



Australian Government
Productivity Commission

Impacts and Benefits of COAG Reforms: Reporting Framework

Productivity Commission
Research Report

December 2010

© Commonwealth of Australia 2010

ISBN 978-1-74037-330-2

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, the work may be reproduced in whole or in part for study or training purposes, subject to the inclusion of an acknowledgment of the source. Reproduction for commercial use or sale requires prior written permission from the Commonwealth. Requests and inquiries concerning reproduction and rights should be addressed to the Commonwealth Copyright Administration, Attorney-General's Department, National Circuit, Canberra ACT 2600 or posted at www.ag.gov.au/cca.

This publication is available in hard copy or PDF format from the Productivity Commission website at www.pc.gov.au. If you require part or all of this publication in a different format, please contact Media and Publications (see below).

Publications Inquiries:

Media and Publications
Productivity Commission
Locked Bag 2 Collins Street East
Melbourne VIC 8003

Tel: (03) 9653 2244
Fax: (03) 9653 2303
Email: maps@pc.gov.au

General Inquiries:

Tel: (03) 9653 2100 or (02) 6240 3200

An appropriate citation for this paper is:

Productivity Commission 2010, *Impacts and Benefits of COAG Reforms: Reporting Framework*, Research Report, Canberra, December.

The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au) or by contacting Media and Publications on (03) 9653 2244 or email: maps@pc.gov.au

Foreword

The COAG reform agenda is wide-ranging and ambitious. It has its genesis in the recognition, following completion of the National Competition Policy process, that further reforms – and notably a focus on human capital – would be needed to meet the challenges for Australia of an ageing population and other pressures.

The reform architecture established in 2008 includes a prominent role for the COAG Reform Council, to monitor progress in implementation of the agenda and thereby to enhance accountability and help maintain reform momentum. Complementing the Council's central role, the Productivity Commission was asked by COAG to report to it periodically on the economic 'impacts and benefits' of the reforms. This is desirable to verify that COAG reforms are having the anticipated benefits and to indicate their extent, and also to reveal opportunities for further gains.

This initial 'framework' report sets out for COAG's consideration the broad approach and a sequence that the Commission could follow in its substantive reports. It highlights the need to look at both the direct and indirect impacts of any reform, and to recognise that not all of the impacts in some areas will be measureable in economic terms. Assessments will also require varying degrees of judgement, and these will need to be informed by effective consultation processes.

In preparing its report, the Commission has benefitted greatly from advice and feedback from senior officials across all governments, including at three workshops, one of which was devoted to modelling issues and approaches. The Commission is grateful for this assistance and looks forward to further responses to its proposed assessment framework.

Gary Banks AO
Chairman

December 2010

Terms of reference

I, Nick Sherry, Assistant Treasurer, pursuant of Parts 2 and 3 of the *Productivity Commission Act 1998* hereby request that the Productivity Commission undertake reporting on the impacts and benefits of COAG reforms.

Purpose of the study

The Council of Australian Governments (COAG) is committed to addressing the challenges of boosting productivity, increasing workforce participation and mobility and delivering better services for the community. This reform agenda will also contribute to the goals of improving social inclusion, closing the gap on Indigenous disadvantage and improving environmental sustainability.

At its March 2008 meeting, COAG agreed that, to assist the COAG Reform Council in its role of helping to enhance accountability and promote reform, and monitoring the progress of the COAG reform agenda, the Productivity Commission (the Commission) would be requested to report to COAG on the economic impacts and benefits of COAG's agreed reform agenda every two to three years. In doing so, the Commission should be guided by COAG reform objectives and goals identified in the Intergovernmental Agreement on Federal Financial Relations, COAG communiqués and related documents, particularly as they relate to addressing the challenges stated above.

The reporting will cover, as appropriate, the realised and prospective economic impacts and benefits of the different reform streams, including regulation, infrastructure and human capital issues of workforce productivity and participation. Each report to COAG will give priority to informing governments of the nature of reform impacts and benefits and the time scale over which benefits are likely to accrue, given COAG's reform framework and implementation plans. Where information about specific reform impacts or initiatives is limited, the Commission's reporting would produce broad or 'outer envelope' estimates of the potential benefits and costs of reform.

The reporting program should enable governments to have up-to-date information with which to evaluate what has been achieved through the reform agenda and provide an assessment of potential future gains.

Scope of reports

Each report should cover reform developments, impacts and benefits in each COAG reform area. At the commencement of each reporting cycle, the Assistant Treasurer will provide directions concerning particular reporting priorities to be addressed within this broad framework. Without limiting the scope of matters to be considered, determination of reporting priorities could take into account:

- the fiscal impact of reform on each level of government

-
- the availability of new material on COAG's reform agenda or implementation plans
 - the implementation of a significant body of reform over a sufficient period to enable a meaningful review of the likely impacts and benefits of that reform
 - any emerging concern about the potential impacts or benefits of a reform.

The Commission's reports to COAG should provide information on:

- the economic impacts and benefits of reform and outcome objectives, including estimates of the economy-wide, regional and distributional effects of change
- assessments, where practicable, of whether Australia's reform potential is being achieved and the opportunities for improvement. The analysis should recognise the different nature of sectoral productivity-based and human capital reforms and the likely time paths over which benefits are likely to accrue.

In preparation for its inaugural full report, the Commission should also provide a 'framework' report to COAG outlining its proposed approach to reporting on the impacts and benefits of COAG's reform agenda.

Methodology

The Commission will develop and maintain analytical frameworks appropriate for the quantification of the impacts and benefits of reform, and the provision to government and the community of assessments of the economy-wide, regional and distributional effects of COAG's reform agenda. The frameworks should be transparent, and subject to independent assessment. As far as practicable, the frameworks should be made available for wider use.

The Commission should provide an explanation of the methodology and assumptions used in its analysis. The Commission should also provide guidance concerning the sensitivity of results to the assumptions used and bring to COAG's attention informational limitations and weaknesses in approaches to reform evaluation. The scope for improvement should be identified.

Consultation and timing

In the course of preparing each report, the Commission should consult the COAG Reform Council, relevant Ministerial Councils, any relevant COAG working groups, Commonwealth Ministers, State and Territory Treasurers and more widely, as appropriate. While these consultations would inform the Commission's assessment, responsibility for the final report would rest with the Productivity Commission.

The Commission's framework report should be submitted to COAG by 31 December 2010. The Commission will then complete full reports at 2-3 year intervals dated from 1 January 2009, in accordance with directions for individual reports from the Assistant Treasurer.

Final reports will be submitted by the Productivity Commission to the Assistant Treasurer for conveyance to COAG. The Assistant Treasurer will advise the Commission of the timing for individual reports. The reports will be published.

Nick Sherry

Assistant Treasurer

[Received 18 June 2010]

Contents

Foreword	III
Abbreviations	IX
Overview	XI
1 Introduction	1
1.1 The request to the Commission	2
1.2 What the framework should cover	2
1.3 Consultations to date	3
1.4 Structure of this report	3
2 What are the COAG reforms?	5
2.1 Overview of COAG reforms	7
2.2 The architecture for the reform agenda	10
2.3 Changes to Commonwealth-State financial relations	19
3 An evaluation framework	29
3.1 The conceptual framework	30
3.2 The direct impacts of reform	34
3.3 The economy-wide impacts of reform	36
3.4 Reporting the impacts and benefits	39
4 Implementing the framework	41
4.1 Study processes	42
4.2 The nature of evidence on reform impacts	44
4.3 Estimating direct impacts	45
4.4 Estimating economy-wide impacts	48
4.5 Reporting the economy-wide results	53
5 Applying the framework to the reform streams	55
5.1 The competition and regulation stream	56

5.2	The human capital stream	61
5.3	The environment stream	65
6	Implications for the first report	71
6.1	Setting reporting priorities	71
6.2	Some possible priorities	72
	References	75
	Annex	
	Catalogue of COAG Reforms and Initiatives	
	<i>An annex, detailing COAG reform agreements and initiatives as they currently stand, is available on the study website (www.pc.gov.au/projects/study/coag-reporting)</i>	
	Boxes	
2.1	The COAG reforms at a glance	8
2.2	Broad structure of the main COAG agreements	14
2.3	Reform of Australian Government payments to the States	22
3.1	Impacts on wellbeing	31
3.2	Identifying reform potential	34
3.3	Comparative static and dynamic approaches to assessing economy-wide impacts	38
4.1	The Commission's consultative approach to its inquiries and studies	43
4.2	Possible influences of COAG financial reforms on other reform impacts	48
4.3	Estimating deviations from the reference case	50
4.4	The Monash Multi-Region Forecasting Model	51
5.1	Implementation of COAG priority areas for deregulation	57
5.2	Impacts of regulatory barriers in energy markets	59
5.3	Implementation of COAG education-related initiatives	62
5.4	Valuing effects on ecosystems	68
5.5	Risk and uncertainty and the assessment of climate change policy	69
	Figures	
2.1	The COAG policy and financial architecture	11

2.2	Australian government payments to the States, 2009-10	20
3.1	Impacts of reform	32
Tables		
2.1	Government sources of revenue and outlays, 2008-09	19
2.2	Overview of Australian Government National Specific Purpose Payments and National Partnership Payments to the States, 2009-10	25

Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
BER	Building the Education Revolution
BGSP	Boom Gate Safety Program
BRCWG	Business Regulation and Competition Working Group
BSSP	Black Spot Safety Program
CASAS	Connected – Any Student, Any School
COAG	Council of Australian Governments
CoPS	Centre of Policy Studies
Cwlth	Commonwealth
DALYs	Disability-adjusted life years
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GP	General Practitioner
GSP	Gross State Product
GST	Goods and Services Tax
GWh	Gigawatt hour
HILDA	Household, Income and Labour Dynamics in Australia
HVSP	Heavy Vehicle Safety and Productivity Program
ICT	Information and Communications Technologies
LRET	Large-scale Renewable Energy Target
MDBA	Murray-Darling Basin Authority
MMRF	Monash Multi-Regional Forecasting (model)
NCP	National Competition Policy
NPP	National Partnership Payment

NSW	New South Wales
NT	Northern Territory
OHS	Occupational health and safety
PAYG	Pay As You Go
PET	Positron Emission Tomography
QALYs	Quality-adjusted life years
QLD	Queensland
REC	Renewable Energy Certificate
RET	Renewable Energy Target
SA	South Australia
SES	Socio-Economic Status
SPP	Specific Purpose Payment
SRES	Small-scale Renewable Energy Scheme
TAFE	Technical and Further Education
TAS	Tasmania
VET	Vocational education and training
VIC	Victoria
WA	Western Australia

OVERVIEW

Key points

- The Commission has been requested to report every two to three years to COAG on the economic ‘impacts and benefits’ of COAG reforms. The Commission is also required to consider the extent to which Australia’s reform potential is being achieved and opportunities for improvement.
 - In preparation for its first report, the Commission has been requested to provide this framework report outlining its proposed approach.
- As in earlier exercises, the Commission will adopt an economy-wide approach for its assessments.
 - The proposed framework recognises the direct and wider flow-on effects of reforms. As far as practicable, costs incurred by government to achieve reform objectives and outcomes will also be taken into account.
- The framework will provide for the quantification of the impacts of COAG reforms on national economic activity, employment and income. It will also provide quantification of fiscal, as well as State, regional and other distributional effects of change.
 - The Commission proposes to use a ‘dynamic general equilibrium model’ to project economy-wide impacts.
- Where practicable, the social and environmental impacts will also be assessed.
 - Although not in comparable metrics, available indicators will be drawn on to help provide a broader assessment of the overall impacts of reform.
- The Commission will group reforms into three broad streams: competition and regulation; human capital (including health, education and training); and the environment.
 - The proposed framework will account for differing lead times and the implications of changing demographic and economic characteristics on reform impacts.
- Taking into account the progressive development and implementation of COAG’s reforms, it is proposed that the Commission’s first report provide:
 - an overview of the agenda and the potential for gains;
 - an assessment of areas of the competition and regulation stream for which policy development and implementation are advanced; and
 - an assessment of an area of the human capital stream, such as education, where agreements have been concluded and there are some realised as well as prospective impacts.
- It is proposed that the Commission progressively report across the three reform streams in subsequent reports.

Overview

Since the early 1990s, Australia has experienced the longest period of continuous economic growth and associated rise in household incomes on record. It has also avoided some of the more severe effects of the global economic downturn associated with the global financial crisis. While the mining boom has played a key role in this, Australia's economic performance has been underpinned by wide-ranging economic reforms that increased the productivity, competitiveness and flexibility of our economy.

National Competition Policy (NCP) was an important component of that program of reforms, with its emphasis on removing barriers to productivity and economic efficiency across the country. By the mid-2000s, most of the NCP reforms initially agreed to by the Council of Australian Governments (COAG) were in place. However, an ageing population, together with ongoing global competition and environmental pressures, mean that further reforms are needed if Australians are to achieve significantly higher living standards in the future.

These imperatives have been recognised by COAG, which developed a new agenda of reforms aimed at boosting productivity, increasing workforce participation and mobility and improving the quality of public services (COAG 2008b). The agenda also seeks to contribute to the goals of improving social inclusion, closing the gap on Indigenous disadvantage and improving environmental sustainability. At an early stage in the development of the COAG reform agenda, the Commission estimated that the achievement of identified infrastructure reforms and reductions in regulatory burdens could increase GDP by nearly 2 per cent (PC 2006). Other reforms to enhance workforce participation and increase productivity (through health, education and workforce participation reforms) were projected to deliver even larger gains, though these would materialise over a lengthy period and may require significant public investment.

More concrete information about individual reforms and implementation plans is now becoming available.¹ This affords the opportunity for assessments to be made

¹ An annex detailing COAG reform agreements and initiatives as they currently stand, is available on the Commission's web page.

of actual reforms being implemented and the extent to which Australia is reaching its reform potential.

What the Commission has been asked to do

The Commission has been requested by COAG to report on the economic impacts and benefits of the COAG reforms every two to three years. The Commission is also required to consider whether Australia's reform potential is being achieved, and opportunities for improvement. The Commission's reports are to complement the COAG Reform Council's role of enhancing accountability and promoting reform by monitoring progress in the COAG Reform Agenda.

In preparation for its first substantive report, the Commission has been requested to provide this framework report outlining its proposed approach. This approach has been guided by COAG's request that it:

- report on both the realised and prospective economic impacts and benefits of the different reform streams;
- give priority to informing governments of the nature of reform impacts and benefits;
- report on the timescale over which benefits are likely to accrue, given COAG's reform framework and implementation plans; and
- identify emerging concerns about the potential impacts of reform and make assessments as to whether Australia's reform potential is being achieved.

The approach proposed by the Commission in this report should enable it to provide governments with relatively up-to-date information, focused sequentially on specific areas of reform in three reports over eight to ten years. Early reports will not be able to cover the whole COAG agenda, which is still in train, but will focus on key areas where reforms have been implemented.

What the framework should cover

The Commission has been asked to develop a framework which can be used to address the broad reporting remit of its terms of reference. This indicates that the framework may need to address reporting priorities relating to:

- the fiscal impact of reform on each level of government;
- the availability of new material on COAG reforms or implementation plans;

-
- the implementation of a significant body of reform over a sufficient period to enable a meaningful review of the likely impacts and benefits of that reform; and
 - any emerging concerns about the potential impacts or benefits of a reform.

Recognising the progressive implementation and, in some cases, long lead times of reforms, the Commission's reporting will need to be tailored to areas for which it is possible to provide meaningful updates on impacts.

The terms of reference ask that the Commission's framework provide for the quantification of the impacts and benefits of reform, and assessments of the economy-wide, regional and distributional impacts. The framework will also need to test the sensitivity of results to changes in key assumptions.

The Commission's approach

The COAG reforms would be assessed in terms of their direct impacts, with flow-on effects to the wider economy and community then considered. As far as practicable, costs incurred by government to achieve these objectives and outcomes would be taken into account.

The Commission's framework will provide for the quantification of the impacts on economic activity, employment and income at the national level. In relation to these economic impacts, it will also enable some quantification of fiscal, state and regional, and distributional effects of change.

Determining the impacts of COAG's reforms requires the Commission to ascertain how the economy would differ compared to if there were no reform. This requires isolation of the effects of reforms from other influences. In its proposed framework, the Commission recognises that:

- it can be problematic to isolate such effects where different policies considered by COAG interact to affect a single sector (such as in power generation), or are subject to sequencing (such as in early childhood development, primary schooling and later education);
- reforms may interact with ongoing demographic and economic change (such as workforce participation and pollution reduction measures);
- demographic and economic changes over time have implications for the counterfactual used in assessing the impacts of reform (such as changes in the size of target population groups); and

-
- some COAG reforms will have social and environmental outcomes that are not amenable to direct measurement using conventional economic accounting frameworks.

The Commission has accordingly sought to develop methodologies that provide tractable approaches for meaningful analysis, notwithstanding these complexities. In particular, the Commission's analysis of economic impacts will be complemented by assessments of social and environmental impacts, which are often only partially reflected in market-based (economic) measures.

Differentiating the reforms into streams through their direct impacts

The reform streams developed by COAG differ in some important respects:

- Reforms associated with the *competition and regulation* stream can be regarded as primarily focusing on the productivity and economic efficiency of product and factor markets. Changes in activity levels that would raise incomes generally flow from improvements in productivity. This stream of reform can be broadly regarded as falling within the framework established by previous analyses of the implications of NCP.
- Reforms associated with the *human capital* stream focus on human service delivery and the condition of individuals and their capabilities.
 - Reforms with a focus on the status of individuals and their capabilities, contribute to workforce participation and productivity. Human capital reforms also contribute to the goals of improving social inclusion and reducing Indigenous disadvantage, and in some instances involve the provision of new services. The achievement of these goals could require significant additional discretionary outlays.
 - Reforms associated with human service delivery (such as in the areas of health, education and community services) may also deliver productivity improvements. However, reforms in these areas also provide for improvements in quality. These have both economic and social impacts, making them distinct in many ways from activities covered in the competition and regulation stream. Reforms across the human capital stream will often involve long lead times before outcomes are achieved.
- Reforms associated with the *environment* stream focus on the allocation of available environmental resources (notably water) between industrial, household and environmental uses and reducing the potential impact of human activity on the environment (such as carbon emissions). The reforms will have a number of impacts on productivity and efficiency, but will also have a number of complex

environmental and social impacts. The establishment of market mechanisms can assist in achieving environmental goals, achieving a more efficient allocation of available resources among competing uses. Additional discretionary government outlays may be required to manage resources. The level and nature of government interventions to achieve environmental goals are likely to vary over time with the scale of human activity. Lead times between reform implementation and the realisation of benefits could also be protracted (especially in relation to policies directed at carbon pollution reduction).

Because of these differences, it is unlikely that estimates of impacts of the reform streams will be comparable. For the purposes of its reporting, the Commission will therefore group reforms into the above three broad streams.

Analytical approaches

Given the breadth of the agenda, information gaps and the difficulty of quantifying all of the relevant economic, social and environmental effects, judgements will be required in assessing the impacts and likely benefits of the reforms. These will need to take into account the uncertainties surrounding the direct impacts of reforms and the likely flow-on effects on living standards. In making its assessments, the Commission will therefore need to conduct consultative investigations akin to the approach followed in its commissioned projects. To support its investigations, the Commission will also undertake its own quantitative and qualitative analysis of the effects of reform and draw on other available research.

The Commission's proposed framework for quantifying the effects of reforms in each reform stream will take account of differences across streams, as well as lead times and the implications of evolving demographic and economic characteristics. It will also establish processes for drawing links between economic activity (changes in productivity, workforce participation and mobility and service delivery) and social and environmental outcomes and impacts.

A common economy-wide model will be used to quantify the aggregate, regional and distributional effects of economic outcomes and those environmental and social outcomes that affect economic activity. The model will be similar to that used by the Commission on four previous occasions to illustrate the potential impacts of widely-based national reform: in 1995 for Hilmer and related reforms; in 1999 for a smaller range of NCP reforms of particular relevance to rural and regional Australia; in 2005 to report on the economic and distributional consequences of NCP reforms; and in 2006 to report on the potential benefits of COAG's embryonic National Reform Agenda.

The model used on this occasion will be an updated version of the model used in the 2005 and 2006 exercises. The model — referred to as the Monash Multi-Regional Forecasting (MMRF) model — treats each State and Territory as a separate economic region with over 50 industry sectors in each jurisdiction. For the forthcoming assessments, however, the MMRF model is being updated to include:

- a dynamic capability, to reflect the effects of demographic and economic change on the impacts and benefits of COAG reforms;
- explicit modelling of demographic change; and
- a revised treatment of energy and the environment (including carbon emissions).

Social and environmental impacts that fall outside of the economy-wide model will also be assessed to complement the Commission's projections.

Reporting priorities and sequencing

Taking into account the progressive nature of policy development and implementation of COAG reforms and associated reporting requirements, it is proposed that the Commission's first report would draw on its previous work on the National Reform Agenda, as well as other studies, to illustrate the benefits of each reform stream.

Specific reforms chosen for more detailed assessment will be those that:

- are likely to have a material impact (that is, those of national significance or which are likely to have a significant impact on communities in more than one jurisdiction);
- represent material changes to current policy settings; and
- have a longer-term perspective.

It is proposed that the detailed reporting by the Commission across the reform streams be implemented progressively. Early assessments would focus on reforms covered by the *Intergovernmental Agreement on Federal Financial Relations* — currently the main Intergovernmental Agreement governing the implementation of COAG reforms. Environmental and other matters outside this agreement considered by COAG (including water market reform and addressing climate change) would be assessed in reports further along the reporting cycle, depending on policy development and reporting guidance from government.

Based on the above criteria, the Commission suggests that, for the first report, consideration be given to the inclusion of:

-
- areas of the competition and regulation stream likely to have realised or prospective impacts — for example, substantial progress has been made on the implementation of at least 12 deregulation priority areas; and
 - an area of the human capital stream likely to have realised or prospective impacts — for example, currently a range of education and training reforms have been implemented or are at an advanced stage of development.

It is proposed that assessments of reform potential relating to these areas also be included in the analysis.

A possible sequence for subsequent reports

The program for subsequent reports could be confirmed after the results of the first study are considered and further progress in policy development and implementation of reforms has been made. On the basis that it would be desirable to have completed an initial analysis of COAG reforms within ten years of the introduction of the current COAG reform agenda, the subsequent two reports (two to three years apart) could cover:

- competition and regulation reforms not covered in depth in the first report, including energy markets, transport and infrastructure;
- any education and training reforms not covered in depth in the first report; and
- health, ageing, affordable housing and disability related reforms.

It is proposed that reporting on initiatives targeting specific social concerns (such as Indigenous disadvantage and gambling), and those in the environment stream (that is, water and climate change policy) would depend on policy developments and directions from government.

In this sequence, reforms in the competition and regulation and human capital streams would be the focus of early reports. The Commission would not assess the changes in Commonwealth-State financial relations in their own right, but rather consider their effects as part of the assessment of the individual reform streams.

1 Introduction

Since the early 1990s, Australia has experienced the longest period of continuous economic growth on record and associated rise in household incomes. It has also avoided some of the more severe effects of the global economic downturn associated with the global financial crisis. While the mining boom has played a key role in this, Australia's economic performance has been underpinned by wide-ranging economic reforms that increased the productivity, competitiveness and flexibility of our economy.

National Competition Policy (NCP) was an important component of that program of reforms across the country, with its emphasis on removing anti-competitive barriers to productivity and economic efficiency. By the mid-2000s, most of the NCP reforms initially agreed to by the Council of Australian Governments (COAG) were in place. However, the demands of an ageing population, together with ongoing global competition and environmental pressures, mean that further reforms are needed if Australians are to achieve significantly higher living standards in the future.

These imperatives have been recognised by COAG, which over a number of years developed a new agenda of reforms aimed at boosting productivity, increasing workforce participation and mobility and improving the quality of public services (COAG 2008b). The agenda also seeks to address a number of other important social objectives, including affordable housing, Indigenous disadvantage and environmental sustainability. At an early stage in the development of COAG's National Reform Agenda, the Commission estimated that the achievement of identified infrastructure reforms and reductions in regulatory burdens could increase GDP by nearly 2 per cent (PC 2006). Other reforms to enhance workforce participation and increase productivity (through health, education and workforce participation reforms) were projected to deliver even larger gains, though these would materialise over a lengthy period and could be expected to require significant public investment.

More concrete information about individual reforms, their costs and implementation plans are now becoming available. This affords the opportunity for assessments to be made of actual reforms and the extent to which Australia is reaching its reform potential.

1.1 The request to the Commission

The Commission has now been requested by COAG to report on the economic impacts and benefits of the COAG reforms every two to three years. The Commission is also required to consider whether Australia's reform potential is being achieved, and opportunities for improvement. The Commission's reports are to complement the COAG Reform Council's role in enhancing accountability and promoting reform by monitoring progress in the COAG Reform Agenda.

In preparation for its first report, the Commission was asked to provide a framework report outlining its proposed approach. This approach has been guided by COAG's request that it:

- report on both the realised and prospective economic impacts and benefits of the different reform streams;
- give priority to informing governments of the nature of reform impacts and benefits;
- report on the timescale over which benefits are likely to accrue, given COAG's reform framework and implementation plans; and
- identify emerging concerns about the potential impacts of reform and make assessments as to whether Australia's reform potential is being achieved.

The approach proposed by the Commission in this report should enable it to provide governments with relatively up-to-date information, focused sequentially on specific areas of reform in three reports over the next 8-10 years. Reports will not be able to cover the whole COAG agenda, but will focus on key areas of reform.

1.2 What the framework should cover

The Commission has been asked to develop a framework which can be used to address the broad reporting remit of its terms of reference. Without limiting the coverage, the terms of reference indicate that the framework adopted may need to address reporting priorities relating to:

- the fiscal impact of reform on each level of government;
- the availability of new material on COAG's reform agenda or implementation plans;
- the implementation of a significant body of reform over a sufficient period to enable a meaningful review of the likely impacts and benefits of that reform; and
- any emerging concerns about the potential impacts or benefits of a reform.

Recognising the progressive implementation and, in some cases, long lead times of reforms, the Commission's reporting will need to be tailored to areas for which it is possible to provide meaningful updates on the impacts of reform.

The terms of reference ask that the Commission's framework provide for the quantification of the impacts and benefits of reform, and assessments of the economy-wide, regional and distributional impacts. The framework will also need to indicate the sensitivity of the results obtained to changes in key assumptions.

1.3 Consultations to date

The preparation of this framework report benefited from feedback at a series of workshops on work in progress. The workshops were attended by representatives of State, Territory (hereafter referred to as 'States') and Australian government agencies and the COAG Reform Council. Workshops were held on 16 August and 27 October 2010. In addition, on 28 October 2010, the Centre of Policy Studies at Monash University and the Productivity Commission provided a progress report on the Monash Multi-Regional Forecasting (MMRF) model update.

The consultations helped refine and improve the proposed approach, and drew attention to areas of particular policy importance. While the consultations were informative, responsibility for judgements made to complete the proposed framework and this framework report remains with the Commission.

1.4 Structure of this report

Chapter 2 summarises the broad structure of the COAG reform agenda with reference to the main Intergovernmental Agreements and the national system of payments from the Commonwealth to the States associated with its implementation.

Chapter 3 outlines the proposed evaluation framework for assessing direct and wider impacts and benefits of reform. The framework proposed takes into account the breadth of the reform agenda, the varying nature of reforms and the lead times between reform and realisation of benefits, and considers ways to assess reform impacts over time compared to a 'no-reform' path. Chapter 4 then considers the implementation of the framework. It explores how studies of the direct impacts of reform on productivity, prices, workforce participation and the population may proceed. It also considers analysis and reporting of the economic impacts of reform.

Chapter 5 considers some issues relating to the application of the proposed framework to the competition and regulation, human capital and environmental reform streams. Some approaches to identifying and measuring social and environmental impacts are discussed.

Chapter 6 concludes this framework report with a discussion of the possible application of the Commission's proposed framework to forthcoming reports. A possible sequence for these investigations is outlined.

The report is supported by an annex that provides additional details on COAG reforms by broad reform area, and a catalogue of agreements and other initiatives. The annex is available on the study website and on request.

2 What are the COAG reforms?

Key Points

- COAG reforms include:
 - changes to financial relations between the Australian Government and the States; and
 - an extensive series of specific reforms.
- The latter reforms are diverse, spanning the economy. They fall into three broad streams: competition and regulation; human capital; and environment. The reforms seek to:
 - boost productivity, workforce participation mobility; and
 - support wider social and environmental objectives.
- The broad implementation architecture which COAG reforms sit within includes measures that vary in nature, with some focusing on longer-term, nationally significant objectives, while others deal with short-term objectives or regional concerns.
 - Other measures involve a continuation of existing initiatives or government expenditures and are not strictly ‘reforms’.
- Two of the key changes to Commonwealth-State financial relations involve:
 - rationalising Specific Purpose Payments (confined to the human capital stream) giving the States more autonomy in how they can be spent; and
 - introducing narrower, more focused National Partnership Payments to support the delivery of specified outputs or projects, facilitate reforms, or reward those jurisdictions that deliver on nationally significant reform across all reform streams.

At its 26 March 2008 meeting in Adelaide, COAG committed to the ‘COAG reform agenda’ which it described as:

... a comprehensive new microeconomic reform agenda for Australia, with a particular focus on health, water, regulatory reform and the broader productivity agenda. (COAG 2008b, p. 1)

The objective of the agenda is to:

... improve the well-being of all Australians through improvements in the quality, efficiency and effectiveness of government service delivery. (COAG 2008n, p. 4)

COAG announced that it would seek to achieve this objective through two distinct types of reform:

- through changes in the operation of financial relations between the Australian Government and the States (referred to hereafter as changes to Commonwealth-State financial relations); and
- an extensive series of specific reforms.

The basic structure of the COAG reform agenda, which drew on the National Reform Agenda broadly agreed to in 2006, is outlined in the 26 March 2008 communiqué (COAG 2008b). Subsequent COAG meetings have filled out this structure, as COAG has agreed to a range of new initiatives, many of which support or complement the formal agreements that make up the core of the agenda. The ‘core’ of the reform agenda consists of:

- the *Intergovernmental Agreement on Federal Financial Relations* (COAG 2008n);
- six National Agreements; and
- 24 National Partnership Agreements.¹

The *Intergovernmental Agreement on Federal Financial Relations* also covers numerous other, mostly smaller, National Partnership Agreements (hereafter referred to as National Partnerships) that could contribute to the achievement of COAG objectives and goals.

The evolving nature of COAG reforms means that any listing of them will also evolve. In determining which of the matters considered by COAG encompass ‘reforms’, for present purposes, the Commission has been guided by whether an initiative:

- falls under the auspices of the *Intergovernmental Agreement on Federal Financial Relations*;
- was considered by COAG on or after the reform agenda was outlined in March 2008;
- has given rise to a publicly available formal agreement indicating endorsement by COAG (although this may not necessarily result in a signed formal agreement); and
- makes reference to, supports or complements any of the signed formal agreements identified.

¹ The six National Agreements and 24 National Partnerships are to be monitored by the COAG Reform Council and are denoted by the symbol [†] in appendix A.

In listing and categorising measures according to the nature of agreement and reform theme, the Commission has relied on published information about the measure. In particular, where a measure appears to span a number of subject matter areas, it has been classified to one area on the basis of published information.

This chapter outlines the coverage of COAG reforms and processes with reference to the main Intergovernmental Agreements and the associated Commonwealth payments to the States that accompany the reform agenda. Section 2.1 provides an overview of COAG reforms, while section 2.2 describes the architecture for the implementation of the reforms. Section 2.3 then outlines the associated changes in Commonwealth-State financial relations. Section 2.4 summarises the chapter.

This chapter is supported by an annex which provides additional details about the COAG reform agenda by broad reform area and a catalogue of identified agreements and other initiatives.

2.1 Overview of COAG reforms

The COAG reform agenda builds on a series of microeconomic reforms that commenced in the mid-1980s. The agenda seeks to boost:

... productivity, workforce participation and geographic mobility, and support wider objectives of better services for the community, social inclusion, closing the gap on Indigenous disadvantage and environmental sustainability. (COAG 2008b, p. 2)

The reform agenda is wide ranging (box 2.1). It can be combined into three broad reform streams and a miscellaneous group of other reforms:

- a competition and regulation stream (consisting of reforms in the areas of: business regulation and competition; and infrastructure provision);
- a human capital stream (consisting of reforms in the areas of: education and training; health, ageing and disability; housing; and Indigenous reform); and
- a environment stream (consisting of reforms in the areas of: water; and climate change).

Other reform matters include areas of national security, community safety and emergency management.

Box 2.1 The COAG reforms at a glance

- *Business regulation and competition reforms* include measures to create a seamless national economy, particularly through the establishment of national or harmonised regulatory systems. Other areas include implementing previously agreed energy, national transport and other infrastructure reforms, as well as establishing more effective regulatory review and evaluation processes.
- *Education and training reforms* include measures to improve early childhood development, school and vocational education outcomes, including through improvements in literacy and numeracy and in teacher quality and accountability. Vocational education and training reforms seek to increase skill levels and provide additional training places for job seekers and existing workers.
- *Health, ageing and disability reforms* focus on improving the quality of, and access to, health services and the effectiveness of the health workforce, as well as policies to prevent disease and illness, by addressing levels of obesity, smoking, diabetes, physical activity and healthy eating and measures to enhance the quality of life for people with a disability and their carers.
- *Housing reforms* are aimed at improving access to affordable housing, improving access to housing by Indigenous people, enhancing the capacity of the community housing sector and improving housing supply.
- *Indigenous reforms* are intended to close the gap on Indigenous disadvantage, particularly by increasing access to early childhood education, schooling, vocational education and health services and promoting safe communities and improved governance arrangements.
- *Water and climate change reforms* include the establishment of new governance arrangements for the Murray-Darling Basin, the facilitation of national water markets and the introduction of a *National Renewable Energy Target* scheme.
- *Other reforms* include measures to improve national security, community safety, emergency management and other initiatives.

Associated with these specific reform areas, the COAG reforms also include changes to Commonwealth-State financial relations to facilitate long-term policy development, to clarify the roles and responsibilities of each level of government, to improve public accountability, and to improve the quality and effectiveness of government service delivery. The reforms:

- rationalise the number of Specific Purpose Payments from over 90 to five;
- remove restrictions on how those payments can be spent; and
- introduce National Partnership Payments to support the delivery of specified outputs or projects, facilitate reforms, or reward those jurisdictions that deliver on nationally significant reform.

Sources: COAG (2008n); and Australian Government (2010b).

Generally speaking, the reform agenda consists of a series of agreements and other initiatives between the Australian Government and the States that target particular policy concerns. The different types of agreements set out the higher level policy objectives, outcomes and targets of reform in particular subject areas. In some cases, such as in the regulatory reform area, the agreements also set out the reforms themselves. In other cases, especially for many human capital reforms, individual jurisdictions identify the reforms that they will implement to achieve the higher level objectives, outcomes and targets set out in the agreements. Consequently, jurisdictions may address the same policy objectives, outcomes and targets using different policy measures.

The nature and scope of these objectives, outcomes and outputs vary between agreements as do the associated performance benchmarks and targets. For instance, one of the objectives of the *National Partnership Agreement to Deliver a Seamless National Economy* is to ‘reduce the level of unnecessary regulation and inconsistent regulation across jurisdictions’ (COAG 2009p) whereas the objective of the *National Partnership Agreement on Indigenous Economic Participation* is to ‘aspire to halving the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade’ (COAG 2009l).

Reforms in a particular area may involve a number of different agreements (usually National Partnerships and, in the case of human capital, National Agreements), Implementation Plans and other initiatives.

At their most basic level, reforms agreed to by COAG consist of changes in:

- the regulation of certain occupations, industries or activities; and
- the level, composition or funding of government expenditure.

Reforms typically would have a longer-term focus and represent a change in policy. Nevertheless, the nature of the reforms varies.

- Some reforms, such as those in the competition and regulation stream, address economic objectives, while others, such as those in the areas of affordable housing, Indigenous disadvantage and the environment, target broader social or environmental objectives, although they could also have economic effects through productivity and workforce participation.
- Some reforms focus on particular concerns, such as differences in the way an activity or occupation is regulated across States and, in the areas of preventive health and ageing, the incidence of chronic disease risk factors and the sustainability of existing service delivery models into the future.

-
- Some initiatives focus on delivering nationally significant infrastructure, such as the infrastructure priority list.

Many reforms identify priority areas for government expenditure (either new expenditure or a change in priorities) or areas where potential efficiency improvements can be made. Such measures are intended to help to reduce the regulatory imposts that governments place on producers and consumers or enable government services to be delivered at a lower overall cost (including placing less demand on taxation) or to provide a higher standard or range of services.

As noted, there are also a range of matters considered by COAG or covered by the new financial architecture that would not ordinarily be considered longer-term, national ‘reforms’, including:

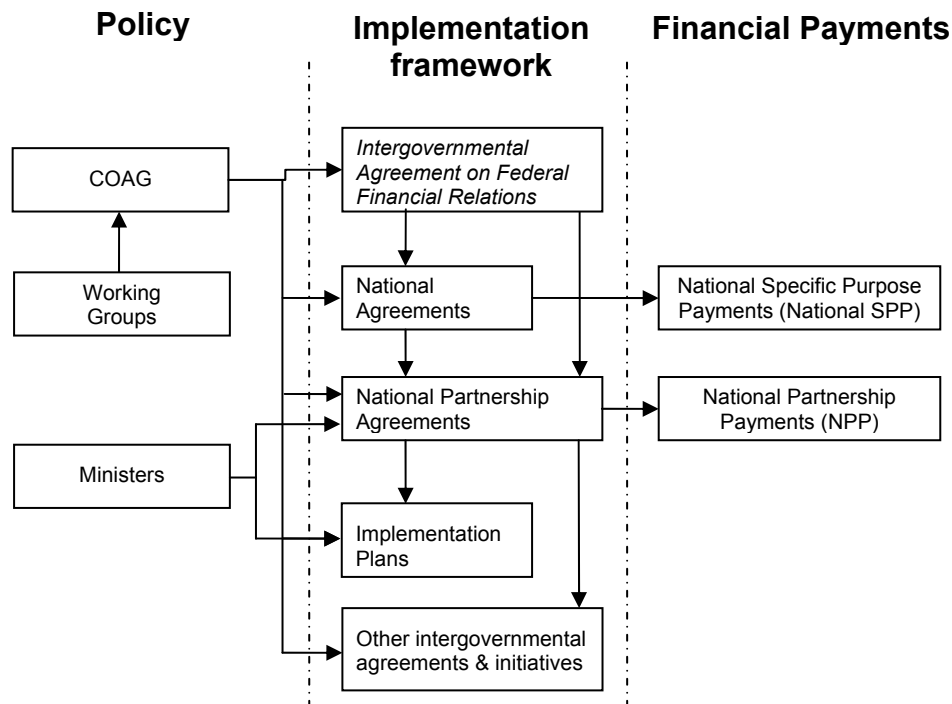
- existing (business as usual) measures that have been recast within the new financial framework set out in the *Intergovernmental Agreement on Federal Financial Relations*, such as essential vaccines and legal assistance services;
- funding to address local issues, such as insulation at Fort Street High School and rehabilitation of the former Rum Jungle mine site; and
- responses to the global financial crisis and measures that address short-term imperatives or are short term in nature, such as macroeconomic stabilisation policies.

2.2 The architecture for the reform agenda

The reform agenda is built around a policy and financial architecture that consists of three elements:

- the policy arrangements that give authority to and oversee the reforms;
- the framework of agreements and initiatives that implement the reforms (that make up the core of the reform agenda); and
- the financial payments that accompany all of the agreements, many providing incentives for the States to meet their reform commitments (figure 2.1).

Figure 2.1 The COAG policy and financial architecture^a



^a Stylised representation. The direction of the arrows indicates the broad ordering of arrangements. For example, National Agreements are schedules to the *Intergovernmental Agreement on Federal Financial Relations*, while the financial arrangements specified in the National Partnership Agreements fall under the auspices of the *Intergovernmental Agreement on Federal Financial Relations*.

Policy

The reform agenda is set by COAG, comprising the Prime Minister, the six State Premiers and the Chief Ministers from the Northern Territory and the Australian Capital Territory. The President of the Australian Local Government Association is also a member of COAG.

Many of the key reforms that make up the COAG reform agenda have been agreed to, and signed, by all jurisdictions. The Australian Government is signatory to all of the agreements.

While all jurisdictions have signed the main agreements, not all jurisdictions have signed all agreements. Each jurisdiction can elect to sign or not sign any agreement and many have opted not to sign particular agreements, either because the agreement is not relevant to their jurisdiction or, as was the case with Western Australia for the *National Health and Hospitals Network Agreement* (COAG 2010g), because it did not support the reforms or the conditions attached. This has given rise to a series of bilateral and multilateral agreements between

members of COAG. For example, the *Agreement on Murray-Darling Basin Reform* (COAG 2008h) is an agreement between the Commonwealth and those States in the Murray-Darling Basin (the ‘Basin States’) — New South Wales, Victoria, Queensland, South Australia and the Australian Capital Territory.

COAG is supported in its role by a range of Working Groups and appropriate Ministers. The Ministerial Council for Federal Financial Relations, which consists of the Treasurers of the Australian Government and the States (or their designated representatives), oversees the operation of the *Intergovernmental Agreement on Federal Financial Relations* (COAG 2008n).

The COAG Reform Council independently advises COAG on the performance of governments in achieving the agreed outcomes and performance benchmarks for reform, the progress of individual jurisdictions in implementing the agreed reforms and on the aggregate pace of reform. The COAG Reform Council reports on:

- whether predetermined performance benchmarks have been achieved under the six National Partnerships;
- the performance of the Australian Government and the States in achieving the outcomes and performance benchmarks specified in 24 key National Agreements;
- the performance of the Australian Government and the Basin States under five bilateral *Water Management Partnerships* under the *Agreement on Murray-Darling Basin Reform*;
- the aggregate pace of activity in progressing COAG’s agreed reform agenda; and
- the consistency of capital city strategic planning systems with the new national criteria.

National agreements and initiatives

The structure of the agreements that make up the core of the reform agenda is primarily set out in the *Intergovernmental Agreement on Federal Financial Relations* (COAG 2008n). It outlines two of the main types of agreement that make up the reform agenda — National Agreements and National Partnership Agreements — and their roles, objectives and basic structure. The agenda also includes selected other intergovernmental agreements and related initiatives.² The reform agenda is designed to be consistent and integrated.

² All of the agreements that make up the reform agenda are ‘intergovernmental agreements’, in the sense that each is an agreement between governments in the Australian Federation. Parties to an agreement include the Australian Government and at least one State.

These agreements are not legally binding. They represent an intention to undertake the agreed reforms and contain procedures for handling any disputes that might arise between the jurisdictions in the development and implementation of reforms.

The agenda also consists of numerous Implementation Plans that outline how the objectives and outcomes set out in the relevant National Partnerships are to be achieved and a range of other specific initiatives that support the partnerships.

The agreements that make up the reform agenda generally set out the mutually agreed objectives, outcomes and outputs to be achieved through reform (box 2.2). Some agreements, most notably (but not always) those with reward payments attached, also set out the associated performance indicators and targets against which progress towards achieved reform objectives, outcomes and outputs can be gauged.

The framework outlined in the *Intergovernmental Agreement on Federal Financial Relations* has been applied to most of the agreements that make up the COAG reform agenda. However, some agreements, such as the *National Health and Hospitals Network Agreement* (COAG 2010g), apply separate, although related, frameworks.

Intergovernmental Agreement on Federal Financial Relations

The *Intergovernmental Agreement on Federal Financial Relations* (COAG 2008n), which is underpinned by the *Federal Financial Relations Act 2009* (Cwlth), sets out the framework that underpins the COAG reform agenda as well as the associated changes to Commonwealth-State financial relations (discussed in section 2.3).

National Agreements

National Agreements fall under the auspices of the *Intergovernmental Agreement on Federal Financial Relations*. National Agreements operate on an ongoing basis and do not have an expiry date.

A National Agreement is:

An agreement defining the objectives, outcomes, outputs and performance indicators, and clarifying the roles and responsibilities, that will guide the Commonwealth and the States and Territories in the delivery of services across a particular sector. (COAG 2008n, Schedule A)

Box 2.2 **Broad structure of the main COAG agreements**

The *Intergovernmental Agreement on Federal Financial Relations* sets out the architecture for the main agreements that make up the COAG reform agenda. While the terminology and structure of each agreement may vary, the agreements generally specify the objectives, outcomes and outputs of reform and, if relevant, some also set out agreed performance indicators, targets for these indicators (termed performance benchmarks) and the timeframe over which these targets are to be achieved.

Objectives

The objectives describe the mutually agreed, overarching aspirations of the agreement.

Outcomes

The outcomes describe the direct effects a government activity is expected to have on community wellbeing. Outcomes should be strategic, high level and observable goals expressed in clear, measurable and achievable terms.

Outputs

The outputs describe the services being delivered by governments to achieve outcomes. Alternatively, they may be used as a proxy for outcomes where outcomes are not readily observable. Outputs can also help to define roles and responsibilities. Outputs should be high level, as detailed outputs run the risk of constraining States' responses to changing demand, cost drivers, priorities and service delivery models.

Performance indicators

The performance indicators are data which inform the community about how governments are progressing towards achieving the objectives, outcomes and outputs.

Performance benchmarks

The performance benchmarks are a quantifiable change in a performance indicator, usually expressed in respect of a period of time — for example, an X per cent increase in X by 20XX. Where necessary to inform the community, performance benchmarks should be few in number, high-level and reflect the highest order, most challenging goals toward attainment of outcomes.

Source: COAG (2008n, Schedule A).

All National Agreements fall within the human capital stream. There are no National Agreements covering the competition and regulation or environment streams, which primarily consist of National Partnerships.

There are six National Agreements:

- *National Healthcare Agreement* (COAG 2008o);
- *National Education Agreement* (COAG 2008p);
- *National Agreement for Skills and Workforce Development* (COAG 2008q);
- *National Disability Agreement* (COAG 2008r);

-
- *National Affordable Housing Agreement* (COAG 2008s); and
 - *National Indigenous Reform Agreement (Closing the Gap)* (COAG 2008t).

Each agreement seeks to clarify the roles and responsibilities of the Australian Government and the States to improve service delivery and reduce duplication within the sectors covered by the relevant agreement.

These National Agreements have been signed by all jurisdictions and are schedules to the *Intergovernmental Agreement on Federal Financial Relations* (collectively they constitute Schedule F of that agreement).

The COAG Reform Council has been tasked to report on the performance of all jurisdictions against the National Agreement outcomes and performance benchmarks. Under the *Intergovernmental Agreement on Federal Financial Relations*, the payments to the States that relate to National Agreements are not conditional on the agreed outcomes and performance benchmarks being met.

National Partnerships and Implementation Plans

National Partnership Agreements also fall under the auspices of the *Intergovernmental Agreement on Federal Financial Relations* and, in some cases, are linked to National Agreements.

A National Partnership is:

An agreement defining the objectives, outputs and performance benchmarks related to the delivery of specified projects, to facilitate reforms or to reward those jurisdictions that deliver on national reforms or achieve service delivery improvements. (COAG 2008n, Schedule A)

Currently there are 51 National Partnerships, of which eight have reform performance reward payments attached to them.³

The basic structure of National Partnerships is broadly similar to that of the National Agreements (box 2.2), although the agreements are narrower and more targeted in their focus.

³ The eight National Partnerships with reward payments are: *National Partnership Agreement to Deliver a Seamless National Economy*; *National Partnership Agreement on Improving Teacher Quality*; *National Partnership Agreement on Essential Vaccines*; *National Partnership Agreement on Literacy and Numeracy*; *National Partnership Agreement on Preventive Health*; *National Partnership Agreement on the Elective Surgery Waiting List Reduction Plan*; *National Partnership Agreement on Youth Attainment and Transitions*; and *The National Health and Hospitals Network — National Partnership Agreement on Improving Public Hospital Services*.

Unlike National Agreements, most National Partnerships have an expiry date, typically between one and four years after signing, or end when the agreed initiatives are completed. The agreements do not specify what will happen to the initiatives being progressed after the agreements expire. Some National Partnerships that have expired, such as the *National Partnership Agreement on the First Home Owners Boost* (COAG 2008l), have given rise to new National Partnerships, while others have not.

Each National Partnership sets out:

- the mutually agreed objectives, outcomes and outputs for reform;
- the reform goals expressed in terms of performance indicators and a target for that indicator (performance benchmark);
- the timeframe over which the targets are to be achieved; and
- the amount and conditions attached to any accompanying financial payments.

Many National Partnerships are supported by detailed Implementation Plans that outline how the agreed objectives, outcomes and outputs are to be achieved. Where the reforms being progressed seek to ensure a nationally consistent approach, a single Implementation Plan covers all signatories. Single Implementation Plans are most common in the competition and regulation stream.⁴ However, where jurisdictions decide on how the agreed objectives, outcomes and outputs are to be achieved, the Implementation Plans are often jurisdiction-specific. This may mean that the States implement different policies in response to the same reform goals. State-specific Implementation Plans are most prevalent in the human capital, environment and other streams. The COAG reform agenda currently consists of around 230 Implementation Plans.

As mentioned, the COAG Reform Council is tasked with reporting progress in implementing the agreed reforms and on the aggregate pace of reform. These assessments are generally undertaken annually.⁵

Progress on implementing COAG reforms varies widely. Available evidence suggests that some reforms are well advanced or have been completed, most notably some of the 27 deregulation priorities set out in the *National Partnership Agreement to Deliver a Seamless National Economy* (for example, BRCWG 2010a, 2010b,

⁴ A single national Implementation Plan, which is periodically updated, accompanies the *National Partnership Agreement to Deliver a Seamless National Economy* (COAG 2009p).

⁵ An exception is reporting on progress in the *National Partnership Agreement on the Elective Surgery Waiting List Reduction Plan* (COAG 2009aq), which is undertaken six monthly in keeping with the assessment periods set out in the agreement (CRC 2010f, 2010j).

Emerson 2010). These include environmental assessment and approvals processes, wine labelling, standard business reporting, national system of trade measurement, health professional registration and accreditation, rail safety regulation and national regulation of trustees. Progress in implementing the remaining deregulation priorities is mixed. Some reforms are in the process of being developed and implemented, and, in isolated instances, some jurisdictions have backtracked on initial commitments. Progress in other reform areas is also mixed, though generally with a lower degree of implementation.

Other intergovernmental agreements and initiatives

In addition to the *Intergovernmental Agreement on Federal Financial Relations*, the reform agenda includes five other intergovernmental agreements:

- *Intergovernmental Agreement for a National Registration and Accreditation Scheme for the Health Professions* (COAG 2008a) (part of the competition and regulation stream);
- *Intergovernmental Agreement for Regulatory and Operational Reform in Occupational Health and Safety* (COAG 2008d) (part of the competition and regulation stream);
- *Intergovernmental Agreement for Business Names Agreement* (COAG 2009aa) (part of the competition and regulation stream);
- *Agreement on Murray-Darling Basin Reform* (COAG 2008h) (part of the environment stream); and
- *Intergovernmental Agreement on a National Water Initiative* (COAG 2004) (part of the environment stream).

Some of these agreements, most notably those on the regulation of health professions and occupational health and safety, have arisen from detailed public examinations by the Productivity Commission (PC 2004, 2005). Three of the associated reforms — national registration and accreditation for the health professions, nationally uniform occupational health and safety systems and nation registration of business names — are also included in the 27 deregulation priorities in the *National Partnership Agreement to Deliver a Seamless National Economy* (COAG 2009p).

A range of other initiatives support or complement the National Agreements and National Partnerships that make up the COAG reform agenda. For example, the development of a national curriculum is a responsibility shared between the Australian Government and the States under the *National Education Agreement* (COAG 2008p).

Of the over 60 different initiatives listed in COAG communiqués and elsewhere that support or complement the formal agreements that include COAG reforms, sufficient detail is available to report on 30. These ‘other initiatives’ cover the breadth of the reform agenda, are highly varied in nature and are generally narrowly focused on specific issues of concern (appendix A).

In accordance with Treasury conventions, the *National Health and Hospitals Network Agreement* is reported as an ‘other’ intergovernmental agreement or initiative. This agreement was signed by all jurisdictions except Western Australia in April 2010 (COAG 2010g). It augments the existing *National Healthcare Agreement* and requires amendments to the *National Healthcare Agreement* and the *Intergovernmental Agreement on Federal Financial Relations*, which have not, as yet, been agreed. This agreement involves material changes to the health system in general and public hospitals in particular. The three primary objectives of this agreement are:

- fundamental reform of the health and hospital system, including funding and governance, to provide a sustainable foundation for providing better services now and in the future;
- changing the way health services are delivered, through better access to high quality integrated care designed around the needs of patients, and a greater focus on prevention, early intervention and the provision of care outside of hospitals; and
- providing better care and better access to services for patients, through increased investments to provide better hospitals, better infrastructure, and more doctors and nurses.

Under the agreement, the Australian Government will become the major funder of Australian public hospitals by funding 60 per cent of the ‘efficient price’ of all public hospital services delivered to public patients. Responsibility for hospital management will be devolved to new local hospital networks, to increase local accountability and to improve performance. The Australian Government will also assume funding and policy responsibility for general practitioners, primary health care services and aged care services. In return, the participating States agreed, among other things, to give up a share of their Goods and Services Tax (GST) revenue to partly fund the new arrangements.⁶

This agreement complements, rather than replaces, the *National Healthcare Agreement*.

⁶ The precise share of GST revenue that each State will be required to give up has not, as yet, been determined or agreed, but is reported to be, on average, around 30 per cent.

The *National Health and Hospitals Network Agreement* contains greater specificity concerning the disposition of funds than does the *National Healthcare Agreement*. From 1 July 2011, the National Healthcare SPP for jurisdictions that have signed the *National Health and Hospitals Network Agreement* will be directed towards funding the new arrangements.

2.3 Changes to Commonwealth-State financial relations

The financial payments that accompany many of the agreements that make up the reform agenda constitute the third element of the reform architecture.

The COAG reforms involve changes to the nature and operation of Commonwealth-State financial relations. These reforms seek to provide:

... the platform for wide ranging policy reforms to improve economic, social and environmental outcomes. (COAG 2008b, p. 4)

The potential for changes to Commonwealth-State financial relations is illustrated by the distribution of government revenues and outlays between levels of government. In broad terms, Commonwealth-State financial relations in Australia are characterised by vertical fiscal imbalance. In 2008-09, the Australian Government raised two-thirds of all government revenue, but only undertook half of all government expenditure. The States funded roughly two-thirds of their expenditure from their own sources of revenue (table 2.1).

Table 2.1 Government sources of revenue and outlays, 2008-09

<i>Level of government</i>	<i>Own-source revenue^a</i>		<i>Own-purpose expenditure^b</i>		<i>Ratio^c</i>
	\$b	Per cent	\$b	Per cent	
Australian Government	310.0	66	255.6	52	1.21
State, Territory & local	161.3	34	236.7	48	0.68
Total	471.4	100	492.3	100	0.96

^a Australian Government: *GFS Revenue*. State, Territory & local: *GFS Revenue* less revenue from *Current grants and subsidies*. ^b Australian Government: *GFS Expenses* less revenue from *Current grants and subsidies* received by State, Territory & local governments. State, Territory & local: *GFS Expenses*. ^c Own-source revenue divided by Own-purpose expenditure.

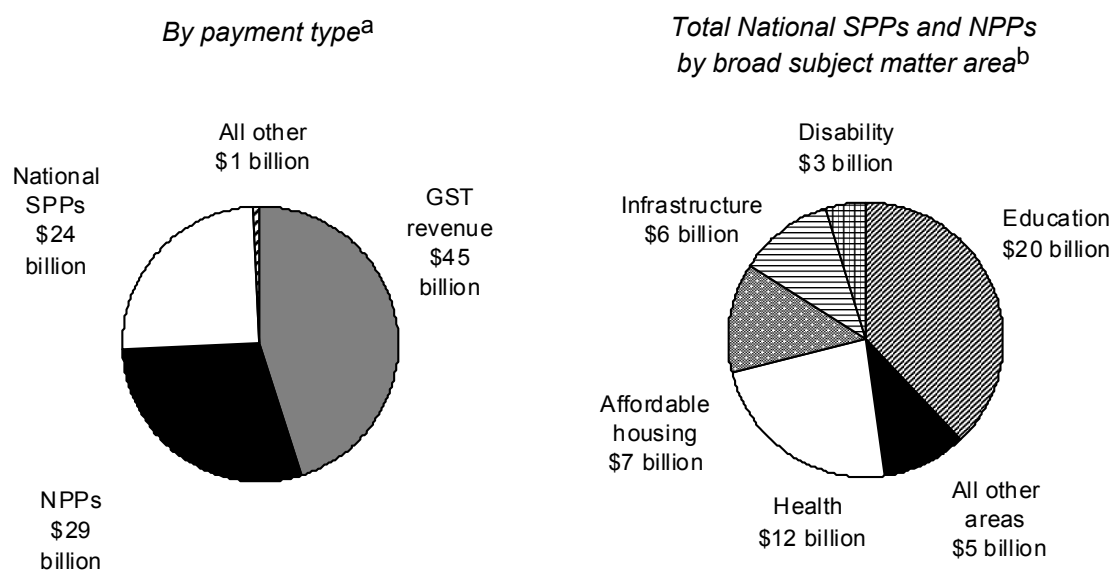
Source: Commission estimates based on ABS (2010).

This vertical fiscal imbalance makes the States reliant on revenue transfers from the Australian Government to fund many of the services that they provide.

The Australian Government transferred almost \$100 billion to the States in 2009-10 (left-hand panel of figure 2.2). The single largest payment involved a \$44.5 billion transfer of untied revenue from the GST (45 per cent of all Australian Government payments to the States in that year). Collectively, NPPs and National SPPs, the two payment types that fall within the scope of the COAG reform agenda, accounted for just over half of the payments — \$29 billion (29 per cent) and \$24 billion (25 per cent), respectively. All other payments from the Australian Government totalled \$717 million in 2009-10 (1 per cent).

Overall, just under 40 per cent, or \$20 billion, of National SPPs and NPPs in 2009-10 was spent on education. This in large part, reflects the importance of the *Building the Education Revolution* component of the *National Partnership Agreement on the Nation Building and Jobs Plan* (COAG 2009i) — which was introduced to stimulate the economy in response to the global financial crisis. The next biggest areas funded by the Australian Government were health (\$12 billion or 23 per cent), affordable housing (\$7 billion or 13 per cent) and infrastructure (\$6 billion or 11 per cent) (right-hand panel of figure 2.2).

Figure 2.2 Australian government payments to the States, 2009-10



^a All other payments consist of general revenue assistance (non-GST revenue sharing arrangements; compensation for Australian Government policy decisions; and payments for national capital influences). ^b All other consists of all payments classified by the Commonwealth Treasury in the areas of skills and workforce, environment, contingent payments, other NPPs and local government.

Source: Commission estimates based on Australian Government (2010b).

Changes under COAG reforms

The COAG reforms involve changes to the nature and operation of financial transfers between the Australian Government and the States (box 2.3). The new arrangements are outlined in the *Intergovernmental Agreement on Federal Financial Relations* (COAG 2008n).

Prior to reform, these financial arrangements were controlled by the *Intergovernmental Agreement on the Reform of Commonwealth State Financial Relations* (COAG 1999).

The new Intergovernmental Agreement is central to the reform agenda and spans all of the other agreements, initiatives and associated financial payments. The *Intergovernmental Agreement on Federal Financial Relations* sets out the framework for *all* intergovernmental financial transfers from the Australian Government to the States other than for Australian Government own-purpose expenses (COAG 2008n, p. 6). The agreement is overseen by the Ministerial Council for Federal Financial Relations.

The main changes to Commonwealth-State financial relations introduced as part of the COAG reform agenda include:

- shifting from SPPs that tied expenditure on particular projects to SPPs that are untied within the sector to which they relate;
- introducing a new type of Australian Government payment to the States called *National Partnership Payments* (NPPs) to support the delivery of specified outputs or projects, facilitate reforms, or reward those jurisdictions that deliver on nationally significant reform;
- changing the quantum of funds made available to the States and the mix of funds across policy areas; and
- streamlining administrative arrangements associated with Australian Government payments to the States.

Box 2.3 **Reform of Australian Government payments to the States**

The COAG reform agenda involves changes in the *Intergovernmental Agreement on Federal Financial Relations* to the operation of Commonwealth-State financial relations, including the conditions under which SPPs to the States are made.

Australian Government payments to the States can be classified as being ‘untied’ or ‘tied’, depending on whether conditions accompany the payment.

The States have full autonomy over the use of untied payments. Prior to the signing of the *National Health and Hospitals Network Agreement* in April 2010, the transfer of revenue from the GST to the States, the largest of all the Australian Government payments to the States, was untied.⁷

Nearly all of the remaining payments to the States, including *all* of the National SPPs and NPPs that form part of the COAG reform agenda, are tied payments. The precise nature of the conditions attached varies between payment types and between individual payments within a particular type of payment (such that the conditions for one SPP may differ from another SPP).

At a minimum, the conditions may require the States to spend the payment in a broadly specified area, such as on health or education. Most payments also require the States to account for how the funds have been expended. Many also require the States to detail any accompanying expenditure that they have undertaken. Agreements may also require the States to provide matching funding or, to disallow States substituting Australian Government expenditure for their own, to maintain their expenditure levels. Some conditions go further by specifying actions that the States are required to undertake. For example, among a range of conditions placed on the States, the *Building the Education Revolution* component of the *National Partnership Agreement on the Nation Building and Jobs Plan* requires the States to ‘accept and adhere to required branding and recognition of all projects, as determined by the Australian Government’ (COAG 2009i, s. D14(i)). Other conditions go further still by specifying how much the States are required to spend and on what.

These conditions are often referred to as ‘input controls’ or ‘output controls’, as they impose constraints on the inputs to be used or the outputs produced.

Tying of grants can be made for a number of reasons:

- they enable the Australian Government to account for how the revenue collected has been spent;
- they are also one way of achieving national objectives or addressing issues that have implications for other jurisdictions; or
- they enable the Australian Government to direct government expenditure.

(Continued next page)

⁷ Even after the signing of the *National Health and Hospitals Agreement*, approximately 70 per cent of the GST revenue for States that signed the agreement (that is, all but Western Australia) remains untied.

Box 2.3 (continued)

Tied grants can also impose economic imposts. They give rise to administrative expenditure by each government to account for the financial flows and, through the conditions attached to each grant, direct State expenditure and potentially the mix of government services delivered.

Recent Commonwealth-State financial reforms set out in the *Intergovernmental Agreement on Federal Financial Relations* seek to reduce the number and type of constraints applying to National SPPs. At the same time, the reforms included a new class of tied payment, National Partnership Payments.

Sources: Australian Government (2008a); and COAG (2008n).

Changes to Specific Purpose Payments

Prior to the reform agenda, the Australian Government provided Specific Purpose Payments (SPPs) to the States. SPPs were defined as:

... a financial contribution to important areas of state responsibility which the Australian Government makes in pursuit of its policy objectives. Typically, the states need to fulfil specified conditions in order to receive these payments, which cover most functional areas of state and local government activity, including education, health, social security, housing and transport. (Australian Government 2007, p. 5)

The reform of SPPs as part of the reform agenda involved reducing the number of SPPs from over 90 to five, renamed, *National Specific Purpose Payments* (National SPPs) (Australian Government 2010b). The effective reduction in the number of SPPs is not quite as large as these figures suggest, as some of the initiatives previously funded through separate SPPs are now funded through separate NPPs. For example, Australian Government funding of essential vaccines was funded as a SPP under the *Australian Immunisation Agreements for Inclusion in the National Vaccine Schedule* (\$396 million in 2007-08) but is now funded as a NPP under the *National Partnership Agreement on Essential Vaccines* (\$326 million in 2009-10).

National SPPs currently accompany five of the six National Agreements. There is no National SPP linked to the *National Indigenous Reform Agreement*, with the other National SPPs funding the associated Indigenous reforms. A National SPP is now defined as:

A Commonwealth financial contribution to support State and Territory delivery of services in a particular sector. (COAG 2008n, Schedule A)

The States are required to spend each National SPP in the service sector relevant to that National SPP.⁸ For example, the *National Education SPP* must be spent on education. However, the States have autonomy as to how the National SPPs are to be spent within these sectors to achieve the mutually agreed objectives.

The arrangements for all National SPPs are broadly similar. The *Intergovernmental Agreement on Federal Financial Relations* sets out the base level of funding for each National Agreement in highly specific terms (COAG 2008n, Schedule D, Table D1). This base level of funding is indexed on 1 July each year according to National SPP-specific growth factors set out in Schedule D.

After a transition period of five years, the overall quantum of funds available for each National Agreement will be distributed across States according to population shares, with no adjustment for other demographic or socio-economic differences across jurisdictions.

The receipt by each jurisdiction of its National SPP is not dependent on the achievement of the agreed objectives or performance benchmarks that are set out in those National Agreements.

National SPPs totalled \$24 billion or roughly one-quarter of all Australian Government payments to the States in 2009-10 (table 2.2). The main National SPPs were directed towards the healthcare and education sectors (\$11 billion and \$10 billion, respectively), with these two sectors accounting for 86 per cent of all National SPPs in 2009-10. The three remaining National SPPs — skills and workforce development, affordable housing and disability — are all similar in size.

While the changes to SPPs under the reform agenda involve distinct elements of reform (such as streamlining the number of payments, reduction in the conditions attached and the associated administrative arrangements), the new system of SPP payments has many similarities to the previous one. The sectoral coverage of the new payments is broadly similar (although the old arrangements also included a raft of small payments in areas such as public law and order, fuel and energy, recreation and culture, and transport and communication that are not included in the new arrangements). The quantum of funding is also similar (\$26 billion under the old arrangements in 2007-08 compared to \$24 billion under the new arrangements in 2009-10), as is the focus on the health and education sectors (collectively, 78 per cent of SPPs in 2007-08). Thus, in some respects, the new arrangements involve a continuation of existing arrangements.

⁸ The States are free to allocate their own funding across or within sectors.

Table 2.2 Overview of Australian Government National Specific Purpose Payments and National Partnership Payments to the States, 2009-10^a

<i>Broad area of expenditure</i>	<i>National SPPs</i>	<i>NPPs^b</i>	<i>Total payments</i>	<i>Share of total payments</i>
	\$m	\$m	\$m	Per cent
Health	11 224.0	1 183.0	12 406.0	23.3
Education	9 760.2	10 445.8	20 206.1	37.9
Skills and workforce	1 317.9	442.2	1 760.0	3.3
Disability	903.7	1 598.4	2 502.1	4.7
Affordable housing	1 202.6	5 842.4	7 045.0	13.2
Infrastructure		5 919.7	5 919.7	11.1
Environment		488.7	488.7	0.9
Contingent payments		722.2	722.2	1.4
Other NPPs		271.2	271.2	0.5
Local government		1 979.8	1 979.8	3.7
Total	24 409.0	28 893.4	53 300.8	100.0

^a National Partnership Payments as published in the Budget Papers and may include expenditure not related to the COAG reform agenda such as \$5.3 million for film and literature classification. ^b Temporary fiscal stimulus spending undertaken to maintain macroeconomic stability during the global financial crisis accounted for roughly \$13 100 million in 2009-10 (Australian Government 2010c, p. 11).

Sources: Australian Government (2010b, 2010c).

The introduction of National Partnership Payments

The changes to Commonwealth-State financial relations that form part of the reform agenda introduced a new type of Australian Government payment to the States called a *National Partnership Payment* (NPP).

NPPs accompany many, but not all, of the National Partnerships. They are:

A Commonwealth payment to the States and Territories, in respect of a National Partnership Agreement, to support the delivery of specified projects, to facilitate reforms or to reward those jurisdictions that deliver on national reforms or achieve service delivery improvements. (COAG 2008n, Schedule A)

The *Intergovernmental Agreement on Federal Financial Relations* sets out three types of NPP:

- project payments;
- facilitation payments; and
- incentive payments (also called reward payments).

The number and amount of each NPP is set out in the relevant National Partnership as are the conditions attached to payment.

Project payments support the delivery of particular outputs or projects. For example, the Australian Government paid the Northern Territory Government \$2 million in 2009-10 to develop and conduct environmental monitoring activities and to develop management and rehabilitation strategies under the *National Partnership Agreement on the Management of the Former Rum Jungle Mine Site* (COAG 2009aj). These payments are typically made when agreed milestones have been reached.

Facilitation payments made to support reform, are typically paid early on in the reform process and may be conditional on the achievement of agreed milestones through the course of the agreement. For example, the *National Partnership Agreement on Literacy and Numeracy* allocated \$150 million over two years to:

... facilitate reform delivering accelerated literacy and numeracy improvement and progress towards the COAG target, with a priority focus on those primary aged students most in need of support, especially Indigenous students. (COAG 2009b, p. 12)

Facilitation payments may also be paid in advance of the States implementing reform, in recognition of administration and other costs of undertaking reform.

Reward (or incentive) payments are made to those jurisdictions that achieve agreed performance targets and generally occur when reform is well advanced or after completion. For example, \$250 million in reward payments in 2012-13 is available under the *National Partnership Agreement to Deliver a Seamless National Economy* to States that achieve the key milestones as set out in the Implementation Plan for the 27 deregulation priorities (COAG 2009p). Reward payments are provided to those States that deliver reform progress and are contingent on the achievement of the agreed performance benchmarks. The achievement of performance benchmarks for reward payments will be monitored by the COAG Reform Council.

The States are required to report annually to the Ministerial Council for Federal Financial Relations detailing total expenditure under the relevant National Partnership. Details are also required on how project and facilitation funding payments from the Australian Government were spent and, where required by the National Partnerships, State contributions.

Unlike National SPPs, NPPs are tied to the objectives and outcomes specified in the relevant National Partnerships and reward payments are conditional on jurisdictions making substantial progress or achieving agreed performance benchmarks.

NPPs are generally smaller, more targeted and much more numerous than National SPPs. The 2010-11 Budget Papers list over 100 different NPP payments in 2009-10, although the same agreement is often listed as having more than one NPP

(Australian Government 2010b).⁹ This is particularly the case in health, where funding may cover the purchase of an individual piece of capital equipment, such as a PET scanner in a particular hospital. These individual payments are aggregated by jurisdiction prior to payment by the Australian Government.

Some of the previous SPPs were recast as NPPs to fit within the new framework set out in the *Intergovernmental Agreement on Federal Financial Relations*. For example, Australian Government payments to the States for legal aid were classified as a public order and safety SPP before the *Intergovernmental Agreement on Federal Financial Relations* but are now NPPs under the *National Partnership Agreement on Legal Assistance Services* (Australian Government 2008a, 2010b, COAG 2010n).

Australian Government expenditure on NPPs totalled \$29 billion or roughly 30 per cent of all payments to the States in 2009-10 (table 2.2). These payments were concentrated in the areas of: education (\$10 billion); infrastructure (\$6 billion); and affordable housing (\$6 billion). Although there is considerable overlap with the sectoral coverage of National SPPs, NPPs also apply to infrastructure, the environment and to a range of miscellaneous areas that are not covered by National SPPs.¹⁰

Other changes to Commonwealth-State financial relations

The changes to Commonwealth-State financial relations that form part of the reform agenda also involve some other miscellaneous changes.

The *Intergovernmental Agreement on Federal Financial Relations* streamlines the administrative arrangements surrounding Australian Government payments to the States. The changes include:

- rationalising the number of payments;
- removing conditions attached to many SPPs;
- reducing the reporting requirements placed on State Governments; and
- clarifying areas of Australian Government, State and shared responsibility to reduce uncertainty and duplications.

⁹ The section of the 2010-11 Budget Paper no. 3 covering NPPs is over 100 pages long (Australian Government 2010b).

¹⁰ The Budget Papers group NPPs into the nine broad categories listed in table 2.2 (Australian Government 2010b), although Australian Government payments to local government are not covered by a National Partnership.

Furthermore, the administration of these payments has been centralised to simplify payments to the States, aid transparency and improve the States' budget processes. Previously, payments were made from Commonwealth portfolio departments to the relevant State agencies, and each payment had its own payment and administrative arrangements. All payments are now centrally administered and processed, with the Australian Treasury making the payments directly to each State treasury. State treasuries are responsible for distributing the funding within their jurisdiction (Australian Government 2008a, p. 16).

The changes to Commonwealth-State financial relations also involve changes to the quantum of funds made available to the States, the mix of these funds across policy areas, and, for National SPPs, details of how the Australian Government funding will be indexed in the future and how the funds will be distributed across States to provide greater certainty to the States.

3 An evaluation framework

Key points

- Reporting to government on the nature of the impacts and benefits of reform, and the time scale over which they will accrue, requires an understanding of the links between reform activities, the resulting economic, social and environmental changes, and measures of living standards and wellbeing.
- The diversity of reforms across and within each reform stream suggests that there will be a range of direct economic, social and environmental impacts.
 - These will also have indirect or flow-on effects throughout the economy, which should enhance the wider community's living standards.
- The Commission's assessments will evaluate the direct *economic* impacts through the lenses of productivity, prices, workforce participation and population.
 - But the Commission will also, where practicable, analyse impacts as they relate to COAG's social and environmental objectives.
- The Commission will employ economic modelling to assess the economy-wide, regional and distributional effects of reform.
- The Commission will consider the efficiency and effectiveness of reforms in achieving COAG's reform objectives and opportunities for improvement.

With the ultimate objective of improving the wellbeing of Australians, the reforms agreed to by COAG focus on areas of national significance where coordinated action across jurisdictions is important. The reforms are varied in nature and wide ranging, covering areas as diverse as competition policy, human capital development and the environment (chapter 2).

This chapter outlines a framework for evaluating the impacts of COAG reforms. The proposed framework takes into account potentially long lead times between the implementation of reforms and the realisation of benefits, and the need to allow for changing demographic and economic characteristics over the implementation and adjustment periods.

Section 3.1 outlines the conceptual framework the Commission will use to analyse the causal relationship between COAG reforms and achievement of the reform objectives. Section 3.2 examines the nature of the direct impacts of reform.

Section 3.3 identifies the economy-wide impacts of reform, including the indirect impacts and feedback effects, and discusses ways to evaluate these impacts in the context of ongoing change. Section 3.4 then outlines how the results may be reported.

3.1 The conceptual framework

The terms of reference ask the Commission to prepare a framework report which outlines its proposed approach to reporting on the impacts and benefits of COAG's reform agenda. To do this, the Commission has been mindful of the objectives of COAG reforms, which are to:

... boost productivity, workforce participation and geographic mobility, and support wider objectives of better services for the community, social inclusion, closing the gap on Indigenous disadvantage and environmental sustainability. (COAG 2008b, p. 2)

In turn, these objectives aim to improve the wellbeing of all Australians, with COAG intending that reform will:

... deliver real benefits for Australian families and their communities, not only today but over a generation. (COAG 2008b, p. 2)

Reporting to government on the nature of the impacts and benefits of reform, and the time scale over which they will accrue, will require an understanding of the links between reform activities, the resulting economic, social and environmental changes,¹ and measures of living standards and wellbeing (box 3.1). From such an understanding, the Commission's quantitative analysis of economic impacts will be complemented by assessments of other impacts of reforms delivered under the three broad reform streams. The findings of such assessments can thus shed light on the impacts on living standards and wellbeing, which can be thought to improve with, amongst other influences:

- increases in per capita income and consumption;
- improvements in health and other social outcomes; and
- sustained improvements in the quality of the natural and built environments.

Improvements can also be supported through greater social inclusion and closing the gap on Indigenous disadvantage.

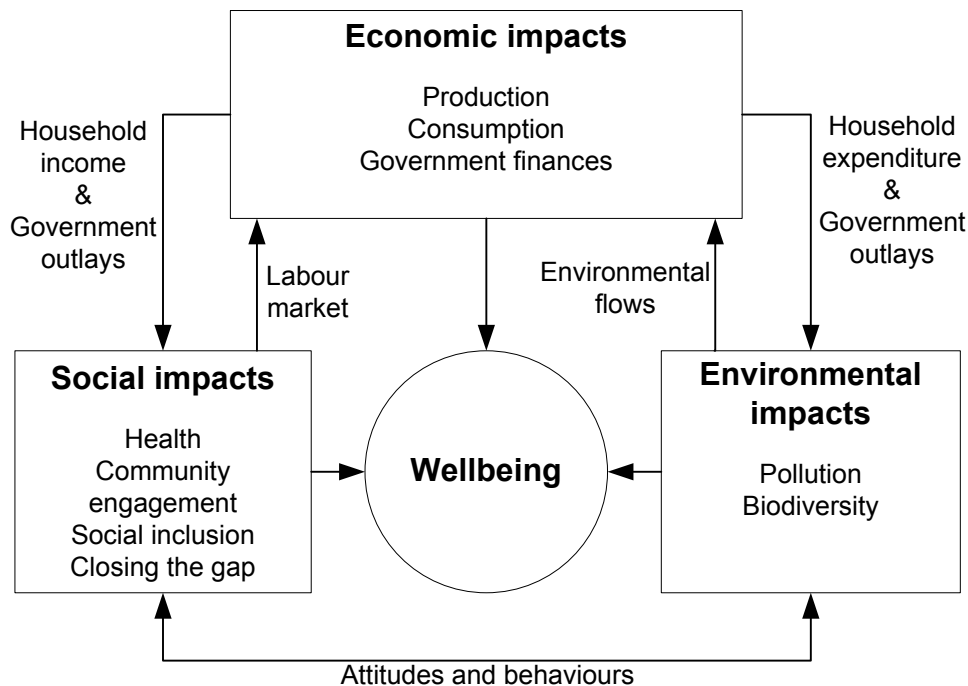
¹ For convenience, this chapter divides the changes or impacts that arise from reforms into three categories: 'economic', 'social' and 'environmental'. The Commission recognises that this classification is somewhat arbitrary as many of the 'economic' impacts identified have social and/or environmental consequences. The reverse is also true. Where possible, such linkages will be recognised.

There are likely to be instances where trade-offs in the achievement of these aspects exist, requiring judgements to gauge the overall benefits, or otherwise, of reforms.

Box 3.1 Impacts on wellbeing

Defining ‘wellbeing’ and the relative importance of factors contributing to improvements in it can be contentious. There are a number of definitions of wellbeing, with studies adopting terminologies including social welfare, standard of living and happiness, depending on their origin and focus. Despite differences in terminology, wellbeing can be thought of as representing the overall ‘utility’ or satisfaction people derive from the different aspects of their lives and the social and physical environment in which they live. Wellbeing can thus be thought of as arising from commonly measured economic outcomes — income received and the consumption of goods and services — as well as social and environmental outcomes (see figure below).

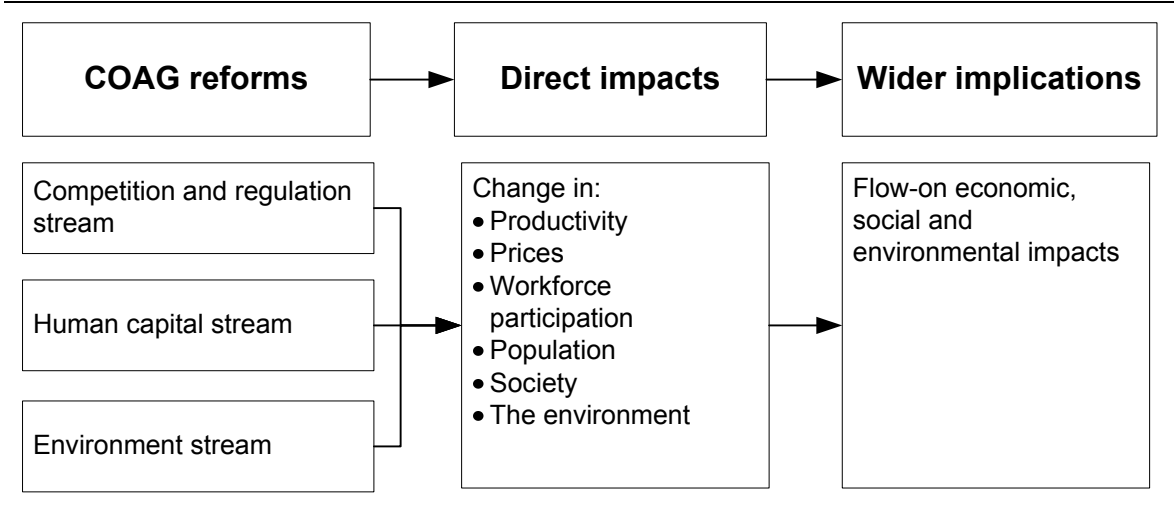
The direct and indirect links to wellbeing



In reporting on the effect of policies on wellbeing, it will be necessary to examine economic as well as relevant social and environmental impacts (the boxes in the figure). Because it is not possible to measure changes in all facets that affect wellbeing in a single metric, measures of the economic impacts will need to be complemented by information about social and environmental change to inform judgements about likely overall benefits, or otherwise, of reform.

The diversity of reforms across and within each reform stream will result in a range of economic, social and environmental impacts (figure 3.1). The conceptual framework that underpins the Commission’s analysis makes a basic distinction between *direct* and *economy-wide* impacts.

Figure 3.1 **Impacts of reform**



Some reforms will, in the first instance, have impacts on:

- *productivity* — changes in the productivity of labour and other inputs, for example, from reductions in the unit cost of service provision;
- *prices* — changes in unit prices, for example though increased competition, or changes in government charges or taxes;
- *workforce participation* — changes in the engagement of people in the workforce; and
- *population* — changes in life expectancy and other demographic variables.

For other reforms, direct economic impacts can arise through changes to human capital and natural resources. These changes, such as improvements in health or education, will typically increase individuals’ potential to contribute to workforce productivity and participation.

Another stream of direct impacts is also possible. These relate to changes in social and environmental conditions that are not captured by market activities (such as improvements in environmental amenity). The achievement of such changes, however, typically involves government expenditures or other interventions, and associated resource costs.

The economy-wide impacts represent both the direct and the indirect effects, such as changes in productivity or prices in one sector and how these influence production activities in another, allowing for the costs involved. The indirect ‘feed-back’ or flow-on effects include impacts on:

- resource reallocation — for example, as labour and capital move between productive uses;
- transition or adjustment costs — for example, down time as workers move to a new location, occupation or industry; and
- longer-term effects — for example, after adjustment of physical and human capital, and natural resource endowments.

The direct and indirect (economy-wide) impacts of reforms are likely to fall into different categories given the stage of their development and implementation, and the timeframes over which benefits are likely to accrue. The effects of reforms can be broadly categorised into three groups:

- *realised* — where reforms have been implemented and impacts are accruing;
- *prospective* — where reforms have been implemented, but impacts are yet to occur; and
- *potential* — where reforms have yet to be implemented, or there is scope for further reforms to deliver additional benefits.

In recognition of the diversity and complexity of the impacts of reform, the framework will need to:

- identify the direct impacts and the time-scale over which they occur, through examining causal changes in economic, social and environmental variables;
- where feasible, use the direct economic impacts to inform the economy-wide analysis (using general equilibrium modelling); and
- focus on the efficiency and effectiveness of various stages of reform (implementation, outputs delivered and outcomes achieved) to identify areas where Australia may not be reaching its reform potential (box 3.2).

The Commission will identify the costs and benefits of reform and the likely net impact on living standards. For some reforms, however, the assessment may be limited to determining their cost-effectiveness (costs relative to outcomes achieved), given inherent difficulties and uncertainties in assessing the benefits. The application of the framework will also be conditioned by the availability of suitable data and techniques for analysis. The methods of analysis that can be used to implement this framework are discussed in chapter 4.

Box 3.2 Identifying reform potential

In addition to being requested to report on the impacts of reform and the time scale over which benefits are likely to accrue, the Commission has also been asked to take account of any emerging concerns and provide information on whether Australia's reform potential is being achieved. Reform potential can be gauged through the efficiency and effectiveness of the various stages of reform — from implementation to outputs delivered and outcomes achieved — in meeting reform objectives.

- *Reform implementation* — includes activities undertaken by governments such as expenditures made, program administration, monitoring and enforcement activities and compliance costs of business, consumers or other groups within the community. The focus of analysis would be on the efficiency of program delivery, given the intended outputs.
- *Outputs* — includes services provided by government to the community and regulatory changes. A key focus of the analysis at this stage would be an examination of the effectiveness of the reforms in achieving intended objectives as specified in the reform agenda. Combined with analysis of the implementation stage, the focus of the analysis would be on the effectiveness of reform outputs in meeting intended outcomes from the reform stream.
- *Outcomes* — includes the range of COAG's outcomes for particular groups or sectors in society. Drawing on information on inputs, outputs and outcomes, the focus of the analysis at this stage would be on the cost effectiveness of outcomes in contributing to the objectives of the COAG reform stream and the reform agenda more broadly.

In completing the analysis of emerging concerns and reform potential, it may also be relevant to consider the effectiveness of policy and monitoring processes for the consideration of reform progress and for developing proposals for new national reform measures that might be implemented within COAG's reform agenda.

3.2 The *direct* impacts of reform

Reforms delivered under the three reform streams will manifest themselves in different ways. For some reforms, the main influence will be through economic impacts; for others it will be through social and environmental impacts.

Economic impacts

The economic impacts of reform, in terms of changes in the productive capacity and size of the economy and per capita income growth, arise through changes in productivity, prices, workforce participation and population.

Reforms in the competition and regulatory reform stream can be expected to directly affect the costs and competitiveness of businesses. For instance, reducing the compliance burdens on business, such as through harmonised regulations, is likely to reduce the ‘red tape’ costs for multi-state firms. But for those businesses that operate within a single jurisdiction, the impacts may vary depending on changes to the requirements imposed. For all firms, there are likely to be some transitional costs in shifting to the new system.

Under the COAG reforms, economic changes may also arise indirectly from changes to social and environmental states and the capacity of individuals to contribute to productive activity. For instance, education reforms, such as initiatives to improve student literacy and numeracy, are likely to have a range of impacts over time. Initially, there could be additional choices available to individuals for further education. Changes in educational attainment levels could, in turn, be expected to improve employment opportunities, and ultimately influence productivity and workforce participation rates. Similarly, health reforms can improve workforce productivity and participation, along with life expectancy.

Reforms directed at environmental objectives can also affect productive activity and measured income. For example, environmental reforms may influence the availability and price of environmental services used in production, including energy and mineral resources and water supplies.

Social and environmental impacts

COAG reforms, particularly in the human capital and environment streams, have also been designed to affect individual capacities and capabilities, and environmental outcomes. Health reforms, for example, are intended to have direct social impacts in terms of individuals’ health and quality of life.

In addition, economic impacts can have flow-on social and environmental effects. Policies that have positive economic impacts on households, for example, usually contribute to improved living standards. In this regard, improving the economic opportunities and labour force outcomes for people facing disadvantage is a key avenue for achieving the objectives of social inclusion and closing the gap on Indigenous disadvantage.

Because the achievement of social and environmental outcomes entails budgetary and resource costs, it will be important to gauge the links between government and private expenditures, and the social and environmental outcomes. More broadly, it will be important to gauge the effects of both changes spending priorities and costs, and reform outcomes, on the overall level and distribution of economic activity.

Fiscal impacts

Although the costs of a reform are part of the economic effects, the composition of spending and fiscal impacts could also affect outcomes. Analysis of the fiscal costs of reform, therefore, could be important in determining the nature of impacts, and the economy-wide, regional and distributional effects of change, and the time scale over which they occur.

The likely impact of changes in government expenditures may also affect how governments fund prospective changes. Fiscal rules can create constraints to service delivery — for instance, if governments commit to limits on expenditure or budget neutrality then the fiscal impacts of policies may impact on the mix of policies that governments are willing or able to undertake. Consideration of such feedback effects are important in an economy-wide analysis.

3.3 The *economy-wide* impacts of reform

The direct effects of reforms will in turn generate a number of indirect impacts on the economy, society and the environment. Taken together, these are referred to as the economy-wide impacts of reform.

Complicating the analysis in many cases, especially for reforms which play out over long timeframes, is the potential interaction of the reform with a changing external environment. In addition, all changes resulting from reform need to be measured against what would have happened in the absence of the reform. The Commission's approach to each of these issues is discussed below.

The 'economy-wide approach'

To assess the economy-wide impacts of reform it is necessary to examine changes in resource use by different sectors and groups within the economy. These changes and their effects will depend on, amongst other factors, changes in relative prices, effects on the terms of trade and the removal (or creation) of economic inefficiencies. Computable general equilibrium models are designed to trace the economy-wide effects of economic impacts (chapter 4).

There will also be some wider social and environmental impacts that, while not necessarily quantifiable in an economic sense, will be considered in conjunction with the results of economic modelling. These include analyses of household income distribution and resource use/depletion effects. Some approaches to assess these issues are also discussed in chapter 4.

Finally, reforms can also lead to ‘dynamic’ incentives for ongoing productivity gains, and alter incentives for investment. Reforms may also have impacts on the institutional environment in which production and investment decisions are made.

Evaluating reform in the context of ongoing change — dynamic interactions

Given potentially long timeframes for both implementation and the occurrence of impacts, there are likely to be interactions between the reforms and other influences in the economy, environment and society more generally. For example, the magnitude of the impacts is likely to be affected by the size of the target activities or population groups, which may change over time and influence the ultimate impacts of the policies. This is particularly pertinent in the areas of education, health and environment, given the lags involved. To examine the economy-wide implications of these impacts, a dynamic modelling approach (box 3.3) is desirable.

The ‘reference case’

In order to provide a point against which to assess the impacts of a policy change, a ‘reference case’ is needed. The reference case in a dynamic framework represents a projection of the path of the economy over time in the absence of reform, reflecting assumptions about the impacts of existing policy settings and the evolution of key macroeconomic variables.

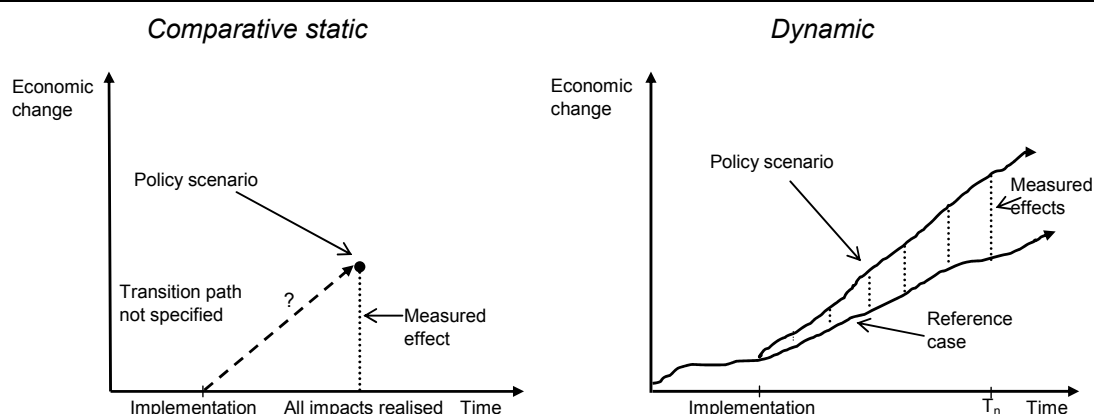
Reference cases in modelling are generally based on standard assumptions about changes in population, terms of trade, technology, productivity and consumer tastes. In addition, for particular applications, attention may be given to the development of the aspects of the reference case that may not be material to other applications. For example, reforms that increase the rate of school retention need to be assessed against the changes in school retention that would have occurred anyway. In this case, special attention would be given to model assumptions relating to progression from school to work. Modelling carbon pollution reduction policies would require special attention to model data and assumptions relating to energy use

A common reference case would typically be adopted to assess different reforms within each full report. Using such an approach, the projected impacts of reforms considered would be reported on a comparable basis. Where relevant, the Commission would report estimates of how the implementation of reforms in one stream (such as, education and training) may affect the projected impacts of another (such as, competition and regulation).

Box 3.3 Comparative static and dynamic approaches to assessing economy-wide impacts

The Commission used a ‘comparative static’ approach to quantify the potential economy-wide benefits of National Competition Policy (IC 1995, PC 1999 and PC 2005) and more recently in its assessment of the National Reform Agenda (PC 2006). Under a comparative static approach, the policy change is measured against the representation of the economy in a benchmark period. It compares the economy pre and post full adjustment to the policy change. There is only limited scope to take into account changes in the demographic and economic structure of the economy that may affect the cost of implementation or the nature or level of benefits, or analyse the transition path between the initial state at implementation and the final outcome after all impacts have been realised (left panel).

Economy-wide modelling approaches



The comparative static approach is most useful when the structure of the economy in the reference period is unlikely to change significantly over the reform period for reasons other than the policy in question. This approach does not trace out a transition path or take into account significant changes in the structure or level of activity that may be important in compounding or dampening the impacts of some reforms (particularly those involving long gestation or implementation periods).

Under the dynamic approach, policy scenarios incorporating shocks that represent the impacts of reform are compared with a projected reference case. The differences between the policy scenario and reference case represent the effects of the reform over time (right panel).

The dynamic approach provides a means of taking into account possible changes in the structure of the economy and the interaction of such changes with the effect of reform. It is more useful in analysing the effect of impacts of long-term policies against informed assessments of the economy in the period when the impacts of reform are likely to emerge.

Reference cases applied in successive Commission studies would be updated to take into account new information about the underlying developments in the economy. This would include where new information is available about the projected effects of national reform. Because, for any one study, there will be information gaps and uncertainties surrounding the progression of the economy and the impacts of reform, the Commission will need to adopt some simplifying assumptions in order to meet its reporting requirements. These assumptions would be reported and where appropriate, tests would be undertaken using alternative assumptions to illustrate the sensitivity of results.

3.4 Reporting the impacts and benefits

In broad terms, the impacts of COAG reforms that directly boost productivity, workforce participation and mobility would be largely reflected in measures of income generated from productive activity. These effects, and the underlying activities, are typically captured by ‘market’ measures and can be reported in dollar values.

For those reforms which have flow-on economic effects, such as in health and education, the impacts might only be partially captured by market measures — such as increases in workforce productivity and participation due to changes in education or health status. In these instances, and where all outcomes from reform are not captured by market measures, other indicators of reform outcomes may be used to complement the assessment of economic impacts. For example, Quality Adjusted Life Years may be employed to report on how the health status of individuals may change through health and other reforms in the human capital stream. For reforms with non-market outcomes, information on government outlays involved in achieving such outcomes should nevertheless be available.

Subject to directions on reporting priorities from government, the Commission would aim to report in a consistent manner across reform streams, on:

- the scope and coverage of the reforms in the priority group (chapter 2), and the intended outcomes in relation to COAG’s reform challenges and social and environmental goals;
- the direct economic and other impacts of reforms and the time-scale over which they are likely to accrue;
- for economic impacts, the implied reform scenarios (model shocks) in terms of economic and demographic variables such as productivity, prices, workforce participation and population to support the economy-wide analysis of the impacts of reform;

-
- economy-wide analysis of the national impacts of reform, as measured by variables such as gross state product (GSP), gross domestic production (GDP) and national income and the time scale over which these impacts are likely to accrue;
 - the projected regional and distributional effects associated with such changes including, where appropriate, impacts on socio-economic groups, household types and industries;
 - assumptions and limitations of the Commission's quantitative and qualitative analysis and assessments of the sensitivity of findings to alternative assumptions and views; and
 - its overall assessment of the efficiency and effectiveness of the reforms, to identify any emerging concerns about the potential impacts of reform and whether Australia's reform potential is being realised.

4 Implementing the framework

Key points

- In many cases, the Commission will need to adopt a consultative approach, akin to that for its commissioned studies, to assess the impacts of COAG reforms.
 - This will enable it to address the complexity of the agenda and the associated impacts, gather information that would otherwise not be available and validate its findings.
- The information available to assess the direct impacts will depend on policy development and implementation.
 - For realised reforms, data on actual outcomes should be available.
 - For prospective and potential reforms, the main existing sources of information will be the evidence base underpinning reform.
- The economy-wide impacts of those reforms with measurable effects will be estimated using the MMRF computable general equilibrium model.
 - A dynamic approach will be adopted, with the nature and timing of the impacts of reforms modelled as deviations from a ‘reference case’.
- It will be possible to gauge the impacts for some reforms with more confidence than others. Confidence in the estimates will be greater to the extent that:
 - more of the impacts are realised, rather than being prospective or potential;
 - there is greater confidence in projections of the ‘without reform’ scenario;
 - the modelling can capture the interactions of external changes with the reforms; and
 - information on the links between reform inputs, outputs and outcomes and the economic, social and environmental change becomes available.
- For quantitative estimates, sensitivity analysis will be used where appropriate.
- Qualitative assessments against reform objectives will need to be conducted for those reforms, largely within the human capital and environment streams, without measurable impacts.

The extent to which the economy-wide impacts of a reform can be identified and measured will vary. Reforms that affect changes in economic activity will generally be easier to assess, and with more confidence, than those that seek to contribute to social or environmental goals. The scope and complexity of the task of assessing the

impacts and benefits of the COAG reform agenda has important implications for the processes used, and methods of analysis employed, in implementing the assessment framework.

Section 4.1 sets out the study processes for gathering information about likely and observed reform impacts, along with the need to group some reforms for assessment. Section 4.2 discusses the nature of evidence needed to assess the direct impacts and the economy-wide effects. Sections 4.3 and 4.4 examine ways to estimate the direct and economy-wide effects, respectively. Section 4.5 reports the intended approach to presenting the economy-wide results.

4.1 Study processes

This section discusses the approach the Commission intends to take in its reporting. It commences by considering the use of consultative processes that will be needed to gather evidence, and then considers the need to ‘group’ some reforms to provide a meaningful level of analysis.

The studies will require consultative approaches

Given the breadth of the reform agenda, the time-scale over which reforms will be implemented, and the range of possible effects, judgements will be required in assessing reform impacts. These will need to take into account uncertainties surrounding the effects of reforms and their impact on living standards. Data will be incomplete or absent in some areas. The Commission will accordingly need to conduct consultative investigations akin to the approach followed in its commissioned projects (box 4.1). To support its investigations, the Commission would also undertake quantitative and qualitative analysis of the impacts of reform and draw on other available research.

The ‘inquiry-like’ investigations will be aimed at eliciting the views of relevant experts, administering bodies and the wider public. They will provide a forum for the recording and consideration of different viewpoints on the impacts of reform. They would also allow any concerns about those impacts, and whether Australia’s reform potential is being achieved, to be considered.

Apart from wider public consultations, the Commission would consult with the COAG Reform Council, as well as relevant Ministerial Councils, COAG Working Groups, and departments in each jurisdiction.

Box 4.1 The Commission's consultative approach to its inquiries and studies

Inquiries typically concern major policy issues that have a significant impact on different groups within society, or are otherwise contentious or complex to assess. Public inquiries are widely advertised and provide an opportunity for different points of view to be heard and considered. The Commission's thinking and possible recommendations are exposed through a draft report which is made publicly available.

The Commission is active in identifying those potentially interested in an inquiry and all individuals and organisations with an interest can participate. They may do so through the Commission's visit program, through written submissions and through attendance at hearings or other forums. Submissions and transcripts of public hearings are posted on the Commission's website.

For the purpose of the evaluation reports, it is envisaged that the Commission will draw on some features of the inquiry process, such as submissions and visits, in order to elicit views about the impact of COAG reforms. Such an approach may also enable the Commission to identify the potential for further gains within existing or new reform areas.

Grouping and reporting of reforms

Within the three broad streams identified in chapter 2 (and the supporting annex), there is a large range of policy initiatives. Differences also exist in the nature and magnitude of the likely impacts, the time scale over which benefits are likely to accrue and the relationships between measures. As far as possible, the Commission would take known reform characteristics and differences into account in grouping reforms when assessing and reporting on reform impacts.

While it may be possible to assess and report on some reforms on a stand-alone basis, particularly where impacts are likely to be nationally significant and interactions among reforms are not great, it is likely that reforms in many cases will be grouped.

In particular, for reforms that form part of a suite of policies with overlapping effects, it would generally be more meaningful to gather evidence and report on the combined impacts. In the education and training stream, for instance, reforms span early childhood activities, primary and secondary education and post school training activities. Such reforms are likely to be assessed and reported on as a group, so that consideration can be given to the complementarities that exist between measures.

For reforms of a more stand-alone nature, such as business regulation reform, evidence could be gathered and the impacts reported at a finer level. In many cases,

the individual impacts are unlikely to be large in a national context, but in combination with other measures in the reform stream, may afford substantial benefits. In such instances, it would again be useful to report on the aggregate impacts.

For some reforms, the focus of reporting may be reported at a regional level. Reforms to water markets, for example, will have impacts that differ materially between regions because of differences in, among others things, industrial make-up and demographics. In such instances, reporting on reforms at a regional level will highlight differences in the extent of structural adjustment that may occur as a result of the reforms.

Policy actions outside the COAG reform agenda, which have similar objectives and intended impacts, may also be grouped with COAG reforms on a case-by-case basis. This would be particularly relevant where the separate effects cannot be easily isolated.

4.2 The nature of evidence on reform impacts

As noted in chapter 3, the nature of the available evidence on reform impacts will vary depending on the policy development stage reached, implementation completed and timeframe over which benefits are likely to accrue. Where direct impacts are:

- *realised* — they would be determined from available quantitative and qualitative evidence on actual changes in productivity, prices, workforce participation, population and other social or environmental outcomes, and the implementation costs of achieving those outcomes.
- *prospective* — they would be determined from anticipated changes in productivity, prices, workforce participation, population and other social or environmental outcomes, making use of analysis of analogous reforms, consultations, benchmarks and other suitable evidence (for example, differences in participation rates between individuals with chronic disease and those without).
- *potential* — they would be determined from possible changes in productivity, prices, workforce participation, population and other social or environmental outcomes by making use of ‘outer-envelope’ estimates, such as through reference to best-practice approaches, peer-group comparisons and other benchmark studies.

The nature of the available evidence will also guide the type of assessment conducted. Assessments can be characterised in two broad ways:

- *ex post* analysis — where the policy-influenced outcome is observed and an attempt is made to determine how this would have differed from the no-policy case (the counterfactual or reference case); and
- *ex ante* analysis — where the ‘no-policy case’ is observed (or depicted) and an attempt is made to determine how this would have differed if the reform policy had been in place (the counterfactual or reference case) (Smith and Sweetman 2009).

In practice, however, the assessment of reforms will be conditioned by the availability of evidence. The Commission’s experience suggests that in many areas there are information gaps, particularly, but not only, in the social and environmental areas. In human capital areas such as Indigenous disadvantage, there remains significant scope to improve data collection (SCRGSP 2009). In the environment area, recent proposals by the Australian Bureau of Statistics to develop a System of Environmental and Economic Accounts (with the Bureau of Meteorology providing the biophysical data) could ultimately improve the availability of consistent information on environmental stocks and flows across jurisdictions. However, even were this initiative to proceed, it will still be some time before useful data are available.

4.3 Estimating direct impacts

There is a range of approaches that can be used to estimate the direct effects of reforms. These include, amongst others, accounting approaches and those that seek to establish cause and effect between policy actions and outcomes. In estimating the direct effects, consideration also needs to be given to the counterfactual, and uncertainty.

Accounting approaches

Accounting style measures usually focus on inputs and outputs. For realised impacts, assessments of actual establishment and on-going administration costs could be conducted. In cases where reforms have not yet been implemented, estimation of implementation costs could be considered. Such estimates would be based on a range of approaches, including consultations and comparisons with analysis of the realised costs from similar reforms.

Quantification of the costs associated with reform inputs can be used in the analysis of reforms in a number of ways. One focus of analysis may be the efficiency with which programs are provided or government services are delivered. Comparison with benchmarks could be used to highlight whether reforms are being implemented efficiently, or if there is scope to improve delivery of reforms. The quantified costs will also be used to inform modelling of the economy-wide effects of reform.

‘Cause and effect’ analysis

Cause and effect analysis involves analysis of the array of impacts, potentially positive and negative, that arise as a result of a reform. There are a number of different forms of such analysis, including:

- econometric estimates of observed changes that have occurred as a result of these or similar reforms, including in other Australian jurisdictions or comparable economies;
- comparative studies or trials of the experiences of individuals and groups targeted in the reforms; and
- partial equilibrium modelling of causal links between reform activities, outputs and outcomes, and where possible, the economic effects of change.

In assessing and reporting on the contribution of reforms, the focus of the Commission’s analysis will primarily be on quantifiable impacts on productivity, prices, workforce participation, and population — to gauge economic impacts.

For some reforms, however, impacts cannot be readily measured in an economic sense, such as changes in health or education outcomes. In these cases, the direct effects of reform on human capabilities would need to be analysed to gauge the likely conditional changes in economic variables. To achieve this, the analytical processes will need to draw out the economic effects from observable social or environmental changes. For instance, improved health or education levels, which may initially be measured in terms of changes in the incidence of health conditions or school retention rates, would need to be traced through in terms of their impacts on workforce productivity and participation.

For *realised* impacts, analysis will be based, as far as practicable, on information relating to observed changes in economic variables. The availability of relevant data, however, is likely to be mixed. For some reforms, relevant economic variables may be readily available from sources such as the Australian Bureau of Statistics. For others, individual economic or activity information may be required which could be drawn from sources such as the Household, Income and Labour Dynamics

in Australia (HILDA) survey, or data held by government or industry. Where suitable cross-sectional or time series data exist, econometric analysis could be useful to draw inferences about likely causal links between policy changes and the changes in variables of interest (after controlling for other influential factors, such as socio-economic and other household characteristics).

For *prospective* or *potential* reforms, where actual outcomes and effects are yet to occur, judgements will need to be made. Inquiry-like investigations will be particularly useful for informing such judgements about both the nature of changes and the relevant time scales over which effects may surface. Sensitivity analyses will also be important.

The importance of the ‘business-as-usual’ case (the counterfactual)

The direct impacts of reform will be estimated by tracing through how the inputs and outputs result in measurable outcomes, and how these flow through to affect economic variables. These reform outcomes and economic effects are estimated relative to the counterfactual. The difference between the ‘with reform’ scenarios and the ‘without reform’ scenario (the counterfactual) provides the measure of the magnitude of the impacts of reform.

In some instances, defining the counterfactual will be challenging, given the nature of the underlying policy settings. For example, a significant component of the COAG reform agenda has been the change to Commonwealth-State financial relations as outlined in the *Intergovernmental Agreement on Federal Financial Relations* (chapter 2). These changes alone aim to improve the flexibility of States in delivering key services under National Agreements. Such changes could flow through to influence outcomes targeted by separate national reform initiatives (box 4.2).

Uncertainty and risk

Uncertainties surrounding the effects of reform complicate the assessment of the prospective and potential impacts. These may arise where reforms seek to ameliorate outcomes of a future event which might not arise or where the variability of economic and demographic change influences the ultimate outcome of reforms.

Box 4.2 Possible influences of COAG financial reforms on other reform impacts

Changes include the introduction of a new type of Australian Government payment, National Partnership Payments, rationalising the number of Special Purpose Payments from over 90 to five, and providing the States with greater autonomy in how Special Purpose Payments can be spent.

In many respects, the programs delivered under the new National Agreements and funded through the revised Special Purpose Payments can be viewed as 'business-as-usual' activities for COAG. However, there is potential for these changes to influence the direct impacts derived from other policy initiatives delivered under the agenda.

Possible influences arise from:

- increased flexibility for the jurisdictions in the type of services delivered;
- changes in the allocation of resources across the services provided; and/or
- changes in the administrative costs associated with greater flexibility and outcome level reporting.

For example, great uncertainties exist for policies that target climate change. Assessment of the impacts of such policies would need to examine the prospective effects of policies at a future point in time — possibly 50 or more years hence — but are contingent on the actions of other countries around the world. Over such a period, uncertainties also surround the path the economy would have taken in the absence of the policies (see, for example, Australian Government 2008b). Cost-effectiveness assessments are the only practicable course in these circumstances (see chapter 5).

Another issue arises where the direct impact of reform is subject to risk. In this case, it may be better to condition the estimates of the direct impacts to account for the probability that reform will deliver particular outcomes. In its assessment of the *Potential Benefits of the National Reform Agenda* (PC 2006), the Commission adopted this approach when assessing the potential benefits from health promotion and prevention reforms. Given the uncertainty over the potential effectiveness of a roll-out of several programs from clinical trials to national adoption, clinical results were conditioned by the likely compliance rates of those targeted.

4.4 Estimating economy-wide impacts

The economy-wide analysis would need to focus on the economic impacts of reform including, where possible, those associated with the effects of reform with

social and environmental objectives. This analysis will be conditioned by assessments of possible non-market effects stemming from reform.

To estimate the economy-wide impacts of reform, it is proposed to make use of computable general equilibrium (CGE) modelling. This will enable the Commission to report, on a consistent basis, on the impacts of reform on national output and income, as well as the regional and distributional effects. It could also enable the it to report fiscal impacts.

The modelling reference case

The reference case in a dynamic model represents a projection of the path of the economy over time. It reflects assumptions about the impact of existing policy settings and the evolution of key economic variables, and is typically based on the maintenance of existing trends.

Using past trends to determine the reference case, however, can create some additional complexities. Past trends embody the results of ongoing policy reforms over the period on which they are based. Thus, in maintaining these trends, there is an implicit assumption that past levels of ‘reform’ will continue. Where COAG reforms represent ongoing policy evolution, it can mean the impacts of reform are implicitly included in the reference case. To overcome this, where the effect can be determined and is significant, adjustments may be made to the reference case.

The differences between the policy scenario and reference case represent the projected effects of the reform over time. These can manifest themselves in a number of ways (box 4.3). Typically, the impact of reform would be gauged after sufficient time has elapsed for the full effects to have worked their way through the economy.

In developing the reference case, the Commission will make use of existing projections by Treasury for the Inter-Generational Report (Australian Government 2010a). This provides information on key economic drivers of productivity growth and workforce participation. Information on population projections will be drawn from the Commission’s own demographic model, and projections by the Australian Bureau of Statistics. The Commission intends to release an issues paper on the reference case during 2011.

Box 4.3 **Estimating deviations from the reference case**

In modelling the economic impact of reforms, the deviation from the reference case can take a number of forms.

- **Timing effects** — for some reforms, the effect will be to bring forward changes that would have occurred anyway. In these cases, the policy scenario would be represented as an initial deviation from the reference case. However, over time, the policy scenario would converge back towards the reference case, in which a more gradual achievement of effects advanced by the reform is reflected.
- **Level effects** — in this case, a reform would produce a change in the level of economic activity, but growth trends would remain largely unaffected. That is, the policy scenario would be represented as a deviation above (or below) the reference case, but then moves in parallel with the reference case over time.
- **Growth effects** — in some cases, reforms may affect the longer-term growth of the productiveness of the economy, resulting in a sustained change in growth rates, causing a continuing divergence between the level of activity in the reference case and that in the policy scenario.

The Commission's use of computable general equilibrium modelling

As noted, previous studies of the economy-wide impacts of national reforms by the Commission have made use of comparative static versions of the Monash Multi-Regional Forecasting (MMRF) model. For this study, a dynamic version will be used (box 4.4). This will enable projections to be provided on the impacts of reforms over the implementation and adjustment periods, and beyond.

The dynamic approach will also provide additional detail on the path of the benefits and costs of reform. In order to capture the different ways in which reform impacts arise — be they timing, level, growth, or some combination of these — the Commission intends to present the deviations of key variables (such as GDP, GSP and national income, amongst others) from the reference case. These could vary between reform streams and extend to between 20 and 30 years for human capital reforms and beyond for reforms within the environment stream. Such an approach will enable the time scale over which the impacts and benefits of reform accrue to be reported.

Box 4.4 The Monash Multi-Region Forecasting Model

The Monash Multi-Regional Forecasting (MMRF) model is a multi-regional general equilibrium model developed by the Centre of Policy Studies (CoPS) at Monash University. It models the States as separate regions, recognising:

- domestic producers classified by industry and domestic region;
- eight region-specific household sectors;
- an aggregate foreign purchaser of Australia's exports;
- eight State and Territory Governments; and
- the Australian Government.

The model contains explicit representations of intra-regional, inter-regional and international trade flows based on regional input-output data developed at CoPS. It also includes detailed data on government budgets (State and Commonwealth). Second round effects are determined on the basis of the model's input-output linkages, assumptions about the economic behaviour of firms and households, and resource constraints. Important elements of the theoretical structure of MMRF include:

- producers respond to changes in the competitiveness of Australian industry;
- demand for Australian exports responds to the export price of Australian products;
- producers alter their use of labour, produced capital and agricultural land in response to changes in the relative cost of these factors;
- households vary consumption of commodities in response to changes in household income and relative prices of goods consumed; and
- productivity improvements reduce resource costs.

The MMRF database is being updated by CoPS to the reference year 2005-06 and up-rated to 2009-10 to support the assessment of the impacts of COAG reforms.

Key outputs from the MMRF model include projected changes in:

- national and state outputs as measured by gross domestic and state products; and
- revenues and expenditures for States and for Australia.

In order to model the impacts of longer-term policies, such as those in the human capital area, the model has been adapted to make time explicit — that is, it is dynamic. In addition, a detailed demographic module has been incorporated into the model so that population can also be modelled explicitly.

The basic model is described in CoPS (2008).

The economic setting within the model

The Commission's quantitative assessments of the economy-wide implications of reform will focus on the changes in economic activity that occur once the direct

reform impacts have had time to work through the economy. Over the longer term, these represent the effects that are likely to occur after labour and capital markets have fully adjusted between industries and jurisdictions. The assumptions made in regard to the economic setting in which economy-wide reform impacts play out (the ‘closure’ assumptions) have important implications, therefore, for the projected economic and distributional impacts of reform.

Closure assumptions often relate to aspects of capital and employment (such as rates of return on capital and aggregate employment) but also relate to government expenditures and revenue raising and the treatment of fiscal balances.

The sources of revenue for the funding of reform initiatives has implications for costs and expenditures associated with the reforms. If, for example, it is assumed that over the projection period (and in the longer run) government outlays or reforms merely represent changes in spending priorities, there would be no change in the required tax take, in contrast to new spending initiatives.

In the first case, one form of government expenditure would substitute for another, whereas in the second, the implied increase in aggregate government expenditure would be supported by additional taxation revenue. Under both scenarios, however, opportunity costs of government spending would arise — with any given expenditure representing a choice to spend in one area instead of another. In the first case, the opportunity cost would be an assumed reduction in outlays in a non-reform area, while in the second, it would be an assumed reduction in income and private spending opportunities for businesses and consumers.

For the purpose of the Commission’s full reports, it is envisaged that the closure adopted in the policy scenario will reflect the assumption that governments need to fund new outlays through additional tax revenues. This would make explicit any potential ‘efficiency’ loss resulting from any increased government spending.

Unless asked to report on the fiscal impacts of reform, the Commission would also adopt the assumption that government consumption as a share of real GDP is maintained over time.

For particular policy scenarios, however, the nature of the spending arrangements may differ. In such circumstances, the closure assumptions surrounding government expenditures and revenue raising might be altered to better match the details of the policy implementation and reporting priorities.

Sensitivity analysis

Sensitivity analysis is widely used in general equilibrium policy modelling to explore, quantitatively, the implications of different data and modelling assumptions, and alternative policy scenarios. At a number of points in this chapter, the Commission has drawn attention to the possibility of undertaking sensitivity tests to provide further insights into the possible impacts of reform and the time scale over which they will accrue. While it is possible to flag some areas for future attention, it is not possible in advance to specify all of these.

In broad terms, the Commission proposes to undertake sensitivity tests where there is uncertainty about the nature or magnitude of the estimated impacts, or where there is policy interest in alternative reform options. Typically these would seek to place quantitative bounds around choices of data assumption (such as an upper or lower bound to business or household responses) or policy choices (such as fiscal policy assumptions or cautionary approaches to environmental policy).

4.5 Reporting the economy-wide results

Clearly, many factors will need to be taken into account in reporting on the effects of reform and reform potential. Moreover, both economic and other information will be needed to gauge the full implications in terms of COAG's reform 'challenges and goals'.

Reflecting the requirement that the Commission report on the economic effects of reform *per se* and the longer-term focus of the agenda, it is proposed that reporting would:

- abstract from short-term variation in aggregate activity and employment, to avoid confounding results with macroeconomic fluctuations and changes in budget priorities;
- adopt a stylised approach in the reference case based on, where practicable, official projections of longer-term trends;
- report key economic aggregates in per capita terms, to avoid confounding results with scale effects that would arise when examining effects over longer time frames; and
- undertake and report sensitivity tests based on alternative modelling and policy assumptions.

5 Applying the framework to the reform streams

Key Points

- The impacts of reforms in the competition and regulation stream are largely economic in nature and should play out over relatively short timeframes.
 - As implementation of a number of the reforms is progressing, assessments should be able to report on impacts being realised.
- Reforms in the human capital stream target the condition and capability of individuals, and are likely to involve both economic and social impacts.
 - The economic effects include increased productivity and workforce participation.
 - As the effects of new policies are likely to emerge over a long timeframe, assessments would be largely prospective.
- In the environment stream, reforms target the condition of the environment and the use of environmental services. Many of the impacts would only be partially captured by markets and there would likely be long lead times before their full realisation.
 - Much of the reform agenda in the environment stream is still being developed, limiting any assessment of realised or prospective impacts.
 - As reform impacts are often of a non-market nature, and significant uncertainties surround possible outcomes, some assessments will have to be limited to cost-effectiveness analysis.

This chapter looks at some of the main evaluation issues likely to be encountered in applying the analytical framework developed in chapters 3 and 4. The practical issues in implementing the evaluation framework, and gathering and interpreting evidence about reform impacts, differ between reform streams. Many of the issues canvassed in relation to specific examples apply more broadly throughout the three streams.

Section 5.1 outlines some of the key issues likely to be faced in any assessment of reforms within the competition and regulation stream. Section 5.2 provides a similar overview of potential issues in relation to reforms in the human capital stream, while section 5.3 looks at some of the main assessment issues likely to be associated with reforms in the environment stream.

5.1 The competition and regulation stream

Competition and regulatory reforms are aimed at promoting productivity and economic efficiency within product and factor markets — in production, consumption and investment. The reforms focus on addressing regulatory and other barriers that impede competition and economic efficiency and add to costs. Some may also lower the cost to government of business regulation. Reforms in this stream can be broadly regarded as being similar to those delivered under National Competition Policy.¹

Many reforms within this stream relating to business and transport regulation, and particularly those within the ambit of the *National Partnership Agreement to Deliver a Seamless National Economy*, are aimed at reducing the regulatory burden imposed on firms which operate in multiple jurisdictions. Such reforms are intended to provide business with greater flexibility in shifting resources between jurisdictions, provide smaller firms with greater access to interstate markets and ultimately reduce the cost of doing business. If effective, the reforms should lower the costs of goods and services to producers and consumers.

Within the competition and regulation stream, there are two broad areas of reform:

- business regulation and competition — including measures to create a seamless national economy through the establishment of national or harmonised regulatory systems, as well as implementation of previously agreed changes to energy and transport regulation, and establishment of more effective regulatory review and evaluation processes; and
- infrastructure — including efficient provision of major infrastructure, and the development of a national construction code and capital city strategic plans (see annex).

While the reforms in this stream are mainly concerned with reducing business costs, raising productivity and encouraging efficient investment, some of the reforms also have social or environmental objectives, including reforms aimed at workplace safety or consumer protection.

To assess the direct impacts of reform, the Commission would need to consider, among other things: the nature of the reforms; the activities, industries and individuals affected; available assessments of the likely magnitude of impacts; and

¹ Agreements associated with this stream also cover initiatives that support economic stimulus objectives in response to the global financial crisis. Such measures would not necessarily be evaluated as longer run reforms (see chapter 6).

the timescale over which they would occur. It would also draw on relevant benchmark studies to indicate reform potential.

Implementation of reforms in the competition and regulatory stream is advancing (box 5.1). In its 2008-09 report, the COAG Reform Council found that governments had made ‘good’ or ‘generally satisfactory’ progress against 2008-09 milestones across 18 of the 27 deregulation priorities set out in the *National Partnership Agreement to Deliver a Seamless National Economy* (CRC 2009c). Subsequently, it was indicated that reforms in 12 areas had been completed (Emerson 2010). The COAG Reform Council is scheduled to release its next report on progress in achieving the 2009-10 milestones in early 2011.

Box 5.1 Implementation of COAG priority areas for deregulation

The COAG Reform Council independently assesses progress in implementing the *National Partnership Agreement to Deliver a Seamless National Economy* (COAG 2008c). These assessments are done annually, with the next report due to be publicly released in early 2011.

In its 2008-09 report, the Council reported that governments had made ‘good or generally satisfactory’ progress against 2008-09 milestones in 18 of the 27 deregulation priorities (CRC 2009c). While not prejudging the findings of their report for 2009-10 which is due in early 2011, available information suggests that substantial progress has been made on the implementation of at least 12 priority areas:

- a national system of trade measurement;
- a national registration and accreditation scheme for the health professions;
- national regulation of trustee corporations;
- national regulation of mortgage broking;
- national regulation of margin lending;
- national regulation of non-deposit lending institutions;
- national regulation of credit providers;
- standard business reporting;
- environmental assessment and approval;
- the first stage of payroll tax harmonisation (except Western Australia);
- harmonised wine labelling requirements; and
- nationally consistent rail safety regulatory framework (Emerson 2010).

New Australian Consumer Law to implement the national consumer policy framework and product safety reforms will commence on 1 January 2011 (ACL 2010).

Sources: ACL (2010); CRC (2009c); and Emerson (2010).

Two of the eight competition priority areas identified in the *National Partnership Agreement to Deliver a Seamless National Economy* involved Productivity Commission reviews — into Australia’s anti-dumping and countervailing system and restrictions on the parallel importation of books — both of which have been completed. The government decided not to liberalise book imports and has yet to respond formally to the anti-dumping review.

Some progress has reportedly been made in several of the remaining competition priority areas:

- a review of demand-side participation in the national electricity market has been completed (AEMC 2010);
- amendments to the *Trade Practices Act 1974* have been completed as part of the National Access Regime; and
- the Australian Government has implemented a consistent set of competitive tendering regulations and an annual competitive neutrality matrix has been submitted to COAG (COAG 2010s).

The COAG Reform Council is due to report publicly in early 2011 on the progress of reform in these areas as well as progress on National Transport Reforms and the feasibility of different pricing options for heavy vehicles under the Road Reform Plan.

With the implementation of reforms in this stream progressing and with some of the effects likely to be felt over relatively short timeframes, some early assessments should be possible, informed by progress reporting by the COAG Reform Council.

The COAG Reform Council has not been asked to report on progress under the *National Partnership Agreement on the National Building and Jobs Plan*. Information to support any assessment of reform impacts in this area would be drawn from other sources. To date, COAG has asked Infrastructure Australia to conduct a national infrastructure audit and to identify infrastructure priority areas, both of which have been submitted to COAG for consideration (see annex).

Some issues

The effects of regulation can vary

The nature of the impacts of regulatory reform will depend on what effects the regulation had on businesses in the first place. If the regulation required businesses to devote time, effort and resources to compliance, changing such regulations is

likely to have the opposite effect; that is, it should reduce the cost of doing business and hence increase efficiency. If on the other hand, the regulation reduced competition in a given market, regulatory reform may encourage new entrants, efficient investment and innovation. Reduced business costs and improved productivity resulting from reform would yield lower prices for businesses and consumers in the longer term. Sometimes, however, regulation can have adverse unforeseen and unintended effects (box 5.2).

Box 5.2 Impacts of regulatory barriers in energy markets

Retail electricity price caps were introduced in some States to protect consumers from high prices that may arise through retailers abusing market power during the transition from government-owned monopoly retail providers to a 'competitive' market. The presence of a price cap may, under certain circumstances, affect competition in the retail market and mean that the price charged to customers may not reflect the underlying efficient cost of electricity.

The Australian Energy Market Commission (AEMC) found that overly stringent retail price caps in Victoria and South Australia prevented retail prices from rising with wholesale electricity costs, forcing some retailers to leave the market, and reduced competition by discouraging potential entrants (AEMC 2008a, 2008b).

Under the Australian Energy Market Agreement, the States have committed to developing effective competition (contestability) in retail energy markets. Where effective competition can be demonstrated, the States have agreed to phase out retail price regulation for electricity and natural gas (Conlon 2009).

Sources: AEMC (2008a, 2008b); and Conlon (2009).

As well as affecting the regulated activity, regulatory reform can have much broader impacts on the allocation of resources in the economy — by altering the relative returns from different activities, and the consequential re-allocation of labour, capital and other resources.

In undertaking its assessments of the impacts of reforms directed at changing the competitive environment in which firms operate, the Commission will be required to determine the nature of the impediment being addressed and its likely effects. The Commission will make judgements on a case-by-case basis, drawing on available studies as well as its own research. Account will need to be taken of jurisdictional differences, along with variations in the industrial structure of regions.

Impacts of nationally coordinated approaches may vary

As noted, some of the regulatory reforms seek to move towards a nationally coordinated approach to regulating activities, rather than the existing State-based approaches.

Different regulatory settings may:

- create additional costs for businesses that operate in multiple jurisdictions; and
- create differences in the regulatory burden between jurisdictions for regulations seeking to achieve the same outcome.

Labour mobility may also be impeded. For example, a national accreditation or registration process can make it easier for people to take advantage of employment opportunities in other States.

Differences in firm and industry make-up and in the regulatory starting points across States mean that the impacts on business costs, labour mobility and productivity will vary between jurisdictions. Such differences would need to be recognised, and where judged significant, included in the reform scenarios and associated estimates of the realised and prospective impacts for States or regions. Notwithstanding possible regional differences, simplifying the analysis of some regulatory changes to a national perspective may not significantly affect the results.

Some regulatory changes target potential future problems

Some reforms are aimed at reducing the risk of adverse outcomes in the future. One example in this stream is the regulatory ‘gatekeeper’ function that each jurisdiction has agreed to establish (see annex). Such arrangements are intended to help ensure that the impacts of regulatory changes are made transparent to decision makers and the public — and that new or changed regulations do not unduly raise the compliance burden of regulation and industry costs.

One difficulty of analysing the impacts of initiatives that seek to avoid or mitigate future problems is establishing the counterfactual — the effects of regulations that would have been introduced in the absence of the regulatory gatekeeper functions. Another difficulty is in determining whether regulatory review procedures in place are effectively avoiding unduly restrictive or costly regulation.

Some regulatory changes may have social implications that need to be considered

Competition and regulatory reforms can also have a range of social impacts that are not fully captured within economic measures. This is particularly the case for reforms that impact on consumers' ability to operate confidently in markets. In its *Review of Australia's Consumer Policy Framework* (PC 2008), the Commission undertook an assessment of the net benefits from implementing its recommended reforms. In assessing consumer detriment, the Commission included a range of more tangible impacts such as repair and replacement costs incurred by consumers, costs incurred in following up problems, as well as the time taken to rectify problems. At least some of these costs can be observed in the market through reduced expenditure on other goods and services. In its review, the Commission also considered a number of intangible impacts, including the distress suffered by consumers who experience problems (PC 2008).

Another area where potential social impacts and additional costs to households and governments may need to be considered is occupational health and safety reform. In addition to the economic impacts on business, work-related injury and illness also have impacts on individuals, their families and the wider community. Workers bear much of the personal cost of workplace injury and illness (PC 2010). But there are also significant costs and expenses for government (and taxpayers), in terms of healthcare costs, social welfare programs and monitoring and enforcement activities. Assessments relating to impacts will require judgements based on qualitative and quantitative information, some of which may not be comparable.

5.2 The human capital stream

The objectives of this reform stream are to lift productivity, raise workforce participation (above levels that would otherwise be achieved) and to promote COAG's broader goals of social inclusion and closing the gap on Indigenous disadvantage.

It comprises four reform areas: education and training (referred to by COAG as the 'Productivity Agenda'); health, ageing and disability; housing; and Indigenous reforms. Implementation of some of the education-related reforms is in progress (box 5.3). The COAG Reform Council is due to report on the implementation progress of education and training and health reform, as well as progress with the *National Affordable Housing Agreement* and the *National Indigenous Reform Agreement*, during 2011.

Box 5.3 Implementation of COAG education-related initiatives

The COAG Reform Council's report — *COAG Reform Agenda: Report on Progress 2010* (CRC 2010e) — provided an update on the education-related reforms. Progress at that time included:

- National curriculum (*National Education Agreement*)
 - A draft national curriculum for senior secondary years was released on 14 May 2010.
- National Action Plan for Literacy and Numeracy (*National Partnership Agreement on Literacy and Numeracy*)
 - Implementation Plans for the State and Territories have been developed. 30 pilot programs on literacy and numeracy are in place and scheduled to be completed by the end of 2010.
- Evidence-based teaching (*National Partnership Agreement on Literacy and Numeracy*)
 - Implementation Plans have been developed.
- School leadership (*National Partnership Agreement on Literacy and Numeracy*)
 - State and Territory Implementation Plans have been developed.
- National Quality Framework for early childhood education and care (*National Partnership Agreement on the National Quality Agenda for Early Childhood Education and Care*)
 - Implementation of the new system was to begin from 1 July 2010 with full implementation by 1 January 2012. Field testing of an assessment and ratings process took place during June 2010. Provisional assessment and ratings commenced in July 2010.
- Universal access to early childhood education (*National Partnership Agreement on Early Childhood Education*)
 - School level plans are being developed and will be published in line with existing school planning processes.
- National Teacher Professional Standards Framework (*National Partnership Agreement on Improving Teacher Quality*)
 - Draft National Professional Standards have been developed and released for consultation.
- National framework for teacher professional learning and national consistency in pre-service teacher education course achievement (*National Partnership Agreement on Improving Teacher Quality*)
 - State Implementation Plans have been developed.

Source: CRC (2010e).

The terms of reference require the Commission to focus on the economic impacts of reforms. Many of these reforms do not directly target economic objectives, such as increased workforce participation or productivity (a notable exception being in the education and training area). Nevertheless, to the extent that they affect the capabilities of individuals and involve initial and ongoing costs, the reforms are also likely to have economic impacts.

The Commission's assessment would need to consider the nature of the reforms and the often lengthy timeframes over which impacts are likely to flow through to target populations.

Some issues

The impacts of certain reforms will take time

The impacts of many of the human capital reforms will take some time to occur once they have been implemented. A number of information sources could be used to evaluate the possible gestation periods, including:

- experience in the implementation of policies in other comparable jurisdictions or countries; and
- evidence from controlled trials or pilot tests — for example, randomised clinical trials of new products or procedures.

The assessment of the direct impacts of reforms with extended 'gestation periods', requires a parallel counterfactual. For example, reforms in the education and training area target pre-school and school-aged children, with the aim of better equipping them with skills that will see them stay at school longer, and thus improve their employment prospects. But ongoing social and economic changes over the intervening period may lead to progressively higher retention rates anyway and this would need to be taken into account in any assessment of the effects of education reforms.

Thus, to estimate the additional impacts of reforms, information on past trends and judgements about likely changes will be needed.

Changes in the size of the target population may be important

Many reforms in the human capital stream are directed at specific segments of the Australian population. For example, preventative health reforms are aimed at those

people who have, or are likely to develop, key risk factors for chronic disease such as obesity, drug use, smoking and alcohol consumption.

Given this focus, in order to assess the impacts of reform, projected changes in the size and location of those specific groups need to be considered. Such changes have the potential to alter the magnitude of the impacts, and whether or not the conditions are likely to prevail, for benefits to be achieved.

The effect of such factors is illustrated by the reforms under the *National Partnership Agreement on Preventative Health*. The agreement states that the reforms aim to ‘increase the proportion of children and adults at healthy body weight by 3 percentage points within ten years’. By doing so, the agreement seeks to prevent the onset of a number of chronic diseases related to obesity. However, in assessing the impacts of reform, it is important to determine the future proportion of the population that might otherwise be expected to be overweight or obese. If rates were projected to fall anyway, say as a result of existing awareness campaigns or lifestyle programs, the impact of reform could be less than the targeted three percentage points. If rates would otherwise have risen, the impact of meeting the target would be greater.

Where the assessment of initiatives requires an understanding of changes in the size of the target populations, the Commission will consult relevant experts to obtain information about possible trends in socio-economic conditions to inform judgements about the most appropriate counterfactual to use in its analysis. Where possible, the Commission will make use of estimates of changes in the size of the target population that are consistent with the population projections underpinning the modelling reference case.

The social impacts will be more important

As many of the reforms in the human capital stream are directed at the condition and capabilities of individuals, it is useful to examine, at least qualitatively, some of the possible changes in individuals’ quality of life. There are two types of measures:

- *objective measures*: descriptions of an individual’s ‘status’ based on recognised criteria; and
- *subjective measures*: what people report about their own conditions.

While there are numerous measures that might provide insight into quality of life, the choice of which ‘objective’ variables to examine is inevitably grounded in judgements about those factors considered important to measure and compare. The

Commission will consult widely in order to identify which measures should be adopted in the analysis and the key linkages involved.

The use of subjective measures is also not straightforward. For instance, some subjective measures used in economic analysis may have an objective counterpart (for example, expected and actual income), whereas some subjective social measures, such as ‘life satisfaction’, do not. Nonetheless, these measures can be informative — for example, those workers who report poor health are generally more likely to leave the workforce than those reporting good health (regardless of their actual health status). This may have implications for linking measures of health (whether perceived or actual) to workforce participation.

Notwithstanding the difficulties, it is still important to understand the contribution of policy initiatives to changes in these indicators. As with assessing the economic outcomes, issues of effectiveness need to be considered in evaluating social and environmental outcomes.

Despite their limitations, non-market measures can provide a useful basis to gauge the effectiveness of reforms in achieving social and environmental objectives that are not reflected in measures of economic activity. A number of possible indicators could be useful in such assessments including:

- performance reporting indicators — such as those used by the COAG Reform Council for reporting on progress in the implementation of COAG reforms, or those developed by the Steering Committee for the Review of Government Service Provision for reporting on the delivery of government services more generally;
- mortality and morbidity related indicators — such as disability-adjusted life years (DALYs) (Mathers, Vos and Stevenson 1999) or quality-adjusted life years (QALYs) in the area of health reforms;
- social disadvantage and related indicators — such as the Index of Relative Socio-Economic Disadvantage compiled by the ABS (ABS 2006); and
- broader progress indicators — such as the ‘Measures of Australia’s Progress’ indicators developed by the ABS to shed light on the question of whether or not the quality of life of Australians is improving (ABS 2010).

5.3 The environment stream

The environment stream covers reforms aimed at achieving COAG’s broader goal of enhancing environmental sustainability. Two reform areas currently come under the environment stream — water and climate change policy.

The water reforms are covered by two Intergovernmental Agreements:

- *Intergovernmental Agreement on a National Water Initiative*; and
- *Agreement on Murray-Darling Basin Reform*.

The overarching objective of the *Agreement on Murray-Darling Basin Reform* parallels that of the *National Water Initiative*, which is to:

... increase the productivity and efficiency of Australia's water use, to service rural and urban communities and to ensure the health of river and groundwater systems.
(COAG 2008h, p. 2)

Many of the reforms relating to environmental matters, including in the areas of water management and climate change, are either in their early stages of implementation or still evolving.

For example, in relation to water reforms, the Murray-Darling Basin Authority released the *Guide to the Proposed Basin Plan* on 8 October 2010 for community consultation and discussion and, on 14 October 2010, the Australian Government announced a Parliamentary inquiry into the Murray-Darling Basin Plan to focus on socio-economic impacts (Ludwig, Crean and Burke 2010). In the meantime, through the activities of the Commonwealth Environmental Water Holder, the Commonwealth is purchasing water entitlements from existing entitlement holders and delivering the associated water for environmental purposes to various sites across the Murray Darling Basin.

In the area of climate change policy, there are three COAG initiatives: the introduction of energy efficiency measures through the *National Partnership Agreement on Energy Efficiency*; the introduction of a national renewable energy target to increase the share of electricity in Australia generated from renewable sources to 20 per cent by 2020; and national principles for feed-in tariffs.

The direct impacts from environment stream reforms will need to be considered in terms of their economic and social effects, as well as the environmental impacts. For example, direct economic impacts can occur through changes to the availability and price of water and energy. The reforms may also have significant distributional effects, including for rural communities in the Murray-Darling Basin and energy users.

Some of the social and environmental impacts are likely to be captured by economic measures. For example, the direct impacts of Murray-Darling Basin reforms on irrigated agricultural production — particularly in the cotton, rice, dairy and horticulture industries — would have flow-on effects on economic activity and employment in other industries in the basin — such as in the wholesale and retail

trade, transport, finance and machinery repair industries. The resulting change in the distribution of income and employment between activities and regions would be accompanied by adjustment in rural and non-rural communities.

Some issues

Assessing the environmental impacts

The Murray-Darling Basin Authority (MDBA 2010) has identified a number of environmental impacts that the Murray-Darling Basin reforms are designed to achieve, ranging from the health of wetlands and floodplain forests through to the diversity of aquatic plant and animal communities. Many impacts of this nature are also likely to arise from the reforms undertaken through the *National Water Initiative*.

While some of the environmental impacts of the water reforms will be reflected, at least to some extent, in changes in market measures, others, such as the integrity of certain ecosystems, may not be captured by market measures. Such effects are inherently difficult to quantify in monetary terms. Various methods have been devised to estimate the market and non-market components of the value of ecosystem services (box 5.4).

If directed to assess the impacts of water reforms, the Commission would anticipate using a range of non-monetary quantitative measures, to complement its assessment of the economic impacts. For those impacts that are particularly difficult to measure, it is likely that qualitative assessments would also need to be made.

The Commission will need to draw on existing studies — such as the work of the Murray-Darling Basin Authority — to shed light on the nature and magnitude of the environmental benefits of the water reforms. While the Murray-Darling Basin Authority has previously commissioned work on valuing the environmental benefits, it notes that ‘at this stage, additional work is required to have sufficient confidence in the economic value that might be put on environmental health’ (MDBA 2010, p 94).

Box 5.4 **Valuing effects on ecosystems**

Ecosystem functions refer variously to the habitat, biological or system properties or processes of ecosystems. Ecosystem goods (such as food) and services (such as waste assimilation) represent the benefits human populations derive, directly or indirectly, from ecosystem functions. (These goods and services are often collectively referred to as ecosystem services.)

A range of valuation techniques is available to estimate the value of ecosystem services. These include stated preference techniques (surveys of people's willingness to pay) and revealed preference techniques, such as hedonic pricing.

However, there are many conceptual and empirical problems inherent in estimating the value of ecosystem services, with estimates often subject to large uncertainties and error margins. For example, current prices, which form the basis — either directly or indirectly — for many of the valuation estimates, may be distorted because they do not incorporate the value of some ecosystem services. Similarly, values based on individuals' willingness to pay can be inaccurate because, among other things, some individuals may base their preferences on incomplete or incorrect knowledge.

Stated-preference surveys are also vulnerable to framing bias, and the estimated 'shadow prices' may differ greatly from what people would actually be willing to pay.

Source: Costanza et al. (1997).

Social impacts will also need to be considered

Many of the water reforms are also likely to have some significant social impacts. As with the environmental impacts, assessing these would be a complex undertaking. There would also be a spatial dimension, with the nature and magnitude of impacts varying between regions and communities. For example, communities with a high level of dependence on lower-value irrigated agriculture may be more significantly affected by any imposition of particular diversion limits than communities supported by higher-value irrigated agriculture or more diversified economies.

Markets will capture some of these impacts — for example, changes in property prices and assessments of the regional and distributional effects of change will reflect some of the adjustment pressures associated with changes in land use and possible declines in economic activity in some areas. Inevitably, however, there will be some social impacts that will defy market valuation, such as effects on social and community networks in areas facing adjustment. Assessments of such implications would typically draw on social indicators of the impacts of economic change.

Addressing uncertainty and risk

Uncertainty and risk are likely to be central to any assessment of the impacts of COAG's environmental reforms. For example, any assessment of COAG's water reforms would need to recognise the often significant natural variability in rainfall, riverine flows and climate and their variability across regions and States.

Uncertainty and risk are clearly central considerations in assessing the effects of climate change policies. Indeed, this is more so than for water reforms. The environmental impacts of climate change policies depend on global actions, making the outcomes of domestic reforms even harder to assess. The Garnaut Report (Garnaut 2008) commented on the uncertainty surrounding many aspects of climate change, and the difficulties in assessing the economic benefits of policies intended to mitigate climate change (box 5.5).

Box 5.5 Risk and uncertainty and the assessment of climate change policy

Estimating the potential economic impacts of climate change requires that appropriate scientific and economic frameworks be combined. As noted by Garnaut, this is a complex undertaking in view of the uncertainty in many aspects of climate change science at the climate system, biophysical and impact assessment levels. These compounding sources of uncertainty mean that quantifying the economic impacts of both climate change and its mitigation is a difficult and, at times, speculative task.

Garnaut classified the benefits of climate change mitigation into four types, of which only one was assessable using standard economic modelling:

- currently measurable market impacts (for example, impacts on agriculture and on infrastructure; these effects are typically measured as an impact on GDP or consumption, with monetary values as the unit of measurement);
- market impacts not readily measurable (for example, the impact of climate change on the tourism industry; as with the first type of benefit, the estimation of these effects would be in monetary values of GDP or consumption);
- insurance value against high damages (some of the possible outcomes at the bad end of the probability distribution would be thought by many people to be catastrophic — this benefit comprises the 'insurance premium' the community may be prepared to pay to avoid a small probability of highly damaging or possibly catastrophic outcomes); and
- non-market impacts (for example, the impact on environmental amenity, such as impacts on the value that Australians place on the integrity of the Great Barrier Reef, which may be affected by anthropogenic climate change).

Source: Garnaut (2008).

Many of the uncertainties relevant to emissions trading and carbon pricing are also likely to be relevant to any assessment of energy efficiency initiatives or the National Renewable Energy Target scheme, should the Commission be asked to assess them.

Such national energy efficiency and renewable energy initiatives could be assessed separately in their own right or as part of the broader domestic policy response to climate change. As noted, a difficulty in assessing such initiatives would be identifying the environmental impacts from domestic policy responses in the context of policy responses of the world's major emitting economies — responses which are themselves evolving. The current state of play of such responses will be outlined in the Commission's study on *Emission Reduction Policies and Carbon Prices in Key Economies*. Even then, the environmental impacts are surrounded by considerable scientific uncertainty about the evolution of climate and anthropogenic influences on climate change.

Given such uncertainty about the magnitude of the impacts and benefits, the most viable approach may be to assess whether the policy response is cost effective in achieving the desired objectives. Cost-effectiveness analysis is widely used in such circumstances. It compares alternative policy measures on the basis of the ratio of their costs to a single quantified, but not monetised, effectiveness measure, such as reductions in carbon emissions.

6 Implications for the first report

The Commission's substantive reports on the impacts and benefits of the COAG reform agenda will have a number of significant differences relative to previous exercises:

- the reporting will potentially cover the impacts and benefits of existing reforms — those under way or in the pipeline — and further reform potential;
- implications of demographic and economic change for reforms with significant lead times will be analysed; and
- the reporting will not only evaluate the impacts on living standards through achieving higher productivity, increased workforce participation and mobility, but also provide some assessment of how reforms address the broader social and environmental goals.

This chapter outlines an approach that may be considered for setting reporting priorities over the first few reports, commencing December 2011, under the terms of reference (section 6.1). The chapter also considers specific aspects of the agenda that could be examined in greater depth by December 2011 and beyond (section 6.2).

6.1 Setting reporting priorities

The terms of reference require that each report cover 'reform developments, impacts and benefits in each COAG reform area'. The terms of reference also indicate that governments will 'provide directions concerning particular reporting priorities to be addressed'.

At this stage, some reform areas in the COAG agenda are being developed, restricting the scope for reporting on realised or prospective benefits (chapter 5). It would not be possible, therefore, to report in depth on the full impacts and benefits of all aspects of the reform agenda in the Commission's early reports. Nevertheless, for reforms where implementation is advanced, some meaningful reporting on the prospective benefits of reform is likely to be possible.

The first and subsequent reports would consider longer-term matters that primarily relate to the overarching objectives of the reform agenda. Matters that might be subject to assessment by the Commission could therefore be conceived as those that:

- are likely to have a material impact (that is, those of national significance or which are likely to have a significant impact on communities in more than one jurisdiction);
- represent material changes to current policy settings, that is, are not ‘business as usual’; and
- have a longer-term perspective.

This would exclude policies relating to local communities or spending priorities such as emergency management. Also, policies with a shorter-term focus intended to address economic fluctuations associated with the global financial crisis would be ruled out.

For the remaining reforms, while there would be a presumption that they would yield a net benefit to the community, the achievement of intended benefits and further reform potential would be matters for investigation.

6.2 Some possible priorities

The Commission proposes that reporting across the reform streams be implemented progressively. Early assessments would focus on reforms covered by the *Intergovernmental Agreement on Federal Financial Relations* — currently the main Intergovernmental Agreement governing the implementation of COAG reforms. Environmental and other matters outside this agreement considered by COAG (including water market reform) would be included in subsequent reports, depending on policy developments and guidance from government.

First report

Based on the above criteria, the Commission suggests that, for the first report, consideration be given to the inclusion of:

- areas of the competition and regulation stream likely to have realised or prospective impacts — for example, substantial progress has been made on the implementation of at least 12 deregulation priority areas (chapter 5); and

-
- an area of the human capital stream likely to have realised or prospective impacts — for example, currently a range of education and training reforms have been implemented or are at an advanced stage of development (chapter 5).

It is proposed that assessments of reform potential relating to these areas also be included in the analysis.

Taking into account the progressive implementation of COAG reforms, the Commission's first report could also draw on its previous work on the National Reform Agenda, as well as other studies, to illustrate the benefits of each reform stream.

A possible sequence for subsequent reports

The program for subsequent reports could be confirmed after the results of the first study are considered and further progress in policy development and implementation of reforms has been made. On the basis that it would be desirable to have completed an initial analysis of COAG reforms within ten years of the introduction of the current COAG reform agenda, the subsequent two reports (two to three years apart) could cover:

- competition and regulation reforms not covered in depth in the first report, including energy markets, transport and infrastructure;
- any education and training reforms not covered in depth in the first report; and
- health, ageing, affordable housing and disability related reforms.

It is proposed that reporting on initiatives targeting specific social concerns (such as Indigenous disadvantage and gambling), and those in the environment stream (that is, water and climate change policy) would depend on policy developments and directions from government.

In this sequence, reforms in the competition and regulation and human capital streams would be the focus of early reports. The Commission would not assess the changes in Commonwealth-State financial relations in their own right, but rather consider their effects as part of the assessment of the individual reform streams.

References¹

- ABS (Australian Bureau of Statistics) 2006, *Information Paper: An Introduction to Socio Economic Indexes for Areas (SEIFA)*, Cat. no. 2039.0, ABS, Canberra.
- 2010, *Government Finance Statistics, Australia, 2008-09*, Cat. no. 5512.0 (and associated tables).
- ACL (Australian Consumer Law) 2010, *Implementation*, www.consumerlaw.gov.au/content/Content.aspx?doc=the_acl/implementation.htm.
- AEMC (Australian Energy Market Commission) 2008a, *Review of the Effectiveness of Competition in the Electricity and Gas Retail Markets — Victoria*, Second Final Report, Sydney.
- 2008b, *Review of the Effectiveness of Competition in Electricity and Gas Retail Markets in South Australia*, Second Final Report, Sydney.
- 2010, *Market Reviews: Completed*, www.aemc.gov.au/Market-Reviews/Completed.html.
- AITSL (Australian Institute for Teaching and School Leadership) 2010, *National Professional Standards for Teachers*, www.aitsl.edu.au/ta/go/home/pid/713.
- Australian Government 2007, *Federal Financial Relations, 2007-08*, Budget Paper no. 3, CanPrint Communications Pty Ltd, Canberra.
- 2008a, *Australia's Federal Financial Relations, 2008-09*, Budget Paper no. 3, CanPrint Communications Pty Ltd, Canberra.
- 2008b, *Australia's Low Pollution Future: The Economics of Climate Change Mitigation*, Canberra.
- 2010a, *Australia to 2050: Future Challenges*, Canberra.
- 2010b, *Australia's Federal Financial Relations, 2010-11*, Budget Paper no. 3, CanPrint Communications Pty Ltd, Canberra.
- 2010c, *Final Budget Outcome, 2009-10*, CanPrint Communications Pty Ltd, Canberra.

¹ This reference list covers the report and the supporting annex.

-
- BRCWG (Business Regulation and Competition Working Group) 2010a, *BRCWG Report Card on Progress*, www.coag.gov.au/coag_meeting_outcomes/2010-04-19/docs/BRCWG_report_card_progress_deregulation_priorities.pdf.
- 2010b, *BRCWG Report Card on Progress of the 27 Deregulation Priorities*, www.coag.gov.au/coag_meeting_outcomes/2010-04-19/docs/BRCWG_Report_27_deregulation_priorities.pdf.
- COAG (Council of Australian Governments) 1999, *Intergovernmental Agreement on the Reform of Commonwealth State Financial Relations*, www.coag.gov.au/intergov_agreements/docs/reform_of_comm-state_financial_relations.pdf.
- 2004, *Intergovernmental Agreement on a National Water Initiative*, www.nwc.gov.au/resources/documents/Intergovernmental-Agreement-on-a-national-water-initiative.pdf.
- 2005, *Agreement between the Commonwealth of Australian and the Northern Territory in Respect of the Establishment of the National Critical and Trauma Response Centre at Royal Darwin Hospital*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/health/royal_darwin_hospital/Royal_Darwin_Hospital_NT_agreement.pdf.
- 2007, *Regulatory Reform Plan*, www.coag.gov.au/coag_meeting_outcomes/2007-04-13/docs/coag_nra_regulatory_reform.pdf.
- 2008a, *Intergovernmental Agreement for a National Registration and Accreditation Scheme for the Health Professions*, www.coag.gov.au/coag_meeting_outcomes/2008-03-26/docs/iga_health_workforce.pdf.
- 2008b, *Communiqué*, Adelaide, 26 March, www.coag.gov.au/coag_meeting_outcomes/2008-03-26/docs/communique20080326.pdf.
- 2008c, *Communiqué*, Sydney, 3 July, www.coag.gov.au/coag_meeting_outcomes/2008-07-03/docs/communique20080703.pdf.
- 2008d, *Intergovernmental Agreement for Regulatory and Operational Reform in Occupational Health and Safety*, www.coag.gov.au/coag_meeting_outcomes/2008-07-03/docs/OHS_IGA.pdf.
- 2008e, *Standard Business Reporting*, www.coag.gov.au/coag_meeting_outcomes/2008-07-03/docs/standard_business_reporting.pdf.
- 2008f, *Regulation of the Private Security Industry: Manpower (Guarding) Sector*, www.coag.gov.au/coag_meeting_outcomes/2008-07-03/docs/regulation_of_private_security_industry.pdf.

-
- 2008g, *Food Regulation Agreement*, www.coag.gov.au/coag_meeting_outcomes/2008-07-03/docs/food_regulation_IGA.pdf.
- 2008h, *Agreement on Murray-Darling Basin Reform*, www.coag.gov.au/coag_meeting_outcomes/2008-07-03/docs/Murray_Darling_IGA.pdf.
- 2008i, *Communiqué*, Perth, 2 October, www.coag.gov.au/coag_meeting_outcomes/2008-10-02/docs/communique20081002.pdf.
- 2008j, *Personal Property Securities Law Agreement*, www.coag.gov.au/coag_meeting_outcomes/2008-10-02/docs/personal_property_securities_IGA.pdf.
- 2008k, *An Agreement on Australia's National Arrangements for the Management of Security Risks Associated with Chemicals*, www.coag.gov.au/coag_meeting_outcomes/2008-10-02/docs/management_security_risks_associated_IGA.pdf.
- 2008l, *National Partnership Agreement on the First Home Owners Boost*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/FHOB/National_Partnership_on_FHOB.pdf.
- 2008m, *Communiqué*, Canberra, 29 November, www.coag.gov.au/coag_meeting_outcomes/2008-11-29/docs/communique_20081129.pdf.
- 2008n, *Intergovernmental Agreement on Federal Financial Relations*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_federal_financial_relations.pdf.
- 2008o, *National Healthcare Agreement*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FFR_ScheduleF_National_Healthcare_Agreement.pdf.
- 2008p, *National Education Agreement*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_ScheduleF_national_education_agreement.pdf.
- 2008q, *National Agreement for Skills and Workforce Development*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FFR_ScheduleF_National_Skills_and_Workforce_Development_National_Agreement.pdf.
- 2008r, *National Disability Agreement*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FFR_ScheduleF_National_Disability_Agreement.pdf.

-
- 2008s, *National Affordable Housing Agreement*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FFR_ScheduleF_National_Affordable_Housing_Agreement.pdf.
- 2008t, *National Indigenous Reform Agreement (Closing the Gap)*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_FFR_ScheduleF_National_Indigenous_Reform_Agreement.pdf.
- 2008u, *National Principles for Feed-In Tariffs*, www.coag.gov.au/coag_meeting_outcomes/2008-11-29/docs/20081129_national_principles_fits.pdf.
- 2008v, *National Partnership Agreement on Certain Concessions for Pensioners and Seniors Card Holders*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/CS003/concessions_for_pensioners_and_seniors_card_holders_np.pdf.
- 2008w, *Supplementary Information to that Contained in the Communiqué*, www.coag.gov.au/coag_meeting_outcomes/2008-03-26/docs/supplementary_information_communique.pdf.
- 2009b, *National Partnership Agreement on Literacy and Numeracy*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_literacy_and_numeracy.pdf.
- 2009c, *National Partnership Agreement on Preventive Health*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_preventive_health.pdf.
- 2009d, *National Partnership Agreement on Remote Service Delivery*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_remote_service_delivery_with_amended_schedule.pdf.
- 2009e, *National Partnership Agreement on Social Housing*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_social_housing.pdf.
- 2009f, *National Partnership Agreement on TAFE Fee Waivers for Childcare Qualifications*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/ED008/TAFE_Fee_Waiver.pdf.
- 2009g, *National Partnership Agreement on Productivity Places Program*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/ED002/Productivity_Places_Program.pdf.
- 2009h, *Communiqué*, Canberra, 5 February, www.coag.gov.au/coag_meeting_outcomes/2009-02-05/docs/20090205_communique.pdf.

-
- 2009i, *National Partnership Agreement on the Nation Building and Jobs Plan: Building Prosperity for the Future and Supporting Jobs Now*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/infrastructure/nation_building_jobs/agreement/national_building_and_jobs_plan_np.pdf.
- 2009j, *National Partnership Agreement on Improving Teacher Quality*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_improving_teacher_quality.pdf.
- 2009k, *National Partnership Agreement on Hospital and Health Workforce Reform*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_hospital_and_health_workforce_reform.pdf.
- 2009l, *National Partnership Agreement on Indigenous Economic Participation*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_indigenous_economic_participation.pdf.
- 2009m, *National Partnership Agreement on Low Socio-Economic Status School Communities*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/ED004/Low_SES_Status_School_Communities.pdf.
- 2009n, *National Partnership Agreement on Remote Indigenous Housing*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_remote_indigenous_housing.pdf.
- 2009o, *National Partnership Agreement on Early Childhood Education*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_early_childhood_education.pdf.
- 2009p, *National Partnership Agreement to Deliver a Seamless National Economy*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/seamless_national_economy_np.pdf.
- 2009q, *National Partnership Agreement on Water for the Future*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/environment/water_for_the_future/Water_for_the_Future.pdf.
- 2009r, *Communiqué*, Hobart, 20 April, www.coag.gov.au/coag_meeting_outcomes/2009-04-30/docs/20090430_communique.pdf.
- 2009s, *Retail Tenancy Reform Implementation Plan*, www.coag.gov.au/coag_meeting_outcomes/2009-12-07/docs/imp_plan_retail_tenancy_reform.pdf.

-
- 2009t, *Protecting Children is Everyone's Business — National Framework for Protecting Australia's Children 2009-2020*, www.coag.gov.au/coag_meeting_outcomes/2009-04-30/docs/child_protection_framework.pdf.
- 2009u, *National Partnership Agreement to Establish a National Road Safety Council*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/infrastructure/national_road_safety_council/national_road_safety_council.pdf.
- 2009v, *National Partnership Agreement on Closing the Gap in Indigenous Health Outcomes*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/indigenous/closing_the_gap/Closing_the_Gap_indigenous_health_outcomes.pdf.
- 2009w, *National Partnership Agreement on Essential Vaccines*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/HE001/National_Partnership_agreement_on_Essential_Vaccines.pdf.
- 2009x, *National Partnership Agreement on Extending the First Home Owners Boost*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/FHOB/National_Partnership_FHOB_Extension.pdf.
- 2009y, *Communiqué*, Darwin, 2 July, www.coag.gov.au/coag_meeting_outcomes/2009-07-02/docs/20090702_communique.pdf.
- 2009z, *Closing the Gap: National Partnership Agreement on Remote Indigenous Public Internet Access*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/indigenous/public_internet_access/Remote_Indigenous_Public_Internet_Access.pdf.
- 2009aa, *Intergovernmental Agreement for Business Names Agreement*, www.coag.gov.au/coag_meeting_outcomes/2009-07-02/docs/IGA_business_names.pdf.
- 2009ab, *Investing in the Early Years — A National Early Childhood Development Strategy*, www.coag.gov.au/coag_meeting_outcomes/2009-07-02/docs/national_ECD_strategy.pdf.
- 2009ac, *National Partnership Agreement on Energy Efficiency*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/environment/energy_efficiency/energy_efficiency.pdf.
- 2009ad, *National Partnership Agreement on Indigenous Early Childhood Development*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/national_partnership/national_partnership_on_early_childhood_education.pdf.

-
- 2009ae, *Regulatory Reform of the Not-for-Profit Sector Implementation Plan*, www.coag.gov.au/coag_meeting_outcomes/2009-12-07/docs/imp_plan_regulatory_reform_not-for-profit_sector.pdf.
- 2009af, *National Partnership Agreement on Youth Attainment and Transitions*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/education/youth_attainment_transitions/Youth_Attainment_and_Transitions.pdf.
- 2009ag, *National Partnership Agreement on the East Kimberley Development Package*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/infrastructure/east_kimberley/agreement/East_Kimberley_Development_Package.pdf.
- 2009ah, *Closing the Gap in the Northern Territory National Partnership Agreement*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/OT004/Closing_the_Gap_in_NT.pdf.
- 2009ai, *National Partnership Agreement for the Funding of Fort Street High School Noise Insulation*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/infrastructure/fort_street_noise_reduction/Fort_Street_High_NP_and_IP.pdf.
- 2009aj, *National Partnership Agreement on the Management of the Former Rum Jungle Mine Site*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/EN001/implementation_plans/Management_of_the_former_Rum_Jungle_mine_site_-_copy_of_signed_NPA.pdf.
- 2009ak, *National Partnership Agreement on School Pathways Program*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/education/school_pathways_program/school_pathways_program.pdf.
- 2009al, *National Partnership Agreement on Natural Disaster Resilience*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/environment/natural_disaster_resilience/natural_disaster_resilience_2.pdf.
- 2009am, *Communiqué*, Brisbane, 7 December, www.coag.gov.au/coag_meeting_outcomes/2009-12-07/docs/20091207_communique.pdf.
- 2009an, *National Credit Law Agreement 2009*, www.coag.gov.au/coag_meeting_outcomes/2009-12-07/docs/iga_nat_credit_law.pdf.
- 2009ao, *National Partnership Agreement on Health Services*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/health/health_services/health_services.pdf.

-
- 2009ap, *National Partnership Agreement on E-Health*, www.coag.gov.au/coag_meeting_outcomes/2009-12-07/docs/npa_e-health.pdf.
- 2009aq, *National Partnership Agreement on the Elective Surgery Waiting List Reduction Plan*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/health/elective_surgery_waiting_lists/elective_surgery_waiting_list_reduction_plan.pdf.
- 2009ar, *National Partnership Agreement on Health Infrastructure*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/health/health_infrastructure/health_infrastructure.pdf.
- 2009as, *National Partnership Agreement on the National Quality Agenda for Early Childhood Education and Care*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/education/quality_agenda_early_childhood/npa_national_quality_agenda_early_childhood_education_care_signature.pdf.
- 2009at, *National Partnership Agreement on the Development of a Telephone Based National Emergency Warning System*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/Other/Development_of_a_Telephone_based_National_Emergency_Warning_System_NP.pdf.
- 2009au, *Legal Profession Reform Implementation Plan*, www.coag.gov.au/coag_meeting_outcomes/2009-12-07/docs/imp_plan_legal_profession_reform.pdf.
- 2010a, *National Partnership Agreement on TAFE Fee Waivers for Childcare Qualifications*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/ED008/TAFE_fee_waivers_NP_&_TAS_signature_page.pdf.
- 2010b, *National Partnership Agreement on the Digital Education Revolution*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/education/digital_education_revolution/Digital_%20Education_%20Revolution.pdf.
- 2010c, *National Partnership Agreement on Indigenous Clearinghouse*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/indigenous/clearinghouse/Indigenous%20Clearinghouse%20-%20NP%20and%20NT%20signature.pdf.
- 2010d, *National Partnership Agreement on the Victorian Bushfire Reconstruction and Recovery Plan*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/community_services/victorian_bushfire/Victorian_Bushfire_Reconstruction_and_Recovery_Plan.pdf.

-
- 2010e, *National Partnership Agreement on the Digital Regions Initiative*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/Other/digital_regions_initiative/Digital_Regions_Initiative_NP_.pdf.
- 2010f, *Communiqué*, Canberra, 19 April, www.coag.gov.au/coag_meeting_outcomes/2010-04-19/docs/communique_20_April_2010.pdf.
- 2010g, *National Health and Hospitals Network Agreement*, www.coag.gov.au/coag_meeting_outcomes/2010-04-19/docs/NHHN_Agreement.pdf.
- 2010h, *National Partnership Agreement on Pre-Apprenticeship Training*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/education/pre_apprenticeship/Pre-Apprenticeship_Training_NP.pdf.
- 2010i, *National Partnership Agreement on the Great Artesian Basin Sustainability Initiative*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/environment/Great_Artesian_Basin_Sustainability/Great_Artesian_Basin_Sustainability_NP.pdf.
- 2010j, *National Partnership Agreement on Pilot of Drought Reform Measures in Western Australia*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/environment/drought_reform/Pilot_of_Drought_Reform_Measures_in_WA_NP_signed.pdf.
- 2010k, *National Partnership Agreement to Support Local Government and Regional Development*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/Other/local_government/Local_Government_and_Regional_Development_other_NP.pdf.
- 2010l, *National Partnership Agreement to Establish a Project Office for National Rail Safety Regulatory Reform*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/infrastructure/rail_safety_reform/Rail_Safety_Regulatory_Reform_Project%20Office.pdf.
- 2010m, *National Partnership Agreement to Establish a Project Office for Heavy Vehicle Regulatory Reform*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/infrastructure/heavy_vehicle_project_office/Heavy_Vehicle_%20Project_Office_NP.pdf.
- 2010n, *National Partnership Agreement on Legal Assistance Services*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/Other/Legal_Assistance_Services.pdf.

-
- 2010o, *The National Health and Hospitals Network — National Partnership Agreement on Improving Public Hospital Services*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/health/NHHN/NHHN_Improving_Public_Hospital_Services.pdf.
- 2010p, *National Partnership Agreement to Deliver a Seamless National Economy Implementation Plan Part 1 – 27 Deregulation Priorities*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/Other/seamless_national_economy/Seamless_National_Economy_IP_Part_1.pdf.
- 2010q, *National Partnership Agreement to Deliver a Seamless National Economy Implementation Plan Part 2 – Competition Reforms*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/Other/seamless_national_economy/Seamless_National_Economy_IP_Part_2.pdf.
- 2010r, *National Partnership Agreement to Deliver a Seamless National Economy Implementation Plan Part 3 – Regulatory Reform*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/Other/seamless_national_economy/Seamless_National_Economy_IP_Part_3.pdf.
- 2010s, *Heads of Treasuries Competitive Neutrality Matrix Report September 2009*, www.coag.gov.au/coag_meeting_outcomes/2010-09-10/competitive_neutrality_matrix.pdf
- Conlon, P. (South Australia Minister for Energy) 2009, Letter in response to the AEMC's Review of the Effectiveness of Competition in Electricity and Gas Retail Markets in South Australia, www.aemc.gov.au/Media/docs/Minister%20for%20Energy's%20Response-f1e594e0-a706-42f2-8259-43ef8a49a807-0.pdf (accessed 9 April 2010).
- CoPS (Centre of Policy Studies) 2008, *MMRF: Monash Multi-Regional Forecasting Model, A Dynamic Multi-Regional Applied General Equilibrium Model of the Australian Economy*, Centre of Policy Studies, Monash University.
- Costanza, R., d'Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., Naeem, S., O'Neill, R.V., Paruelo, J., Raskin, R.G., Sutton, P. and van den Belt, M. 1997, 'The value of the world's ecosystem services and natural capital', *Nature*, vol. 387, pp. 253-60.
- CRC (COAG Reform Council) 2009a, *National Education Agreement: Baseline Performance Report for 2008*, COAG Reform Council, Sydney.
- 2009b, *National Agreement for Skills and Workforce Development: Baseline Performance Report for 2008*, COAG Reform Council, Sydney.
- 2009c, *National Partnership Agreement to Deliver a Seamless National Economy: Report on Performance 2008–09*, COAG Reform Council, Sydney.

-
- 2010a, *National Healthcare Agreement: Baseline Performance Report for 2008–09*, COAG Reform Council, Sydney.
 - 2010b, *National Disability Agreement: Baseline Performance Report for 2008–09*, COAG Reform Council, Sydney.
 - 2010c, *National Affordable Housing Agreement: Baseline Performance Report for 2008–09*, COAG Reform Council, Sydney.
 - 2010d, *National Indigenous Reform Agreement: Baseline Performance Report for 2008–09*, COAG Reform Council, Sydney.
 - 2010e, *COAG Reform Agenda: Report on Progress 2010*, COAG Reform Council, Sydney.
 - 2010f, *National Partnership Agreement on the Elective Surgery Waiting List Reduction Plan: Period 1 Assessment Report*, COAG Reform Council, Sydney.
 - 2010g, *National Education Agreement: Performance Report for 2009*, COAG Reform Council, Sydney.
 - 2010h, *National Agreement for Skills and Workforce Development: Performance Report for 2009*, COAG Reform Council, Sydney.
 - 2010i, *Water Management Partnerships: Report on Performance 2009*, COAG Reform Council, Sydney.
 - 2010j, *National Partnership Agreement on the Elective Surgery Waiting List Reduction Plan: Period 2 Assessment Report*, COAG Reform Council, Sydney.
- DCCEE (Department of Climate Change and Energy Efficiency) 2010, *Renewable Energy Target*, www.climatechange.gov.au/government/initiatives/renewable-target.aspx.
- DECS (Department of Education and Children's Services) 2010, 'Advanced technology professional development begins', *Education News*, vol. 4, no. 6, p. 8.
- DEEWR (Department of Education, Employment and Workplace Relations) 2009, *Teaching & Learning Capital Fund for Vocational Education & Training — Guidelines for the Better TAFE Facilities Element of the Program*, www.deewr.gov.au/Skills/Programs/Infrastructure/TLCF/Documents/tlcf_btf_guidelines.pdf.
- 2010a, *Overview of the Assessment and Rating Process Development*, www.deewr.gov.au/Earlychildhood/Policy_Agenda/Documents/AssessmentAndRatingProcess.pdf.
 - 2010b, *Early Childhood Education — Universal Access*, www.deewr.gov.au/EarlyChildhood/Policy_Agenda/ECUA/Pages/home.aspx.

-
- 2010c, *Youth Attainment and Transitions*, www.deewr.gov.au/Youth/YouthAttainmentandTransitions/Pages/Home.aspx.
- 2010d, *Piloting Innovative Approaches*, pilots.educationau.edu.au.
- DoHA (Department of Health and Ageing) 2008, *Bringing Nurses Back into the Workforce program — Fact Sheet for Residential Aged Care Homes and Community Package Aged Care Services*, [www.health.gov.au/internet/main/publishing.nsf/content/F5BCE0945326E6F5CA2575910082C994/\\$File/BringNursesBack.pdf](http://www.health.gov.au/internet/main/publishing.nsf/content/F5BCE0945326E6F5CA2575910082C994/$File/BringNursesBack.pdf).
- 2010, *Health and Hospital Fund*, www.health.gov.au/hhf.
- Emerson, C. (Minister for Small Business, Independent Contractors and the Service Economy, Minister for Competition Policy and Consumer Affairs, Minister Assisting the Finance Minister on Deregulation) 2010, *Seamless national economy coming closer*, Media release, 6 July.
- FaHCSIA (Department of Families, Housing, Community Services and Indigenous Affairs) 2010, *National Partnership Agreement on Social Housing*, www.fahcsia.gov.au/sa/housing/progserv/affordability/affordablehousing/Pages/NPASocialHousing.aspx.
- Garnaut, R. 2008, *The Garnaut Climate Change Review*, Final Report, Cambridge University Press, Port Melbourne.
- IC (Industry Commission) 1995, *The Growth and Revenue Implications of Hilmer and Related Reforms: A report by the Industry Commission to the Australian Council of Governments*, AGPS, Canberra.
- Infrastructure Australia 2009, *National Infrastructure Priorities*, www.infrastructureaustralia.gov.au/files/National_Infrastructure_Priorities.pdf.
- Ludwig, J. (Minister for Agriculture, Fisheries and Forestry), Crean, S. (Minister for Regional Australia, Regional Development and Local Government, Minister for the Arts) and Burke, T. (Minister for Sustainable Population, Communities, Environment and Water), 2010, *Parliamentary inquiry into the Murray-Darling Basin Plan*, Joint media release, 14 October.
- Macklin, J. (Minister for Families, Housing, Community Services and Indigenous Affairs) 2010, *Remote Indigenous housing progress*, Media release, 15 July.
- Mathers, C., Vos, T. and Stevenson, C. 1999, *The Burden of Disease in Australia*, AIHW Cat. no. PHE 17, Australian Institute of Health and Welfare, Canberra.
- MDBA (Murray-Darling Basin Authority) 2010, *Guide to the Proposed Basin Plan*, Murray-Darling Basin Authority, Canberra, download.mdba.gov.au/Guide_to_the_Basin_Plan_Volume_1_web.pdf.

-
- MCEECDYA (Ministerial Council for Education, Early Childhood Development and Youth Affairs) 2010, *Communiqué*, Canberra, 8 December www.mceecdya.edu.au/verve/_resources/C07_Communique_8_Dec_2010.pdf.
- OCGRIS (Office of the Coordinator General For Remote Indigenous Services) 2010, Six Monthly Report: December 2009 to August 2010, [cgris.gov.au/userfiles/file/FACS_2165_CGRISREPORT_\[REPORT-html\].pdf](http://cgris.gov.au/userfiles/file/FACS_2165_CGRISREPORT_[REPORT-html].pdf).
- PC (Productivity Commission) 1999. *Impact of Competition Policy Reforms on Rural and Regional Australia*, Inquiry Report no. 8, Canberra.
- 2004, *National Workers' Compensation and Occupational Health and Safety Frameworks*, Inquiry Report no. 27, Canberra.
- 2005, *Australia's Health Workforce*, Research Report, Canberra.
- 2006, *Potential Benefits of the National Reform Agenda, Report to Council of Australian Governments, Commission Research Paper*, Research Report, Canberra.
- 2008, *Review of Australia's Consumer Policy Framework*, Final Report, Inquiry Report no. 45, Canberra.
- 2010, *Performance Benchmarking of Australian Business Regulation: Occupational Health & Safety*, Research Report, Canberra.
- PM&C (Department of the Prime Minister and Cabinet) 2010, *Economic Stimulus Plan Dashboard*, www.economicstimulusplan.gov.au/pages/dash.aspx.
- SCRGSP (Steering Committee for the Review of Government Service Provision) 2009, *Overcoming Indigenous Disadvantage: Key Indicators 2009*, Productivity Commission, Canberra.
- Smith, J. and Sweetman, A. 2009, 'Putting the evidence in evidence-based policy', in Productivity Commission (ed.), *Strengthening Evidence Based Policy in the Australian Federation, Volume 1: Proceedings, Roundtable Proceedings*, Productivity Commission, Canberra.