



Dr Wendy Craik AM
Commissioner
Childcare Inquiry
Productivity Commission
GPO Box 1428
Canberra, ACT 2600

3 February 2014

Dear Wendy,

Re: Inquiry into Childcare and Early Childhood Learning

PricewaterhouseCoopers (PwC) is pleased to make an initial submission to the Productivity Commission's Inquiry into Childcare and Early Childhood Learning ('the Inquiry').

PwC welcomes the Inquiry as we believe it is crucial that the Early Childhood Education and Care (ECEC) sector continues to evolve to meet the learning and development needs of Australia's children. Hence, we are writing to submit our initial views and some key findings from our past work, as well to outline the further thought leadership work that we plan to undertake to demonstrate the value of quality ECEC from a workforce participation perspective, as well as the longer term productivity benefits of improving access to care and education by reducing disadvantage amongst vulnerable children.

PwC is passionate about improving social outcomes, and regularly assists government departments and the private sector by applying an economic lens to inform the development of public policy and organisational strategy. As a market leader in developing and contributing to ECEC policy and reform at the State, Federal and Local Government levels in Australia, we have reviewed the international evidence of the significant benefits which exist for children who participate in quality early childhood programs and services, as well as the immediate and longer-term flow on benefits to broader society.

Our work has shown that the provision of ECEC in Australia has grown to become a core part of **Australia's economic and social fabric** on which families are increasingly relying on to support their workforce participation and their economic wellbeing.¹ Looking at Long Day Care alone the participation rate of 0-4 year olds has grown from 13% in 1996 to 31% in 2011², with the mean hours of attendance in 2011 reaching nearly 20 hours per week.³

Education is an engine of economic growth and has a substantial impact investment in human capital and **on one's individual level of productivity and capacity to contribute to the economy. ECEC must** now be seen as a key contributor to the educational development of young children and subsequently to the broader economy.

In addition, we understand the immediate impacts that can be derived from increased parental workforce participation as a result of greater access to and flexibility in quality childcare provision.

¹ The Productivity Commissions Issues paper indicates that over 50% of 2 and 3 year old children and over 30% of 1 year olds use ECEC services.

² Australian Bureau of Statistics (2012) Childhood Education and Care Australia June 2011. Canberra

³ Ibid.



Our experience in this area has shown that there are significant economic benefits which derive from a good quality ECEC system which enables parental workforce participation and provides the appropriate learning environment for children.

We have also developed unique tools which can demonstrate the economic returns of education for society, including our in-house Integrated Forecasting Model⁴, which goes far beyond the capability of traditional impact assessments and policy design tools. Accordingly, we believe that it is imperative for us to participate in the debate and make a submission to the Inquiry.

The link between good quality ECEC and better outcomes for children has been well demonstrated over many years.⁵ Perhaps the most well-known of these research endeavours are the Abecedarian Study and the Perry Preschool Study. Each of these studies concluded that children who engage in ECEC programs prior to formal schooling receive a number of benefits compared to children who do not.

For example, the Abecedarian Study found that the children who are engaged in ECEC programs not only learn faster and speak more fluently than their peers, but they also achieve better intellectual quotient (IQ) scores. Similarly, the Perry Preschool Study found that children who engage in ECEC programs prior to formal schooling receive benefits well into adulthood compared to those that do not (e.g. a higher level of educational attainment, higher incomes and less likelihood of serving time in prison). These findings are reinforced by the works of James Heckman, who demonstrates that early investment in childhood education produces the greatest returns to human capital.⁶

Similarly, the EPPE study in the UK has reinforced the evidence on the impact of ECEC and emphasised the importance of the quality of care on the outcomes achieved. In the Australian context we also note the work of Warren and Haisken-DeNew who have shown links between ECEC participation and later educational performance.⁷

Given the well-documented benefits associated with participation in ECEC services, PwC looks forward to the findings of the Inquiry. Given our experience in the sector, we are particularly interested in the findings related to:

1. the potential to adopt alternative models of care to improve the quality of the childcare and early learning services delivered in Australia
2. the options to improve the availability, flexibility and cost of childcare and early learning services, particularly for lower-income families and vulnerable or at risk children
3. the options for reform of childcare funding and support.

⁴ Our in-house modelling tools are developed to be integrated and consistent with one another. This means all components are separate, but interlinked models. The models share common inputs, outputs, assumptions and parameters. They are all connected dynamically. Each model can be run separately or conjointly with some, or all other models, with additional models or factors able to be integrated. We call this our Integrated Forecasting Model. It components include: a demographic model, a macroeconomic model, a Commonwealth and State budget model, an industry model (CGE model), a household model and a workforce model.

⁵ Sparling, J. (1972), The Carolina Abecedarian Project, Frank Porter Graham Child Development Institute; Highscope Perry Preschool Study, (2005), Lifetime Effects: The HighScope Perry Preschool Study Through Age 40; Baxter, J. & Hand, K. (2013), etc

⁶ Heckman, J. (2006), Skill Formation and the economics of Investing in Disadvantaged Children, *Science* 312, 1900 (2006).

⁷ Warren, D and Haisken-DeNew, J 2013, *Early Bird Catches the Worm: The Causal Impact of Pre-school Participation and Teacher Qualifications in Year 3 NAPLAN Cognitive Tests*.

The potential of alternative models of care

PwC welcomes the consideration of alternative models of care which have the potential to provide ECEC services that are appropriate and accessible for Australian families. In our experience working in the sector, one model of care which can generate significant benefits for consumers and service providers alike is service integration hubs.

The service integration and co-location of services has obvious benefits – most notably convenience and increased accessibility for children **and families**. **‘Wrap-around’ service delivery models are an innovative approach to addressing holistic learning and development needs particularly for vulnerable or at risk children**. Further service integration can often enhance the quality of service delivery by:

- improving collaboration between ECEC services to deliver better programs through knowledge and resource sharing
- increasing the **sense of ‘connectedness’ reported by users of ECEC services**
- improving access to and participation in services for children and families
- promoting community development through stronger networking and greater involvement in the **education of one’s children**.⁸

By exploring alternative models of care which cultivate improved outcomes for children and service providers, the Inquiry may identify opportunities to apply them in the Australian context. The models of care which are operationalised will have broader economic and funding model implications.

While the Commissions review of alternative models will be broad, encompassing both centre-based and home based models, at the very least the separation of kindergarten (pre-school) models from long-day care should be addressed directly. Our earlier thought leadership paper on the reform of the ECEC system in Australia, **‘A practical vision for early childhood education and care’** (published in 2011), dealt with this issue in some detail and specific recommendations were made to address the funding inflexibilities which stand in the way of more efficient use of State and Commonwealth expenditure in this area.

Enhancing the availability, flexibility and affordability of childcare and early learning services

We note the pressures placed on the system from increases in both volumes of users and childcare fees. Not dissimilar to cost pressures experienced in the health sector, due consideration of future funding for the sector should give regard to demographic changes, particularly following recent upward revisions to ABS population projection. Additionally, pressures on operating costs from regulations, compliance, skilled labour requirements and business inputs for example should be factored into an overall consideration of the ECEC field.

⁸ Sanjeevan, S. McDonald, M. & Moore, T. (2012), *Primary schools as community hubs: A review of the literature*, The Royal Children’s Hospital Centre for Community Child Health and The Murdoch Childrens Research Institute.



Many Australian cities are experiencing a significant period of transformative growth.⁹ This trend is also reflected in the growth of the population of children under four years old. In fact, between 2006 and 2011, the population of children under four years old grew more than eight times than in the previous period (i.e. 2001 and 2005).¹⁰

This is particularly relevant for the ECEC sector. The growth in the population of children under four years old is increasing demand for ECEC services and is resulting in a need for new ECEC infrastructure to support this growth. As thought leaders in market design and the ECEC sector, we support the view that the design of childcare and early learning services should be underpinned by the objective of universal accessibility. That is, ECEC services should be available when needed, offer flexible modes of delivery and should be affordable for parents and families.

A notable example of universal accessibility underpinning early childhood policy is the United Kingdom. In order to ensure that children from all families may realise the benefits of ECEC services, in 2010 the Department of Education (UK) guaranteed early education for all three and four year olds. Under this policy, three and four year olds from lower-income families are entitled to access 15 hours of free early education for 38 weeks of the year. Research shows that children who receive an additional year of ECEC prior to formal schooling achieve significant improvements in their early literacy and numeracy skills.¹¹

In this context we also note the approach adopted by the NZ system of ECEC which guarantees a level of free provision for children and does so through a sector which is overwhelmingly owned and operated by the private sector. The development of this model over the last 10 years offers a significant opportunity for Australia to understand and apply the lessons learnt. We are particularly interested in the findings related to the availability, flexibility and affordability of ECEC services due to its economic implications, as ECEC reform will inevitably impact workforce participation and broader Australian economic trends.

Reform of childcare funding and support

In our experience working in the education sector, the cost of childcare is one of the major expenses for Australian households. If society is to fully realise the benefits associated with participation in ECEC services, the objective of funding models should be to achieve an equitable balance of public and **private investment, while ensuring that all children are able to participate regardless of their family's financial circumstances.**

PwC are cognisant of the budgetary constraints in funding and supporting the ECEC sector to deliver universal outcomes. In order to achieve optimal allocation of resources, it is crucial that service providers are able to identify, understand and prioritise local needs, and that funding is allocated appropriately to meet the cost of service delivery.

We are particularly interested in identifying the extent to which service providers can set prices to meet the particular care and learning needs of children, as well as understanding the impacts that the cost of ECEC services is having on the decisions of parents to utilise the service.

⁹ Australian Bureau of Statistics (2013), *Australian Demographic Statistics, June 2013*.

¹⁰ Ibid.

¹¹ Domitrovich et al. (2013), One versus two years: Does length of exposure to an enhanced preschool program impact the academic functioning of disadvantaged children in kindergarten? *Early Childhood Research Quarterly*, 28 (2013), pp. 704-713.



Once again, our earlier thought leadership paper on the reform of the ECEC system in Australia dealt with this issue in some detail. We have attached this paper for your convenience as it presents a number of alternatives which might usefully be considered by the Commission¹². However, whichever model is adopted, we have argued that it should address the following key principles:

- the primary objective of funding should be to provide universal access to high quality ECEC services, ensuring that cost is not a barrier to participation for any children or families
- given the mixed market approach in ECEC in Australia, funding should predominantly be provided through a subsidy to services based on the parents' choices so that funding follows the child
- the level of subsidy should be based on the cost of a model of a high quality service and be subject to variation to reflect high needs children or high cost locations
- funding should, as far as possible, be available to child care and preschool services in ways which promote the development of a unified system of ECEC.

PwC's contribution to the review

PwC will contribute to the Inquiry by expanding on the work undertaken in our previous ECEC thought leadership paper. This paper proposed a new approach to ECEC in Australia that better harnesses the mix of providers and investment to meet the needs of children and families. Our recommended high level policy settings continue to be relevant:

- expanding the commitment to measures that drive quality improvement
- flexible funding driven by the needs of children and families
- strategic monitoring and engagement to ensure the right services are available in the right places
- investment levels that match the importance of ECEC.

Specifically, we are committed to contributing **to the Productivity Commission's evidence base** by conducting advanced economic modelling to demonstrate the value of quality ECEC from a workforce participation perspective. In addition, this modelling will examine the longer term productivity benefits of improving access to care and education by reducing disadvantage amongst vulnerable children.

PwC's Integrated Forecasting Model (IFM), is able to capture the immediate and longer-run benefits to the economy from access to and the provision of quality childcare. The IFM can measure changes against the base case or current policy settings and can be used to firstly assess and then hone policy design and maximise benefits. The approach provides a fully integrated set of estimates spanning the dynamic impacts on industry, households, government finances and the wider economy.

¹² A copy of this paper is also available online at <http://www.pwc.com.au/industry/government/publications/ecec.htm>



At the centre of the modelling approach will be a CGE model. These models are highly detailed representations of entire economies – with sophisticated economic relationships linking industry sectors, consumers, governments, investors and foreign trade – that provide a comprehensive representation of the status of an economy at a point in time. Underpinned by official data sources, CGE models are an ideal analytical framework to estimate the direct and indirect effect of changes in one part of the economy upon the rest. As noted by the Commission, CGE models overcome the **limitations of simpler ‘input-output’ models, providing a more accurate estimate of the impacts.**¹³

Our modelling would attempt to quantify the impact of continued reform in the key factors outlined above. That is, we would attempt to measure the potential economic and wider benefits associated with alternative models of care, enhancing the availability, flexibility and affordability of childcare and early learning services, and potential reforms in childcare funding and support.

In the undertaking of this work, we intend to consult with key ECEC academics, industry leaders, and peak bodies to test the assumptions for input into the modelling. The result will be demonstration of the impact on the Australian economy from both the potential uplift in productivity, as well as the reduction in disadvantage for vulnerable children. While some of this type of modelling has been done in the United States, we are not aware of any modelling has been undertaken in the Australian context.

We will work with our ECEC thought leadership network to ensure the recommendations can not only be practically implemented, but also create value for children, families and service providers in order to enhance the Australian economy.

We look forward to contributing further to the review by undertaking this work in early 2014 and providing it to the Commission as soon as it is finalised and ahead of its final reporting date.

Yours sincerely,

James van Smeerdijk
Partner, Economics and Policy

This document has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PricewaterhouseCoopers, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

© 2013 PricewaterhouseCoopers. All rights reserved.

PwC refers to the Australian member firm, and may sometimes refer to the PwC network.

Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.

Liability limited by a scheme approved under Professional Standards Legislation

¹³ See <http://www.pc.gov.au/research/staff-notes/input-output-tables>