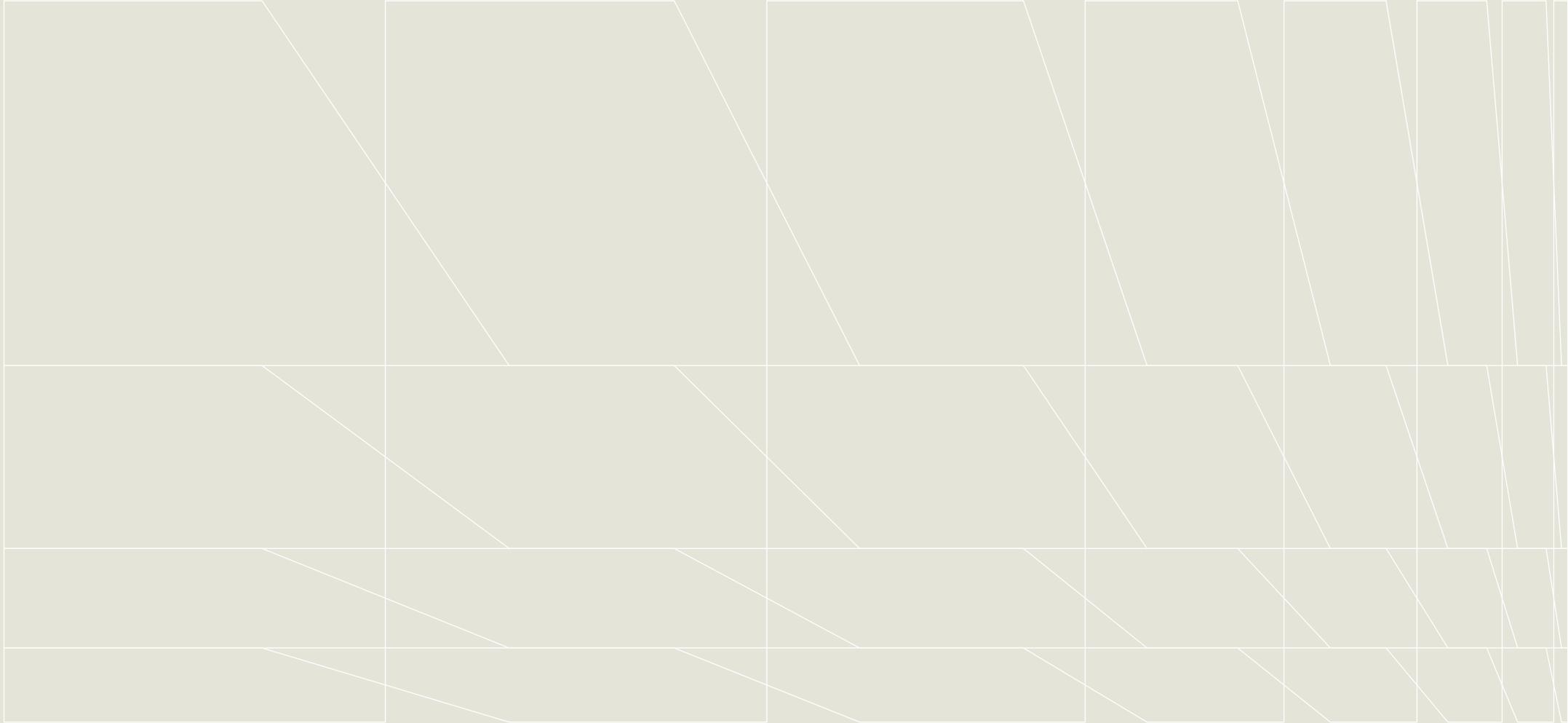
# Concluding Thoughts

The cultural and creative industries connect with productivity at global, national, regional and business or individual workplace levels and through the themes of employment, trade and innovation. However, as this research has shown, the theme of cultural and creative engagement underpins the whole system and can be harnessed in the focus areas and challenges identified in *Advancing Prosperity, Working Future* and the *2023 Intergenerational Report*.

This report canvassed various channels of productivity growth. To harness the productive opportunities in this congested policy topic, given the significance of growing productivity for all Australian jurisdictions, the opportunities in *Accelerate* seek implementation through Australia's federal decision-making architecture, that is, National Cabinet.

This research expands our understanding of the benefits of arts, culture and creativity and can bring decision makers together around new best-practice-led and evidence-led ideas. An additional resource about these benefits is ANA's Insight Report *Transformative: Impacts of Culture and Creativity*,<sup>154</sup> which we intend to update in accordance with our findings and other new findings.

# Appendices and Endnotes



# Appendix 1: Methodology and limitations

## Research design and consultations

This research arose from ANA's multifaceted interest in productivity, which our stakeholders share. The questions and the research objective also evolved from and align with ANA's strategic plan 2023–27. One objective is to help build an ambitious and innovative policy and investment environment for arts, culture and creativity.

ANA shared early drafts of this report with a range of experts. All advisors were invited to provide comments and be named (or not) in the acknowledgements section.

## Data analysis and literature review

The study's scope and literature review prioritised (a) gaining an expansive picture of the available evidence, (b) harnessing contemporary international thinking and (c) building cooperative approaches around Australia's future productivity. For these reasons, ANA primarily reviewed reports of the Australian Productivity Commission and international organisations, occasionally referring back to the specific studies cited therein.

To validate the review's major themes, we searched the academic literature using the key search terms 'productivity' and various combinations of 'creative industries', 'cultural and creative industries', 'arts', and 'culture'.

As is common practice with literature reviews, our overarching research question – 'Can creative and cultural activity make a contribution towards solving Australia's productivity predicament?' – led to more questions, including 'How productive are Australia's cultural and creative industries?' To respond, ANA drew on the ABS definition of the cultural and creative industries and conducted a secondary analysis of the publicly available data. The ABS concepts, sources and boundaries of that dataset are available here: <https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/labour-statistics-concepts-sources-and-methods/2021/concepts-and-sources/labour-productivity>

Drawing on two datasets,<sup>155</sup> we calculated the metric 'IVA per hour worked' to measure labour productivity. The following two inputs were used: (1) actual hours worked at the ANZSIC subdivision (2-digit) level and (2) IVA at the ANZSIC subdivision (2-digit) level.

## Limitations

We did not quantify the productivity impacts of the recommendations. This limitation of the study is consistent with a broader limitation of cultural scholarship on productivity, noted in a UK study: 'There is a large volume of existing research focused on the contributions [the arts, heritage and museums (AHM) sectors] to GVA but few make little or no reference to the quantum of any productivity impacts'.<sup>156</sup>

In the absence of this quantum, where possible, we have focused on expected productivity impacts outlined and prioritised in *Advancing Prosperity*. The evidence contained in that report is useful in providing an Australian context, up-to-date information and an exhaustive understanding of the topic and of debates about productivity in Australia. However, this focus may also be considered a limitation of the study in that we have not conducted an exhaustive review of all available productivity literature.

To mitigate this limitation, we considered any dissenting views, including those in the work of New Zealand's Productivity Commission, and verified the contents of the report with expert advisors.

Through the synthesis of the literature in this research, we considered the relationship among sources of literature on arts, culture and creativity and all 71 of the recommendations in *Advancing Prosperity*, which it argues 'collectively would enable productivity growth across the Australian economy'.<sup>157</sup> That is, we did not only consider recommendations and supporting evidence that the Productivity Commission considered to have the highest priority through its prioritisation of reform directives.<sup>158</sup>

# Appendix 2: What do we mean by arts, culture and creativity?



At ANA, we acknowledge the cultures of Aboriginal and Torres Strait Islander peoples in Australia and their continuing creative practices in this land. These practices remind us of the importance of sharing knowledge, skills and stories and help us to understand what we mean when we talk about arts, culture and creativity.

At ANA, arts, culture and creativity include activities such as

- attending cultural events
- visiting cultural venues
- creating or performing something
- engaging with arts, culture and creative content in your home

We also know that not all arts, culture and creative activities appeal to all people, but most people feel that there is something that they can enjoy and that is both relevant and significant to them.

The word 'culture' has many different meanings. At ANA, we use 'culture' to refer to the ways of living and the everyday forms of expression and creativity that we either share as Australians or that we share with other members of our particular social groups or communities.

We also note that arts and cultural activities can sit within the industrial category of the cultural and creative economy, which includes industries and occupations that use creativity for production and where cultural symbolism is evident in the finished product. This includes the activities listed in the bullet points above, but also includes activities in industries and occupations that may be less obvious, such as advertising, design and architecture.

←

**Source:** Reproduced from Jodie-Lee Trembath and Kate Fielding, "Australia's Cultural and Creative Economy: A 21st Century Guide," Canberra: A New Approach and the Australian Academy of the Humanities, October 2020, <https://newapproach.org.au/wp-content/uploads/2021/08/5-ANA-InsightReportFive-FullReport.pdf>. The original was created using inputs from Australia's Cultural Funding by Government data series 2007-08 to 2017-18 and the UNESCO Framework for Cultural Statistics and UNCTAD's Creative Economy Report 2008.

# Endnotes

- 1 Productivity Commission, “5-Year Productivity Inquiry: Advancing Prosperity,” February 7, 2023, <https://www.pc.gov.au/inquiries/completed/productivity/report/productivity-advancing-prosperity-all-volumes.pdf>, 2:2.
- 2 Based on Commonwealth of Australia data. “Working Future: The Australian Government’s White Paper on Jobs and Opportunities,” The Treasury, September 2023, <https://treasury.gov.au/sites/default/files/2023-09/p2023-447996-working-future.pdf>, 2.
- 3 Based on Commonwealth of Australia data. “Intergenerational Report 2023 Australia’s Future to 2063,” The Treasury, 2023, <https://treasury.gov.au/sites/default/files/2023-08/p2023-435150.pdf>, 79.
- 4 For more details on each of these questions please refer to: Productivity Commission, “5-Year Productivity Inquiry,” 1:12-25; 1:11.
- 5 Productivity Commission, “5-Year Productivity Inquiry,” 1:1.
- 6 ‘Cultural and creative engagement’ is one of the 50 indicators of wellbeing in the Department of the Treasury’s ‘Measuring What Matters’ framework. The framework is described as being a supplement to other traditional ways of measuring the economy, such as the use of GDP or employment. Based on Commonwealth of Australia data. “Measuring What Matters: Australia’s First Wellbeing Framework,” The Treasury, July 2023, [https://treasury.gov.au/sites/default/files/2023-07/measuring-what-matters-statement020230721\\_0.pdf](https://treasury.gov.au/sites/default/files/2023-07/measuring-what-matters-statement020230721_0.pdf).
- 7 New Zealand Productivity Commission, “Productivity by the Numbers,” 2023. <https://www.productivity.govt.nz/assets/PBTN-2023-digital-final-3-July.pdf>, 103.
- 8 The term ‘frontier’ and its characterisations have various meanings in productivity debates. For example, ‘frontier’ can refer to specific firms at the top of the industry productivity distribution or to a whole industry, or it can be used for comparisons of countries’ productivity.
- 9 Commonwealth of Australia 2021, “National Cabinet Priorities,” September 30, 2022, <https://federation.gov.au/sites/default/files/2023-06/national-priorities.pdf>.
- 10 Australian Bureau of Statistics, “Labour Statistics: Concepts, Sources and Methods,” February 15, 2022, <https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/labour-statistics-concepts-sources-and-methods/2021/concepts-and-sources/labour-productivity>.
- 11 Sources: Australian Bureau of Statistics, Cultural and creative activities. <https://www.abs.gov.au/statistics/people/people-and-communities/cultural-and-creative-activities/latest-release>. accessed 25 October 2023. United Nations Conference on Trade and Development, “Creative Economy Outlook 2022,” 2022, [https://unctad.org/system/files/official-document/ditctsce2022d1\\_en.pdf](https://unctad.org/system/files/official-document/ditctsce2022d1_en.pdf); Commonwealth of Australia, “At a Glance: Cultural and Creative Activity Estimates, 2010-11 to 2019-20,” October 2022, <https://www.infrastructure.gov.au/sites/default/files/documents/bcarr-cultural-and-creative-activity-in-australia-at-a-glance-october2022.pdf>. Also see Part 2’s discussion of labour productivity growth in cultural and creative industries, and footnotes 27 and 147 for other ANA sources.
- 12 Australian Bureau of Statistics, “Labour Productivity,” accessed September 19, 2023, <https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/labour-statistics-concepts-sources-and-methods/2021/concepts-and-sources/labour-productivity>.
- 13 Australian Bureau of Statistics, “Labour Productivity.”
- 14 Productivity Commission, “5-Year Productivity Inquiry,” 7:2; 2:5.
- 15 New Zealand Productivity Commission, “Productivity by the Numbers,” 103.
- 16 Australian Bureau of Statistics, “Labour Productivity.”
- 17 Satellite accounts ‘allow an expansion of the national accounts for selected areas of interest while maintaining the concepts and structures of the core accounts’. More information about the satellite accounts created to measure economic contributions of cultural and creative activity can be found here: Australian Bureau of Statistics, “5271.0 – Australian National Accounts: Cultural and Creative Activity Satellite Accounts, Experimental, 2008-09 – Explanatory Notes,” February 10, 2014, <https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/5271.0Explanatory%20Notes12008-09?OpenDocument>.

- 18 OECD, "OECD Employment Outlook 2023: Artificial Intelligence and the Labour Market," July 11, 2023, 2023, <https://doi.org/10.1787/08785bba-en>.
- 19 Commonwealth of Australia 2021, "Australia's Federal Relations Architecture," accessed October 11, 2023, [https://federation.gov.au/sites/default/files/2023-06/federal-relations-architecture\\_0.pdf](https://federation.gov.au/sites/default/files/2023-06/federal-relations-architecture_0.pdf).
- 20 Productivity Commission, "5-Year Productivity Inquiry," 4: 36.
- 21 Productivity Commission, "5-Year Productivity Inquiry," 1:35; 36.
- 22 Based on Commonwealth of Australia data. "Working Future."
- 23 Based on Commonwealth of Australia data. "Intergenerational Report 2023."
- 24 Commonwealth of Australia 2021. "Meeting of the National Cabinet - A Better Future for the Federation - Media Release 28 Apr 2023 Brisbane Prime Minister," Australia's Federal Relations Architecture, accessed October 11, 2023, <https://federation.gov.au/about>.
- 25 However, debates exist about how the two frameworks are related and about culture's role in measuring well-being. For instance, culture is identified as 'ambiguous' in New Zealand's well-being framework, and productivity is identified as an indicator within Australia's well-being framework.
- 26 New Zealand Productivity Commission, "Productivity by the Numbers." 4.
- 27 Kate Fielding, Angela Vivian, and Sari Rossi, "To Scale: Mapping Financial Inflows in Australian Arts, Culture and Creativity," Canberra: A New Approach, August 2023, [https://newapproach.org.au/wp-content/uploads/2023/08/ANA-64088-To-Scale-Report-Combined\\_AW.pdf](https://newapproach.org.au/wp-content/uploads/2023/08/ANA-64088-To-Scale-Report-Combined_AW.pdf)
- 28 Productivity Commission, "About," accessed October 19, 2023, <https://www.pc.gov.au/about>.
- 29 New Zealand Productivity Commission, "About Us," accessed October 19, 2023, <https://www.productivity.govt.nz/about-us/>.
- 30 "Reflections on Productivity, Public Policy, and Challenges Associated with Closing the Gap: National Press Club Address, 23 August 2023, Michael Brennan, Chair, Productivity Commission," <https://www.pc.gov.au/media-speeches/speeches/reflections/reflections.pdf>. 3.
- 31 OECD, "OECD Employment Outlook 2023: Artificial Intelligence and the Labour Market," July 11, 2023, 2023, <https://doi.org/10.1787/08785bba-en>.
- 32 OECD, "The Culture Fix: Creative People, Places and Industries - Local Economic and Employment Development (LEED)," June 3, 2022, <https://doi.org/10.1787/991bb520-en>, 11.
- 33 Productivity Commission, "5-Year Productivity Inquiry," 5:59.
- 34 See technical appendix and background research. Fielding, Vivian, and Rossi, "To Scale.", 30.
- 35 Productivity Commission, "5-Year Productivity Inquiry," 1:23.
- 36 Productivity Commission, "5-Year Productivity Inquiry," 5:4.
- 37 Productivity Commission, "5-Year Productivity Inquiry," 5:59.
- 38 OECD, "The Culture Fix," 202.
- 39 OECD, "The Culture Fix," 19.
- 40 OECD, "The Culture Fix," 14.

- 41 Specifically, *Advancing Prosperity* argues that given that spillovers from co-location are localised, and most place-based programs focus on highly novel innovators, place-based innovation policies are unlikely to yield a significant and wide-reaching diffusion dividend. Productivity Commission, “5-Year Productivity Inquiry,” 55. However, in the course of this research, ANA encountered discussions on the productivity benefits of place-based approaches for tackling community challenges and disadvantages, not in the literature on arts and culture. Most notably, a recent overview of place-based approaches in Australia foregrounds the relationship of productivity and place in the following example and quote: ‘In Bell Bay [Aluminium]’s case, helping the local community [George Town, Tasmania] leads to productivity benefits in terms of logistics savings and improving the socio-economic conditions in its workforce capture area. It’s also helping to increase the innovation capacity and value-add of local suppliers.’
- Geatches, Lauren, Caroline Preston, and Andra Putnis, “Where Are We? Place-Based Approaches to Tackling Community Challenges in Australia,” Equity Economics and Development Partners, June 2023, [https://assets.website-files.com/62b998c0c9af9f65bba26051/649bc20d41688afed4256ef9\\_PRF%20EE%20Where%20Are%20We%202023%20V4%20FINAL.pdf](https://assets.website-files.com/62b998c0c9af9f65bba26051/649bc20d41688afed4256ef9_PRF%20EE%20Where%20Are%20We%202023%20V4%20FINAL.pdf), 33.
- 42 See Recommendation 5.13. Productivity Commission, “5-Year Productivity Inquiry.”
- 43 Productivity Commission, “5-Year Productivity Inquiry,” 5:63.
- 44 OECD, “The Culture Fix,” 52.
- 45 According to *Advancing Prosperity*, ‘Knowledge-based capital spending is often defined as the sum of gross fixed capital spending on computer software, research and development, mineral and petroleum exploration, and artistic works’. Productivity Commission, “5-Year Productivity Inquiry: Advancing Prosperity,” 5:12.
- 46 Reporting about this area of innovation notes that ‘Australian Seaweed Institute report predicted the domestic industry could potentially generate \$1.5B annually by 2040 while reducing greenhouse emissions by 10%’. “50 Australian Inventions Changing the World”, *Weekend Australian*, 26–27 August, 2023. More recent reporting notes the business Sea Forest was recently named as a finalist for the \$1.9m Earthshot prize.
- 47 See Chapter 5. Kate Fielding, Iva Glisic, and Jodie-Lee Trembath, “Transformative: Impacts of Culture and Creativity,” Canberra: A New Approach and the Australian Academy of Humanities, November 2019, <https://newapproach.org.au/wp-content/uploads/2021/07/2-ANA-InsightReportTwo-FullReport.pdf>.
- 48 Based on Commonwealth of Australia data. “Working Future,” 88.
- 49 *Advancing Prosperity* specifically refers to IGEA’s short courses on ‘how to run a studio, webinars on areas where support is needed (such as in applying for grants and learning project management skills) and education summits to bring together educators to ensure consistency and that available offerings target the industry’s skill needs’. Productivity Commission, “5-Year Productivity Inquiry,” 5:39.
- 50 “Advisory Board for the Arts,” Advisory Board for the Arts, accessed August 30, 2023, <https://www.advisoryboardarts.com>. The ABA website notes that it serves a global membership of arts organizations. The majority of its research is reserved for members, but selections from its Signature Research Initiatives, Featured Articles, and Arts Executive Benchmarks are publicly available.
- 51 The Productivity Commission considers the role of the Indigenous Art Code as part of the study report of Aboriginal and Torres Strait Islander visual arts and crafts: ‘The corporation also provides important advice and support for artists, but does not receive funding for this role’. Recommendation 8.1 of the Productivity Commission study is that ‘the Australian Government, in partnership with State and Territory Governments should modestly increase funding to Indigenous Art Code Limited to support key processes [ . . . ]’. Productivity Commission, “Aboriginal and Torres Strait Islander Visual Arts and Crafts Study Report,” November 2022, <https://www.pc.gov.au/inquiries/completed/indigenous-arts/report/indigenous-arts.pdf>, 39.

- 52 UNCTAD's six creative services groupings are as follows: research development; software; audiovisual and information; advertising; market research and architecture; and cultural, recreational and heritage services. See Table 8. United Nations Conference on Trade and Development, "Creative Economy Outlook 2022," 2022, [https://unctad.org/system/files/official-document/ditctsce2022d1\\_en.pdf](https://unctad.org/system/files/official-document/ditctsce2022d1_en.pdf).
- 53 UNCTAD has a list of 197 creative goods. These fall under the following sub-categories: art and crafts (carpets, products related to celebration, other crafts, paperware, wickerware, and yarn); audiovisuals (films and CDs, DVDs and tapes); design (architecture, fashion, glassware, interior, jewellery, and toys); new media (recorded media and video games); performing arts (musical instruments and printed music); publishing (books, newspapers, and other printed matter); and visual arts (antiques, painting, photography, and sculpture). United Nations Conference on Trade and Development, "Creative Economy." 32.
- 54 United Nations Conference on Trade and Development, "Creative Economy." iii.
- 55 UNCTAD suggests this is 'due to the lack of physical exchanges on the global art market, an important distribution channel for visual arts, and increasing digitization in the audiovisual and publishing sector'. United Nations Conference on Trade and Development, "Creative Economy." 4.
- 56 See Chart 13. UNCTAD, "Creative Economy Outlook: Trends in International Trade in Creative Industries," 2018, [https://unctad.org/en/PublicationsLibrary/ditcted2018d3\\_en.pdf](https://unctad.org/en/PublicationsLibrary/ditcted2018d3_en.pdf).
- 57 Jodie-Lee Trembath and Kate Fielding, "Australia's Cultural and Creative Economy: A 21st Century Guide," Canberra: A New Approach and the Australian Academy of the Humanities, October 2020, <https://newapproach.org.au/wp-content/uploads/2021/08/5-ANA-InsightReportFive-FullReport.pdf>, 71.
- 58 Productivity Commission, "5-Year Productivity Inquiry," 3:92.
- 59 The ABS identifies four modes of trade in services: cross-border supply, consumption abroad, commercial presence, presence of natural persons. More details can be found in Box 3.7 - Types of trade in services of the Productivity Commission. Productivity Commission, "5-Year Productivity Inquiry," 3:92.
- 60 Productivity Commission, "5-Year Productivity Inquiry," 3:48.
- 61 Productivity Commission, "5-Year Productivity Inquiry," 3:66.
- 62 New Zealand Productivity Commission, "Productivity by the Numbers," 62.
- 63 International consumers also form an important part of the market for Aboriginal and Torres Strait Islander visual arts and craft, accounting for \$110-137 million spent by international visitors, of which at least 64-68% is spent on souvenir products. Artists sell their work to individuals through a range of channels including art centres, art fairs, private dealers, commercial galleries, manufacturers and wholesalers (who use art on souvenirs, clothing, homewares, etc.) and graphic design agencies. They also sell directly to consumers (both in physical retail settings and through online marketplaces, websites and social media). The bodies assisting the market to function are peak industry bodies, legal advisory and advocacy bodies and services. A summary of the Productivity Commission's proposed responses and expected benefits in this part of the market can be found in Productivity Commission, "Aboriginal and Torres Strait Islander Visual Arts and Crafts Study Report," November 2022.
- 64 Opportunity 4. Fielding, Vivian, and Rossi, "To Scale."
- 65 United Nations Conference on Trade and Development, "Creative Economy Outlook 2022," 55.

- 66 The indicators in this UNCTAD analysis are the World Bank Human Capital Index, which captures the expected productivity of a child born today as a future worker, relative to a benchmark of complete education and full health (which gives a maximum value of 1). The indicators of the analysis also include mean years of schooling (in years), share of individuals using the internet, share of individuals with an account at a financial institution or with a mobile-money-service provider, UNCTAD B2C E-commerce Index measures an economy's preparedness to support online shopping (ranking and percentage value). See Table 11. United Nations Conference on Trade and Development, "Creative Economy Outlook 2022."
- 67 Productivity Commission, "5-Year Productivity Inquiry," 1:14.
- 68 Productivity Commission, "5-Year Productivity Inquiry," 1:14.
- 69 New Zealand Productivity Commission, "Productivity by the Numbers," 83.
- 70 Productivity Commission, "5-Year Productivity Inquiry," 1:25.
- Advancing Prosperity* notes that the role for publicly funded investments should be limited to areas where the private sector is unwilling or unable to invest. This is so that governments avoid crowding out private sector investments that would otherwise have occurred (see recommendation 4.1 for more details).
- Further, *Advancing Prosperity* uses a whole-of-economy model to simulate the increased use of technology and data in regional and remote areas that could result from improved digital infrastructure. However, this increased productivity focuses on the 'mining' and 'agriculture, forestry and fishing' industries, not the cultural and creative industries.
- 71 Productivity Commission, "5-Year Productivity Inquiry: Advancing Prosperity," 4:10.
- 72 New Zealand Productivity Commission, "Productivity by the Numbers," 31.
- 73 Productivity Commission, "5-Year Productivity Inquiry," 4:36.
- 74 *Advancing Prosperity* provides an interesting list of factors that determines which organisations are operating at the frontier of productivity performance. These factors include organisations' use of resources and how quickly they adopt new technologies. It argues that "the more organisations in an economy that are like this, the more productive is society overall, and the more rapidly it can absorb global technologies." Productivity Commission, "5-Year Productivity Inquiry," 5:4.
- 75 OECD, "The Culture Fix," 125.
- 76 Loren King and Dan Popov, "Productivity and the Arts Heritage and Museum Sectors: A Report for DCMS," Frontier Economics, February 2020, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/918258/Productivity\\_and\\_the\\_Arts\\_Heritage\\_and\\_Museum\\_Sectors.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/918258/Productivity_and_the_Arts_Heritage_and_Museum_Sectors.pdf), 6.
- 77 Productivity Commission, "Aboriginal and Torres Strait Islander Visual Arts and Crafts Study Report," 340.
- 78 See ANA's short paper on the applications of AI in arts, culture and creativity. For broader-cross-sectoral analysis of the empirical literature, the OECD notes that "artificial intelligence will automate certain tasks, but the net impact on employment is ambiguous." OECD, "OECD Employment Outlook 2023."
- 79 The key barriers identified in *Advancing Prosperity* are inadequate internet, lack of skills, low awareness and uncertainty about benefits, security concerns, cost and legacy systems. Productivity Commission, "5-Year Productivity Inquiry," 1:x.
- 80 OECD, "OECD Employment Outlook 2023."
- 81 OECD, "OECD Employment Outlook 2023."
- 82 Alan Hui and Kate Fielding, 'Friend, Foe or Frenemy', Canberra: A New Approach. (Forthcoming)
- 83 Productivity Commission, "5-Year Productivity Inquiry," 7:5.

- 84 International Labour Organization, "Report for the Technical Meeting on the Future of Work in the Arts and Entertainment Sector," 2023, [https://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/publication/wcms\\_865323.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_865323.pdf).
- 85 The recommendations consider, for example, co-operation between bargaining parties, wage determination and business decision-making and costs in relation to skill shortages.
- 86 The ABS provides a framework of occupations and examples in 'gig economy work' for labour statistics. These occupations include 'rental economy workers', 'labour services' and 'marketplace workers'. Each of these types of work can be further broken down into 'digital platform work' or 'non-digital platform work'. 'Labour services digital platform work', which is the ABS population of interest, is enabled through 'profile-based platforms' or 'on-demand platforms'. 'Profile-based platforms' include those that are 'task-based' (e.g. Airtasker), 'professional services' (e.g. Upwork, Freelancer), and 'caring' (e.g. Sitr, Mable). 'On-demand platforms' include 'personal transport' (e.g. Uber, Sheba, Ola) and 'delivery services' (e.g. Amazon Flex, Uber Eats). Australian Bureau of Statistics. "Employment Arrangements." Accessed October 26, 2023. <https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/labour-statistics-concepts-sources-and-methods/2021/concepts-and-sources/employment-arrangements>.
- 87 Productivity Commission, "5-Year Productivity Inquiry," 1:19.
- 88 International Labour Organization, "Report for the Technical Meeting." 62; 65.
- 89 OECD, "The Culture Fix," 17.
- 90 OECD, "The Culture Fix," 54.
- 91 The federal government's decision to include the indicator of cultural and creative engagement in Australia's National Wellbeing Framework signals its recognition of well-being and cohesion benefits. Based on Commonwealth of Australia data. "Measuring What Matters: Australia's First Wellbeing Framework,"
- 92 Christina Davies, Matthew Knuiman, and Michael Rosenberg, "The Art of Being Mentally Healthy: A Study to Quantify the Relationship between Recreational Arts Engagement and Mental Well-Being in the General Population," *BMC Public Health* 16, no. 1 (2016): 15, <https://doi.org/10.1186/s12889-015-2672-7>.
- 93 Cited in Fielding, Glisic, and Trembath, "Transformative," 7:52.
- 94 Tully Barnett, Alex Cothren, and Joanne Arciuli, "Telling the Story of Arts and Health in South Australia," Flinders University Arts and Health Alliance, 2022, [https://researchnow-admin.flinders.edu.au/ws/portalfiles/portal/60623008/Telling\\_the\\_Story\\_of\\_Arts\\_and\\_Health\\_in\\_South\\_Australia.pdf](https://researchnow-admin.flinders.edu.au/ws/portalfiles/portal/60623008/Telling_the_Story_of_Arts_and_Health_in_South_Australia.pdf).
- 95 Productivity Commission, "Mental Health," 2020, <https://www.pc.gov.au/inquiries/completed/mental-health/report/mental-health.pdf>, 1:9.
- 96 Productivity Commission, "5-Year Productivity Inquiry," 5:62.
- 97 Daisy Fancourt and Saoirse Finn, *What Is the Evidence on the Role of the Arts in Improving Health and Well-Being? A Scoping Review*, WHO Health Evidence Network Synthesis Reports (Copenhagen: WHO Regional Office for Europe, 2019), <http://www.ncbi.nlm.nih.gov/books/NBK553773/>.
- 98 Fancourt and Finn, *What Is the Evidence on the Role of the Arts in Improving Health and Well-Being?* ii.
- 99 M Alison Balbag, Nancy L Pedersen, Margaret Gatz, "Playing a Musical Instrument as a Protective Factor against Dementia and Cognitive Impairment: A Population-Based Twin Study," *International Journal of Alzheimer's Disease* 2014 (2014): 836748, [10.1155/2014/836748](https://doi.org/10.1155/2014/836748).
- 100 J Li, L Zhou, Y Wang, "The Effects of Music Intervention on Burn Patients During Treatment Procedures: A Systematic Review and Meta-analysis of Randomized Controlled Trials." Fancourt and Finn, *What Is the Evidence on the Role of the Arts in Improving Health and Well-Being?*

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- 102 World Health Organization, "Ground-Breaking Research Series on Health Benefits of the Arts," accessed October 11, 2023, <https://www.who.int/news/item/25-09-2023-ground-breaking-research-series-on-health-benefits-of-the-arts>.
- 103 Productivity Commission, "Innovations in Care for Chronic Health Conditions - Productivity Reform Case Study," 2021, <https://www.pc.gov.au/research/completed/chronic-care-innovations/chronic-care-innovations.pdf>.
- 104 Two examples of initiatives that Creative Australia has shared on this topic, specifically on arts approaches that are a complementary solution to addressing the mental health impacts of climate change in a submission to the federal government, are as follows: the Creative Recovery Network and the Centre for Reworlding. Creative Australia, "Australia Council Submission: National Health and Climate Strategy," 2023, <https://creative.gov.au/about-us/publications-and-submissions/>.
- 105 Fielding, K., Sidhu, A., & Vivian A., "Intergenerational arts and culture: Lessons across middle Australia". Canberra: A New Approach, October 2023. [https://newapproach.org.au/wp-content/uploads/2023/10/Intergenerational-arts-and-culture\\_AnalysisPaper\\_ANA.pdf](https://newapproach.org.au/wp-content/uploads/2023/10/Intergenerational-arts-and-culture_AnalysisPaper_ANA.pdf)
- 106 Recommendation 6.3 in Productivity Commission. Productivity Commission, "5-Year Productivity Inquiry."
- 107 Tourism is mentioned as a heat-exposed industry in *Advancing Prosperity*, as are agriculture and fisheries and others relying on physical labour in heat-exposed environments. Productivity Commission, "5-Year Productivity Inquiry," 8:1.
- 108 The following is the original source on this topic, which the OECD cites: "Systematic application of interpretive social science techniques [is needed] to understand the ways in which these arts based interventions do or do not achieve affective public engagement with climate change and hence might hold the key to unlocking broader climate compatible behaviour change." Miriam Burke, David Ockwell, and Lorraine Whitmarsh, "Participatory Arts and Affective Engagement with Climate Change: The Missing Link in Achieving Climate Compatible Behaviour Change?" *Global Environmental Change* 49 (2018): 95-105.
- 109 Powerhouse Museum, "100 Climate Conversations," accessed October 18, 2023, <https://powerhouse.com.au/program/100-climate-conversations#overview>.
- 110 Based on Commonwealth of Australia data. "Intergenerational Report 2023."
- 111 Fancourt and Finn, *What Is the Evidence on the Role of the Arts in Improving Health and Well-Being?*
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- 116 Reserve Bank of Australia, "Productivity," accessed September 2023, <https://www.rba.gov.au/education/resources/explainers/productivity.html>.
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- 119 OECD, "Base Erosion and Profit Shifting," 2023, <https://www.ato.gov.au/Business/International-tax-for-business/In-detail/Base-Erosion-and-Profit-Shifting/?page=1>
- 120 Based on Commonwealth of Australia data. "Intergenerational Report 2023," 82.
- 121 Kate Fielding and Jodie-Lee Trembath, "Twenty-First Century Priorities for Australian Arts and Culture Policy: What's New, What's Endured, What's Next," Canberra: A New Approach, October 2021, <https://newapproach.org.au/analysis-papers/twenty-first-century-priorities-for-australian-arts-and-culture-policy-whats-new-whats-endured-whats-next/>.
- 122 The cultural and creative workforce is sometimes understood as extending beyond the specific industries that are classified as containing cultural and creative activity (e.g. embedded workers in a variety of industries). This analysis focuses on the parts of the workforce contained within the industries classified as including cultural and creative activity.
- 123 The industry value added (IVA) was identified as the most suitable output for calculating labour productivity at the ANZSIC industry subdivision (2-digit) level, based on available datasets.
- 124 Productivity Commission, "5-Year Productivity Inquiry," 1:iv.
- 125 ABS, "Australian Industry," 2022, <https://www.abs.gov.au/statistics/industry/industry-overview/australian-industry/latest-release#data-downloads>.
- 126 Figure 4 uses industry statistics published by the ABS. Two datasets are used: (1) actual hours worked are sourced from the Labour Account Australia dataset, and (2) IVA figures are sourced from the Australian industry dataset. Data are collected at the ANZSIC subdivisions (2-digit) level for all industry categories relating to cultural and creative activity.
- 127 Australian Bureau of Statistics, "Division J Information Media and Telecommunications, Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 (Revision 2.0)," June 26, 2013, <https://www.abs.gov.au/statistics/classifications/australian-and-new-zealand-standard-industrial-classification-anzsic/2006-revision-2-0/detailed-classification/j>.
- 128 Australian Bureau of Statistics, "Division J Information Media and Telecommunications."
- 129 Productivity Commission, "5-Year Productivity Inquiry," 1:x.
- 130 Productivity Commission, "5-Year Productivity Inquiry."
- 131 New Zealand Productivity Commission, "Productivity by the Numbers," 15.

- 132 Australia's National Cultural Institutions are as follows: the Australian National Maritime Museum; Bundanon Trust; Museum of Australian Democracy at Old Parliament House; National Film and Sound Archive of Australia; National Gallery of Australia; National Library of Australia; National Museum of Australia; National Portrait Gallery; Australia Council for the Arts; Australian Film, Television and Radio School; Screen Australia.
- 133 Fielding, Angela, and Rossi, "To Scale."
- 134 UNESCO, "MONDIACULT 2022: States Adopt Historic Declaration for Culture," accessed January 27, 2023, <https://www.unesco.org/en/articles/mondiacult-2022-states-adopt-historic-declaration-culture>.
- 135 Productivity Commission, "5-Year Productivity Inquiry," 5:63.
- 136 In that research's methodology, the non-market output of market producers in the cultural and/or creative industries refers to the value of cultural and creative goods and services supplied by nonprofit institutions for free, or at prices that are not economically significant. For more information about the methodology for calculations, please refer to the explanatory notes of the Cultural and Creative Activity Satellite Accounts. Australian Bureau of Statistics, "5271.0 - Australian National Accounts: Cultural and Creative Activity Satellite Accounts, Experimental, 2008-09 - Explanatory Notes," February 10, 2014, <https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/5271.0Explanatory%20Notes12008-09?OpenDocument>.
- 137 The other components of their economic contribution are gross value added (GVA) from cultural and creative industries, compensation of employees (COE) received by individuals working in cultural and creative occupations outside the cultural and creative industries, and volunteer services to arts and heritage organisations. "At a Glance: Cultural and Creative Activity Estimates, 2010-11 to 2019-20," Commonwealth of Australia, October 2022, <https://www.infrastructure.gov.au/sites/default/files/documents/bcarr-cultural-and-creative-activity-in-australia-at-a-glance-october2022.pdf>.
- 138 Productivity Commission, "5-Year Productivity Inquiry: Advancing Prosperity," Xi.
- 139 The attitudinal survey measures this innovativeness in APS agencies through questions about 'responsibilities to look for new ways to improve the way we work', 'encouragement from a supervisor to come up with new or better ways of doing things', 'recognition for coming up with new and innovative ways of working', 'agency actions to inspire new or better ways of doing things', 'recognition and support for the notion that failure is a part of innovation'.
- 140 Australian Public Service Commission, "APS Employee Census 2022," November 10, 2022, <https://www.apsc.gov.au/initiatives-and-programs/workforce-information/research-analysis-and-publications/aps-employee-census-2022>.
- 141 To explain this, *Advancing Prosperity* notes that 'productivity improvements also come in the form of novel products, which contribute to an increase in product variety', with a caveat that 'the size and nature of the benefits of novel and improved quality products are difficult to measure and are typically underestimated.' Productivity Commission, "5-Year Productivity Inquiry," 2:11.
- 142 The examples in this table are intended to illustrate the approaches recommended in *Advancing Prosperity*.
- 143 ANA has described the typology and considered it in an Australian context in our research report To Scale. Fielding, Vivian, and Rossi. "To Scale."
- 144 Productivity Commission, "5-Year Productivity Inquiry," 1:36.
- 145 The Productivity Report on Government Services currently only considers indicators relating to services covering education, justice, community services, health, emergency management, housing and homelessness. Previous ANA research has considered this area of reporting in our analysis of cultural funding by governments in Australia. Vivian, Angela, Kate Fielding, and Tim Acker, "The Big Picture 3: Expenditure on Artistic, Cultural and Creative Activity by Governments in Australia in 2007-08 to 2020-21," Canberra: A New Approach, March 2023, [https://newapproach.org.au/wp-content/uploads/2023/03/A-New-ApproachANA\\_Big-Picture-3\\_-Expenditure-on-Artistic-Cultural-and-Creativeactivity-by-governments-in-Australia-in-2007%E2%80%932020%E2%80%9321.pdf](https://newapproach.org.au/wp-content/uploads/2023/03/A-New-ApproachANA_Big-Picture-3_-Expenditure-on-Artistic-Cultural-and-Creativeactivity-by-governments-in-Australia-in-2007%E2%80%932020%E2%80%9321.pdf). 58.

- 146 An example shared in the course of this research is SDG reporting by the TARNANTHI Festival of Contemporary Aboriginal and Torres Strait Islander Art (presented by the Art Gallery of South Australia with Principal Partner BHP and support from the Government of South Australia).
- 147 Productivity Commission, “5-Year Productivity Inquiry” 1:6.
- 148 Productivity Commission, “5-Year Productivity Inquiry,” 1:7.
- 149 Productivity Commission, “5-Year Productivity Inquiry,” 1:7.
- 150 Productivity Commission, “5-Year Productivity Inquiry,” 1:34.
- 151 Productivity Commission, “5-Year Productivity Inquiry,” 5:V.
- 152 Productivity Commission, “5-Year Productivity Inquiry,” 1:xi.
- 153 Productivity Commission, “5-Year Productivity Inquiry,” 1:35; 36.
- 154 Fielding, Glisic, and Trembath, “Transformative.”
- 155 Australian Bureau of Statistics, “Labour Account Australia, Final Quarterly Balanced: Subdivision, Division and Total All Industries,” accessed October 2023, [https://www.abs.gov.au/statistics/industry/industry-overview/australian-industry/latest-release](https://explore.data.abs.gov.au/vis?fs[0]=Labour%2C0%7CEmployment%20and%20unemployment%23EMPLOYMENT_UNEMPLOYMENT%23&pg=0&fc=Labour&df[ds]=LABOUR_TOPICS&df[id]=LABOUR_ACCT_Q&df[ag]=ABS&df[vs]=1.0.0&pd=2020-Q1%2C2023-Q2&dq=...Q; Australian Bureau of Statistics, Australian Bureau of Statistics, “Australian Industry by Subdivision. 2021-22,” May 26, 2023, <a href=).
- 156 King and Popov, “Productivity and the Arts Heritage and Museum Sectors,” 4.
- 157 Productivity Commission, “5-Year Productivity Inquiry,” 1:45.
- 158 The Productivity Commission’s prioritisation framework is built on two criteria: expected productivity impact (high or low) and complexity (complex or simple). More information on the framework is available in volume 1 of Advancing Prosperity. Productivity Commission, “5-Year Productivity Inquiry,” 1:45.



**A New Approach (ANA)**