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Productivity Commission

Impacts of COAG Reforms: Business Regulation and VET

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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.

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Foreword

The Council of Australian Governments' current reform agenda includes reforms aimed at boosting productivity, increasing workforce participation and mobility and improving the quality of public services. The reforms are directed at three important areas: competition and regulation, human capital and the environment.

The Productivity Commission has been asked to report every two to three years on the 'impacts and benefits' of specified elements of the COAG reform agenda. For its first substantive report in this series, the Government directed the Commission to focus on regulatory reforms under the 'seamless national economy' stream, and on vocational education and training reforms and initiatives that support successful transitions from school.

As most reforms have either just been implemented or remain to be implemented, the impacts assessed and reported in this study are largely prospective. Quantitative modelling has been used to project the economy-wide impacts of the reforms over time. It should be noted that the projections are based on various assumptions spelt out in the report, and can be sensitive to these.

The Commission's analysis has benefitted from a range of information and evidence, including material put forward in submissions and during consultations, regulation review statements and other assessments. The Commission is grateful to all those businesses, organisations, individuals and government officials who participated in its study.

The study was overseen by Commissioner Patricia Scott. The research team for the regulatory reform component was led by Paul Gretton and that for the vocational education component by Patrick Jomini, in the Commission's Canberra and Melbourne offices, respectively.

Gary Banks AO
Chairman
April 2012

Terms of reference

Impacts and benefits of COAG reforms

Productivity Commission Act 1998

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]

Letter of direction

Dear Mr Banks

I am writing to you regarding priorities to be addressed in the Productivity Commission's first report on the Impacts and Benefits of COAG Reforms. I apologise for delay in providing these directions to you.

In December 2010, I received the Commission's framework report, which proposed that the first substantive report include a detailed analysis of the impacts of reform in the competition and regulation stream and the human capital stream.

For the first report, I agree that the Commission should examine areas of COAG's competition and regulation stream likely to have realised or prospective impacts. The COAG Reform Council assessed the progress of the deregulation and competition reforms as at 30 September 2010 in its National Partnership Agreement to Deliver a Seamless National Economy: Performance Report for 2009-10. I consider that the Commission's report should focus on the 14 completed deregulation reforms (pending COAG's agreement to the completion of the food reform), the Personal Property Securities and Occupational Health and Safety reforms which are scheduled to be operational by 1 January 2012, and the National Construction Code reform which is substantially complete (see Attachment A for a numbered list of these all of these reforms).

Taking into account the longer term nature of the implementation of many of the competition reforms, I agree with the Commission's proposal that these be considered in more depth in the second or later reports. I also consider that the remaining deregulation reforms should also be examined at this time.

Under the human capital stream, I endorse the Commission's proposal that the impact of education and training reforms be examined in detail in its first report. I ask that the Commission focus on the impacts of reforms to vocational education and training on productivity and workforce participation. Initiatives that support young people and disadvantaged groups in making a successful transition from school to further education, training or employment should also be examined by the Commission as part of this analysis.

I note that the Commission does not propose to provide an estimate of the realised and prospective economic impacts and benefits of all the different reform streams. While I appreciate the rationale for not doing so in this first report, this is an area that I would appreciate greater focus on in future reports.

The terms of reference that were provided in June 2010 asked the Commission to report to COAG on this matter by 31 December 2011. However, in view of the delays in providing these directions, I have extended the time for the Commission to provide COAG with its report from 31 December 2011 to the end of March 2012, with a discussion draft to be provided in December 2011.

This letter has been copied to the Prime Minister, the Deputy Prime Minister and Treasurer, the Minister for Finance and Deregulation, the Minister for Tertiary Education and the Minister for School Education.

Yours sincerely

BILL SHORTEN
[Received 22 August 2011]

Attachment A — Reforms to be focused on

14 completed deregulation reforms

- Health workforce (Deregulation reform stream 5 in the CRC report)
- Trade measurement (Reform stream 6)
- Trustee corporations (Reform stream 10)
- Standard business reporting (Reform stream 19)
- Wine labelling (Reform stream 25)
- Rail safety (Reform stream 19)
- Australian consumer law (Reform stream 8)
- Product safety (Reform stream 9)
- Phase 1 of Consumer credit (includes 3 separate reforms; reform streams 11, 12 and 13)
- Payroll tax (Reform stream 3)
- Development assessment (Reform stream 4)
- Food (Reform stream 20)

2 reforms scheduled to be operational by 1 January 2012

- Personal Property Securities (Reform stream 18)
- Occupational Health and Safety (Reform stream 1)

1 reform that is substantially complete

- National Construction Code (Reform stream 15)

Extension letter

Mr Gary Banks AO
Chairman
Productivity Commission
PO Box 1428
Canberra City ACT 2601

Dear Mr Banks

Thank you for your letter dated 15 March 2012, seeking an extension to the reporting date for the Productivity Commission study Impacts of COAG reforms: Business Regulation and VET.

I note that further time is needed to enable consideration of late submissions and finalise detailed modelling of reform outcomes.

Accordingly, I agree to your request to extend the reporting date for the study from 31 March to 30 April 2012.

I have copied this letter to the Prime Minister.

I look forward to receiving the report in due course.

Yours sincerely

DAVID BRADBURY

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Preface

The Commission's report into the *Impacts of COAG Reforms: Business Regulation and VET* comprises three volumes:

- This volume contains the Overview of the entire report, along with an introduction and three chapters which provide details on the economic context in which the reforms will play out, and the Commission's preliminary assessment of the overall impacts of the regulation and vocational education and training reforms examined, respectively.
- The second volume contains chapters which assess the impacts of the 17 Seamless National Economy business regulation reforms examined.
- The third volume contains chapters which assess the impacts of the vocational education and training reforms examined.

All three volumes are available on the Commission's website via the study page (www.pc.gov.au/projects/study/coag-reporting).

The Commission will also be publishing a supplement to the report which will contain details of the economy-wide modelling used in the study.

Abbreviations and explanations

Abbreviations

ABS	Australian Bureau of Statistics
ASIC	Australian Securities and Investments Commission
ATO	Australian Taxation Office
COAG	Council of Australian Governments
CoPS	Centre of Policy Studies
CRC	COAG Reform Council
EGW	Electricity, gas and water
ELMO	Education and labour market outcomes
GDP	Gross Domestic Product
GST	Goods and Services Tax
IAC	Industries Assistance Commission
IC	Industry Commission
LLN	Language, literacy and numeracy
MFP	Multi-factor productivity
ML	Mature learners
MMRF	Monash Multi-Regional Forecasting (model)
NASWD	National Agreement for Skills and Workforce Development
NCP	National Competition Policy
NCVER	National Centre for Vocational Education Research
NFSS	National Foundation Skills Strategy
NPAPPP	National Partnership Agreement on Productivity Places Program
NPASR	National Partnership Agreement on Skills Recognition
NRA	National Reform Agenda
OECD	Organisation for Economic Co-operation and Development

OHS	Occupational Health and Safety
PC	Productivity Commission
TAFE	Technical and Further Education
VET	Vocational education and training
WS	Waste services

Explanations

Billion	The convention used for a billion is a thousand million (10^9).

OVERVIEW

Key points

- This study assesses the impacts of COAG reforms in two areas:
  - aspects of the 'Seamless National Economy' regulatory reform priorities; and
  - vocational education and training (VET).
- As most of the reforms being assessed have only just been implemented or are to be implemented, most benefits are yet to occur.
  - Forward looking (*ex ante*) assessments of potential changes, together with information obtained during this study, have been the starting point for determining likely impacts.
  - Given the early stage of most reforms, judgements have had to be made. This is particularly the case in estimating the progress and impact of the OHS reforms, given the uncertainties, including the dynamic effects.
- The Commission's assessment is that the reforms being considered could raise output and income in all jurisdictions.
- Seamless National Economy reforms are aimed at reducing the regulatory burden imposed on firms that operate in multiple jurisdictions. Full implementation could ultimately provide cost reductions to business of around $4 billion per year.
  - After a period of adjustment, national output (GDP) could be increased by nearly one half of a per cent (around $6 billion per year).
  - Based on current plans, the majority of these gains could accrue by 2020.
- Guided by achievement of reform milestones, reform reward payments should, as far as practicable, be linked to the achievement of reform outputs and outcomes.
- Vocational education and training reforms are aimed at improving the overall quality of the workforce and encouraging higher workforce participation, through increased VET provision and greater flexibility in courses offered.
  - Attainment of the COAG 2020 targets potentially could raise GDP by two per cent.
  - It would also assist in achieving COAG's broader social inclusion goals.
- Increased efforts by governments will be required if the potential of the COAG agenda is to be realised.
- A number of areas offer opportunities for even better outcomes. In particular:
  - a more systematic approach to identifying and implementing business regulation reforms;
  - initiatives to increase VET completion rates; and
  - ensuring VET reforms are sequenced so that the building blocks are in place for the successful transition to more contestable markets including:
    - strengthening quality control through cost-effective independent validation and auditing of training organisations' assessment practices, as well as
    - making information available to students on the costs of training, quality and labour market outcomes for individual training organisations.

Overview

Effective economic reform promotes productivity growth and improvements in living standards. The implementation of Australia's National Competition Policy (NCP) provided important underpinnings to recent economic growth. Many of the reforms initially agreed by the Council of Australian Governments (COAG) are in place. However, an ageing population, global competition and ongoing technological change mean that further reform is needed if Australia is to achieve its potential for higher living standards in the future.

These needs have been recognised by COAG which, in March 2008, agreed to:

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

The reforms are intended to boost:

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

The scope of reforms analysed in this report are set out in the relevant GOAG agreements.

What the Commission has been asked to do

At its March 2008 meeting, COAG agreed that the Commission be requested to report to it on the economic impacts and benefits of its agreed reform agenda every 2 to 3 years. The letter of direction for this inaugural report directs that the Commission focus on the impacts of two reform areas:

- aspects of the 'Seamless National Economy' deregulation priority areas; and
- the vocational education and training (VET) reforms and initiatives that support young people to make successful transitions from school to further education, training and employment.

For each of these areas, the Commission is required to provide information on:

- the economy-wide impacts of reforms, including estimates of the regional and distributional effects of change; and
- where practicable, assessments of whether Australia's reform potential is being achieved and opportunities for improvement.

The analysis is to recognise the different nature of regulatory and human capital reforms and the likely time paths over which benefits are to accrue.

The study complements a parallel study by the Commission on the *Identification and Evaluation of Regulation Reforms*. That study reported on frameworks and approaches to identify areas of reform and methods for evaluating reform outcomes. The Commission is also examining the role of local government as a regulator as part of a series on performance benchmarking of Australian business regulation, and undertaking a study of Commonwealth, State and Territory regulatory impact analysis processes.

Difficulties in estimating impacts

Achieving meaningful estimates of the likely impacts of the reforms being assessed is demanding, and made more difficult by the largely prospective nature of the study. The study has required judgements to be made about the impacts of reforms that have just been implemented or are in the process of implementation. It has also required judgements to be made of the timescale over which benefits of these reforms may accrue. There is a significant degree of imprecision arising from:

- the need for judgement in identifying activities or population groups that are directly affected by the reforms;
- lack of detailed information about the extent to which actual reforms are likely to affect target groups across jurisdictions and the scale of these effects;
- absence of robust *ex post* evidence of changes to productivity, prices and workforce participation arising from the reforms and the exact nature and timing of any change;
- difficulties in separating the effects of reforms from ongoing economic change;
- difficulties in accounting for the influences of other actions by government that may complement or detract from the anticipated effects of reform; and
- difficulties in accounting for the risk that implementation may depart from announced intentions and uncertainties concerning responses of businesses and consumers to regulatory changes.

In reporting on the impacts of reforms within the scope of this assessment, the Commission has drawn attention to these issues and information gaps, and, to the extent possible, the sensitivity of results to alternative judgements. It has also drawn attention to implementation gaps, emerging concerns about the reforms in progress and opportunities for improvement that may bear on the interpretation of results.

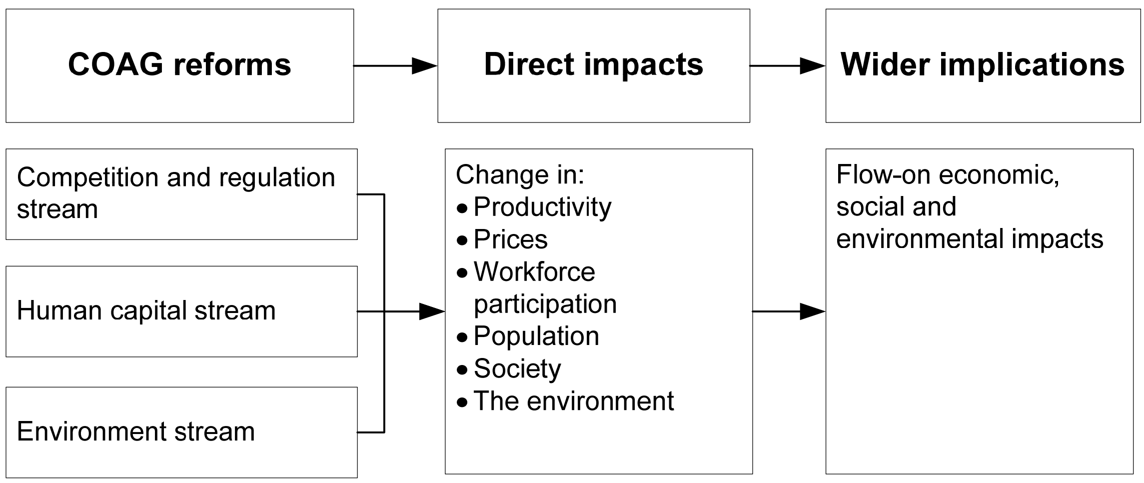
The results are exploratory and should be regarded as only broadly indicative of the impacts and benefits that could accrue from the reforms assessed or related opportunities for improvement. The estimates and analysis are intended to advance understanding of the scale of benefits that could accrue from the business regulation and VET reforms being assessed. *The estimates presented are not forecasts of the economic or fiscal impacts of the reforms.*

The Commission's approach

Reporting framework

As in earlier assessments of the impacts of national reform, the Commission has adopted an economy-wide approach for its assessments. Under this approach, the direct impacts of reforms on activities, industries, the workforce or consumers, and wider flow-on effects are recognised (figure 1).

Figure 1 **Analytical framework**



As far as practicable, transitional and ongoing costs incurred by government and business to achieve reform objectives and outcomes are also taken into account.

Where the Commission has identified additional ongoing administration and compliance costs, those costs are included in the estimates of the longer-run impacts of reform. In its assessments of the timescale over which impacts accrue, transition costs are also included. In addition to these costs, increased outlays by government on education services required to achieve VET education objectives are also included in the Commission's assessments.

The Seamless National Economy and VET reforms differ in some respects.

- The Seamless National Economy deregulation priority areas — part of the broader regulation and competition stream — are a diverse range of stand-alone measures that focus on productivity and economic efficiency of activities and industries within national markets, and the cost of doing business across jurisdictional boundaries.
- In contrast, the VET stream of reforms — part of the broader human capital stream — focuses on individuals and their potential to contribute to workforce participation and productivity.

Because of these differences, the estimates of the impacts of the regulation reform and VET reform streams, and assessments of reform potential and opportunities for improvement, are considered separately. Further, the stand alone nature of individual regulatory reforms requires that information be gathered for each reform. However, while the individual impacts are typically not large in a national context, and in some cases likely to accrue over extended periods, the measures combined are likely to afford future national benefits.

Estimating direct impacts

As the reforms being assessed have only been implemented in the past two to three years or are at implementation, few gains have been realised to date. Most benefits therefore are in prospect and empirical data is not available on actual impacts.

Accordingly, *ex ante* assessments of potential gains have been used as a starting point for the Commission's assessments. These assessments are typically drawn from regulatory impact statements (RISs) or business cases related to the reforms. For VET, the Commission has drawn on policy documents and data on actual training activity and undertaken new modelling. To complete assessments of impacts, the partial analyses have been combined with: assessments of the activities, industries and household groups likely to be directly affected by reforms; assessments of the nature of the impacts; and mainly qualitative information provided in submissions and feedback from consultations undertaken in the course of this study.

Reflecting that reforms are being implemented progressively, in its assessment, the Commission has treated the *ex ante* estimates as either realised or in prospect where implementation is either complete, or at completion. Where elements of reforms within the scope of the Seamless National Economy agenda or the COAG VET reform area are yet to be implemented, but *ex ante* estimates are available, the associated impacts are treated as potential.

Regulatory changes and reform possibilities are likely to differ between jurisdictions, including because of the regulatory environment in the jurisdictions, the size and complexity of local economies, and flow on effects of changes in other jurisdictions. Information about direct impacts by jurisdiction, however, is typically not available. In its assessment, the Commission has treated benefits as accruing to jurisdictions in proportion to the scale of affected activities, industries or demographic groups within those jurisdictions.

The *ex ante* assessments are 'outer-envelope' in nature. That is, they assume full implementation of the measures included in the current agenda will be achieved and complete adjustment by business, government and consumers to the effects of those measures.

Further policy development could afford potential gains above those implied by available *ex ante* estimates of the impacts of the current Seamless National Economy reforms. Possibilities for further gains from these opportunities are reported qualitatively.

Assessing wider impacts

The economy-wide and fiscal impacts of each stream have been estimated using a general equilibrium model that has been specially updated for this study (box 1). The Commission has used this model in two modes. In the first (the *comparative static*) mode, the model is used to estimate the longer-run impacts of reform after full adjustment to reform-induced change. In the second (*dynamic*) mode, the model is used to trace out the time path over which the benefits of reform are likely to occur. It is inclusive of the impact of transition costs (where relevant information is available) in the implementation of reform.

The COAG reforms, particularly in the VET area, are intended to affect human capacities and capabilities, and social outcomes. In this regard, improving economic opportunities and labour force outcomes will be an avenue for achieving COAG's objectives of social inclusion and closing the gap on Indigenous disadvantage. Measures of social inclusion include reported increases in workforce participation, as well as literacy and numeracy. Changes in these measures are also reflected in the Commission's economy-wide analysis.

Box 1 Economy-wide modelling framework

The Commission has used economy-wide general equilibrium modelling to quantify the economic and revenue implications of COAG reforms. Similar frameworks have been used by the Commission on four previous occasions to illustrate the impacts of widely-based national reform — in 1995 for Hilmer (NCP) and related reforms, in 1999 for a smaller range of National Competition Policy reforms of particular relevance to rural and regional Australia, in 2005 to report on the consequences of National Competition Policy reform, and in 2006 to estimate the potential benefits of COAG's National Reform Agenda.

This study uses an updated version of the model adopted in the 2006 exercise. The model — referred to as the Monash Multi-Regional Forecasting-CR12 model (MMRF) — treats each State and Territory as a separate economic region with potentially over 60 industry sectors in each jurisdiction.

For this study, the MMRF model was updated to include:

- differentiation of products produced for export and domestic markets;
- a cohort based demographic module; and
- mobility of the labour force between nine occupational groups.

These developments are most relevant to applying the model in the dynamic mode.

Business regulation reforms

Unnecessary red tape and the associated cost of regulation is an ongoing theme in discussions of national reform. That theme is revisited in this study from the perspective of the cost of doing business, particularly across jurisdictions.

There are substantial gains available from regulatory reform. These gains accrue to businesses, households and government from more effective regulation and/or improved targeting of regulation, as well as reducing 'red tape'. The Commission's 2006 report on the potential benefits of the COAG National Reform Agenda (NRA) estimated that NRA-consistent reforms had the potential to reduce regulatory compliance costs by as much as 0.8 per cent of GDP based on estimates of the total compliance costs faced by Australian businesses.

Inevitably, achievement of all or part of such cost reductions and associated efficiency improvements would entail individual actions across the many government regulations applying throughout the economy. The actual impact of any action would depend on the:

- scope for improvement in any reform area;
- actual changes in regulation implemented; and
- scale of activity affected.

In this setting, individual actions, if well designed and executed, are likely to be worthwhile and valued from a sectoral and consumer perspective. However, the economy-wide (aggregate) impact will be incremental and can be modest for individual reforms. Nevertheless, reflecting overall reform potential, reform across a range of areas taken together can make a material impact on aggregate output and incomes.

The assessed Seamless National Economy reforms, collectively, cover a significant part of national economic activity. They bring together a very diverse collection of measures (box 2). A common link is that individual measures require, to varying degrees, cross-jurisdictional action and greater national 'coherence' — harmonisation or uniformity — to be beneficial.

In this vein, the Seamless National Economy reforms are aimed at providing net benefits by reducing the regulatory burden imposed on firms operating in multiple jurisdictions. The reforms broadly fall within the scope of the Commission's previous analysis.

The reforms are intended to:

- provide businesses with greater flexibility in shifting resources between jurisdictions;
- provide smaller firms with greater access to interstate markets; and
- reduce the cost of doing business.

Some of the reforms are also intended to improve the effectiveness of market regulation and achieve health and safety outcomes.

If effective, the reforms would lower the costs of goods and services to producers and consumers. The reforms are often incremental in nature and, in many cases, were already the subject of an ongoing reform process (including though unfinished business in COAG's National Competition Policy program of legislative reviews). COAG's reform agenda provided a framework to advance reforms that required coordinated action between jurisdictions.

Box 2 Regulatory reforms examined in this report

The Commission has been asked to examine the impacts of Seamless National Economy reforms in the following areas:

- Consumer law and product safety — the reforms seek to create a national consumer policy regime, establish a single national consumer law and increase protection afforded to consumers;
- Mortgage brokers, margin lending and non-deposit taking institutions (collectively referred to hereafter as the 'consumer credit' reforms) — the reforms seek to create a single national approach to consumer protection regulation in relation to the use of credit;
- Personal properties securities — the reforms seek to create a national system for the regulation and registration of security interests in personal property;
- Trustee corporations — the reforms seek to established a national approach to the regulation of trustee corporations;
- Standard business reporting — the reforms seek to establish a multi-agency program to provide consistent and streamlined government financial reporting requirements;
- Payroll tax — the reforms seek to reduce legislative and administrative differences in payroll tax across jurisdictions;
- Occupational health and safety — the reforms seek to establish a harmonised approach to occupational health and safety regulation;
- Rail safety — the reforms seek to reduce the burden on rail operators of complying with a number of different rail safety regimes within and between jurisdictions;
- Health workforce — the reforms seek to create a national health practitioner registration and accreditation system for specified health professions;
- Trade measurement — the reforms seek to ensure that nationally consistent and equitable practices and standards are used for all transactions based on measurement;
- Food regulation — the reforms seek to reduce the regulatory burden on businesses and not-for-profit organisations in relation to food regulation, without compromising public health;
- Wine labelling — the reforms seek to harmonise labelling requirements so that one common label (of the two usually found on wine bottles) can be used for both domestic and export markets;
- Development assessment — the reforms seek to improve processes for development assessment across Australia and reduce building costs; and
- National Construction Code — the reforms seek to achieve a nationally consistent approach to building and plumbing regulation in Australia.

Progression towards the realisation of benefits varies

Even though all regulatory reforms assessed in this study have been agreed by COAG, progress toward the realisation of benefits varies

- For some reforms, available information suggests benefits are accruing in line with expectations. For example, trade measurement and wine labelling are affording measurable but small gains at the national level.
- Some reforms have achieved implementation milestones as assessed by the COAG Reform Council, but there is some doubt about whether the gains identified in the RISs or businesses cases will be realised without further action by government. For example, the impact of Standard Business Reporting is largely dependent on take-up and, at this stage, this is not assured without concerted action. Recent announcements by the Australian Taxation Office (ATO) have improved prospects, but take-up at present is negligible.
- Achievement of implementation milestones is not necessarily a good guide concerning whether, and to what extent, benefits are likely to accrue from a reform. For example, the National Construction Code has met its implementation milestones; however, differences in the administration of the code between jurisdictions can erode the intent of the reform. Other regulatory differences between jurisdictions are being codified into model or national legislation and regulation (for example, rail safety).
- In some areas, achievement of implementation milestones is at risk and reform potential as initially envisaged, although substantial, is unlikely to be achieved under current policy settings (for example, development assessment).
- There is also evidence of unilateral reform activity by the States, including measures that originated from earlier national reform initiatives. For example, a follow-on from the NCP legislative review program was cited in consultations as leading to selective state-based development assessment reforms.
- The possible benefits from some reforms are contested by key interested parties (for example, rail safety and occupational health and safety (OHS)). In other cases, benefit estimates in publicly available *ex ante* studies are considered to significantly understate actual potential (for example, development assessment).
- The lack of political 'buy in', changes in government and unrealistic implementation deadlines have been cited in consultations in relation to a number of reforms (for example, OHS, consumer credit and development assessment).
- The transition to the new regulatory environment can be disruptive to business, particularly when the change involves the introduction of new large scale

computer systems. For example, referring to the initial stages of new applications, some health professionals have reported disruptions arising from the new system of registration and accreditation, while representatives of credit providers have reported substantial 'teething problems' with the implementation of the harmonised system regulating consumer credit. There can also be significant lags between systems development and take-up (such as for standard business reporting). In this context, participants drew the Commission's attention to the need for new IT systems and harmonised data sets to be tested before going live and for there to be effective short term workarounds if teething problems are expected.

- Some reforms are largely of an administrative nature and, while desirable, would be expected to have modest aggregate effects (for example, centralisation of trade measurement). In a similar vein, other reforms represent unfinished business from earlier regulatory changes (for example, the harmonisation of rail safety regulation follows from the introduction of standard gauge interstate rail links).

Assessment of direct impacts

Progress towards implementation of reforms varies. In the Commission's assessment, if full implementation of the 17 Seamless National Economy reforms being assessed is achieved, business costs could be lowered by around $4 billion per year, in the longer run. The achievement of these gains involves some transition costs and in some cases additional ongoing costs.

Realised and prospective business cost reductions

Of the estimated reduction in business costs, around $3 billion relates to reforms for which measures have been implemented (or are at the implementation stage) (table 1). Because Seamless National Economy reforms are in the early stage of implementation, only a small fraction of this total is likely to have been realised to date. Available information suggests that some of the largest benefits are likely to accrue from reforms affecting development and construction — that is, implementation of the National Construction Code and streamlining development assessment processes. Because of the potential for the consumer policy and product safety reforms to span a large part of household consumption activities, prospective benefits in these areas are estimated to be substantial in value terms.

Table 1 **Estimated reductions in business costs from the 17 COAG business regulation reforms assessed**[a]

$ million per year (2010-11 dollars)

Reform	*Realised benefits*	*Prospective benefits*[b]	*Realised and prospective benefits*	*Potential benefits*[c]
Consumer law and product safety	60	820	880	..
Consumer credit[d]	10	35	45	..
Personal property securities	..	70	70	..
Trustee corporations	..	4	4	..
Standard business reporting	2	58	60	500
Payroll tax	20	10	30	..
Occupational health and safety	..	480	480	..
Rail safety	9	7	16	..
Health workforce	..	160	160	..
Trade measurement	5	..	5	..
Food regulation	..	1	1	..
Wine labelling	12	17	29	..
Development assessment	25	200	225	125
National Construction Code	..	1 050	1 050	..
Total direct impacts quantified	**143**	**2 912**	**3 055**	**625**

.. zero, less than $500 000, or not estimated. [a] Longer-run direct impacts per year. [b] Reforms have been implemented, but reform-induced reduction in business costs yet to occur. [c] Agreed reforms to be implemented. [d] Mortgage brokers, margin lending and non-deposit taking institutions.

Available information suggests that some benefits in the form of productivity improvements are likely to accrue over the short to medium term (within five years of implementation). Such benefits come from reforms that focus in particular on streamlining administrative procedures and reducing compliance and administrative costs (such as in the areas of OHS, payroll taxation and wine labelling). Other benefits are likely to accrue more gradually over the medium to longer terms. The reforms that yield such benefits are likely to involve more interactive responses on the part of government, producers and consumers (such as the Australian Consumer Law).

Potential business cost reductions

Some agreed reforms being assessed are yet to be implemented. *Ex ante* estimates and the Commission’s investigations to date indicate that the full implementation and take-up of the reforms being assessed could reduce business and other costs by, at least, a further $0.6 billion per year, mainly in the areas of Standard Business Reporting and development assessment (table 1).

Transition and ongoing costs

It should be noted that, in some of these areas, the government has incurred substantial costs to develop and commence implementing reforms, in the expectation of future benefits. The largest single cost identified relates to Standard Business Reporting, for which around $170 million has been outlaid by government to fund systems development. At this stage, take-up for a key component is negligible, although the intention to migrate major reporting systems to Standard Business Reporting to widen its application is expected to lift take-up substantially. The changes in regulations also involve one-off transition costs for business. The main cost identified relates to training and other adaptation costs associated with the introduction and compliance with the new OHS system. These are estimated to amount to about $75 per worker, or around $850 million across the economy.

In addition to transition costs, it is recognised that additional costs are likely to be incurred by business to meet ongoing reporting and compliance requirements of the new regulatory frameworks. Although the full effect of new frameworks cannot be easily ascertained until new frameworks are bedded down, available information indicates that the main area of additional compliance costs to business is in the area of OHS, where it is recognised that businesses operating in a single state would incur costs of the new harmonised system but will not be able to avail themselves of offsetting benefits. Available benchmark estimates indicate that the ongoing additional costs to single-state businesses could be about $14 per worker or around $110 million across the economy.

Some changes in ongoing government administrative expenditures have also been identified. Some of these changes relate to the transfer of program responsibilities from the States to the Australian Government and should have negligible impact on overall outlays (for example, in trade measurement). Others involve some net increase in outlays associated with increased monitoring or service provision (such as OHS, consumer policy and consumer credit reforms). In other cases, there is likely to be a net reduction in government service requirements (for streamlined development assessment procedures).

Overall, the Commission has identified transitional costs to business and government amounting to around $1.7 billion. Additional ongoing costs to business of around $145 million per year, and a possible net increase in government outlays of around $70 million, have also been identified.

Assessment of economy-wide impacts of 17 regulation reforms

Commission modelling suggests that if full implementation of reforms ultimately occurs and businesses and consumers respond in accordance with expectations, the assessed reforms could raise GDP by around 0.4 per cent in the longer run (or over $6 billion). These are 'outer envelope' estimates — they represent the potential maximum longer-run impacts of the Seamless National Economy reforms being assessed. The projections take into account the impact of identified additional on-going costs to government and business.

Of this total, about four fifths (or nearly $5 billion) relates to benefits from reforms that have been implemented (that is 'realised' and 'prospective' benefits) while the remainder are assessed as pertaining to reforms yet to be implemented, at this stage (that is, 'potential' benefits) (table 1).

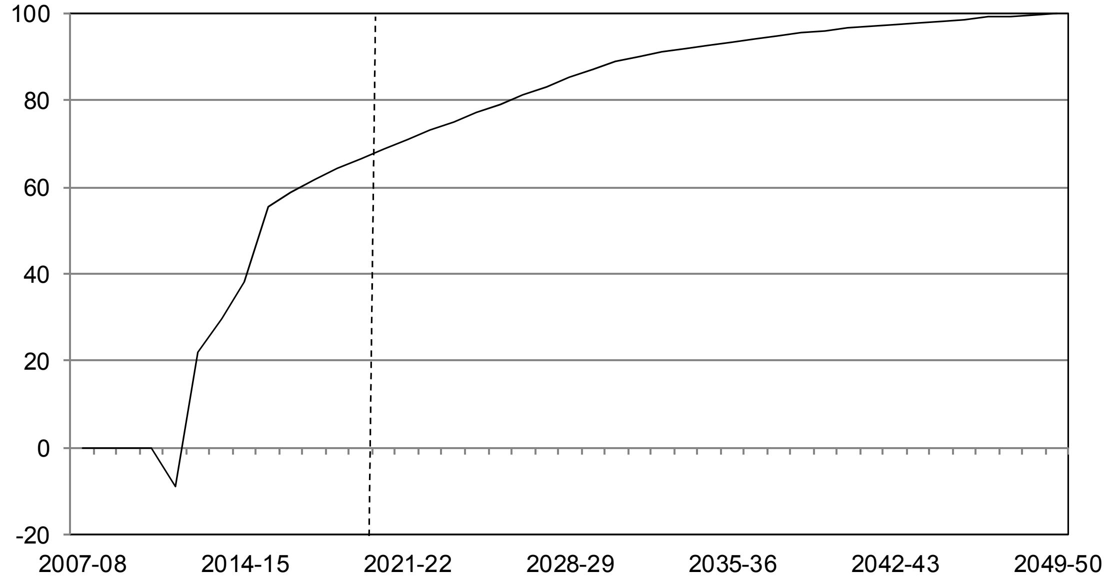
Based on information about timing of implementation and the nature of reforms, the Commission's assessment is that the majority of the economy-wide effects of reforms implemented would be felt by 2020 (figure 2). These estimates of the timescale over which the realised and prospective benefits are likely to accrue take into account identified ongoing and transition costs associated with *all* of the 17 Seamless National Economy reforms assessed. As can be seen from the figure, the concentration of transition costs at the early stages of the reform process is projected to impose a temporary cost on the national economy (that is, a lower GDP from levels that may otherwise apply) in the transition period. The scale and duration of this economy-wide cost would be sensitive to actual transition costs incurred by business and government and the timing of those costs.

State implications

Under the modelling scenarios, all jurisdictions are projected to achieve higher output levels from the combined effects of the Seamless National Economy reforms assessed (table 2). The projected benefits for each jurisdiction reflect both the dividends from reform within jurisdictions and flow on (or indirect) effects of reform in other jurisdictions on the competiveness of industry. Improved productivity is also projected to raise real wages in all jurisdictions, which in turn raises real consumption per person.

Figure 2 **Timescale over which the economy-wide benefits from reforms implemented are likely to accrue**[a,b]

Per cent of the change in real GDP



a The negative impact on GDP in the early stages of the reform period reflects the temporary effects of one-off transition costs of reforms assessed. **b** The analysis assumes that *all* projected cost reductions and productivity improvements relating to reforms implemented are ultimately realised.

Table 2 **Indicative output implications of the 17 COAG business regulation reforms assessed**

Per cent

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*
Real GSP/GDP	0.3	0.3	0.4	0.4	0.8	0.4	0.5	0.2	0.4
Output per person employed	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4

Fiscal impacts

The projected outer-envelope increase in Australia's GDP and national income with the full accrual of the benefits of reforms implemented could raise the combined net revenue of Australian governments by over $1 billion per year. Of this *prospective* increase, nearly two thirds is estimated to accrue to the Australian Government through (mainly) company and personal income taxation. The remainder is estimated to accrue to State, Territory and local governments, mainly in the form of property taxes and GST receipts.

Opportunities for improvement

Achieving the reform potential of agreed reforms

The Commission's assessment is that there are a number of areas where there is a real risk that prospective benefits will, in fact, not be achieved. In particular:

- The full realisation of potential benefits from standard business reporting requires its adoption as the core reporting framework by key participating agencies including the ATO and Australian Securities and Investments Commission (ASIC). During the study, the ATO advised the Commission, in writing, of its commitment to transition to the SBR framework as its primary channel for its electronic interaction with business. Prior to the finalisation of this report, the ATO also announced its intention to transfer current systems to the SBR framework and to commence decommissioning some existing systems.
- The full realisation of prospective benefits from the National Construction Code requires, amongst other things, uniform interpretation of building standards by administering authorities (mainly local governments). The Commission was informed during the study that there can be significant differences in interpretation between administering authorities, not related to climatic and other recognised environmental factors.
- The achievement of available benefits from the development assessment reforms requires, amongst other things, the extension of code assessment to commercial and industrial developments. It also would benefit from the maintenance of an effective inter-jurisdictional coordination framework. In this regard, the implementation of more efficient and harmonised development assessment procedures appears to have been put at risk by the winding up of the key reform council — the Local Government and Planning Minister's Council — and separate regulatory reviews across jurisdictions.
- The achievement of the full benefits of harmonisation across jurisdictions requires that jurisdictions adopt common legislative provisions. However, the Commission was informed that jurisdictional differences have been codified (or consolidated) in some cases into model legislation and codes of practice, effectively eroding the original intent of harmonisation (for example, in the areas of OHS, rail safety and National Construction Code).

Further gains could be expected to be realised from the effective implementation of the other areas of Seamless National Economy reforms not assessed in this study.

Broader opportunities for improvement

Most Seamless National Economy reforms assessed in this study are a next step in a progression of reforms intended to improve the operational efficiency of business and government, and reduce the cost of doing business across jurisdictions.

The Commission notes a number of other regulatory reform and policy developments that have been identified, including:

- extension of the coverage of the National Construction Code to additional construction services (gas fitting, electrical work, telecommunications and engineering have been mentioned in consultations as possible priorities);
- with regard to the broader operation of the construction industry, at its April 2012 meeting, COAG noted that Heads of Treasuries have been asked to undertake analysis of construction industry costs and productivity, and agreed to consider the outcomes of this work through Senior Officials;
- further harmonisation of food safety regulation and food labelling requirements;
- further development of code-based development assessment and planning approval processes, and the use of cost-effective electronic systems;
- also with regard to development assessment processes, at its April 2012 meeting, COAG agreed to a proposal to benchmark Australia's major project development assessment processes against international best practice and to report to COAG; and
- extension of standard business reporting to other administrative reporting (such as to Centrelink and Medicare).

There would also appear to be scope for more fundamental reforms in some of the Seamless National Economy areas being assessed. For example, the Henry review of Australia's taxation system recommended that payroll taxation be replaced by an even more efficient tax.

Overall, in the Commission's assessment there are opportunities for achieving further benefits by continuing or extending traditional reform approaches (including harmonising legislation and adopting common codes of practice). There would also appear to be opportunities for more fundamental change.

Some broader issues and governance

This study has highlighted gaps that can exist between initial aspirations, milestones being 'ticked' and impacts on the ground. It also suggests that there are opportunities for improvements both within the frameworks of current reform approaches and more broadly.

Flexibility of arrangements

As regional markets become more integrated through interstate trade and investment and through with the movement of people, the advantages of harmonisation of regulatory frameworks across jurisdictions also increases. Such harmonisation is frequently directed at lowering compliance costs for national firms. Such firms are relatively few in number, although they are much more significant in economic terms.

In this context, the gains from harmonisation may be eroded to the extent that some firms bear additional transition and ongoing costs not matched by benefits to them. There are many small firms operating in only one state that may face increased regulatory compliance costs in order for a smaller number of large firms to have greater ease of access to interstate markets and lower costs in operating across state boundaries.

Given this, adoption of more flexible arrangements (including opt-in arrangements for firms as an alternative to ‘universal’ harmonisation) may afford more cost effective opportunities for improvement.

In addition, while there has been an emphasis on the concept of harmonisation in Seamless National Economy reforms, the application of the framework through national laws, model laws, codes of practice and other arrangements has not, to date, afforded full harmonisation across a number of areas assessed. The adoption of more targeted regulatory changes, including alternative harmonisation models, such as cross-jurisdictional opt-in arrangements and interpretative services where appropriate, may help achieve greater harmonisation where it is commercially important and administratively feasible.

Reform payments

Because of the ‘vertical fiscal imbalance’ in the Australian Federation, reform payments have evolved through National Competition Policy reforms to be part of Australia’s reform architecture. In relation to the Seamless National Economy reforms, reform payments are being made by the Australian Government to the States and Territories in two tranches. In the first tranche, *ex ante* reform payments have been made to facilitate reform. In the second tranche, reward payments are to be made on the achievement of agreed milestones based on the advice from the

COAG Reform Council. In its monitoring, the COAG Reform Council has observed that achievement of reform milestones does not necessarily reflect effectiveness in achieving reform objectives.

In the Commission's assessment, while there may need to be some initial payments to assist with up-front costs, *ex post* reform reward payments should be linked, as far as practicable, to the actual achievement of agreed outputs and outcomes.

Closing the gap between realised and potential reform benefits

There is evidence that substantial further government action is required to achieve anticipated reform potential. The Commission's assessment is that the scale of unfinished business would be reduced, and realised reform benefits increased, though a better matching of reform objectives with the scale of available review and implementation resources, and more effective stakeholder participation.

Because the cost-reducing and productivity enhancing benefits of the reforms will accrue over a number of years, realisation of the full potential from the reforms assessed will require continued commitment and sustained effort by government.

Achieving effective Seamless National Economy reform

Economic reform in the Australian Federation occurs in the context of the Australian Constitution, which assigns a small range of exclusive powers to the Australian Government and a range of matters on which the Australian Government can exercise powers concurrently with the States. In this system, effective national economic reform of the type being undertaken in the Seamless National Economy stream requires cooperation between jurisdictions. Each reform typically extends the boundaries, to varying degrees, of previous reform efforts and other economic and social changes.

This study suggests effective ongoing regulatory reform in this context requires:

- *agreement about the nature and extent of the problems to be addressed;*
- *agreed goals in selected priority areas that are practical and achievable rather than aspirational;*
- *tractable and cost-effective solutions commensurate with the scale of the problems and reform goals;*
- *strong leadership at the implementation level to ensure accountability and real momentum for change, with implementation arrangements resting with*

institutions that have an interest in and clear responsibility for successful outcomes;

- *an effective allocation of reform responsibilities between COAG and its members;*
- *pressure from industry to deliver real gains; and*
- *an effective monitoring process with real accountability — the COAG Reform Council process of checking milestones does create some pressure for action, but it does not go to outcomes on the ground and some milestones are little more than steps in a long process.*

In a similar vein, the Commission's recent research report on *Identifying and Evaluating Regulation Reforms*, amongst other things, emphasised that there remains scope for improvement in 'prioritisation and sequencing of reviews and reforms — with greater attention paid to the costs of developing and undertaking reforms …' (p. x).

Concerning reform reward payments, the current study also suggests that any *ex poste* reward payments be tied to actual outputs and outcomes, rather than process milestones or projected outcomes.

VET reforms and youth transitions initiatives

States and Territories were at different points in the process of developing and implementing their own VET policy reforms in 2009, when they committed to pursuing the outcomes and targets set out in the main agreement giving effect to a new set of VET reforms — the *National Agreement for Skills and Workforce Development* (NASWD) (box 3). NASWD emphasised the importance of making the VET systems more contestable and client driven.

Progress towards an entitlement-based system with greater contestability varies across the jurisdictions. At this stage, only Victoria has introduced an entitlement system within a contestable market, although South Australia will transition to its own version of this arrangement from July 2012.

Box 3 **NASWD outcomes and targets**

The 2009 NASWD defined four outcomes and two targets to be reached by 2020. In the more recent 2012 NASWD, COAG reiterates its commitment to the 2020 targets, noting that they are ‘ambitious’, ‘long-term’ and ‘aspirational’.

Outcomes

The working age population has gaps in foundation skills reduced to enable effective educational, labour market and social participation.

The working age population has the depth and breadth of skills and capabilities required for the 21st century labour market.

The supply of skills provided by the national training system responds to meet changing labour market demand.

Skills are used effectively to increase labour market efficiency, productivity, innovation and ensure increased utilisation of human capital.

Targets

Halve the proportion of Australians without qualifications at Certificate III level or above by 2020 (from 47.1 per cent of 20-64 year-olds to 23.6 per cent).

Double the number of higher level (Diploma and Advanced Diploma) qualification completions by 2020.

On 13 April 2012, COAG agreed to the *National Partnership Agreement on Skills Reform* (NPASR), with the following key elements:

- introducing a national training entitlement for a government-subsidised training place to at least the first Certificate III qualification for working age Australians without qualifications;
- income-contingent loans for government-subsidised Diploma and Advanced Diploma students for students undertaking higher level qualifications, thereby reducing their upfront costs of study;
- developing and piloting independent validation of training provider assessments and implementing strategies which enable TAFEs to operate effectively in an environment of greater competition;
- a new *My Skills* website to improve access for students and employers to information about training options, training providers and provider quality; and
- supporting around 375 000 additional students over five years to complete their qualifications, and improving training enrolments and completions in high-level skills and among key groups of disadvantaged students, including Indigenous Australians. (COAG 2012)

The latest agreements are silent about what might occur between 2017 and 2020, the year of the COAG targets.

The Commission's approach

The Commission has been asked to estimate:

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

In estimating the impacts of the COAG VET reform agenda, the Commission has not assessed all policy initiatives affecting the VET sector, but has focussed on specific initiatives associated with the key COAG VET agreements.

The following policy initiatives are accounted for in the scope of this project:

- The introduction of a market-based system in Victoria from mid-2009. Estimates of the *realised* impacts of this initiative are based on increases in government-funded training activity over the period 2009–2011, relative to a baseline of 2008 activity. *Prospective* effects reflect qualification completions post-2011, by government-funded students who commenced their study between 2009 and 31 December 2012 — when the current policy statement will expire. The policy initiatives are associated with an additional 93 000 students aged 15 to 64, on average per year, undertaking government-funded VET in Victoria (from a base of 284 000 in 2008).
- The *National Partnership Agreement on Productivity Places Program* (NPAPPP), implemented by States and Territories except Victoria from July 2009. As the Agreement will conclude on 30 June 2012, the Commission has treated all of the effects of the NPAPPP as *realised*. An additional 129 000 government-funded students per year, on average, are estimated to have studied in the publicly-funded VET sector as a consequence of the NPAPPP (from a base of 701 000 per annum in the pre-reform period — 2005 to 2007).
- Implementation by South Australia of a market-based system. Given the 1 July 2012 scheduled commencement date for this initiative, and steps already undertaken to implement related changes to the South Australian training system, the effects of this reform effort are deemed to be *prospective*. The increase in the number of government-funded VET students attributable to this initiative is estimated to be 22 000 per year, on average (relative to a base case of 95 000 government-funded students aged 15 to 64 in 2009). Effects of increased government-funded training effort in South Australia as part of the NPAPPP are included in the assessment of the national initiative.

- *Potential* reform effects. Given uncertainty about the timing and progress of the reforms, estimates of potential impacts assume the achievement of the COAG targets set out in the original NASWD and recently reiterated by COAG. While COAG has characterised these as aspirational, it has also recommitted to them. This approach is consistent with COAG's terms of reference for this study: that where information about specific reform initiatives is limited, the Commission's reporting would produce broad or 'outer envelope' estimates of the potential benefits and costs of reform.
- *Realised* and *prospective* effects of an expansion in the Australian Government-funded Language, Literacy and Numeracy Program (LLNP) have also been assessed. In relation to *potential*, the Commission has modelled the effects of achieving the National Foundation Skills Strategy for Adults target announced by COAG's Standing Council on Tertiary Education, Skills and Employment in November 2011, that by 2022, two thirds of working age Australians will have literacy and numeracy skills at Level 3 or above.

What VET outcomes are in scope?

People enrolling in a course can follow a number of outcome paths: the completion of a qualification at a higher level than they currently have; a new qualification at the same or lower level than what they currently have (what the Commission refers to as reskilling), and not completing the course. The prevalence of these three types of outcomes from the VET sector is summarised in figure 3.

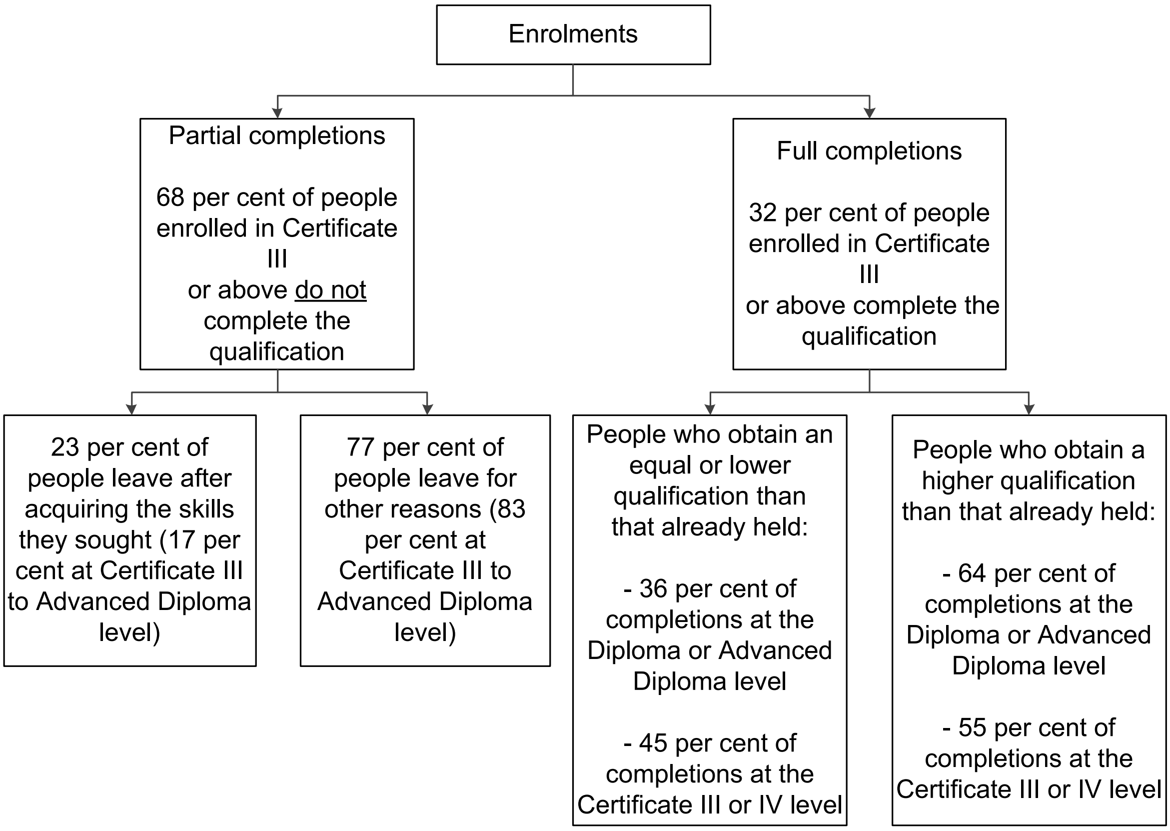
A striking feature of the present system is the low completion rate. Low VET completion rates mean that increases in training effort can translate into a relatively small increase in qualification attainment.[1]

The first COAG target, to halve the proportion of Australians without qualifications at Certificate III level or above by 2020 is used as a progress measure in the 2009 NASWD and as a performance indicator in the 2012 NASWD. As a result, the Commission has focused on the impacts of qualification attainment at Certificate III and above. In addition, it has considered qualifications at a level higher than that

[1] Completion rates vary across States and Territories. The National Centre for Vocational Education and Training estimates that about 32 per cent of students who commenced a qualification at a Certificate III to Advanced Diploma level in 2007 completed their study. Higher completions rates have been reported for trade apprentices (56.6 per cent) and participants in the NPAPPP (55 per cent, from commencements in New South Wales). South Australia also report recent completion rates that exceed 50 per cent.

already obtained,[2] but clearly, there can be gains when people acquire competencies and skill sets, even if they do not obtain a qualification (a partial completion). Similarly, there can be gains from acquiring a new qualification at the same level or below (reskilling).

Figure 3 **Prevalence of full and partial completions and reskilling**



The Commission has used scenarios to illustrate the possible effects of partial completions and reskilling. Given the paucity of data relating to these training outcomes, the quality of these estimates is lower than for full completions at a higher level. That said, reasonable assumptions based on available data were made to produce orders of magnitude of the possible effects of these training outcomes on the variables of interest.

2 The Victorian and South Australian reforms include some form of this feature. In addition there are data limitations for estimating the effects of other outcomes. Employment and wage premium estimates are typically derived only with reference to the highest qualification that an individual has gained. Few studies have estimated premiums for partial qualification completion, or qualification attainment at or below the highest level already achieved. Further research in this area would strengthen the analysis of the potential benefits of such outcomes.

Assessment of reform impacts

Increases in employment and productivity are important because of their potential to raise GDP per capita and yield to net social benefits. Given that the policy focus on employment and productivity reflects their contribution to these broader economic indicators, the Commission has adopted the Treasury's 3Ps framework in this study. This framework decomposes GDP per capita into contributions labelled population, participation and productivity. In this framework, the concept of participation reflects employment among people aged 15 to 64, not the definition typically used in labour market statistics. The concept of an employment rate is, therefore, used in this analysis in place of participation.

Productivity is measured in terms of GDP per hour worked. Changes in this measure as a result of a policy initiative therefore reflect contributions from people already in employment, and from those who gain work. The contribution to the national indicator of labour productivity from up-skilling by people already in employment is unambiguously positive. To the extent that people entering employment are less productive than the average person already in work, such an addition to the workforce can reduce the average productivity index. This is not to say that bringing people into employment who would otherwise not have worked is a bad thing. It is simply a reflection of the limitations of labour productivity as a measure of the benefits of a policy initiative. For this reason, the Commission uses the concepts of GDP (a measure of economic activity) and net social benefit (a measure of community welfare) as indicators of the impacts of the COAG reform agenda (see chapter 2 of volume 3).

In each of assessment, the Commission has estimated the effects of the initiatives modelled over and above what might otherwise have eventuated — the baseline. This baseline includes what could be expected to occur given the VET policy settings in existence before the original NASWD and what is known about changes in other parts of the education system. Individual initiatives of the States and Territories outside the COAG process are not captured by the COAG estimates, but are captured implicitly in the baseline. The baseline also includes an 'autonomous' increase in qualifications in the population, as older generations with lower qualification attainments retire and younger cohorts with higher rates of qualification attainments join the workforce.

Estimated impacts of reforms against the baseline — qualifications higher than already held

Table 3 shows the estimated impact of each of the reforms. Importantly the reforms already realised, and in prospect contribute to the total estimates gains from the reforms. The column marked 'potential estimates' shows what has to be achieved in addition to those gains identified as realised and prospective for COAG to meet its 2020 target. The last column shows the gain from achieving the COAG target of halving the proportion of Australians aged 20 to 64 without qualifications at Certificate III level or above between 2009 and 2020.

Table 3 **Overview of results, higher qualification scenarios**

		Victorian realised	*Victorian prospective*	*SA prospective*	*NPAPPP realised*	*Potential*	**Total gain from achieving 2020 target**
Increased highest qualification[a]							
Cert. III to Ad. Dip.	no.	25 000	46 000	11 000	117 000	1 091 000	**1 290 000**
Employment and productivity							
Change in employ.[b]	%	0.02	0.03	0.01	0.11	0.88	**1.04**
Change in productivity[c]	%	0.01	0.02	0.00	0.04	0.29	**0.35**
GDP	%	0.03	0.04	0.01	0.20	1.67	**1.95**
Private and net social benefit[d]							
Payments to labour	$m	2 063	3 481	999	9 536	92 020	**108 099**
Net social benefit	$m	1 113	1 830	504	5 039	48 809	**57 295**

[a] Estimates rounded to the nearest thousand. [b] Change in employment relative to the baseline expressed as a percentage of the Australian working-age population. [c] Change in productivity of the Australian workforce, relative to the baseline. [d] Present value of changes over the graduates' working lives – see adjoining text.

The 2020 targets for qualification attainment in the working-age population are ambitious. The estimated potential gains that would result from achieving those targets are relatively large, reflecting both the substantial increase in places and completions required and, relative to the other VET scenarios modelled, the longer timeframe over which training effort is higher.

Relative to the baseline (in which 32.5 per cent of the population aged 20 to 64 do not have at least a Certificate III qualification in 2020), the increases in the profile of qualification attainment associated with attainment of the COAG VET targets by 2020 are projected to raise (table 3):

- the number of completions by about 1.29 million over the period 2010 to 2020;
- employment by 1.04 per cent by 2020;
- labour productivity by 0.35 per cent; and
- GDP by 1.95 per cent.

These results are substantially revised from those provided in the Discussion Draft, reflecting higher completion rates for South Australia and NPAPPP, correction of a number of errors, the application of a smaller discount for ability bias, and the discounting of future benefits (at 6 per cent, real). The Commission's revised analysis in these respects benefited from feedback received on the Discussion Draft, including at a modelling workshop.

The longer term impacts of achieving the 2020 targets over the working life of the persons achieving the higher level qualifications serve to increase labour income by more than $108 billion (2012 dollars) over the period 2010 (when the first graduates are assumed to enter the workforce) to 2062 (when the last 2020 graduates are assumed to retire, assuming a 42 year working life for young learners).

The initiatives are projected to produce discounted net social benefits of $57 billion over the period 2010 to 2062. These benefits are likely to be understated, given that they do not account for externalities and other potential gains (see below).

Figure 4 illustrates the relationship between the baseline numbers and proportions of 20-64 year-olds without at least a Certificate III.

These results are comparable with those of other recent studies of VET reforms (see appendix A in volume 3).

Other gains

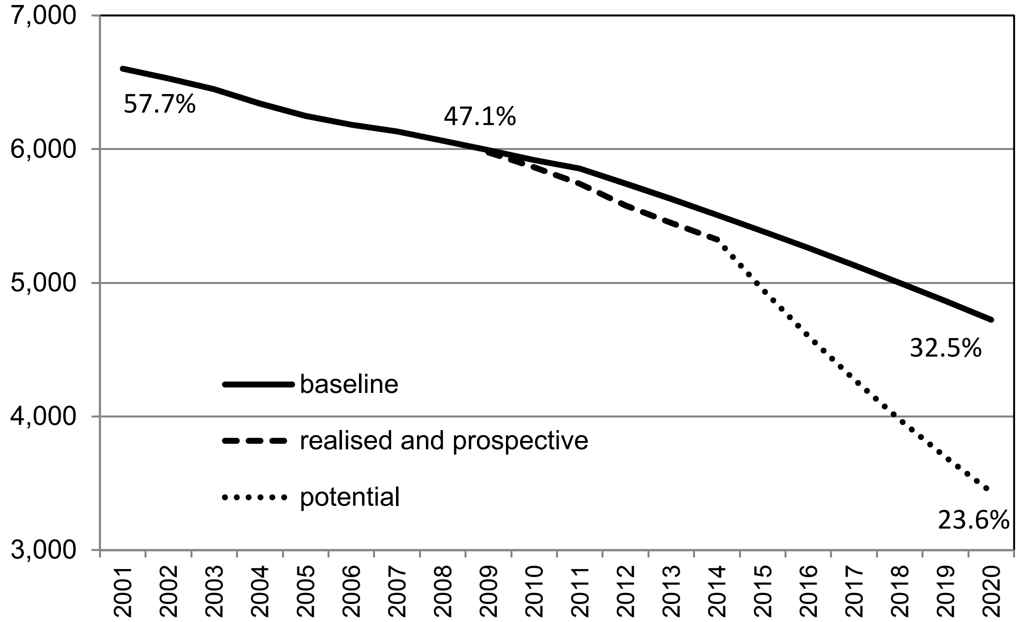
The initiatives considered in this report can be expected to also increase the numbers of partial completions and of completions at or below the level of qualification already held. A more effective VET sector will also improve the functioning of the labour market with a better and faster matching of skills to vacancies.

Partial completions

The latest survey indicates that 23 per cent of students who finish without completing their qualification of enrolment nominate having acquired the skills needed for their work, or attainment of their training goals, as their main reason for leaving early.

Figure 4 **Proportion and numbers of 20–64 year olds without a Certificate III or above, 2001–2020, baseline and estimates[a,b]**

Persons ('000)



[a] The baseline is based on an extrapolation of the trend in the reduction of the proportion from 2001 to 2009, as in CRC (2011) and on ABS Series B population projections. [b] The percentages represent the proportion of 20–64 year olds in the population without a Certificate III or above.

Qualification at or below current level

With the exception of the language, literacy and numeracy (LLN) analysis, the focus of the reform agenda is on Certificate III to Advanced Diploma attainment. In Victoria in 2010, for example, 36 per cent of government-funded enrolments were at a level lower than Certificate III.

The higher qualification scenario only assesses the economic impacts of qualifications that increase an individual's level of attainment. This is consistent with the Victorian entitlement, where access to a government-funded place at Certificate III level and above is constrained (with limited exceptions) to a higher qualification than the one a person currently holds. The South Australian Government has adopted a more flexible approach, allowing a person with a qualification equal to their current course to be eligible for a government-funded place.

Of course, completing a lower level qualification might maintain or improve a graduate's productivity and employment prospects. As the South Australian

Government has noted, career changers may need to start at a lower qualification level than that already held. Even when people are not changing career, they may need refresher or extra courses because of regulatory requirements.

Nationally, over one-third of Diploma and Advanced Diploma graduates in 2009 had previously completed a qualification at or above that level. The corresponding figure for Certificate III and IV students was 45 per cent.

While evidence on the relationship between reskilling and labour market outcomes is not conclusive, presumably individuals perceive a benefit in this form of VET activity, or they would not be prompted to invest time, money and effort in it. Intuitively, reskilling could be expected to assist individuals in retaining employment or enhance their employment prospects. This hypothesis is borne out in data collected on training motivations by the National Centre for Vocational Education Research (NCVER 2010, 2011c). The most frequently nominated motivations for reskilling by mature learners are that 'It was a requirement of my job' and 'I wanted extra skills for my job'.

Scenarios for partial completions and reskilling

This analysis is limited to mature learners, who constitute the majority of the VET students in these categories.

Partial completions represent about 32 per cent of higher completions. The Commission assumed in this scenario that part completers benefit from 50 per cent of the gains that are available to completers; the benefits therefore add up to about 15 per cent of those obtained from the higher qualification scenario (table 4).

Those completing a qualification at the same or lower level as the one previously held represent more than three quarters of completions at or above Certificate III. These graduates are assumed to benefit from a 6 per cent addition to the wage premium attached to their original qualification and 75 per cent of the employment premium (in recognition of the potentially large employment effect that reskilling can have). There is therefore a strong employment effect, and economic benefits are estimated to be in the order of 50 per cent of the benefits from the potential higher completion scenario for mature learners.

Table 4 **Potential effects of higher completions, partial completions and re-skilling scenarios, mature learners, by 2020**
Potential scenario

	Unit	*Higher completions*	*Part completions*[a]	*Same or lower qualification*
Increased completions/partial completions[b]				
Cert. III to Ad. Dip	no.	731 000	237 000	570 000
Employment and productivity				
Change in employment[c]	%	0.69	0.11	0.46
Change in productivity[d]	%	0.27	0.04	0.14
Private and net social benefit[e]				
Payments to labour	$m	67 793	10 499	38 645
Net social benefit	$m	41 655	6 466	20 314

[a] Assuming 50 per cent of the premiums from full completions. [b] Estimates rounded to the nearest thousand. [c] Change in employment relative to the baseline expressed as a percentage of the Australian working-age population. [d] Change in productivity of the Australian workforce, relative to the baseline. [e] Present value of the change for the cohort over their working lives (assumed to be 18 years for mature learners).

Gains from improving literacy and numeracy

Estimated changes in employment and productivity stemming from realised and prospective changes in LLN skills in the working-age population are very small, reflecting the small number of additional places under the policy initiatives modelled. The Australian Government has committed funding for an additional 43 570 places in the Language, Literacy and Numeracy Program over four years from 2010-11. When completions and the effectiveness of the program are taken into account, the Commission estimates that about 13 700 people aged 25 to 64 achieve a skill improvement sufficiently large to move them up a skill level.

Potential reform impacts could be much larger, but achieving these outcomes would require commensurately larger effort to address LLN skill gaps.

Given the extent of surveyed LLN skill gaps in the population, and the positive productivity gains associated with LLN skill improvements, it would suggest that significant improvements in skills are achievable if sufficient resources are directed to this task.

In terms of potential impacts, the Commission has modelled a 6 percentage point increase in the proportion of people at skill level 3 by 2022. Achievement of this National Foundation Skills Strategy (NFSS) target implies declines in the proportions of people at both levels 1 and 2. Some of those affected by initiatives introduced in response to the target will only progress from level 1 to 2. The Commission's estimates include the effects of this skill acquisition. The New Zealand experience, in achieving a 7 percentage point improvement in adult reading literacy between 1996 and 2006, suggests that an improvement of the magnitude targeted under the NFSS is feasible.

If these improvements were achieved in practice, the Commission estimates that a 0.16 per cent increase in employment for men and a 1.03 per cent rise for women could ensue. Average productivity of men could rise by about 0.82 per cent and by 0.91 for women. An increase in GDP of 0.7 per cent is estimated as a consequence of these changes.

Social inclusion also benefits

Adult literacy, and participation in the labour market, are two indicators of social inclusion. Estimated improvements in these measures as a consequence of the COAG VET reform agenda indicate the scope for assessed policy initiatives to improve social inclusion.

But the assumptions matter

While all the reform scenarios modelled are estimated to have positive economic impacts, and to result in net social benefits, the point estimates presented must be interpreted with caution. Sensitivity analysis was conducted by varying a number of key parameters. It shows that small changes in the assumptions can change the results markedly (see appendices D and E in volume 3).

An improved VET sector and labour market

The Commission anticipates that, over time, there would be a gain in moving from a regulated and supply driven system to a demand driven contestable market, provided quality is maintained. In fact, with improved information to prospective students and employers, and stronger auditing and validation of course outcomes, improved quality should result over time. And there could be cost savings at constant quality. For illustrative purposes, assuming a 2 per cent improvement in the efficiency of delivering services in the publicly-funded VET sector (estimated to be about $7.5 billion in size), this would be equivalent to about $150 million in 2010 dollars.

A more efficient and flexible VET sector would be expected to also improve the functioning of the labour market (through faster retraining and better matching of people to vacancies).

The Commission's analysis of youth transitions

In this study, the notion of a successful transition is considered from the perspective of COAG's goals for the reform agenda: increases in workforce participation, productivity and social inclusion. A successful transition, therefore, is deemed to occur when a young person reaches an 'end point' consistent with a high probability of employment and social inclusion later in life. The Commission has assumed that a person's employment status in the period before he or she turns 25 is a reasonable predictor of his or her future outcomes. Successful transitions, therefore, are defined with reference to a person's employment status in the period before they turn 25. Some people who are not employed at this point in their lives are either studying or engaged in child rearing. Their transition outcome is unclear, and they are not included in the Commission's assessments of the prevalence and characteristics of successful transitions.

COAG initiatives that aim to improve transitions tend to focus on people in the early stages of the transition process. It will be some years before the impacts of this effort are visible in measures of successful transitions. The Commission has, therefore, focused on identifying the incidence of, and characteristics associated with, successful transitions.

When employment, of any type, in four of the preceding seven months before someone turns 25 is used as the identifying criterion, 7 per cent of the cohort that turned 25 in 2008 is deemed not to have made a successful transition. Under the more restrictive criterion of any employment in all seven months, 13 per cent of the cohort is found not to have made a successful transition. Characteristics like higher measured ability and educational attainment are associated with successful transition.

The incidence of unsuccessful transitions underscores the importance of policy activity in this area. Using either identifying criterion, a significant proportion of young people reach the age of 25 with relatively poor prospects for economic and social engagement.

Achieving effective VET reform

There are several areas with potential to improve VET reform efforts.

The information available to prospective students could be improved. Although many websites provide information about course content, data on post-completion employment rates by course and provider are not available. It is also difficult to compare the prices of courses on offer from different providers. The *MySkills* website, to be fully operational in 2015-16, has the potential to improve information availability. However, valid and reliable data on employment outcomes at a provider and course level are not currently collected, and it is unclear if these will be included in the labour market information available on *MySkills*.

Concerns about the quality of VET delivery have emerged in recent Commission reports on aged care, early childhood development, and the VET workforce. The Victorian Essential Services Commission also raised concerns in a report published in September 2011. While the national VET regulator arrangements will address a number of points of weakness, independent auditing and validation could substantially strengthen quality controls and public assurance in the VET system. In that regard the Commission notes the NPASR commitment to developing and piloting independent validation represents a first step down this important path. Cost effective independent auditing and validation would represent a substantial reform.

As discussed above, completion rates in VET are currently low. The greater availability of income-contingent loans and payments to providers on completions (with quality checks) would be expected to increase completions. Some level of non-completion is consistent with optimal training decisions by individuals. However, a significant proportion of those who do not complete (about 60 per cent) report that they leave because of a change in their circumstances; for example, job loss or change, ill health, a change in plans or time pressures. Given the positive association between qualification attainment and labour market outcomes, initiatives to support learners at risk of non-completion would enhance the effectiveness of VET reforms. The South Australian Government has a number of initiatives including a pilot program, Learner Support Services, to improve completion rates. The NASWD commits COAG to ‘strengthening the capacity of public and private providers ... to support people in training. This is supported in the NPASR.

Once an individual has a higher–level qualification, further skills might efficiently be gained by undertaking specific modules only. The design and analysis of VET reform effort would be assisted by the collection and analysis of data on completions of skill sets. As some types of partial qualification completion are likely to deliver positive outcomes to students, future reform efforts could include progress measures relating to this VET activity.

Finally, a successful move to a more competitive system requires a number of ‘building blocks’, including:

- regulatory systems that can identify and respond to poor performance;
- mechanisms for timely information collection and data analysis;
- provision of adequate information about employment outcomes to potential VET clients; and
- governance arrangements that allow public providers greater autonomy and capacity to compete with other providers.

Systems to pay providers on outcomes achieved, including progressive payments (for example, on module completions) rather than input measures, might also need to be developed.

1 Introduction

At its 28 March 2008 meeting, the Council of Australian Governments (COAG) agreed to a new reform agenda. The agenda is aimed at boosting productivity, increasing workforce participation and mobility, and improving the quality of public services. It also seeks to contribute to the broader goals of improving social inclusion, closing the gap on Indigenous disadvantage and environmental sustainability.

The agenda is underpinned by an *Intergovernmental Agreement on Federal Financial Relations* between the Commonwealth, States and Territories. In the Agreement, all governments acknowledged that 'coordinated action is necessary to address many of the economic and social challenges which confront the Australian community'.

The reform agenda is wide ranging (box 1.1). Its components can be categorised into three broad reform streams:

- 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
- an environment stream (consisting of reforms in the areas of: water; and climate change).[1]

In addition, there is a miscellaneous group of other reform matters including in the areas of national security, community safety and emergency management.

[1] The framework report for this study (PC 2010a) and its supporting annex provides additional details on the COAG reform agenda and a catalogue of agreements and other initiatives.

Box 1.1 **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 (2008a); Australian Government (2010a).

1.1 Background

In 2010, the Australian Government asked the Productivity Commission to report every two to three years on the ‘impacts and benefits’ of specified aspects of the COAG reform agenda. The Commission is also asked to consider the extent to which Australia’s reform potential is being achieved and opportunities for improvement.

For the first report in this series, the Government has directed the Commission to focus on the impacts of two reform areas:

- aspects of the ‘seamless national economy’ deregulation priorities; and
- vocational education and training (VET) reforms and initiatives that support successful transitions from school.

The letter of direction asks the Commission to provide a discussion draft in December 2010 and a final report in March 2012. The reporting date was subsequently extended to April 2012.

This study complements a wide range of other studies and inquiries undertaken by the Commission on regulatory and national reform matters. In the last decade, the Commission has released:

- *Review of National Competition Policy* (NCP) in 2005; and
- *Potential Benefits of the National Reform Agenda* in 2006.

The Commission has also undertaken several detailed studies on regulatory issues and matters allied to national reform streams. It has reported on matters subject to legislative and regulatory reviews including in the areas of consumer policy, building regulation, gambling, third party access to infrastructure, professions and occupations and water supply and management. It has also undertaken a series of studies on performance benchmarking of Australian business regulation and annual reviews of regulatory burdens on business.

This study complements a parallel study by the Commission on the identification and evaluation of reforms (Productivity Commission 2011). That study reported on frameworks and approaches to identify areas of regulatory reform and methods for evaluating reform outcomes. The Commission is also examining the role of local government as a regulator as part of a series on performance benchmarking of Australian business regulation, and undertaking a study of Commonwealth, State and Territory regulatory impact analysis processes.

1.2 The Commission's assessment role in this study

In its reporting on the impacts and benefits of COAG reforms, the Commission is required to:

- report on the realised and prospective economic impacts of these reform streams; and
- report on the nature of reforms and timescale over which benefits are likely to accrue.

The Commission is asked to identify any emerging concerns about the potential impacts of reform and, where appropriate, make an assessment of the extent to which Australia's reform potential is being realised and opportunities for improvement.

In reporting on the nature and timescale of the impacts of reforms, the Commission has been asked to recognise the different nature of productivity-based and human capital reforms and time paths over which benefits from the respective streams are likely to accrue.

Reporting framework

In preparing for its reporting on the impacts of COAG reforms, the Commission was initially required to report on the approach to be taken. Its research report, entitled *Impacts and Benefits of COAG Reforms: Reporting Framework*, was released in January 2011 (PC 2010a). This framework report set out in broad terms the Commission's proposed approach to assessing the impacts of the COAG reforms.

The framework embodies an economy-wide approach to assessments of reform impacts. It recognises the direct impacts of reform, including additional transition and implementation costs, and wider flow-on effects of the reforms. Within the framework, key impacts of the COAG reforms on national economic activity, employment and income are quantified.

In its reporting on the nature of reforms, the framework recognises that social and environmental impacts are also relevant in assessing benefits. In the context of the current report, these considerations are of more immediate relevance to the Commission's assessment of VET reforms than regulatory reforms.

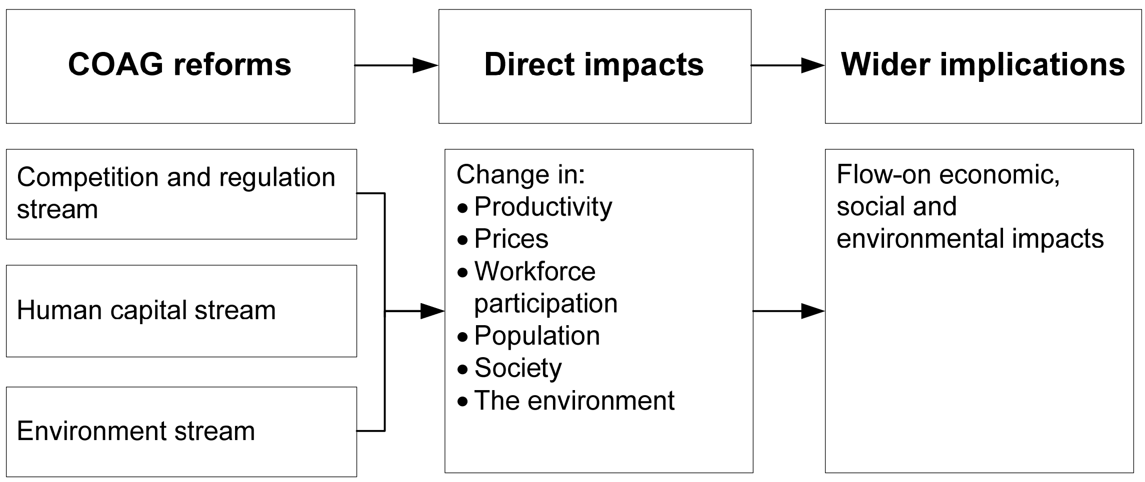
In assessing the impacts, the effects of reforms have, as far as practicable, been categorised into three broad groups:

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

While reforms being assessed are diverse in nature, both within the regulation stream and between the regulation and VET streams, a similar assessment procedure has been applied across the streams. This has involved:

- reporting on the scope of the reform and the progress of implementation;
- identifying which groups in industry or the community are most likely to be directly affected and how;
- assessing the direct impacts of the individual reform streams on sectoral productivity (and business and government costs), prices, and workforce participation and productivity — so as to generate policy scenarios for the modelling of the economic and fiscal effects of COAG reforms being assessed; and
- economy-wide modelling of the flow on effects of these impacts (figure 1.1).

Figure 1.1 **Analytical framework**



Data source: PC (2010a).

1.3 The approach

Estimating direct impacts

A major task in preparing this report was determining the likely direct impacts of reforms. In principle, these impacts should be measured against the situation of no reform — the 'business as usual' case. By and large, this base case reflects the economic settings prevailing in the different areas associated with the regulatory reforms around the time of COAG's agreement to proceed with its reform agenda.

As most reforms assessed in this report have either just been implemented or remain to be implemented, the impacts reported in this study are based on what the effects of reform are likely to be, that is, *ex ante* analysis. For the regulation reform stream, this reporting mainly entails reference to regulation review statements and business cases for reform (where available), assessments of the economic activity directly affected by reform, earlier studies of the impacts of national reforms and other information obtained during the study.

In the case of VET, it has also entailed the estimation of special models linking educational attainment from either current or future policy initiatives with workforce productivity and participation (the relevant modelling frameworks are outlined below).

Where estimating the direct impacts is based on *ex ante* assessments or incomplete information, the estimates by and large relate to what could be considered possible with full implementation of the reforms. The estimates cannot be construed as indicating outcomes from the reform process. Rather they provide information on what may be possible if the reforms were fully funded and implemented, and all impediments to the achievement of reform objectives were removed. Where there is a range of possible outcomes, the range has been used to inform the Commission's assessment of likely impacts. And, where agreed policy initiatives were not fully implemented, the relevant direct impacts have been designated as 'potential' according to the Commission's nomenclature.

Because of information gaps and uncertainties, the preparation of assessments of the direct impacts was demanding. It required judgements to be made about the effects of reforms just implemented or at implementation. It has also required judgements to be made about the (uncertain) time scale over which the direct productivity, workforce participation and other changes induced by reform are likely to become evident. For these reasons, there remains a significant degree of imprecision concerning the estimates of direct impacts and the timescale over which they could accrue that need to be taken into account in the interpretation of the estimates.

Modelling frameworks

Economy-wide modelling

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.

The Commission has used economy-wide, computable general equilibrium, modelling on four previous occasions to illustrate the impacts of widely-based national reform (IC 1995; PC 1999; 2005a and 2006).

In each of these studies, the model was applied in a longer-run 'comparative-static' framework. The framework is *comparative* in the sense that it compares pre- and post-reform economies and assumes full adjustment to reform induced change. It is *static* in that it does not trace out the adjustment path.

For this study, the model was applied in the longer-run comparative static framework to project the longer-run impacts of reforms being assessed in both the regulatory reform and VET streams. The fiscal analysis in this study follows the approach in the 1995 and 2006 exercises. In common with those exercises, the fiscal implications of reform are reported holding real public spending constant.[2]

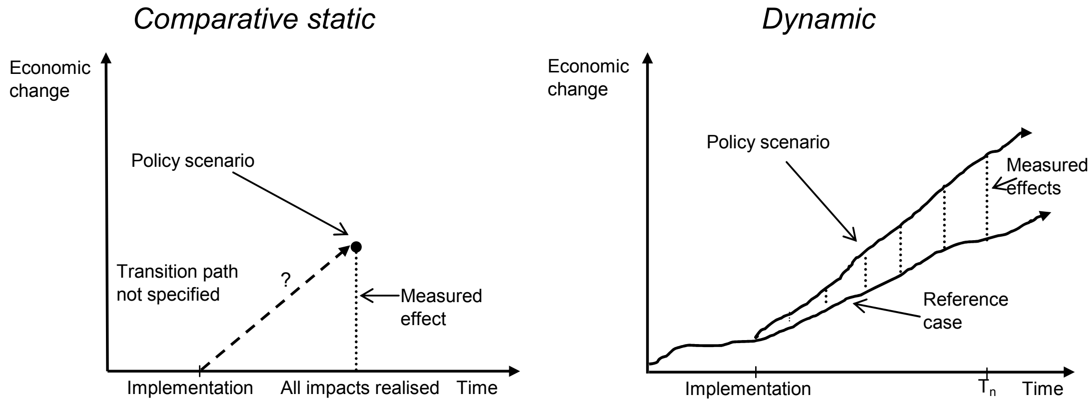
For this study, the Commission has also applied a dynamic approach, for the first time, in reporting on the impacts of national reform. The adoption of this approach has enabled the Commission to report on the timescale over which benefits are likely to accrue. Under the dynamic approach, policy scenarios incorporating shocks that represent the impacts of reform are compared over time with a projected reference case. The differences between the policy scenario and reference case represent the effects of the reform over time (box 1.2).

[2] The 1999 and 2005 studies focused on total national expenditure rather than revenue implications for governments of reform. In those studies, budget neutrality was maintained in nominal terms, with any revenue gains being transferred to households.

Box 1.2 **Comparative static and dynamic approaches to assessing economy-wide impacts**

The Commission used a ‘comparative static’ approach to quantify the potential economy-wide effects of National Competition Policy (IC 1995, PC 1999 and PC 2005a) and more recently in its assessment of the National Reform Agenda (PC 2006). Under a comparative static approach, the impact of a 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 does not trace out a transition path or take into account significant changes in the structure or level of activity that may influence the ultimate impacts of reforms or illustrate the possible economic environment in which the impacts of reform could occur (particularly for reforms involving long gestation or implementation periods).

Under the dynamic approach, policy scenarios incorporating shocks that represent the impacts of reform are compared over time 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. Such an approach provides a framework for assessing the impacts of reform of the economy in the period when the impacts of reform are likely to emerge.

The reference case itself represents a projection of the path of the economy over time. The reference case adopted for this study is based on standard assumptions about changes in population, terms of trade, and productivity. Because there are information gaps and uncertainties surrounding the progression of the economy into the future, the Commission has adopted simplifying assumptions in order to meet its reporting requirements.

As the focus of this study is on the economic impacts of reforms being assessed rather than on the reference case, as such, the Commission has presented the results as percentage changes from the reference case, rather than in terms of the level of activity with the COAG reforms in place.

An overview of the MMRF model is provided in box 1.3, with additional detail in appendix B. The approach and key modelling assumptions adopted in the modelling reference case are also outlined. Further details of modelling the reference case will be presented in a supplement to this report (to be made available on the Commission's webpage for this study).

Vocational education and training sector modelling

As MMRF does not model the links between educational attainment and workforce productivity and participation, it was necessary to employ purpose built frameworks to take account such linkages.

The first model, termed the Education and Labour Market Outcomes (ELMO) model, was developed to estimate the effects of changes in incentives on young learners, aged 15-24. The ELMO model is an optimisation model in which representative individuals are assumed to invest in an educational options, based on the net returns they can expect from this decision over the 42 years assumed to be their working life.

The second model, termed the Mature Learners (ML) model, was developed to estimate the effects of policy initiatives on 25-64 year-olds. Due to the complexity of motivations for undertaking training later in workers' careers, this was not modelled as an optimisation process. Returns and other indicators were estimated, based on an average remaining working life of 18 years.

A separate framework was also developed to estimate the effects of VET literacy and numeracy initiatives.

Box 1.3 **Overview of the MMRF model**

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

- domestic producers classified by industry and State;
- eight State-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-state, inter-state and international trade flows based on State input-output data developed at CoPS. It also includes detailed data on State, Territory and Australian Governments' budgets. 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 the following:

- 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.

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 each level of government.

The basic model is described in CoPS (2007).

Each model was used, in turn, to estimate the likely implications of VET reforms on workforce productivity, participation and occupational mix for the population cohorts covered. Estimates were also made of the additional funding needed to achieve the higher levels of educational attainment. The estimated productivity, participation and educational outlay changes (that is, modelling scenarios) were then employed to project the economy-wide impacts of the VET reforms in the MMRF framework.

Details about each of the VET analytical frameworks are provided in volume 3 of this report.

Assessing reform potential and opportunities for improvement

The Commission has been asked to report on whether, in its assessment, Australia is reaching its reform potential and whether there are opportunities for improvements.

The Commission has considered these matters in relation to the 17 regulation reform areas being assessed and the VET stream. In making its assessment in relation to the current agenda of reforms and implementation plans, the Commission has considered factors such as:

- agreement about the nature and extent of the problem to be addressed;
- settled reform priorities, and identifiable and agreed implementation goals;
- availability of tractable and cost-effective solutions commensurate to the scale of the problem and reform goals;
- achievement of implementation;
- momentum for change with implementation arrangements vested with institutions that have an interest and clear responsibility for successful outcomes, rather than aspirational goals; and
- effectiveness of monitoring processes with real accountability.

More broadly, the Commission also considered whether there is scope for achieving further benefits by:

- continuing or extending traditional reform approaches in the areas investigated (including harmonisation of legislation and adopting common codes of practice);
- adopting more flexible arrangements (including opt in arrangements); and
- pursuing opportunities for more fundamental change.

A summary of the Commission's findings with respects to the streams of reforms being assessed is provided in chapters 3 and 4, respectively, of this overview volume. Additional detail of the individual reform areas and opportunities for improvement are provided in the supporting volumes on each reform area.

1.4 Consultations

During the course of this study the Commission released:

- an issues paper on 31 August 2011 outlining the range of matters on which it was seeking information and advice;
- a background paper on 10 October 2011 on VET and youth transitions;

- a discussion draft on 20 December 2011 setting out the Commission's preliminary findings; and
- a supplement to the discussion draft was released on 17 February 2012 setting out details of the Commission's economy-wide modelling framework, including a modelling reference case for assessing the timescale over which the benefits of reform are likely to accrue.

The preparation of this report benefited from informal consultations with a range of interested parties and feedback from a number of workshops. The workshops were attended, as appropriate, by representatives of State, Territory (hereafter referred to as 'States') and Australian government agencies and the COAG Reform Council, as well as other interested parties and experts. The Centre of Policy Studies at Monash University attended the modelling workshops to provide a progress report on the MMRF model update (the workshops and attendees are listed in appendix A).

The preparation of the report was also informed by submissions made to the study. Twenty submissions were received prior to the release of the Commission's discussion draft in December 2011 while a further 31 were received in response to the draft (listed in appendix A).

The consultations helped refine and improve the proposed approach, and drew attention to areas of particular policy importance. In particular, the feedback on the modelling of the VET reforms proved particularly useful in refining and advancing the preliminary analysis. Feedback on the assessments of the impacts of regulatory reforms also enabled the Commission to test the scale of possible reform-induced changes. While the consultations were informative, responsibility for judgements made to complete this report remains with the Commission.

As noted, details of consultations and workshops supporting the report as well as submissions received are provided in appendix A. The public submissions can be accessed through the Commission's webpage.

1.5 Structure of this report

Chapter 2 outlines the broad economic context in which reform will be undertaken. Chapter 3 reports results from the Commission's modelling of the economy-wide and regional effects of the 17 Seamless National Economy deregulation priorities assessed. It also summarises the Commission's assessment of whether Australia's reform potential is being achieved and opportunities for improvement in these priority areas. Chapter 4 reports on these matters in relation to COAG's VET reforms.

This overview volume is supported by two separate volumes on the Commission's analysis on the two reform areas referred to the Commission for assessment. These volumes are available in printed form on request and on the study website at pc.gov.au. The study is also supported by a supplement outlining the economy-wide MMRF model and the Commission's application of this model to quantify the economy-wide, regional and fiscal impacts of the reforms assessed. This supplement will be made available on the study website.

2 Reform in context

Australia has undertaken wide ranging microeconomic reforms which have helped deliver sustained economic growth and seen improvements in living standards for most Australians. While significant improvements in Australia's economic performance have been achieved, opportunities for further reform exist. The need for further reforms is heightened by the pressures currently being placed on the flexibility of the economy from rapid changes in Australia's terms of trade, ongoing global competition and environmental pressures, and the future demands of an ageing population.

In this chapter, the broad achievements of Australia's past microeconomic reforms are briefly discussed in section 2.1. Section 2.2 then discusses the broad economic context of further reform.

2.1 Broad achievements of past reforms

Since the early 1990s, Australia has experienced its 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, Australia's performance has been underpinned by past economic reforms that increased the productivity, competitiveness and flexibility of our economy.

The range of reforms has been extensive. Some, because of their scale, scope, or ongoing impetus, have had a greater impact on the Australian economy than others. For example, the floating of the dollar in 1983 exposed a number of structural weaknesses in the Australian economy but also facilitated structural adjustment. The removal of barriers to foreign capital and merchandise, also had significant effects by heightening competitive pressures on Australian enterprises, in turn leading to greater pressure on governments to institute reforms that reduced business costs, improved their operational flexibility and encouraged efficient investment. Similarly, reforms of inefficient government monopolies responsible for infrastructural services such as energy, telecommunications, transport and water brought improved governance and more competition, yielding higher productivity, lower service costs and improved living standards.

Those latter reforms commenced at the state level, but eventually found more consistent expression in the National Competition Policy (NCP). NCP also incorporated a process for systematically identifying, and testing the justification for, anticompetitive arrangements across the whole of Australia's regulatory landscape. By the mid-2000s, most of the NCP reforms initially agreed to by the Council of Australian Governments (COAG) were in place. Over the period, these and other initiatives have achieved significant reforms in many areas (box 2.1).

Box 2.1 **Major Australian achievements in regulation reform**

Trade liberalisation — reductions in tariff assistance (that began in 1973) and the abolition of quantitative import controls gathered pace from the mid-1980s. The effective rate of assistance to manufacturing fell from around 35 per cent in the early 1970s to 5 per cent by 2000.

Capital markets — the Australian dollar was floated in March 1983, foreign exchange controls and capital rationing (through interest rate controls) were removed progressively from the early 1980s. Foreign-owned banks were allowed to compete for corporate customers and then, in the 1990s, to act as deposit taking institutions.

Infrastructure — partial deregulation and restructuring of airlines, coastal shipping, telecommunications and the waterfront occurred from the late 1980s. Across-the-board commercialisation, corporatisation and privatisation initiatives for government business enterprises were progressively implemented from around the same time.

Labour markets — the Prices and Incomes Accord operated from 1983 to 1996. Award restructuring and simplification, and the shift from centralised wage fixing to enterprise bargaining, began in the late 1980s. Further reform occurred in the mid-1990s with the introduction of the *Workplace Relations Act 1996*.

Human services — competitive tendering and contracting out, performance-based funding, and user charges were introduced in the late 1980s and extended in scope during the 1990s. Administrative reforms were introduced in health, education and community services in the early 1990s.

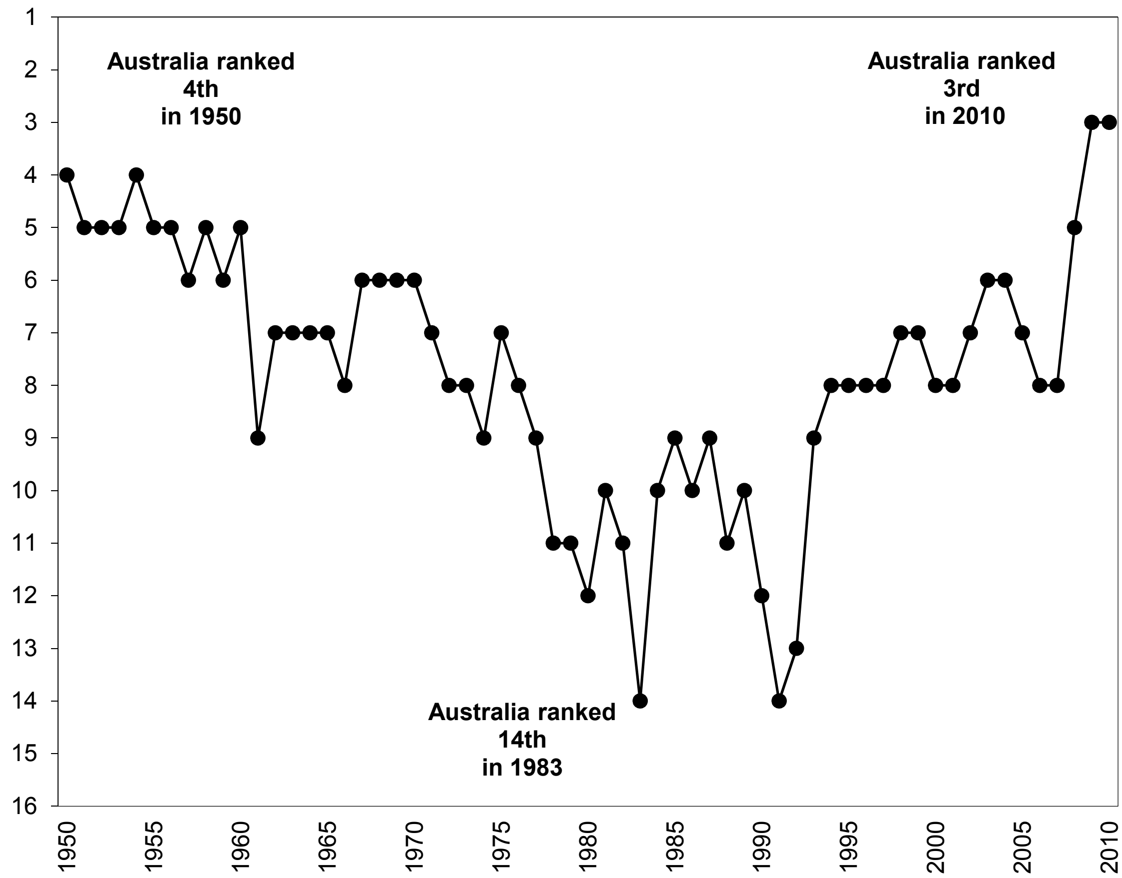
Competition reform — National Competition Policy in 1995 brought about broad-ranging reforms to essential service industries (including energy and road transport), government businesses and a wide range of anti-competitive regulation was commenced by all Australian governments in a coordinated national program.

Taxation reform — capital gains tax and the dividend imputation system were introduced in 1985 and 1987, respectively. The company tax rate was lowered progressively from the late 1980s. A broad-based consumption tax (GST) was implemented in 2000, replacing the narrow wholesale sales tax system and a range of inefficient state-based duties. And income tax rates were lowered at the same time.

Source: PC (2011).

These reforms saw a turnaround in Australia's relative global performance, allowing for measured standards of living to improve. Indicative of this, prior to the series of reforms, Australia's GDP per capita relative to other OECD countries had slipped to 14th from a high of 4th in the 1950s (figure 2.1). From the 1990s onwards, reform induced productivity improvements saw Australia's ranking rise, and, coupled with the recent resources boom, has resulted in Australia having the third highest GDP per capita amongst OECD countries.

Figure 2.1 **Per capita GDP ranking in OECD countries, 1950 to 2010**[a]



[a] Measured in purchasers parity prices.

Data source: The Conference Board Total Economy Database, September 2011, www.conference-board.org/data/economydatabase/.

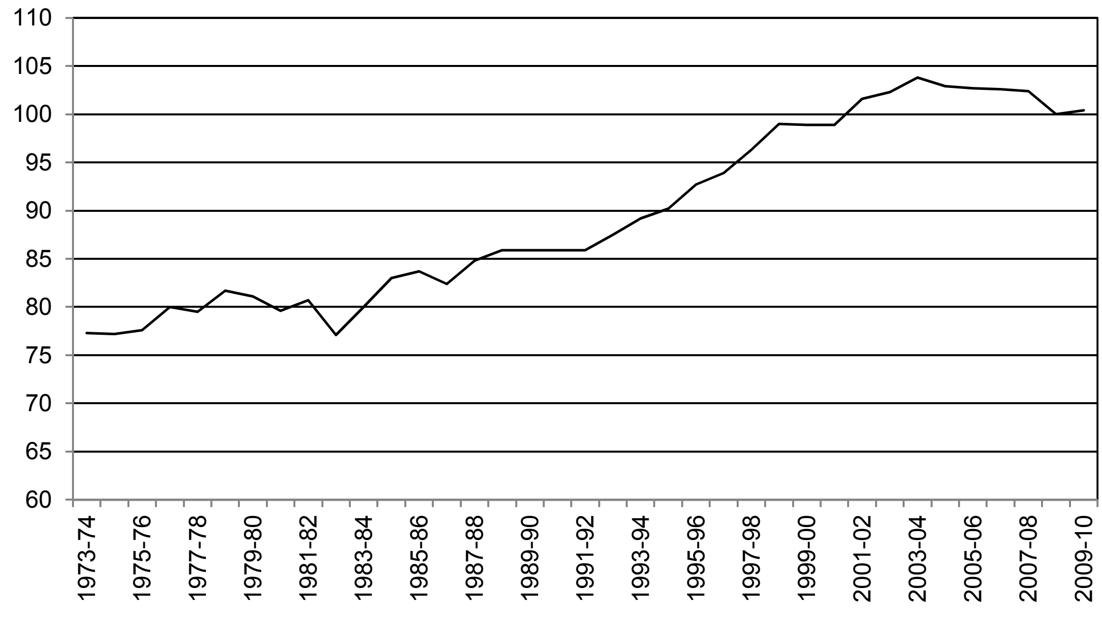
2.2 The broad economic context of further reform

Effective economic reform promoted productivity growth and improvements in living standards. In addition, the demands of an ageing population, together with ongoing changes in the global economic environment, technological change and environmental pressures, mean that further reforms are needed if Australia is to achieve its potential for higher living standards in the future. This section examines trends in productivity, the terms of trade and population to provide some context for the assessment of the impacts of COAG reforms.

Sustaining productivity growth

In the longer-run, the achievement of productivity growth in the Australian economy will be fundamental to the achievement of higher living standards. In this context, reforms that support technological and organisational change will effectively govern the pace of productivity growth and improvements in living standards. Over the past four decades, Australia has experienced multifactor productivity (MFP) growth (market sector), on average, of around 0.8 per cent per annum (figure 2.2). Within this period, measured productivity growth varied from year to year due to influences such as the business cycle and periods of rapid investment growth.

Figure 2.2 **Trends in national multi-factor productivity growth**
Market sector comprising 12 selected industries, index 2008-09=100



Data source: ABS (*Experimental Estimates of Industry Multifactor Productivity*, Cat. no. 5260.0.55.002, 2011).

Despite the cyclical movements, the influence of reform has also been linked to sustained improvements in national productivity. Of particular note was the sharp rise in productivity growth which occurred during the 1990s — the period of rapid ascendancy of Australia's economic ranking relative to other OECD nations. The cause of this increase in measured MFP growth has been subject to debate, with factors such as an international productivity boom, recovery from recession, higher skill levels and technological breakthroughs cited as potential factors. However, previous Commission analysis has not found any of these factors to be significant in explaining the above average productivity growth, leaving reforms undertaken in the 1980s and 1990s — including National Competition Policy and labour market deregulation reforms, amongst others — as the most likely drivers (PC 2010b).

But since the 1990s, productivity growth has flattened and, in the last full productivity cycle from 2003-04 to 2007-08, MFP growth declined on average by 0.2 per cent a year. In large part, the recent productivity performance can be associated with a number of special factors relating to three sectors: mining; agriculture, forestry and fishing; and electricity, gas, water and waste services (EGW&WS) (PC 2010b). Mining productivity has declined in line with strong growth in export prices associated with the mining boom, which has seen an expansion in capital capacity ahead of output and development of lower quality resources. Agricultural productivity has been affected by widespread drought, as has EGW&WS. The latter has also been affected by increasing demand for energy. These effects have led to significant increases in capital investment in the sectors (including, for example, in desalination plants), which has depressed productivity growth.

While these special factors account for the recent slowing of productivity growth, continuation of such trends would ultimately erode the standard of living of Australians. Economic reforms that encourage the flexible use of resources, the development of human capital and technological and organisational change are likely to contribute to higher productivity growth in the future. In this context, the impacts of COAG's reform agenda are likely to contribute to a return to growth in multi-factor productivity.

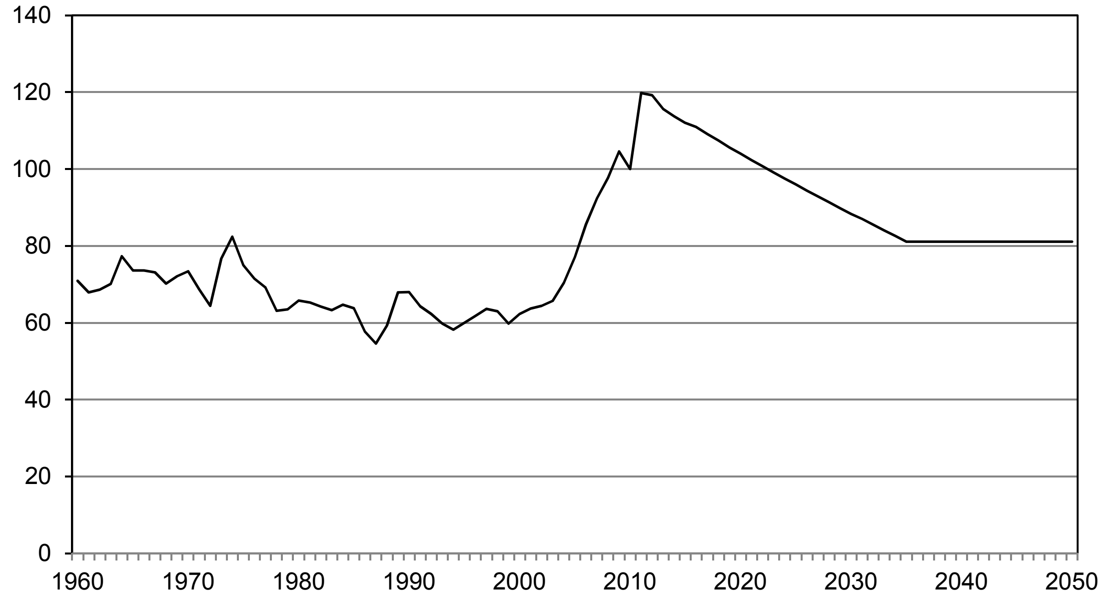
Adjusting to changes in the terms of trade and global competition

Australia's changing terms of trade will also place structural adjustment pressures on the economy. Over the past 140 years, the linear trend of Australia's terms of trade has been generally flat. Despite this, there has been considerable short-run variability over some periods. Indeed, Australia's terms of trade is currently at its highest level in history — 65 per cent above the average level for the 20^{th} century (Stevens 2011).

However, the high terms of trade is unlikely to last. Recent modelling by the Treasury assesses that the terms of trade will gradually decline from the current high level (figure 2.3). It is then projected to stabilise from the mid-2020s until the end of the projection period in 2049-50.

The current sharp increase in the terms of trade, and any subsequent projected unwinding, will lead to pressures for structural adjustment, and importantly, flows of resources between sectors of the Australian economy. Impediments to these flows will materially affect how the labour force and industry adjust to these changes and will therefore have an impact on the standard of living of Australians.

Figure 2.3 **Australia's terms of trade, past and projected**[a]



[a] Actual data to 2008-09. Projections to 2049-50

Data source: Treasury (2011).

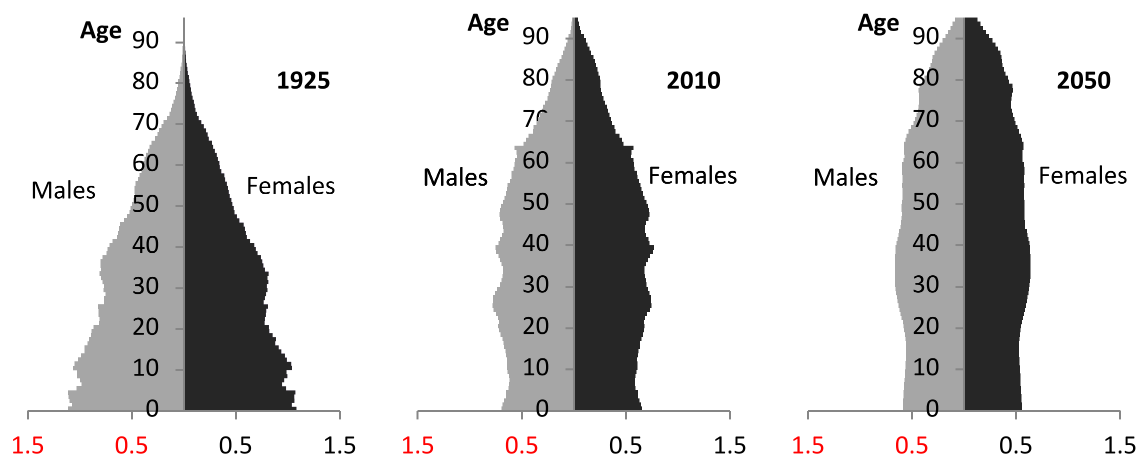
Meeting the demands of population ageing

Another key factor that will place pressures in the Australian economy over the next half century is the changing age structure of the Australian population. Over the past century, the incidence of deaths in Australia in all age groups has declined and the average number of births per women has fallen, shifting the age structure of the population profoundly (figure 2.4). These trends have resulted in an 'ageing of the population' where the ratio of older Australians to younger Australians has been increasing. Population ageing is expected to accelerate over the next few decades in Australia, with far-reaching economic implications including reducing the proportion of Australians in the workforce and dampening per capita economic growth.

The main issue with population ageing comes from the changing age structure of the population — namely the ratio of the older Australians to the working age population. In 1970, there were 7.5 people of working age to support every person aged 65 and over. By 2010, this had fallen to an estimated 5 people of working age for every person aged 65 and over. The Treasury projects this ratio to decline to 2.7 people of working age to support every person aged 65 and over by 2050 (Australian Government 2010b). The proportion of the population aged 85 and over is projected to increase even more rapidly, rising from 1.8 per cent in 2010 to 5.1 per cent in 2050.

Figure 2.4 **The changing structure of the Australian population, 1925, 2010 and projection at 2050**

Per cent of population



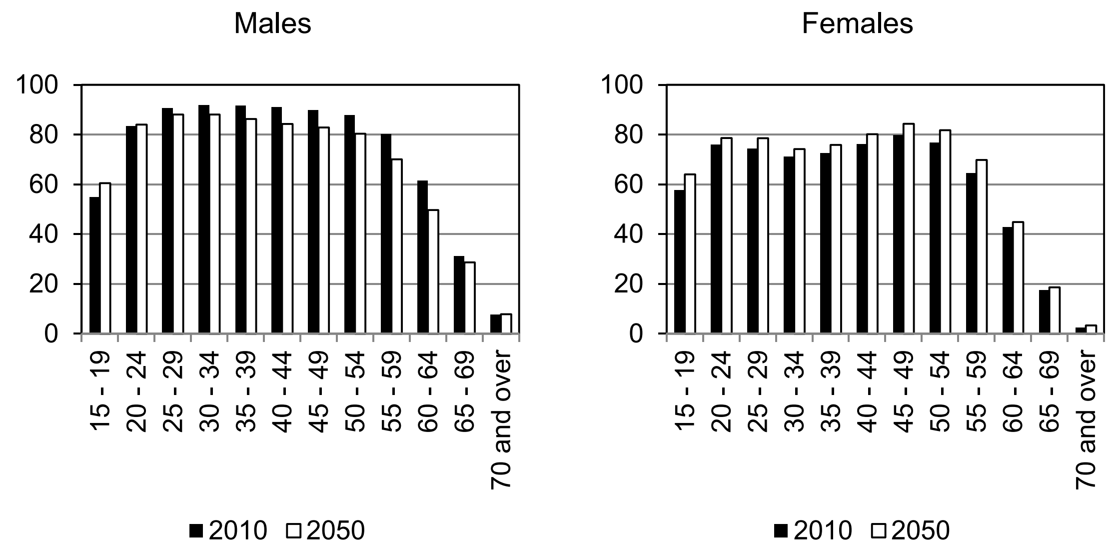
Data sources: Australian Demographic Bulletins 1921-1970; ABS (*Population by Age and Sex, Australian States and Territories*, Jun 2010, Table 9, Cat. no. 3201.0); Commission estimates.

The increase in the proportion of older Australians and continuation of current trends will cause labour force participation rates to fall. This is primarily a result of older Australians having significantly lower participation than those aged under 65. The Treasury projected the total labour force participation rate for people aged 15 and over to fall to less than 61 per cent by 2049-50, compared with 65 per cent in 2010 (Australian Government 2010b).

The changes in participation rates, however, are not expected to be consistent between men and women and across age groups (figure 2.5). Overall, participation rates by men across most age groups are expected to fall from current levels, with the reverse expected for women.

Reforms that improve the flexibility of the economy to promote productivity along with policies that foster participation will enable the economy to adjust to the changing age structure and afford benefits. As noted by the Commission in response to pressures identified in its ageing report, any future reform agenda to enhance Australia's productivity performance needs to be wide-ranging, including economic and social infrastructure, labour markets, taxation, natural resource management, innovation policy and regulatory processes generally. The agenda encompasses all levels of government (PC 2009; PC 2010b).

Figure 2.5 **Participation in the Australian workforce, actual and projected**



Data sources: ABS (*Labour Force, Australia*, Cat. no. 6291.0.55.001, Data Cube LM8, 2011); PC (2005b).

2.3 Potential gains from reform

Given the pressures discussed above, earlier work by the Commission (PC 2006) identified a number of areas where potential gains existed from further reform. Outer envelope estimates of the long-run potential gains from competition and regulation reforms and reforms targeted at human capital were estimated.

In the competition and regulation reform stream, reforms pertaining to electricity, gas, road and rail, and ports and business regulation ('red tape') were assessed. Overall, the Commission estimated that the achievement of identified competition reforms and reductions in regulatory burdens could increase GDP by nearly 2 per cent (PC 2006). About three-quarters of this flowed from reductions in the cost of business regulation.

On the human capital side, potential reforms in the area of preventative health, education and training and work incentives (concerning the influence of welfare payments on workforce participation decisions) were assessed. These reforms were found to potentially enhance workforce participation and increase productivity (through health, education and workforce participation reforms) and were projected to deliver even larger gains than in the competition and regulatory area. However, such impacts would materialise over a lengthy period and could be expected to require significant public investment.

The new reform agenda developed by COAG aims to boost productivity, increase workforce participation and mobility and improve 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.

The impacts of reform, including those examined in this study, with be occurring at a time where Australia needs to improve its productivity performance, adapt to changes in international conditions (such as changes in Australia's terms of trade and the after mouth of the global financial crisis), and ageing population and lower (relative) labour force participation.

3 Business regulation reforms

Key points

- The 17 business regulation reforms assessed span a diverse range of activities and industries.
  - Some relate to individual activities such as wine labelling, construction and rail safety.
  - Others operate more broadly, such as consumer law, trade measurement and occupational health and safety.
- The nature, timing and assessed impact of each reform varies widely.
  - The impacts of some are expected to occur shortly after implementation.
  - Others require behavioural changes by businesses and consumers and the impacts are likely to take longer to occur.
- With full implementation, the assessed reforms could reduce business and other costs by around $4 billion per year (in current dollars).
- However,
  - many of the reforms are just taking effect and have yet to result in substantial realised impacts; and
  - increased commitment and sustained effort by government will be required to achieve most of the gains.
- With the realisation of the business cost reductions, the Commission's modelling suggests that the reforms assessed could increase GDP by around 0.4 per cent (about $6 billion in current dollars) in the longer run.
  - The reforms are likely to increase activity and incomes in all jurisdictions.
  - Much of the economy-wide benefits are likely to accrue by 2020, although achieving these benefits will require additional effort by governments.
- There are a number of opportunities to improve the effectiveness and efficiency of the assessed reforms and to extend their reach.

The 17 business regulation reforms referred to the Commission cover a diverse range of activities (box 3.1). Most of the reforms target specific activities, although some, such as occupational health and safety and consumer law, span activities across the economy. Collectively, these reforms are likely to impact, either directly or indirectly, on a significant part of national economic activity.

Box 3.1 **COAG business regulation reforms assessed**

The Commission has been asked to examine the impacts and benefits of 17 COAG business regulation reforms:

- Consumer law and product safety — the reforms seek to create a national consumer policy regime, establish a single national consumer law and increase protection afforded to consumers;
- Mortgage brokers, margin lending and non-deposit taking institutions (collectively referred to hereafter as the 'consumer credit' reforms) — the reforms seek to create a single national approach to consumer protection regulation in relation to the use of credit;
- Personal properties securities — the reforms seek to create a national system for the regulation and registration of security interests in personal property;
- Trustee corporations — the reforms seek to established a national approach to the regulation of trustee corporations.
- Standard business reporting — the reforms seek to establish a multi-agency program to provide consistent and streamlined government financial reporting requirements;
- Payroll tax — the reforms seek to reduce legislative and administrative differences in payroll tax across jurisdictions;
- Occupational health and safety — the reforms seek to establish a harmonised approach to occupational health and safety regulation;
- Rail safety — the reforms seek to reduce the burden on rail operators of complying with a number of different rail safety regimes within and between jurisdictions;
- Health workforce — the reforms seek to create a national health practitioner registration and accreditation system for specified health;
- Trade measurement — the reforms seek to ensure that nationally consistent and equitable practices and standards are used for all transactions based on measurement;
- Food regulation — the reforms seek to reduce the regulatory burden on businesses and not-for-profit organisations in relation to food regulation, without compromising public health;
- Wine labelling — the reforms seek to harmonise labelling requirements so that one common label (of the two usually found on wine bottles) can be used for both domestic and export markets;
- Development assessment — the reforms seek to improve processes for development assessment across Australia and reduce building costs; and
- National Construction Code — the reforms seek to achieve a nationally consistent approach to building and plumbing regulation in Australia.

While some of the reforms, such as those relating to consumer law, consumer credit and product safety, have a consumer focus, all reforms will affect business.

Each of the reforms assessed involve some combination of:

- the introduction of new legislation, regulation or regulatory instruments;
- changes to, or the repealing of, existing legislation, regulation or regulatory instruments;
- changes to the way regulations are implemented or to the way government regulators operate, interact with business or the processes by which decisions are made; and
- government expenditure to fund the associated administrative and policy changes or the development of new technology.

A vast majority of these changes involves coordinated action across jurisdictions to achieve greater national 'consistency'.

This chapter presents the impact of the business regulation reforms assessed by the Commission. It places these reforms in the broader context of COAG's Seamless National Economy reforms (section 3.1). It then reports on the direct and economy-wide impacts (sections 3.2 and 3.3, respectively). The chapter concludes by canvassing opportunities to improve these reforms (section 3.4).

Volume 2 of this report assesses each reform separately. Each chapter outlines how the new regulatory arrangements differ from those that operated previously, the timeframes over which implementation has occurred or is occurring, the Commission's assessment of the direct impacts, the timescale over which these impacts are expected to occur, and any opportunities for improvement.

3.1 The business regulation reforms in context

The reforms assessed form part of a broader COAG regulatory reform agenda covered by the *National Partnership Agreement to Deliver a Seamless National Economy*. The reforms encompassed by this National Partnership aim to:

> … deliver more consistent regulation across jurisdictions and address unnecessary or poorly designed regulation, to reduce excessive compliance costs on business, restrictions on competition and distortions in the allocation of resources in the economy. (COAG 2009, p. 3)

The agreement seeks to create 'a Seamless National Economy' that transcends State and Territory borders. As well as the 17 reforms assessed in this study, the agreement also contains an additional 10 'deregulation' priority areas (giving

27 deregulation priority areas in total), eight competition priorities and improved processes for creating and reviewing regulation.[1]

The Seamless National Economy reforms drew together many pre-existing COAG initiatives into a single reform package (COAG 2009 and 2011). For example, the *COAG Regulatory Reform Plan April 2007* (COAG 2007) covered rail safety, trade measurement, personal properties securities, occupational health and safety, National Construction Code, product safety and development assessment.

The agreement also drew in a range of other ongoing initiatives that were consistent with the objectives of the Seamless National Economy reforms, such as in the areas of payroll tax and health workforce. Other initiatives responded to particular business concerns, such as wine labelling.

Many of the Seamless National Economy reforms (such as payroll tax, standard business reporting and trade measurement) were identified in the *Regulation Taskforce* (2006). Others have been the subject of previous Productivity Commission reporting: occupational health and safety reform was addressed in *National Workers' Compensation and Occupational Health and Safety Frameworks* (PC 2004); health workforce reform in *Australia's Health Workforce* (PC 2005c); and product safety and consumer law reforms in *Review of Australia's Consumer Policy Framework* (PC 2008).

Motivations for reform

The *National Partnership Agreement to Deliver a Seamless National Economy* seeks to reduce the impost that regulation places on business by:

- creating a seamless national economy, reducing costs incurred by business in complying with unnecessary and inconsistent regulation across jurisdictions;
- enhancing Australia's longer-term growth, improving workforce participation and overall labour mobility; and
- expanding Australia's productive capacity over the medium term through competition reform, enabling stronger economic growth. (COAG 2009, p. 4)

The business regulation reforms assessed here seek to remove impediments to the efficient operation of markets by improving the consistency of regulation across jurisdictions, by improving the efficiency and effectiveness of regulation, by

1 The 10 deregulation priorities not assessed in this report are: electronic conveyancing; registration of business names; trade licensing; directors' liability; environment assessment and approval processes; maritime safety; mine safety; chemicals and plastics regulation; oil and gas regulation (upstream processing industry); and other consumer credit (phase two of the consumer credit reforms).

reducing the cost to business of complying with regulation (compliance costs) and by improving the operation of government regulators. Where practicable, the reforms also seek to reduce the cost to government of administrating regulation.

Improving the consistency of regulation across jurisdictions

Many of the assessed reforms involve greater harmonisation of regulatory arrangements to reduce and, in selected cases, eliminate regulatory differences across jurisdictions (usually between States and Territories). This move to greater regulatory harmonisation is aimed at reducing the costs incurred by businesses that operate across State and Territory borders. These changes may also have implications for businesses that operate wholly within a single jurisdiction (often in the form of temporary cost increases associated with adjusting to the new regulatory arrangements).

There are a number of methods that Australian governments can use to achieve a greater degree of regulatory harmonisation between jurisdictions, ranging from memorandums of understanding through to State and Territory governments legally transferring their regulatory power to the Australian Government (termed as a 'referral of powers') (box 3.2). They can also include 'opt in' arrangements tailored around the circumstances of particular types of business.

For the areas under review, many of the reforms involve the transfer of existing State and Territory government regulatory functions to a single national regulator (as in the national registration of specified health practitioners, which is based on state legislation, and the national system of trade measurement). Some also involve the referral of state powers to the Australian Government (as in personal property securities and trustee corporations reforms), the extension of Australian Government powers under corporations law at the expense of the States (as in consumer credit), and moves towards the standardisation of assessment and reporting requirements (development assessment and standard business reporting).

Improving the efficiency and effectiveness of regulation

Many of the reforms go beyond what is needed to eliminate regulatory differences between jurisdictions and seek to improve the effectiveness and efficiency of the regulations in meeting policy objectives. These reforms aim to improve the operation of particular markets, increase consumer safeguards, increase probity of credit market transactions and enhance the quality of service provision. For example, the National Construction Code is being progressively developed to 'provide nationally consistent and minimum necessary building design and construction standards relevant to health, safety, amenity and sustainability'.

Box 3.2 Mechanisms for implementing national regulatory arrangements

A number of methods have been used by governments in Australia to implement national regulatory arrangements.

- *Referral of powers* — Under Section 51(xxxvii) of the Constitution, the Commonwealth Parliament has the power to make laws with respect to 'matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States'. If all jurisdictions refer their powers to the Commonwealth, the Commonwealth becomes the sole legislator and regulator on that matter.
- *Template legislation* — also referred to as 'applied laws' legislation, involves one jurisdiction enacting a law that is then applied by other jurisdictions as their law as if it was national legislation.
- *Model legislation* — involves the drafting of a model document that each participating jurisdiction draws on in drafting their own legislative instruments, which may include jurisdictional-specific considerations.
- *Harmonising subordinate legislation* — involves adopting common approaches to subordinate legislation such as reference to national standards or codes of practice.
- *Mutual recognition* — involves each jurisdiction recognising particular regulations created and administered by other jurisdictions, even where such regulations vary from their own rules and regulations.
- *Implementing agreed principles* — involves governments agreeing to a set of principles that they then implement as they see fit.
- *Memorandums of understanding* — involve setting out agreed processes to assist with coordination between jurisdictions and between regulatory agencies (both within and between jurisdictions).
- *Service-level agreements* — involve contracts that establish the terms for cooperation between agencies on certain matters.
- *'Opt in' arrangements* — involves allowing parties subject to regulation to self-select (often subject to a certain criteria) between state-based or national (Commonwealth) regulation. An example of such a scheme was the self-insurance against workers' compensation claims and later occupational health and safety regulation under the Commonwealth's Comcare scheme.

Many of these methods have been used in the 17 Seamless National Economy reforms assessed as a means to achieving greater national consistency or have been used previously.

Reducing the cost to business of complying with regulation

Some of the COAG business regulation reforms seek to lower compliance costs and make regulations less onerous on business. In this regard, code-based processing of development assessment applications and a common set of national planning system principles to guide development assessments is being introduced to reduce unnecessary or unwarranted variation in local planning laws. In a similar vein, the development of a National Construction Code seeks to integrate the existing national building and plumbing codes into a single document to address areas of inconsistency and overlap between the two codes. Such measures have the potential to lower the costs of doing business *within* and *across* jurisdictions.

Improving the operation of government regulators

Some reforms require an increase in government administrative effort to implement the agreed reforms — such as the new Australian Consumer Law and occupational health and safety. Other reforms seek to streamline government administration and improve the way businesses interact with government regulators.

The streamlining of government administrative processes takes a number of forms. Some involved replacing existing jurisdictional-based regulators with a new national regulator, which should reduce unnecessary duplication of effort. In the case of the health workforce reforms, for example, the reforms involved moving to a new national registration and accreditation system for specified health practitioners. Similarly, the extension of corporations law to cover trustee corporations and the subsequent repealing of legislation by State and Territory governments has seen the Australian Government assume sole regulatory responsibility in this area. As indicated above, there are a number of legal means by which this move to greater national regulatory consistency has been achieved.

Other reforms seek to increase consistency in the way that existing regulators operate to reduce the unnecessary impost placed on business. In this regard, the payroll tax reforms seek to achieve greater legislative and administrative uniformity in the way payroll tax operates across States and Territories by adopting common provisions and definitions for key terms used in payroll tax legislation. The reforms do not involve changes to the rate of payroll tax or the thresholds at which it applies.

Few of the reforms assessed, however, actually involve jurisdictions fully relinquishing their regulatory responsibilities to a single national regulator. State and Territory governments will therefore continue to incur regulatory administration costs and this will potentially involve some state-specific compliance costs for affected businesses and activities.

The assessed reforms all involve set-up and transition costs to government and business associated with designing, implementing, understanding and adapting to the new regulatory arrangements. These costs tend to be short-term in nature. Many reforms also give rise to ongoing costs, usually in the form of additional government expenditure. Some reforms also involve ongoing costs to business. For example, effective rollout of standard business reporting should lower ongoing regulatory compliance costs to industry as well as processing costs to government.

Implementation progress against agreed milestones

The COAG Reform Council is charged with reporting on progress in implementing the deregulation priorities that fall under the *National Partnership Agreement to Deliver a Seamless National Economy*.

The Council's 2010-11 assessment of each of the 17 business regulation reforms referred to the Commission is summarised in table 3.1 (CRC 2012).[2] In short:

- all of the reforms other than National Construction Code, personal property securities and occupational health and safety were found to be completed or largely completed;
- some of the milestones associated with the National Construction Code were assessed as not being met, but no significant risks were identified;
- all of the personal properties securities milestones associated were assessed as being completed, but the timeframe was considered as being at risk; and
- key milestones associated with the occupational health and safety reforms had not been met and that the output was assessed as being at risk.

2 The Commission's draft assessment drew on information from the Council's 2009-10 progress report (COAG Reform Council 2010). Since that report, implementation of several reforms has advanced from 'Reforms having substantial progress' to 'Reforms completed or largely completed'.

Table 3.1 **COAG Reform Council's summary of progress in implementing the 17 COAG business regulation reforms assessed by the Commission, at 30 September 2011**

Reform priority area	*Reforms completed or largely completed*[a]	*Reforms having substantial progress*[b]	*Reforms with implementation issues or risks*[c]
Consumer law	✓		
Product safety	✓		
Mortgage brokers[d]	✓		
Margin lending[d]	✓		
Non-deposit taking institutions[d]	✓		
Personal properties securities			✓
Trustee corporations	✓		
Standard business reporting	✓		
Payroll tax	✓		
Occupational health and safety			✓
Rail safety	✓		
Health workforce	✓		
Trade measurement	✓		
Food regulation	✓		
Wine labelling	✓		
Development assessment	✓		
National Construction Code		✓	

[a] All milestones have been fully or largely completed. [b] Substantial progress has been made on milestones and the reform objectives are on track to be achieved. [c] There are implementation issues or risks that the overall intended output or objective of the reform may not be on track. [d] Collectively referred to in this report as the 'consumer credit' reforms.

Source: Based on CRC (2012, pp. xv and xvii).

While assessing the pace of implementation of reform, the Council's progress reporting does not focus on the achievement of the COAG reform goals or the effectiveness of reforms implemented. In this regard, the COAG Reform Council in its *Report on Progress 2011* noted that:

> … while the *National Partnership Agreement to Deliver a Seamless National Economy* contains some challenging implementation milestones, it does not include true performance benchmarks as defined in the IGA [Intergovernmental Agreement on Federal Financial Relations]. (CRC 2011, p. 21)

The simple achievement of designated milestones therefore may not accurately reflect the extent to which Australia is achieving COAG's reform goals or realising the potential economic benefits that may be available under the Seamless National Economy reforms. Similarly, achievement of specified milestones for the purpose of gauging reform reward payments under the National Partnership is not necessarily reflective of reform outcomes.

3.2 Estimated direct impacts of the business regulation reforms

Assessing the direct impacts of reform is challenging and many judgements and assumptions are needed. In its assessments, the Commission has drawn attention to these issues and information gaps, and, to the extent possible, the sensitivity of results to alternative judgements. As many of the direct impacts will take time to occur and some reforms have yet to be fully implemented, assumptions also need to be made about the timescale over which benefits will accrue. Full realisation of the possible benefits, in practice, will depend on future circumstances and may require increased commitment and sustained effort of the governments involved. These assumptions give the resulting estimates a distinct ‘outer-envelope’ flavour.

Accordingly, the estimates of impacts presented are exploratory and should be regarded as being broadly indicative of the direction and scale of possible changes.

Direct impacts

The Commission’s assessments suggest that, with full implementation, the reforms have the potential to reduce business and other costs by around $4 billion per year (table 3.2).

The reforms likely to have the largest overall direct impacts are those that individually have a relatively large impact on business costs (such as the National Construction Code, occupational health and safety, development assessment and health workforce), or which affect a large cross-section of economic activity (such as consumer law, occupational health and safety and standard business reporting).

Around 80 per cent of the overall impacts are classified as ‘prospective’, with most of the remaining impacts classified as ‘potential’. The Commission has found that there has been little in the way of realised impacts to date, as most of the reforms have only been recently implemented.

While desirable and providing measurable contributions to total benefits, many of the reforms, such as trade measurement and payroll tax, individually are assessed as having modest effects at the national level. Cumulatively, these reforms are likely to afford worthwhile national future benefits.

Table 3.2 **Estimated outer-envelope reductions in business costs of the 17 COAG business regulation reforms assessed**[a]

$ million per year (2010-11 dollars)

Reform	*Realised benefits*	*Prospective benefits*[b]	*Realised and prospective benefits*	*Potential benefits*[c]
Consumer law and product safety	60	820	880	..
Consumer credit[d]	10	35	45	..
Personal property securities	..	70	70	..
Trustee corporations	..	4	4	..
Standard business reporting	2	58	60	500
Payroll tax	20	10	30	..
Occupational health and safety	..	480	480	..
Rail safety	9	7	16	..
Health workforce	..	160	160	..
Trade measurement	5	..	5	..
Food regulation	..	1	1	..
Wine labelling	12	17	29	..
Development assessment	25	200	225	125
National Construction Code	..	1 050	1 050	..
Total direct impacts quantified	**143**	**2 912**	**3 055**	**625**

.. Zero, less than $500 000 or not estimated. [a] Longer-run direct impacts after rounding. Excludes identifiable ongoing costs and transition effects. [b] Reforms have been implemented, but reform-induced reductions in business costs yet to occur. [c] Agreed reforms to be implemented. [d] Mortgage brokers, margin lending and non-deposit taking institutions.

Source: Commission estimates.

The assessments for some of the reforms, such as consumer law (substantial impacts) and wine labelling (very small), are in line with those in the regulatory impact statements that initially accompanied the reforms. For other reforms, the Commission's assessment is that the possible benefits could differ from earlier assessments. In the case of the rollout of electronic development assessment processes, information available to the Commission suggests that possible benefits may be higher than previous estimates suggest. For others, such as personal property securities, the assessments are lower than earlier estimates. These differences are discussed for each reform in the relevant chapters of volume 2.

Fully realising the benefits of reform depend on implementation of outstanding policy measures, including those implementation milestones assessed by the COAG Reform Council as being 'at risk'. As the impacts of some reforms are expected to occur over an extended period of time, realisation of these benefits will require ongoing commitment and sustained effort from all governments involved (including local governments, in particular, in relation to construction codes and development assessment processes). Their realisation will also require future policy environments that are consistent with, and supportive of, the reform objectives.

Realised direct benefits

Although implementation is generally well advanced for the reforms assessed, the available evidence suggests that there has generally been little in the way of realised gains to date (table 3.2). As noted, the relatively modest nature of these impacts is because many of the reforms have only been operating for a short period of time and the expected impacts are yet to occur.

The Commission's assessment is that the realised direct impacts could amount to $143 million, with the bulk of these gains coming from consumer law, development assessment and payroll tax. Other reforms assessed as having generated realised impacts include consumer credit, standard business reporting, rail safety, trade measurement and wine labelling

While standard business reporting is viewed as complete in terms of reaching its COAG milestones, its performance to date shows little of the estimated gains have been realised and increased effort will be required to achieve substantial gains.

Prospective direct benefits

The available evidence suggests that, after full adjustment, the regulation reforms assessed could afford reductions in business costs of around $3 billion per year (table 3.2).

The largest contributors to these prospective impacts are continuing gains from reforms to the National Construction Code, consumer law, occupational health and safety, development assessment and health workforce. In each case, the assumed future benefits are associated with the progressive adaptation of businesses and consumers (as appropriate) to the regulatory changes.

However, as mentioned, realisation of these prospective direct impacts requires increased commitment and sustained effort by government and full implementation of the agreed reforms and achievement of the reform objectives. It also requires that there are no other regulatory or other impediments to reform objectives being achieved. For example, the estimate for development assessment depends on complementary action by local government.

The need for increased commitment and sustained effort means that realisation of the *impacts* in a number of areas can be considered 'at risk'. These risks arise from implementation issues rather than from the reforms themselves and their objectives. For example, it was put to the Commission that Commonwealth environmental reforms being advanced were having adverse impacts on the streamlining of development assessment process, notwithstanding the potential for the development assessment reforms to deliver substantial benefits (sub. DR-G8).

These assessments suggest that achieving the implementation milestones need not be a good guide as to the benefits gained from reform. For example, the National Construction Code reforms have met their implementation milestones. However, differences in the administration of the code between jurisdictions can erode the intent of the reform. Other regulatory differences between jurisdictions are being codified into model legislation and regulations, thereby reducing the benefits from the move to greater national consistency (for example, rail safety).

Potential direct benefits

For the purpose of this study, a distinction is made between the potential impacts from reforms agreed to by COAG, but for which implementation is outstanding, and opportunities for further reforms that are consistent with the objectives of the reforms assessed to deliver additional benefits. The latter are canvassed in the next section under opportunities for improvement.

The Commission's assessments of the potential impacts of each reform relate to the measures that have not yet been implemented. In ascertaining these impacts, the Commission has drawn on forward-looking (*ex ante*) assessments of the possible impacts referred to in existing commitments and timetables, including those used in the regulatory impact statements that accompanied each reform. In its assessment, the Commission has treated these benefits as accruing to jurisdictions in proportion to the scale of affected activities, industries or demographic groups within those jurisdictions. These assessments are distinctly 'outer-envelope' in nature at the national level.

The assessed reforms have the potential to deliver an additional $625 million per year reduction in business and other costs (table 3.2). These additional cost reductions come from standard business reporting ($500 million per year) and development assessment ($125 million).

It should be noted that very significant development expenditure has been undertaken as part of standard business reporting in the expectation of future benefits, with around $170 million spent by government on systems development. At this stage, the take-up rate for standard business reporting has been very small, as many of the key government forms are not standard business reporting compliant and the software used does not currently allow for the accompanying payments to be made. For this reason, much of the foreshadowed gain is assessed as being 'potential'.

Reform costs

For each of the supporting regulatory reform areas covered in this report, assessments are made of the additional costs involved in introducing and administering each reform using available information. The quality and comprehensiveness of this information varies markedly.

The Commission has found it difficult to reliably and accurately assess all of these costs. Many sources provide cost information on aspects of the reforms, especially those associated with the introduction of the new arrangements. These sources include various COAG documents, budget papers, annual reports and regulatory impact statements (in some cases, the source documentation reported budget appropriations rather than the actual costs involved). It is often unclear as to the comprehensiveness of this information and, in particular, precisely how these costs differ from those incurred in administering, and complying with, the previous arrangements. This makes it difficult to ascertain whether this expenditure involves *additional* costs associated with the new reforms or represent costs that would have been incurred anyway.

While quantification of the impacts of reforms requires many judgements, the Commission notes that the costs estimates, in particular, should be viewed with caution.

Setup and transition costs

Information available to the Commission indicates that the *total* additional cost to government of setting up and transitioning to the new regulatory arrangements is of the order of \$500 million. One-third of this is attributable to standard business reporting and has been incurred, whereas most of the associated impacts are assessed as being potential. The remaining reforms assessed involve some, usually modest, transition costs to government, mostly incurred by the Australian Government.

In addition, many of the reforms may also impose transition costs on business. For example, the occupational health and safety reforms are assessed as involving additional training and other costs of roughly \$75 per worker (\$850 million in total). Total business transition costs across all reform areas assessed are estimated to be in the order of \$1.2 billion.

While imposing an immediate impost on the economy, these setup and transition costs are not assessed as ‘ongoing’.

Ongoing costs

In addition to transition costs, it is recognised that additional ongoing costs are likely to be incurred by business and government to meet reporting and compliance, and administrative requirements of the new regulatory frameworks.

With regard to costs to business, although the full effect of new frameworks cannot be easily ascertained until new frameworks are bedded down, available information indicates that the main area of additional compliance costs to business is in the area of occupational health and safety. In this reform area, it is recognised that businesses operating in a single state would incur costs associated with the new harmonised system, but will not be able to avail themselves of the offsetting benefits from harmonisation. Available benchmark estimates indicate that the ongoing additional costs to single-state businesses could be about $14 per worker (across single-state enterprises) or around $110 million across the economy.

Increased governance arrangements and the introduction of new enforcement powers have also given rise to additional ongoing costs to government. Across all of the reforms assessed, additional ongoing administration costs are estimated to be around $150 million per year. In the Commission's assessment, the main additional ongoing expenditure relate to occupational health and safety, consumer law and development assessment.

The assessed reforms also give rise to ongoing administrative costs saving to government of around $90 million per year. These cost savings arise from the transfer of certain regulatory responsibilities from State and Territory governments to the Australian Government (such as in trade measurement) or from more efficient service delivery (primarily flowing from the development assessment reforms). Full implementation of the occupational health and safety reforms are also expected to lead to a $55 million reduction in disability support pension and related payments associated with fewer workplace injuries.

The harmonisation of definitions for the collection of payroll tax (but not payroll tax rates and state-specific exemptions) is expected to lead to a $60 million (net) reduction in payroll tax revenue to governments. There would be an associated lowering of the cost of employing labour by payroll tax liable businesses.

Overall, additional ongoing costs to business of around $145 million per year, and a net increase in government outlays of around $70 million, have also been identified.

Other effects

Other effects identified include, for example:

- a reduction in outlays on health expenditures and higher workforce participation associated with the new OHS laws and rail safety laws; and
- a gradual increase in household demand for consumer products associate with the new Australian consumer law.

The net effect of these changes is modest at a national level.

3.3 Estimated economy-wide impacts of the business regulation reforms

As discussed in chapter 1, the Commission has used an economy-wide general equilibrium model to assess the flow-on effects of these direct impacts on the wider economy. A strength of this approach is that it explicitly takes into account the inter-linkages between businesses, households and government, and subsequent changes in investment and factor usage arising from changes in the financial returns flowing to primary factor owners (labour, capital and land).

Each of the 17 business regulation reforms assessed will impact on the economy in different ways. Some will reduce the resources that affected businesses may need to comply with government regulation, while others will generate productivity gains through increased competition and factor mobility. To make the economy-wide modelling of these reforms tractable given the wide range of industries and activities directly affected, the modelling assesses the overall impact of each reform on business costs in terms as its effect on multifactor productivity — the efficiency with which labour and capital are jointly used — in the affected activities and industries and the overall impact of each reform on government expenditure in terms of its effect on real expenditure on public administration by the Australian Government and each State and Territory government. To the extent that the reforms impact on inputs other than the use of labour and capital, the distributional consequences may differ from that presented here. The direct impacts on workforce participation, payroll tax revenue collected by state and disability support pension payments are modelled as per the direct impacts assessed.

As also noted in chapter 1, this modelling has been applied in two modes. In the first (*comparative static*) mode, the model is used to estimate the longer-run impacts of reform after full adjustment to reform-induced change. In the second (*dynamic*) mode, the model is used to trace out the time path over which the benefits of reform are likely to occur.

The economy-wide results presented in this final report differ slightly from those presented in the discussion draft as a result of refinements made by the Centre of Policy Studies to the preliminary model database and as a result of refinements in the application of the reform scenarios (that is, the model shocks).

National macroeconomic and sectoral changes

The Commission's modelling suggests that, with increased commitment and sustained effort, the reforms assessed could increase GDP by around 0.4 per cent in the longer run (about $6 billion) (table 3.3). Of this, the realised and prospective reform benefits are estimated to account for around 85 per cent (approximately $5 billion), with the potential impacts accounting for the balance (approximately $1 billion).

The modelling indicates that, given the assumption that the reduction in business costs flow through into multifactor productivity, the reforms would free up labour and capital resources in the affected activities and industries. Over time, these resources become available for use in other activities and industries in the economy. Thus, reforms in specific areas of the economy also benefit activities and industries in the broader economy and resources freed up in one state may also benefit other states.

After allowing for the re-location of resources between activities, the modelling suggests that the longer-run effect of business regulation reforms will benefit most sectors of the economy, especially trade-exposed sectors such as mining, and will raise real wages and household consumption as well as national investment and exports.

Table 3.3 **Estimated longer-run macroeconomic and sectoral effects of the business regulation reforms assessed**[a]

Percentage change, real government spending assumed fixed

Variable	*Realised and prospective impacts*[b]	*Potential impacts*[c]
Real gross domestic product	0.37	0.05
Real net national income[d]	0.35	0.05
Real gross national expenditure	0.28	0.03
of which:		
Real household consumption	0.33	0.05
Real investment	0.34	0.02
Export volumes	0.64	0.12
Import volumes	0.20	0.02
Terms of trade	-0.13	-0.02
Real wages	0.35	0.06
Value added (at factor cost)		
Agriculture	0.26	0.06
Mining	0.69	0.11
Manufacturing	0.39	0.06
Services	0.35	0.04
Employment (persons)		
Agriculture	0.09	0.00
Mining	0.43	0.04
Manufacturing	0.10	-0.01
Services	-0.02	0.00

[a] Comparative-static simulation of the longer-run direct impacts of the business regulation reforms assessed, excluding all setup and transition costs. [b] Reforms have been implemented, with economy-wide reform-induced impacts occurring. [c] Agreed reforms yet to be implemented. [d] Real net national income is the value of Australian production after allowing for income accruing to non-residents and depreciation of the physical capital stock.

Source: MMRF model estimates.

State and Territory results

In keeping with the broadly positive macroeconomic and sectoral impacts, the modelling similarly suggests that full implementation of the reforms would lead to increased outputs and incomes in all jurisdictions (table 3.4).

As mentioned, the business regulation reforms free up resources for use across the wider economy and not just those sectors that are the focus of reform. The modelling indicates increases in real GDP and real net income in all States. These increases are biggest in the mining-orientated states of Western Australia and Queensland and smallest in the Australian Capital Territory, which is the jurisdiction least reliant on exports. All jurisdictions are projected to benefit in per capita terms.

Table 3.4 Estimated realised and prospective effects of the business regulation reforms by State and Territory[a]

Percentage change, real government spending assumed fixed

	NSW	*Vic*	*QLD*	*SA*	*WA*	*Tas*	*NT*	*ACT*	*Aust*
Real gross domestic product	0.30	0.30	0.38	0.36	0.70	0.33	0.41	0.19	0.37
Real net income[b]	0.29	0.28	0.37	0.36	0.66	0.33	0.38	0.18	0.35
Output per person	0.35	0.36	0.37	0.35	0.39	0.34	0.37	0.28	0.37
Consumption per person	0.34	0.34	0.33	0.32	0.28	0.32	0.35	0.35	0.33
Value added (at factor cost)									
Agriculture	0.24	0.23	0.26	0.26	0.35	0.25	0.27	0.07	0.26
Mining	0.44	0.61	0.54	0.51	0.90	0.56	0.63	0.00	0.69
Manufacturing	0.33	0.33	0.44	0.43	0.77	0.40	0.52	0.22	0.39
Services	0.30	0.29	0.36	0.36	0.64	0.32	0.36	0.18	0.35
Employment (persons)									
Agriculture	0.05	0.04	0.08	0.09	0.21	0.09	0.10	-0.10	0.09
Mining	0.20	0.35	0.29	0.31	0.66	0.36	0.42	0.00	0.43
Manufacturing	0.06	0.04	0.13	0.13	0.47	0.08	0.23	-0.01	0.10
Services	-0.07	-0.08	-0.01	-0.02	0.27	-0.04	0.02	-0.09	-0.02

[a] Comparative-static simulation of the longer-run direct impacts of the business regulation reforms assessed, excluding all setup and transition costs and benefits. The modelling assumes that all of the prospective impacts are ultimately realised. [b] Real net income is the value of Australian production after allowing for income accruing to non-residents and depreciation of the physical capital stock.

Source: MMRF model estimates.

The State distribution after inclusion of the realised, prospective and potential impacts is shown in table 3.5.

Table 3.5 Estimated realised, prospective and potential effects of the business regulation reforms by State and Territory[a]

Percentage change, real government spending assumed fixed

	NSW	*Vic*	*Qld*	*SA*	*WA*	*Tas*	*NT*	*ACT*	*Aust*
Real gross domestic product	0.34	0.34	0.44	0.42	0.78	0.38	0.45	0.19	0.42
Output per person	0.40	0.41	0.42	0.40	0.45	0.39	0.42	0.33	0.42

[a] Comparative-static simulation of the longer-run direct impacts of the business regulation reforms assessed, excluding all setup and transition costs and benefits. The modelling assumes that all of the prospective and potential impacts are ultimately realised.

Source: MMRF model estimates.

Government revenue and expenditure implications

The fiscal modelling assumes that all discretionary government expenditure is held fixed. As a result, the main government expenditure items to change are Australian Government payments of revenue from the goods and services tax (GST) to the States, which depends on the level of taxable activity and is assumed non-discretionary in the model.

The modelling suggests that, with full implementation, the business regulation reforms have the potential to generate additional government revenue of almost $1.4 billion per year (table 3.6). The reforms to development assessments and the National Construction Code, in particular, are projected to boost building activity and, consequently, State property tax revenue is projected to increase proportionately more than all other taxes. Overall, almost 65 per cent of this revenue is projected to accrue to the Australian Government, which is close to its existing two-thirds share of revenue after accounting for the transfer of GST revenue to the States. The balance between the Australian Government and State and Territory government revenue in practice is sensitive to the nature of the reforms and the regional distribution of activities affected.

Table 3.6 **Estimated longer-run government revenue implications of the realised and prospective effects of the business regulation reforms**[a]

$ million (2010-11 dollars), real government spending assumed fixed

Item	*State, Territory & local government*	*Australian Government*	*Total*
Operating revenues (excluding GST receipts)	374	893	1 267
GST receipts (net of GST-tied payments)	165	0	165
Total operating revenues	539	893	1 432
Operating expenses (excluding GST-tied grant payments)	45	18	64
Operating balance (*net* government revenue)	**494**	**875**	**1 368**

a Comparative-static simulation of the longer-run direct impacts of the business regulation reforms assessed, excluding all setup and transition costs and benefits. Assumes that all of the prospective impacts are realised.

Source: MMRF model estimates.

Timescale over which these impacts are expected to occur

Assuming full realisation of the estimated impacts and based on information about timing of implementation and the nature of reforms, most of the direct impacts on business costs (and other factors) assessed to be in prospect are anticipated to occur within the next five years. However, the full impacts of the reforms to consumer law, health workforce, product safety, rail safety and standard business reporting are expected to take much longer (at least a decade) to occur.

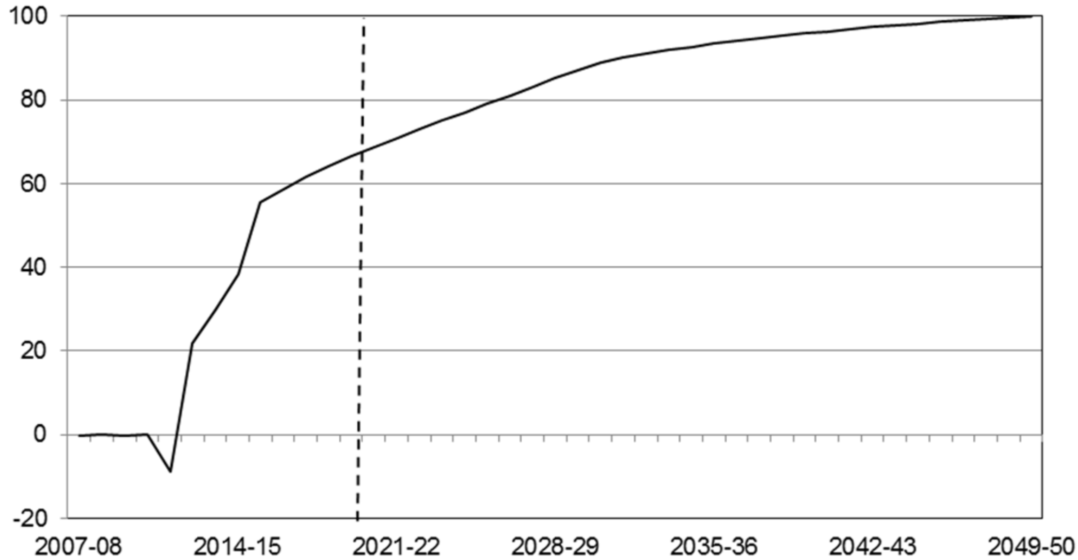
Because of the considerable uncertainties involved, no attempt has been made to project the precise timescale over which the potential benefits of the reforms assessed, will occur.

The Commission's assessment is that around 60 per cent of the total economy-wide effects assessed would be felt by 2020 (figure 3.1). These estimates take into account: the realised and prospective effective of reforms implemented; and identified ongoing costs and one-off transition costs associated with *all* of the 17 Seamless National Economy reforms assessed. The impact of transition costs is particularly evident in the early years, over which costs are being incurred ahead of the realisation of the projected reform benefits.

A further (that is, potential) benefit would be available from completing the implementation of the reforms assessed (figure 3.1, right hand axis).

Figure 3.1 **Timescale over which the realised and prospective impacts are estimated to occur, 2007-08 to 2049-50**[a,b,c]

Per cent of increase in real GDP



[a] Dynamic simulation results of the time-scale over which the economy-wide realised and prospective impacts of COAG business regulation reforms assessed are likely to accrue taking account of the impact of additional ongoing costs and transition costs. The modelling assumes that *all* of the prospective cost reductions and productivity improvements are ultimately realised. [b] The timescale over which potential impacts are likely to occur is not assessed. [c] The negative impact in 2011-12 reflects the assumption that the $850 million in business setup costs associated with implementing the occupational health and safety reforms occur in that year. To the extent that these costs are spread over other years, the impact in 2011-12 will be less than that indicated and that in other years will be more.

Data source: MMRF model estimates.

3.4 Opportunities for improvement

Achieving effective, meaningful and lasting national reform across agencies at one level of government and in a federation such as Australia can be hard.

The Constitution places binding constraints on the nature and type of reform that governments, especially the Australian Government, can undertake. Under the Constitution, all residual powers not granted exclusively or concurrently to the Australian Government are assigned to the States. The limited range of exclusive powers constrains the ability of the Australian Government to undertake unilateral reform, and the concurrent powers, if exercised, may give rise to overlapping regulatory and administrative responsibilities with the States. As a result, State involvement and cooperation is often essential for successful national reform, especially where greater national consistency is important.

Building consensus for such reform takes time and involves trade-offs and compromises to overcome the numerous impasses involved.

National reforms can become complicated by jurisdictional differences, requiring some reforms to be sufficiently flexible to handle relevant regional differences. For example, national building codes need to handle climatic and other environmental differences between diverse regions, such as the sub-tropics, deserts and mountain areas.

Notwithstanding difficulties in designing reforms, even once initial agreement has been reached, political support for these reforms can also change over time. In the time since the Seamless National Economy agreement was signed in February 2009, there has been a new Prime Minister, six new Premiers, one new Chief Minister and numerous ministerial changes. In addition, there has been a range of new and emerging priorities such as the ongoing response to the global financial crisis, the subsequent European debt crisis, droughts, floods, bushfires, and altered public perceptions about the most appropriate type of reform required (such as has occurred with occupational health and safety).

A strong case for reform is important for achieving ongoing consensus and maintaining momentum in a dynamic environment. This is easier when there is a clear constituency for, and commitment to, reform from the wider industry and community, and the costs are not concentrated on particular sections of the community or sustained over time.

Trying to do too much, too quickly, however, can result in existing resources being spread thinly and reduce the scope for effective stakeholder participation. There are also risks that any stakeholder participation may not be used as effectively as it might. Ultimately, these considerations can compromise the potential for beneficial reform. For example, although the Commission heard that national accreditation and registration of specified health practitioners was worthwhile, some in the industry considered that the implementation process was rushed and placed undue adjustment pressure on the sector. Hence, there is a need to balance aspirations with what can be reasonably achieved within the time and resources available.

External constraints also may impinge on the achievement of reform objectives. For example, the Commission heard that local government mandates on the generation of energy within new buildings as part of the development approval process may be illegal under the 'third line forcing' provisions of the *Competition and Consumer Act 2010 (Cwlth)*. This highlights risks in bundling 'reforms' and the need to consider the wider ramifications of reform. This example illustrates both the cost effectiveness of the on-site electricity generation requirement and the possible restrictions on the achievement of policy objectives that may arise from other unrelated regulatory requirements.

In ascertaining potential opportunities for improvement, the Commission has been cognisant of the realities that can give rise to gaps between the initial aspirations for reform, the objectives being pursued, the policies implemented and the subsequent impacts. However, such gaps may also highlight opportunities for reform.

Achieving the reform potential of agreed reforms

The Commission's assessment is that there are a number of areas where reforms are in progress, but where there are risks around whether prospective or potential benefits will, in fact, be achieved. In particular:

- The full realisation of potential benefits from standard business reporting requires its adoption as the core reporting framework by key participating agencies including the ATO and ASIC. This will provide software developers with an economic incentive to include standard business reporting compatibility in their accounting packages. Such commitments will need to be supported by expanding the scope of standard business reporting forms and an increase in the awareness of its potential value to business for the full potential of standard business reporting to be realised. In the course of this study, the ATO and ASIC advised of their commitment to transition to the standard business reporting framework, with the ATO indicating its intention to adopt standard business reporting as the primary channel for electronic interaction between business and the ATO (chapter 6, volume 2).

- The full realisation of prospective benefits from the National Construction Code requires, among other things, uniform interpretation of building standards by administering authorities (mainly local governments). In the course of this study, the Commission was informed that there can be significant differences in interpretation, not related to climatic and other recognised environmental factors (chapter 15).
- The achievement of available benefits from the development assessment reforms requires, among other things, the extension of code assessment to commercial and industrial developments. It also would benefit from the maintenance of an effective inter-jurisdictional coordination framework and a body to drive reform. In this regard, the implementation of more efficient and harmonised development assessment procedures appears to have been put at risk by the winding up of the key ministerial reform council — the Local Government and Planning Minister's Council — and separate reviews across jurisdictions (chapter 14).
- The achievement of the full benefits of harmonisation between jurisdictions entails common legislative provisions between jurisdictions. However, the Commission was informed that jurisdictional differences were codified (or consolidated) in some cases into model legislation and codes of practice, effectively eroding the original intent of harmonisation. It was highlighted in particular in the areas of occupational health and safety, rail safety and the National Construction Code (chapter 8, 9 and 14, respectively).

While reform priorities will change over time, COAG has recently reiterated the importance of completing the current Seamless National Economy agenda (COAG 2012, p. 3).

There are opportunities to secure anticipated benefits through Seamless National Economy reforms by aligning actual implementation of the reforms with reform objectives.

Broader opportunities for improvement

Most of the Seamless National Economy reforms assessed in this study are the latest step in a progression of reforms intended to improve the operational efficiency of business and reduce the cost of doing business across jurisdictions.

The Commission notes a number of other regulatory reform and policy developments that have been identified, including:

- extension of the coverage of the National Construction Code to additional construction services (such as gas fitting, electrical work, telecommunications and engineering have been mentioned in consultations as possible priorities);
- further harmonisation of food safety regulation and food labelling requirements;
- further development of code-based development assessment and planning approval processes, and the use of cost-effective electronic systems; and
- extension of standard business reporting to other administrative reporting (such as to Centrelink and Medicare).

There would also appear to be scope for more fundamental reform in some of the Seamless National Economy areas being assessed. For example, the Henry Review of Australia's taxation system recommended payroll taxation be replaced by an even more efficient tax (Henry Review 2010). The Commission has not estimated these gains.

Overall, in the Commission's assessment there are opportunities for achieving further benefits by continuing or extending traditional reform approaches (including harmonisation of legislation and adopting common codes of practice). There would also appear to be opportunities for more fundamental change.

Some broader issues and governance

This study has highlighted gaps that can exist between initial aspirations, milestones being 'ticked' and impacts on the ground. It also suggests that there are opportunities for improvement both within the current reform frameworks and more broadly.

Flexibility of arrangements

As regional markets become more integrated through interstate trade and investment, and the movement of people, the advantage of harmonisation of regulatory frameworks across jurisdictions also increases. Such harmonisation is frequently directed at lowering compliance costs for national firms. However, although they are much more significant in economic terms, such firms are relatively few in number.

In this context, the gains from harmonisation may be eroded to the extent that some firms bear additional transition and ongoing costs not matched by benefits to them. There are many small firms operating in only one state that may face increased regulatory compliance costs in order for a smaller number of large firms to have greater ease of access to interstate markets and lower costs in operating across State boundaries.

Given this, the adoption of more flexible arrangements (including opt-in arrangements for firms as an alternative to 'universal' harmonisation) may afford more cost effective opportunities for improvement.[3]

In addition, while there has been an emphasis on the concept of harmonisation in Seamless National Economy reforms, the application of the framework through national laws, model laws, codes of practice and other arrangements has not, to date, afforded full harmonisation across a number of areas assessed. In this regard, one jurisdiction noted:

> There also needs to be greater recognition that national harmonisation may not be equally appropriate for all States and that 'harmonisation' does not necessarily mean 'identical'. States must have the flexibility to introduce reforms aligned to national agendas that take into account jurisdictional differences and needs. (sub. DR-G8)

The adoption of more targeted regulatory changes, including alternative harmonisation models, such as cross-jurisdictional opt-in arrangements and interpretative services where appropriate, may help achieve greater harmonisation where it is commercially important and administratively feasible.

Reform payments not linked to outcomes

Because of the 'vertical fiscal imbalance' in the Australian Federation, reform payments have evolved through National Competition Policy reforms to be part of Australia's reform architecture. In relation to the Seamless National Economy reforms, COAG reform payments are being made by the Australian Government to the States and Territories in two tranches. In the first tranche, *ex ante* payments have been made to facilitate reform. In the second tranche, reward payments are to be made on achievement of agreed milestones based on advice from the COAG Reform Council. In its monitoring, the COAG Reform Council has observed that achievement of reform milestones does not necessarily reflect effectiveness in achieving reform outcomes.

In the Commission's assessment, while there may need to be some initial payments to assist with up-front costs, reward payments should be linked, as far as practicable, to the achievement of agreed outputs and outcomes.

3 The relative merits of 'opt in' regulatory arrangements and the scope for regulatory competition in a federal system are canvassed in PC (2005d) and Banks (2006).

Closing the gap between realised and potential reform benefits

There is evidence that substantial further government action is required to achieve anticipated reform potential. The Commission's assessment is that the scale of unfinished business would be reduced, and realised reform benefits increased though a better matching of reform objectives with the scale of available review and implementation resources, and more effective stakeholder participation.

Because the cost-reducing and productivity enhancing benefits from reforms will accrue over a number of years, realisation of the full potential from the reforms assessed will require continued commitment and sustained effort by government.

Achieving effective reform

Cooperation between jurisdictions is required to achieve meaningful and effective Seamless National Economy reform. Each reform typically, to varying degrees, progresses earlier reform efforts. This study suggests that to be fully effective, regulatory reform in this context requires:

- agreement about the nature and extent of the problem to be addressed;
- agreed goals in selected priority areas that are practical and achievable rather than aspirational;
- tractable and cost-effective solutions commensurate with the scale of the problems and reform goals;
- strong leadership at the implementation level to ensure accountability and real momentum for change with implementation arrangements resting with institutions that have an interest in, and clear responsibility for, successful outcomes;
- an effective allocation of reform responsibilities between COAG and its members;
- pressure from industry to deliver real gains; and
- an effective monitoring process with real accountability — the COAG Reform Council process of checking milestones does create some pressure for action, but it does not go to outcomes on the ground and some milestones are little more than steps in a long process.

This study also suggests that any *ex poste* reform reward payments be tied to actual outcomes, rather than process milestones or projected outcomes. Process milestones are not necessarily real outcomes.

Increasingly COAG's attention may need to be open to remedial steps that can be taken to get some reforms back on track in terms of achieving anticipated goals.

4 VET reforms

Key points

- Vocational education and training reforms are aimed at improving the overall quality of the workforce and encouraging higher workforce participation, through increased VET provision and greater flexibility in courses offered.
  - Attainment of the COAG 2020 targets has the potential to raise GDP by two per cent.
  - It would also assist in achieving COAG's broader social inclusion goals.
- Increased effort by governments will be required for the full potential of the COAG reform agenda to be realised.
- A number of areas offer opportunities for even better outcomes. In particular:
  - initiatives to increase VET completion rates;
  - ensuring VET reforms are sequenced so that the building blocks are in place for the successful transition to more contestable markets including,
    - strengthening quality control through cost-effective independent validation and auditing of training organisations' assessment practices; and
    - making information available to students on the costs of training, quality and labour market outcomes for individual training organisations.
  - greater autonomy and capacity for TAFEs to compete with other providers; and
  - tying payments to outcomes.

4.1 What the Commission was asked to do

The Australian Government — following a request from the Council of Australian Governments (COAG) — asked the Productivity Commission to report on the economic impacts and benefits of COAG's vocational education and training (VET) reform agenda and initiatives that support successful transitions from school.

In undertaking its assessment, the Commission was asked to:

- report on the economy-wide, regional and distributional effects of reforms;
- take into account the costs incurred by governments in implementing reforms;
- comment on the time paths over which the effects of reform are likely to accrue;

- provide guidance on the sensitivity of estimated results to the assumptions used;
- draw attention to information gaps that limit approaches to reform evaluation; and
- assess, where practicable, whether Australia's reform potential is being achieved and the opportunities for improvement.

The Commission has made many assumptions in estimating the impacts of COAG's VET reform agenda. These are outlined in this chapter and detailed in volume 3. Sensitivity analysis undertaken indicates that those assumptions are critical. When the assumptions change, so do estimated changes in employment, productivity and broader economic activity, often quite markedly.[1] The results, therefore, should be regarded as only broadly indicative of the possible impacts of policy initiatives assessed. The estimates and analysis are intended to advance understanding of the scale of effects that might occur. The estimates presented are not forecasts of the economic or fiscal impacts of the reforms. Rather, they reflect the impacts of VET policy initiatives in isolation from any other influence, including in isolation from initiatives in other parts of the education system.

Consistent with the terms of reference, the results are presented relative to a baseline to isolate the effect of the initiatives modelled relative to the outcomes that would have occurred with the previous policy settings and with the demographic momentum, which means that the education of the population is assumed to be increasing independently of the COAG policy initiatives under scrutiny.

Although some results are expressed in terms of percentage changes relative to the baseline, others are expressed in terms of real values and are discounted to account for the long term effects of the initial expenditures (box 4.1).

1 Consistent with the goal of the reform agenda to lift economic activity, a measure of employment is used in preference to the traditional concept of participation in this study (see chapter 2 in volume 3).

Box 4.1 **Effects of discounting**

When economic flows occur over a long period, it is appropriate to discount them to account for the preference for the present. The discount rate reflects the trade-off between present and future consumption (or savings). The analysis in this report is in real terms, that is, it abstracts from the effects of inflation, and prices and wages are assumed to be measured in terms of 2012 dollars.

The choice of a discount rate is complex. It depends, among other considerations, on whether the flows being discounted measure private or social, real, or nominal values. In this report, all values are expressed in real terms and both private and social values are discounted. For simplicity, a six per cent, real discount rate is applied to all values, and all values are discounted to 2012.

The effect of discounting is illustrated with a simple example in which costs of studying (monetary and foregone income while studying) are assumed to amount to $20 000 in the first year and additional returns due to studying (the premium) are $10 000 per year over 40 years. A discount rate of 6 per cent is applied in table A.

Table A **Illustrative example of the effect of discounting on a simplified private benefit calculation**

Discount rate: 6 per cent, real

	undiscounted	*discounted*
	$	$
Initial costs	20 000	20 000
Gross returns	400 000	150 463
Net returns	380 000	130 463

4.2 The COAG VET reform agenda

COAG VET reforms are given effect through the *National Agreement for Skills and Workforce Development* (NASWD), and supporting national partnership agreements, such as the *National Partnership on Skills Reform* (NPASR), which was released on 13 April 2012. The NASWD sets out four outcomes and two broad targets for the VET reform agenda (box 4.2). The scope of the Commission's assessment of the impacts of the COAG VET reform agenda is defined by policy initiatives that support progress towards these outcomes and targets.

States and Territories were at different points in the process of developing and implementing VET policy reforms in 2009, when they committed to pursuing the outcomes and targets set out in the main agreement giving effect to VET reforms — the NASWD. The NASWD emphasised the importance of making the VET systems more contestable and client driven.

Box 4.2 **NASWD outcomes and targets**

The 2009 NASWD defined four outcomes and two targets to be reached by 2020. In the more recent 2012 NASWD, COAG reiterates its commitment to the 2020 targets, noting that they are ‘ambitious’, ‘long-term’ and ‘aspirational’.

Outcomes

The working age population has gaps in foundation skills reduced to enable effective educational, labour market and social participation.

The working age population has the depth and breadth of skills and capabilities required for the 21st century labour market.

The supply of skills provided by the national training system responds to meet changing labour market demand.

Skills are used effectively to increase labour market efficiency, productivity, innovation and ensure increased utilisation of human capital.

Targets

Halve the proportion of Australians without qualifications at Certificate III level or above by 2020 (from 47.1 per cent of 20-64 year-olds to 23.6 per cent).

Double the number of higher level (Diploma and Advanced Diploma) qualification completions by 2020.

Progress towards an entitlement based system with greater contestability varies across the jurisdictions. At this stage, only Victoria has introduced an entitlement system within a contestable market, although South Australia will transition to its own version of this arrangement from July 2012.

On 13 April 2012, COAG agreed to the NPASR, with the following key elements:

- introducing a national training entitlement for a government-subsidised training place to at least the first Certificate III qualification for working age Australians without qualifications;
- income-contingent loans for government-subsidised Diploma and Advanced Diploma students for students undertaking higher level qualifications, thereby reducing their upfront costs of study;
- developing and piloting independent validation of training provider assessments and implementing strategies which enable TAFEs to operate effectively in an environment of greater competition;
- a new *My Skills* website to improve access for students and employers to information about training options, training providers and provider quality; and
- supporting around 375 000 additional students over five years to complete their qualifications, and improving training enrolments and completions in high-level

> skills and among key groups of disadvantaged students, including Indigenous Australians. (COAG 2012)

The latest agreements are silent about what might occur between 2017 and 2020, the year of the COAG targets.

4.3 The Commission's approach

The Commission has been asked to estimate:

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

In estimating the impacts of the COAG VET reform agenda, the Commission has not assessed all policy initiatives affecting the VET sector, but has focussed on specific initiatives associated with the key COAG VET agreements.

The following policy initiatives are accounted for in the scope of this project:

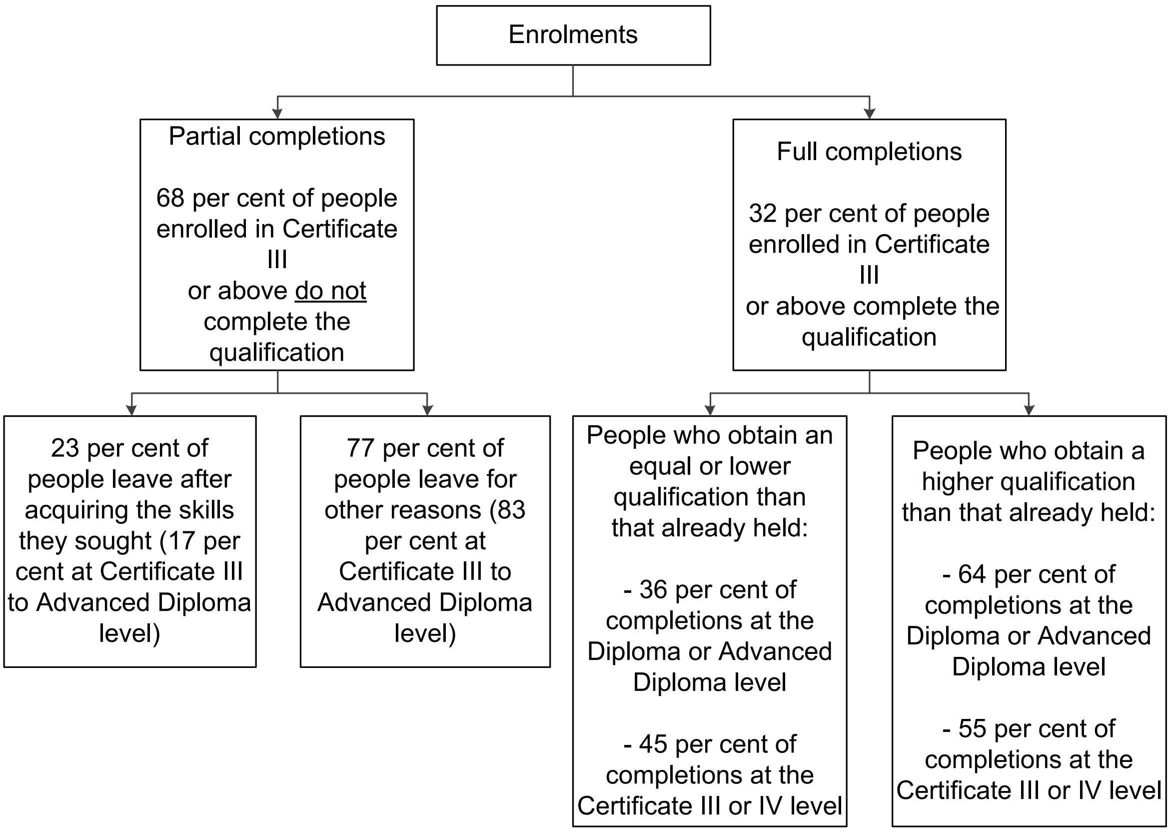
- The introduction of a market-based system in Victoria from mid-2009. Estimates of the *realised* impacts of this initiative are based on increases in government-funded training activity over the period 2009–2011, relative to a baseline of 2008 activity. *Prospective* effects reflect qualification completions post-2011, by government-funded students who commenced their study between 2009 and 31 December 2012 — when the current policy statement will expire. The policy initiatives are associated with an additional 93 000 students aged 15 to 64 per year, on average, undertaking government-funded VET in Victoria (from a base of 284 000 in 2008).
- The *National Partnership Agreement on Productivity Places Program* (NPAPPP), implemented by States and Territories except Victoria from July 2009. As the Agreement will conclude on 30 June 2012, the Commission has treated all of the effects of the NPAPPP as *realised*. An additional 129 000 government-funded students per year, on average, are estimated to have studied in the publicly-funded VET sector as a consequence of the NPAPPP (from a base of 701 000 per annum in the pre-reform period — 2005 to 2007).

- Implementation by South Australia of a market-based system. Given the 1 July 2012 scheduled commencement date for this initiative, and steps already undertaken to implement related changes to the South Australian training system, the effects of this reform effort are deemed to be *prospective*. The increase in the number of government-funded VET students attributable to this initiative is estimated to be 22 000 per year, on average (relative to a base case of 95 000 government-funded students aged 15 to 64 in 2009). Effects of increased government-funded training effort in South Australia as part of the NPAPPP are included in the assessment of the national initiative.
- *Potential* reform effects. Given uncertainty about the timing and progress of the reforms, estimates of potential impacts assume the achievement of the COAG targets set out in the original NASWD and recently reiterated by COAG. While COAG has characterised these as aspirational, it has also recommitted to them. This approach is consistent with COAG's terms of reference for this study: that where information about specific reform initiatives is limited, the Commission's reporting would produce broad or 'outer envelope' estimates of the potential benefits and costs of reform.
- *Realised* and *prospective* effects of an expansion in the Australian Government-funded Language, Literacy and Numeracy Program (LLNP) have also been assessed. In relation to *potential*, the Commission has modelled the effects of achieving the National Foundation Skills Strategy for Adults target announced by COAG's Standing Council on Tertiary Education, Skills and Employment in November 2011, that by 2022, two thirds of working age Australians will have literacy and numeracy skills at Level 3 or above.

What VET outcomes are in scope?

People enrolling in a course can follow a number of outcome paths: the completion of a qualification at a higher level than they currently have; a new qualification at the same or lower level than what they currently have (what the Commission refers to as reskilling), and not completing the course. The prevalence of these three types of outcomes from the VET sector is summarised in figure 4.1.

Figure 4.1 **Prevalence of full and partial completions and reskilling**



The first COAG target, to halve the proportion of Australians without qualifications at Certificate III level or above by 2020 is used as a progress measure in the 2009 NASWD (p. 6) and as a performance indicator in the 2012 NASWD (section 20). As a result, the Commission has focused on the impacts of qualification attainment at Certificate III and above. In addition, it has considered qualifications at a level higher than that already obtained,[2] but clearly, there can be gains when people acquire competencies and skill sets, even if they do not obtain a qualification (a partial completion). Similarly, there can be gains from acquiring a new qualification at the same level or below (reskilling).

The Commission has used scenarios to illustrate the possible effects of partial completions and reskilling. Given the paucity of data relating to these training outcomes, the quality of these estimates is lower than for full completions at a level

[2] The Victorian and South Australian reforms include some form of this feature. In addition there are data limitations for estimating the effects of other outcomes. Employment and wage premium estimates are typically derived only with reference to the highest qualification that an individual has gained. Few studies have estimated premiums for partial qualification completion, or qualification attainment at or below the highest level already achieved. Further research in this area would strengthen the analysis of the potential benefits of such outcomes.

higher than already held. That said, reasonable assumptions based on available data were made to produce orders of magnitude of the possible effects of these training outcomes on the variables of interest.

Brief conceptual framework[3]

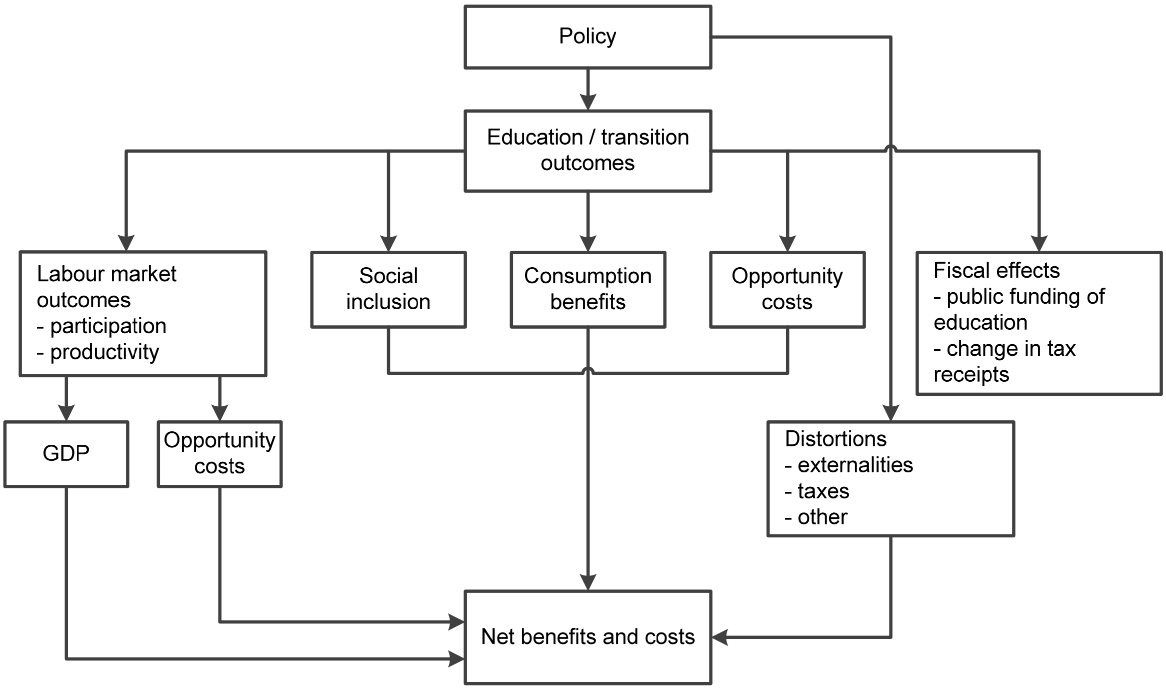
The VET policies that are being implemented as part of the COAG reform agenda lead to changes in engagement in education and training (figure 4.2). Consequent changes in VET and transitions outcomes influence labour market activity, including workforce participation and productivity, and social inclusion. These effects of policy change are sources of benefits, since they tend to increase people's wellbeing. An increase in employment or productivity increases incomes and material wellbeing, while people generally benefit from participating in their communities.

Education and training also lead to non-pecuniary benefits, for example, job satisfaction, and opportunity costs to students. The latter include the value of earnings and leisure foregone while spending time studying.

Public funding of education and training has implications for government budgets, while changes in workforce participation and productivity also impact on government tax receipts and transfer payments. Fiscal effects of this type sit outside the benefit–cost framework because they are transfers that do not result in any aggregate benefits or any resource costs, aside from any costs associated with the tax/transfer system itself. If someone pays an additional $100 in tax, that person has $100 less and the government (or, perhaps more correctly, the beneficiaries of government spending), has an additional $100. There is a positive fiscal effect from the government's perspective, but not from a benefit–cost perspective — the cost to the taxpayer is equal to the benefit to the beneficiaries of government spending.

3 The conceptual framework is detailed in chapter 2, volume 3.

Figure 4.2 **Conceptual framework for the Commission's quantitative analysis of VET reforms**



Some intuition

In choosing between education options, individuals compare the benefits and costs of each option, choosing the option which yields the highest net benefit. For an individual who elects to complete a Certificate III/IV, the net benefit of that option exceeds the net benefits of all other options. By funding part of the qualification, the government influences the private cost of education and thereby choices. The initial funding of the qualification and any taxes collected on the additional income that results from a higher qualification affect government net expenditure.

For an individual who pursues a Certificate III/IV, the private cost is composed of $1758 in fees and $15 660 in foregone earnings (estimated as $18/hour, the wage imputed to a young person with a Year 11 qualification). Ignoring the effect of ability on wages, the estimated benefit is an increase in the hourly wage from $21/hour (the wage imputed to a person aged 25 and over with a Year 11 qualification) to $25.47. This translates to an (undiscounted) increase in lifetime earnings of $324 632,[4] or about $7700 per year, over 42 years.

4 $140 664 discounted (6 per cent, real).

The government's contribution is about $5333 and the (undiscounted) change in net government taxation revenue is about $123 000 over 42 years.[5]

4.4 Assessment of reform impacts

Increases in employment and productivity are important because of their potential to raise GDP per capita and yield net social benefits. Given that the policy focus on employment and productivity reflects their contribution to these broader economic indicators, the Commission has adopted the Treasury's 3Ps framework in this study. This framework decomposes GDP per capita into contributions labelled population, participation and productivity. In this framework, the concept of participation reflects employment among people aged 15 to 64, not the definition typically used in labour market statistics. The concept of an employment rate is, therefore, used in this analysis in place of participation.

Productivity is measured in terms of GDP per hour worked. Changes in this measure as a result of a policy initiative therefore reflect contributions from people already in employment, and from those who gain work. The contribution to the national indicator of labour productivity from up-skilling by people already in employment is unambiguously positive. To the extent that people entering employment are less productive than the average person already in work, such an addition to the workforce can reduce the average productivity index. This is not to say that bringing people into employment who would otherwise not have worked is a bad thing. It is simply a reflection of the limitations of labour productivity as a measure of the benefits of a policy initiative. For this reason, the Commission uses the concepts of GDP (a measure of economic activity) and net social benefit (a measure of community welfare) as indicators of the impacts of the COAG reform agenda.

In each assessment, the Commission has estimated the effects of the initiatives modelled over and above what might otherwise have eventuated — the baseline. This baseline includes what could be expected to occur given the VET policy settings in existence before the original NASWD and what is known about changes in other parts of the education system. Individual initiatives of the States and Territories outside the COAG process are not captured by the COAG estimates, but are captured implicitly in the baseline.[6] The baseline also includes an 'autonomous' increase in qualifications in the population, as older generations with lower qualification

5 $53 452 discounted (6 per cent, real).

6 Chapter 1, volume 3, provides examples of the types of initiatives included in the baseline.

achievements retire and younger cohorts with higher rates of qualification achievement join the workforce.

Estimated impacts of qualifications higher than already held

The low completion rates mentioned above are reflected in the estimated effects of the realised and prospective reforms on student and qualifications numbers relative to the baseline (table 4.1).

Table 4.1 **Summary of qualification attainments at higher level than already held**

	Vic realised	*Vic prospective*	*SA*	*NPAPPP*
Student/places	170 900[a]	153 900[a]	60 000[b]	387 000[a]
Estimated qualifications				
Total				
Dip. / Ad. Dip.	3 665	12 313	2 366	21 637
Certs III / IV	21 403	33 488	9 013	95 313

[a] Students. [b] Places.

Source: Appendix C, volume 3.

Table 4.2 shows the estimated impact of each of the reforms. Importantly the reforms already realised, and in prospect contribute to the total estimated gains from the reforms. The column marked ‘potential estimates’ shows what has to be achieved in addition to those gains identified as realised and prospective for COAG to meet its 2020 target. The last column shows the gain from achieving the COAG target of halving the proportion of Australians aged 20 to 64 without qualifications at Certificate III level or above between 2009 and 2020.

The 2020 targets for qualification attainment in the working-age population are ambitious. The estimated potential gains that would result from achieving those targets are relatively large, reflecting both the substantial increase in places and completions required and, relative to the other VET scenarios modelled, the longer timeframe over which training effort is higher.

Source:

Table 4.2 **Overview of results, 'higher qualification' scenarios**

		Victorian realised	*Victorian prospective*	*SA prospective*	*NPAPPP realised*	*Potential*	**Total gain from achieving 2020 target**
Increased highest qualification[a]							
Cert. III to Ad. Dip.	no.	25 000	46 000	11 000	117 000	1 091 000	**1 290 000**
Employment and productivity							
Change in employ.[b]	%	0.02	0.03	0.01	0.11	0.88	**1.04**
Change in productivity[c]	%	0.01	0.02	0.00	0.04	0.29	**0.35**
GDP	%	0.03	0.04	0.01	0.20	1.67	**1.95**
Private and net social benefit[d]							
Payments to labour	$m	2 063	3 481	999	9 536	92 020	**108 099**
Net social benefit	$m	1 113	1 830	504	5 039	48 809	**57 295**

[a] Estimates rounded to the nearest thousand. [b] Change in employment relative to the baseline expressed as a percentage of the Australian working-age population. [c] Change in productivity of the Australian workforce, relative to the baseline. [d] Present value of changes over the graduates' working lives.

Source: Commission estimates.

Relative to the baseline (in which 32.5 per cent of the population aged 20 to 64 do not have at least a Certificate III qualification in 2020), the increases in the profile of qualification attainment associated with attainment of the COAG VET targets by 2020 are projected to raise:

- the number of completions by about 1.29 million over the period 2010 to 2020
- employment by 1.04 per cent by 2020
- labour productivity by 0.35 per cent
- GDP by 1.95 per cent.

These results (table 4.2) are substantially revised from those provided in the Discussion Draft, reflecting higher completion rates for South Australia and NPAPPP, correction of a number of errors, the application of a smaller discount for ability bias, and the discounting of future benefits (at 6 per cent, real). The Commission's revised analysis in these respects benefited from feedback received on the Discussion Draft, including at a modelling workshop.

The longer term impacts of achieving the 2020 targets over the working life of the persons achieving the higher level qualifications serve to increase labour income by more than $108 billion in 2012 dollars, over the period 2010 (when the first graduates are assumed to enter the workforce) to 2062 (when the last 2020 graduates are assumed to retire, assuming a 42 year working life for young learners).

The initiatives are projected to produce discounted net social benefits of $57 billion over the period 2010 to 2062. These benefits are likely to be understated, given that they do not account for externalities and other potential gains (see below).

The potential scenario, which is defined as the effort to be made beyond the life of the policy statements that are accounted for in the realised and prospective scenarios contributes more than 80 per cent of the projected results.

Figure 4.3 illustrates the relationship between the baseline numbers and proportions of 20-64 year-olds without at least a Certificate III.

- With a continuation of pre-reform policy settings, the COAG Reform Council projected the proportion of 20 to 64 year olds without a Certificate III or higher qualification to fall to 32.5 per cent in 2020 (equivalent to 9.8 million *with* a Certificate III or above, assuming 14.4 million 20–64 year olds in 2020). This is the baseline against which the effects of attaining the targets is measured.
- Realised and prospective increases in training activity to date are estimated to have produced almost 200 000 higher level completions.
- The COAG target of only 23.6 per cent of 20 to 64 year olds without at least a Certificate III level qualification is equivalent to 11.1 million *with* a Certificate III or above by 2020.

Other gains

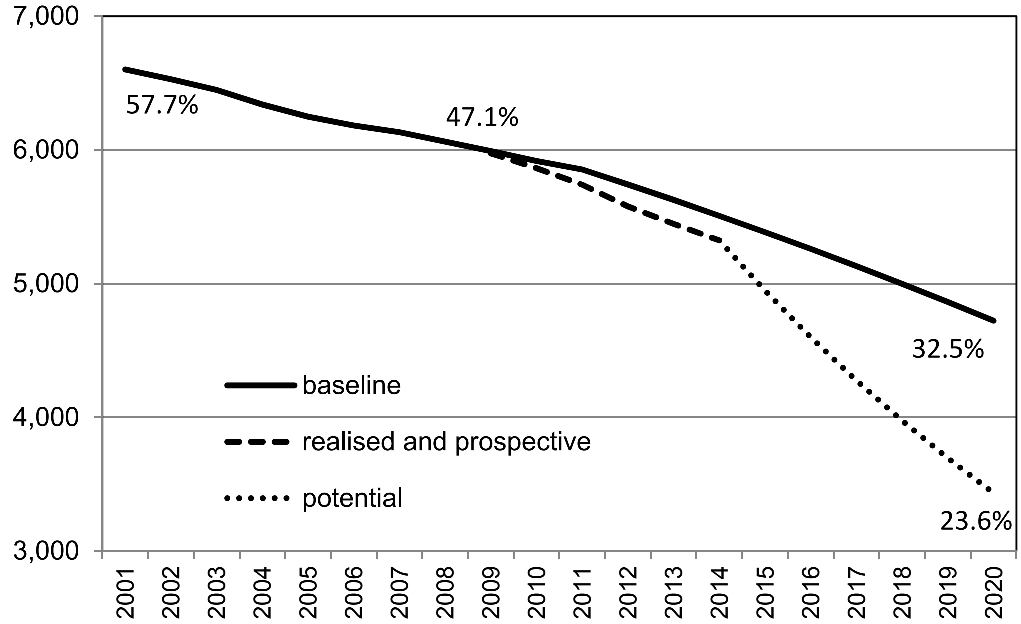
The initiatives considered in this report can be expected to also increase the numbers of partial completions and of completions at or below the level of qualification already held. A more effective VET sector will also benefit the economy and in turn improve the functioning of the labour market with a better and faster matching of skills to vacancies.

Partial completions

The latest survey indicates that 23 per cent of students who finish without completing their qualification of enrolment nominate having acquired the skills needed for their work, or attainment of their training goals, as their main reason for leaving early.

Figure 4.3 **Proportion and numbers of 20–64 year olds without a Certificate III or above, 2001 to 2020, baseline and estimates[a,b]**

Persons ('000)



[a] The baseline is based on an extrapolation of the trend in the reduction of the proportion from 2001 to 2009, as in CRC (2011) and on ABS Series B population projections. [b] The percentages represent the proportion of 20–64 year olds in the population without a Certificate III or above.

Data sources : Commission estimates based on CRC (2011); ABS (2011); Series B.

These results are comparable with those of other recent studies of VET reforms.[7]

Qualification at or below current level

With the exception of the language, literacy and numeracy (LLN) analysis, the focus of the reform agenda is on Certificate III to Advanced Diploma attainment. In Victoria in 2010, for example, 36 per cent of government-funded enrolments were at a level lower than Certificate III.

The 'higher qualification' scenario only assesses the economic impacts of qualifications that increase an individual's level of attainment. This is consistent with the Victorian entitlement, where access to a government-funded place at Certificate III level and above is constrained (with limited exceptions) to a higher qualification than the one a person currently holds. The South Australian Government has adopted a more flexible approach, allowing a person with a

[7] See appendix A, volume 3.

qualification equal to their current course to be eligible for a government-funded place.

Of course, completing a lower qualification might maintain or improve a graduate's productivity and employment prospects. As the South Australian Government has noted, career changers may need to start at a lower qualification than that already held. Even when people are not changing career, they may need refresher or extra courses because of regulatory requirements.

Nationally, over one-third of Diploma and Advanced Diploma graduates in 2009 had previously completed a qualification at or above that level. The corresponding figure for Certificate III and IV students was 45 per cent.

While evidence on the relationship between up-skilling and labour market outcomes is not conclusive, presumably individuals perceive a benefit in this form of VET activity, or they would not be prompted to invest time, money and effort in it. Intuitively, reskilling could be expected to assist individuals in retaining employment or enhance their employment prospects. This hypothesis is borne out in data collected on training motivations by the National Centre for Vocational Education Research (NCVER 2010, 2011c). The most frequently nominated motivations for reskilling by mature learners are that 'It was a requirement of my job' and 'I wanted extra skills for my job'.

Scenarios for partial completions and reskilling

This analysis is limited to mature learners, who constitute the majority of the VET students in these categories.

Partial completions represent about 32 per cent of completions at a level higher than already held. The Commission assumed in this scenario that part completers benefit from 50 per cent of the gains that are available to completers; the benefits therefore add up to about 15 per cent of those obtained from the 'higher qualification' scenario (table 4.3).

Those completing a qualification at the same or lower level as the one previously held represent more than three quarters of completions at a level higher than the one already held. These graduates are assumed to benefit from a 6 per cent addition to the wage premium attached to their original qualification and 75 per cent of the employment premium (in recognition of the potentially large employment effect that reskilling can have). There is therefore a strong employment effect, and economic benefits are estimated to be in the order of 50 per cent of the benefits from the potential 'higher completion' scenario for mature learners.

Table 4.3 **Potential effects of qualification completions at higher level than held, partial completions and re-skilling scenarios, mature learners, by 2020**

Potential scenario

	Unit	*Higher than held*	*Part completions*[a]	*Same or lower qualification*
Increased completions/partial completions[b]				
Cert. III to Ad. Dip	no.	731 000	237 000	570 000
Employment and productivity				
Change in employment[c]	%	0.69	0.11	0.46
Change in productivity[d]	%	0.27	0.04	0.14
Private and net social benefit[e]				
Payments to labour	$m	67 793	10 499	38 645
Net social benefit	$m	41 655	6 466	20 314

[a] Assuming 50 per cent of the premiums from full completions. [b] Estimates rounded to the nearest thousand. [c] Change in employment relative to the baseline expressed as a percentage of the Australian working-age population. [d] Change in productivity of the Australian workforce, relative to the baseline. [e] Present value of the change for the cohort over their working lives (assumed to be 18 years for mature learners).

Source: Commission estimates.

Gains from improving literacy and numeracy

Estimated changes in employment and productivity stemming from realised and prospective changes in LLN skills in the working-age population are very small, reflecting the small number of additional places under the policy initiatives modelled. The Australian Government has committed funding for an additional 43 570 places in the Language, Literacy and Numeracy Program over four years from 2010-11. When completions and the effectiveness of the program are taken into account, the Commission estimates that about 13 700 people aged 25 to 64 achieve a skill improvement sufficiently large to move them up a skill level.

Potential reform impacts could be much larger, but achieving these outcomes would require commensurately larger effort to address LLN skill gaps.

Given the extent of surveyed LLN skill gaps in the population, and the positive productivity gains associated with LLN skill improvements, it would suggest that significant improvements in skills are achievable if sufficient resources are directed to this task.

In terms of potential impacts, the Commission has modelled a 6 percentage point increase in the proportion of people at skill level 3 by 2022. Achievement of this National Foundation Skills Strategy (NFSS) target implies declines in the proportions of people at both levels 1 and 2. Some of those affected by initiatives introduced in response to the target will only progress from level 1 to 2. The Commission's estimates include the effects of this skill acquisition. The New Zealand experience, in achieving a 7 percentage point improvement in adult reading literacy between 1996 and 2006, suggests that an improvement of the magnitude targeted under the NFSS is feasible.

If these improvements were achieved in practice, the Commission estimates that a 0.16 per cent increase in employment for men and a 1.03 per cent rise for women could ensue. Average productivity of men could rise by about 0.82 per cent and by 0.91 for women. An increase in GDP of 0.7 per cent is estimated as a consequence of these changes.

Social inclusion also benefits

Adult literacy, and participation in the labour market, are two indicators of social inclusion. Estimated improvements in these measures as a consequence of the COAG VET reform agenda indicate the scope for assessed policy initiatives to improve social inclusion.

But the assumptions matter

While all the reform scenarios modelled are estimated to have positive economic impacts, and to result in net social benefits, the point estimates presented must be interpreted with caution. Sensitivity analysis was conducted by varying a number of key parameters. It shows that small changes in the assumptions can change the results markedly (see appendices D and E, volume 3).

An improved VET sector and labour market

The Commission anticipates that, over time, there would be a gain in moving from a regulated and supply driven system to a demand driven contestable market, provided quality is maintained. In fact, with improved information to prospective students and employers, and stronger auditing and validation of course outcomes, improved quality should result over time. And there could be cost savings at constant quality. For illustrative purposes, assuming a 2 per cent improvement in the efficiency of delivering services in the publicly-funded VET sector (estimated to be about $7.5 billion in size), this would be equivalent to about $150 million in 2010 dollars.

A more efficient and flexible VET sector would be expected to also improve the functioning of the labour market (through faster retraining and better matching of people to vacancies).

4.5 The Commission's analysis of youth transitions

In this study, the notion of a successful transition is considered from the perspective of COAG's goals for the reform agenda: increases in workforce participation, productivity and social inclusion. A successful transition, therefore, is deemed to occur when a young person reaches an 'end point' consistent with a high probability of employment and social inclusion later in life. The Commission has assumed that a person's employment status in the period before he or she turns 25 is a reasonable predictor of his or her future outcomes. Successful transitions, therefore, are defined with reference to a person's employment status in the period before they turn 25. Some people who are not employed at this point in their lives are either studying or engaged in child rearing. Their transition outcome is unclear, and they are not included in the Commission's assessments of the prevalence and characteristics of successful transitions.

COAG initiatives that aim to improve transitions tend to focus on people in the early stages of the transition process. It will be some years before the impacts of this effort are visible in measures of successful transitions. The Commission has, therefore, focused on identifying the incidence of, and characteristics associated with, successful transitions.

When employment, of any type, in four of the preceding seven months before someone turns 25 is used as the identifying criterion, 7 per cent of the cohort that turned 25 in 2008 is deemed not to have made a successful transition. Under the more restrictive criterion of any employment in all seven months, 13 per cent of the cohort is found not to have made a successful transition. Characteristics like higher measured ability and educational attainment are associated with successful transition.

Young people classified as having made a successful transition under this definition differed significantly from their peers who had not, in a number of ways. They are less likely to have no post-school qualification, slightly more likely to have a university educated mother and much less likely to have a disability (table 4.4).

Table 4.4 **Selected characteristics of young people who do, and do not, make a successful transition, per cent of cohort[a]**

	Success	*Failure*
No post-school qualification	30.8	41.7
Bachelor degree or higher qualification	32.9	24.9
High measured ability at age 15	25.5	17.5
Mother's education — University	22.1	16.3
Disability	1.6	8.8

[a] All differences between success and failure are significant at the 95 per cent level, except for mother's education for which the difference is significant at the 90 per cent level.

Source: Commission estimates.

The incidence of unsuccessful transitions underscores the importance of policy activity in this area. Using either identifying criterion, a significant proportion of young people reach the age of 25 with relatively poor prospects for economic and social engagement.

4.6 Achieving effective VET reform

There are several areas with potential to improve VET reform efforts.

The information available to prospective students could be improved. Although many websites provide information about course content, data on post-completion employment rates by course and provider are not available. It is also difficult to compare the prices of courses on offer from different providers. The *My Skills* website, to be fully operational in 2015-16, has the potential to improve information availability. However, valid and reliable data on employment outcomes at a provider and course level are not currently collected and it is unclear if these will be included in the labour market information available on *My Skills*.

Concerns about the quality of VET delivery have emerged in recent Commission reports on aged care, early childhood development, and the VET workforce (box 4.3). The Victorian Essential Services Commission also raised concerns in a report published in September 2011. While the national VET regulator arrangements will address a number of points of weakness, independent auditing and validation could substantially strengthen quality controls and public assurance in the VET system. In that regard the Commission notes the NPASR commitment to developing and piloting independent validation represents a first step down this important path. Cost effective independent auditing and validation would represent a substantial reform.

Box 4.3 **Recent Productivity Commission conclusions on the quality of delivery in the VET sector**

In a study of the VET workforce, the Commission reported that:

> … concerns about the quality of delivery by some providers [of the Certificate IV in Training and Assessment] are well founded … (VETAB 2008, cited in PC 2011a, p. 259)

The study into the provision of aged care services concluded that:

> While the delivery of many training courses is of high quality, there are some registered training organisations that are not delivering accredited courses to the standard required … (PC 2011b, p. 347)

Most recently, the study on the early childhood development workforce found that:

> Study participants report that the quality of ECEC [early childhood education and care] training … is highly variable. While there are examples of excellence, concerns about poor quality training from [registered training organisations] are widespread. (PC 2011c, p. 203)

As discussed above, completion rates in VET are currently low. The greater availability of income-contingent loans and payments to providers on completions (with quality checks) would be expected to increase completions. Some level of non-completion is consistent with optimal training decisions by individuals. For example, if a highly skilled worker only needs a unit or two of training, it could be wasteful of his or her time and resources, and public funds, for them to complete a full qualification. However, a significant proportion of those who do not complete (about 60 per cent) report that they leave because of a change in their circumstances; for example, job loss or change, ill health, a change in plans or time pressures. Given the positive association between qualification attainment and labour market outcomes, initiatives to support learners at risk of non-completion would enhance the effectiveness of VET reforms. The South Australian Government has a number of initiatives including a pilot program, Learner Support Services, to improve completion rates. The NASWD commits COAG to 'strengthening the capacity of public and private providers [...] to support people in training'. This is supported in the NPASR.

Once an individual has a higher–level qualification, further skills might efficiently be gained by undertaking specific modules only. The design and analysis of VET reform effort would be assisted by the collection and analysis of data on completions of skill sets. As some types of partial qualification completion are likely to deliver positive outcomes to students, future reform efforts could include progress measures relating to this VET activity.

Finally, a successful move to a more competitive system requires a number of 'building blocks', including:

- regulatory systems that can identify and respond to poor performance;
- mechanisms for timely information collection and data analysis;
- provision of adequate information about employment outcomes to potential VET clients; and
- governance arrangements that allow public providers greater autonomy and capacity to compete with other providers.

Systems to pay providers on outcomes achieved, including progressive payments (for example, on module completions) rather than input measures, might also need to be developed.

A Public consultation

This commissioned study is the first in a series assessing the impacts and benefits of COAG reforms. The Commission received the Terms of Reference for this stream of work on 18 June 2010 and released a framework report outlining the proposed methodology on 19 January 2011 (PC 2011). The Commission received the letter of direction for this study on 22 August 2011. On 15 March 2012, the Commission sought an extension of the reporting date to 30 April 2012. An extension was granted on 19 March 2012.

In line with its normal study procedures, the Commission has actively encouraged public participation.

- On 31 August 2011, the Commission released a circular notifying people and organisations thought likely to have an interest in the areas covered by the letter of direction and inviting written submissions. Twenty one submissions were received before the release of the Discussion Draft and a further 33 submissions were received after its release (table A.1).
- The Commission met with various interested parties from the private sector and government agencies (table A.2).
- On 29 September 2011, the Commission convened a workshop in Melbourne to consult with experts having a detailed knowledge of the VET and the VET reforms. Participants who attended the workshop are listed in table A.3.
- On 14 October 2011, the Commission convened a workshop in Melbourne to detail the changes being made to the MMRF model use in this study. Participants who attended the workshop are listed in table A.4.
- The discussion draft was released on 20 December 2011. The discussion draft set out the Commission's preliminary assessment, and invited comment and feedback.
- A supplement to the discussion draft was released on 17 February 2012 setting out details of the Commission's economy-wide modelling framework, including a modelling reference case for assessing the timescale over which the benefits of reform are likely to accrue.
- On 20-21 February 2012, the Commission convened three post-draft workshops to consult with government stakeholders regarding the business regulation

reforms, the VET and transition reforms, and MMRF model development. Participants who attended these workshops are listed in table A.5.

- On 5 April 2012, the Commission convened a workshop in Canberra to consult with experts regarding VET reforms. Participants are listed in table A.6.

The Commission would like to thank all those who have contributed to the study.

Table A.1 **Submissions received**

Participants	*Submission no.*
Australian Bankers' Association	R9
Australian Bureau of Statistics	R10
Australian Chamber of Commerce and Industry	DR-V15
Australian Competition and Consumer Commission	R8
Australian Council of Trade Unions	DR-V13
Australian Logistics Council	R4
Australian Mathematical Sciences Institute	V2
Australian Medical Association	R5
Australian Nursing Federation	DR-V10
Australian Council for Private Education and Training	DR-V14
Australian Railway Association	R6
Australian Securities and Investment Commission	DR-R26
Australian Taxation Office	R11, DR-R17
BusinessSA	DR-G5
Chamber of Commerce and Industry Queensland	DR-G4
Consumer Affairs Australia and New Zealand	DR-R27
Dairy Australia	R2
Deloitte Touche Tohmatsu	DR-R28
Department Education, Employment and Workplace Relations	DR-G6
Department of Further Education, Employment, Science and Technology, (SA)	DR-V7
Department of Innovation, Industry, Science and Research	G2
Department of Industry, Innovation Science, Research and Tertiary Education	DR-V9, DR-V16
Department of Premier and Cabinet, Tasmania	G3
Department of Resources, Energy and Tourism	R7
ForestWorks Industry Skills Council	V3
Housing Industry Association	DR-G7
Impact Management Group	DR-R29
Information Brokers & Law Stationers Association	DR-R14
Master Builders Australia	DR-R25
McKenzie Group Consulting	DR-R24
Mortgage and Finance Association of Australia	DR-R22
National Board Chairs & Australian Health Practitioner Regulation Agency	DR-R15
National Centre for Vocational Education Research	V1

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Table A.1 **(continued)**

Participants	*Submission no.*
Noble & Associates	DR-R13
Department of Education and Communities (NSW)	V6
Treasury (NT)	DR-R20
South Australian Farmers Federation	DR-R18
Safe Work Australia	R1, DR-R23
Skills Australia	V4, DR-V11
South Australian Government	G1
Standard Business Reporting Division, Treasury	R12
Sustainability Learning Institute	DR-V8
TAFE Directors Australia	V5, DR-V12
The Institute of Certified Bookkeepers	DR-R30
The Treasury	DR-R19
Thomas Mizanowski	DR-R21
Transport Safety Victoria	R3
Trustee Corporations Association of Australia	DR-R16
Western Australian Government Agencies	DR-G8

Table A.2 **Visits and meetings**

Organisation
Attorney-General's Department
Australian Bankers' Association
Australian Buildings Code Board
Australian Chamber of Commerce and Industry
Australian Council of Social Service
Australian Council of Trade Unions
Australian Government Information Management Office
Australian Health Practitioner Regulation Agency
Australian Industry Group
Australian Local Government Association
Australian Securities and Investments Commission
Australian Skills Quality Authority
Australian Taxation Office
Australasian Railway Association
Business Council of Australia
COAG Reform Council
Department for Education and Child Development (SA)
Department of Education and Communities (NSW)
Department of Education, Employment and Workplace Relations
Department of Finance (WA)
Department of Finance and Deregulation
Department of Further Education, Employment, Science and Technology (SA)
Department of Health and Ageing
Department of Infrastructure and Transport

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Table A.2 **(continued)**

Organisation
Department of Planning (NSW)
Department of the Prime Minister and Cabinet
Department of Treasury (WA)
Department of Treasury and Finance (SA)
Department of Treasury and Finance (Vic)
Development Assessment Forum
Graham Bradley AM
Health Workforce Australia
Housing Industry Association
Impact Management Group
Independent Economics
Master Builders Australia
McKenzie Group Consulting
Medical Board of Australia
Melbourne Institute of Applied Economic and Social Research
Mirvac
MYOB
National Centre for Vocation Education Research
National Transport Commission
Noble & Associates
Nursing and Midwifery Board of Australia
Peter Noonan (Allen Consulting)
Pharmacy Board of Australia
Property Council of Australia
Reckon
Safe Work Australia
Skills Victoria
Standard Business Reporting Division, The Treasury
State Revenue Office (Vic)
Stockland
The Treasury
Victorian Competition and Efficiency Commission

Table A.3 **VET Workshop — Melbourne 29 September 2011**

Australian Education Union
Department of Education and Communities (NSW)
Department of Education and Training (NT)
National Advisory for Tertiary Education Skills and Employment
National Skills Standards Council
National VET Equity Advisory Council
Swinburne University, TAFE Division
TAFE Directors Australia
William Angliss Institute of TAFE

Table A.4 **MMRF Workshop — Melbourne 14 October 2011**

Australian Bureau of Statistics
Centre of Policy Studies, Monash University
COAG Reform Council
Department of Premier and Cabinet (NSW)
Department of the Prime Minister and Cabinet
Department of Treasury and Finance (SA)
Department of Treasury and Finance (Vic)
The Treasury
Treasury (NSW)
Treasury (Qld)

Table A.5 **Workshops — Melbourne 20-21 February 2012**

The business regulation reforms
COAG Reform Council
Department of Finance and Deregulation
Department of Premier and Cabinet (NSW)
Department of Premier and Cabinet (Qld)
Department of Premier and Cabinet (SA)
Department of the Prime Minister and Cabinet
Department of the Chief Minister (NT)
Department of Treasury and Finance (Vic)
The Treasury
Treasury (NSW)
Treasury (Qld)
Treasury Directorate (ACT)
The VET and transitions reforms
COAG Reform Council
Department of Chief Minister (NT)
Department of Education and Training (NSW)
Department of Premier and Cabinet (SA)
Department of the Prime Minister and Cabinet
Department of the Premier and Cabinet (Qld)
Department of Treasury and Finance (Vic)
Treasury (NSW)
Treasury (Qld)

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Table A.5 **(continued)**

Organization
MMRF model development
COAG Reform Council
Department of Prime Minister and Cabinet
Centre of Policy Studies, Monash University
Department of Education and Training (NSW)
Treasury (NSW)
Department of the Chief Minister (NT)
Treasury (Qld)
Department of Premier and Cabinet (SA)
The Treasury
Department of Treasury and Finance (Vic)

Table A.6 **VET Workshop — Canberra 5 April 2012**

Department of Industry, Innovation, Science, Research and Tertiary Education
Department of Prime Minister and Cabinet
Skills Australia
TAFE Directors Australia

B The MMRF model

This appendix provides an overview of the Monash Multi-Regional Forecasting (MMRF) model that was used to assess the economy-wide effects of business regulation and VET reforms and ascertain the wider fiscal implications. This model has been used widely by the Commission and others to analyse the effects of public policy in Australia, and is well suited to examining policies with a regional focus.

B.1 An overview of the MMRF model

The Monash Multi-Regional Forecasting (MMRF) model is a 'bottom-up' model that treats each State and Territory as a separate economy. The model includes:

- 64 industries and commodities in each State, and the interlinkages contained in the input-output tables;
- State labour markets, comprised of eight occupations, with the supply of labour moving between States to equate differences in occupational-specific real wages;
- eight State-specific household sectors, which supply production factors, consumer goods and services, and pay income and commodity taxes;
- eight State and Territory Governments; and
- the Australian Government.

Important elements of the theoretical structure of the version of MMRF used in this project include the following:

- households change their consumption bundles in response to changes in their incomes and in relative prices;
- producers adapt their output and their relative use of labour, capital and agricultural land in response to changes in the relative prices;
- productivity improvements are modelled as reducing resource costs; and
- foreign demand for Australian exports responds to the export price of Australian products, and exporters can accrue short-term rents in response to price changes.

The model is documented in more detail in CoPS (2007).

Database

The core of the updated MMRF model is its database, which can be thought of as being composed of:

- a production core, comprised of eight input-output tables that are linked through interstate trade; and
- fiscal accounts for the nine governments.

The production core of the database shows how each industry in each State economy is linked to other industries within that State and in other States. It is based on input-output tables prepared by the ABS and on various ABS state publications. It provides a detailed description of the structure of production and demand in each State and Territory, and shows:

- the flow of industry outputs to other industries (termed ‘intermediate inputs’), final demands by households (consumption), government, investment (for capital formation purposes) and exports; and
- the cost structures of industries in terms of intermediate inputs of commodities (goods and services supplied by domestic industries and by imports), primary factors of production (labour, capital and agricultural land), other costs to production and commodity taxes and subsidies.

The production core accounts for product taxes and subsidies on all transactions and includes margin services, which represent the costs associated with transferring products from the producer (or the port of entry in the case of imports) to final consumers and other users. Transportation and distribution margin services include gas supply, wholesale and retail trade, transport, storage and insurance costs. Product taxes and the value of margin services represent the difference between the cost of production of a good or service (the basic price of the good) and the price paid by the user (the purchasers’ price of the good). Import duties, other than excise on imported goods, are treated as a commodity tax on imports. The database also contains detailed intra-state, inter-state and international trade flows.

The fiscal accounts detail revenue and expenditure for the nine State, Territory and Australian governments and align with the ABS Government Financial Statistics. The accounts include a range of:

- government revenue sources, such as income tax, payroll tax, the GST, duties excise and other commodity taxes and tariffs; and
- government expenditure, including operating expenses, welfare payments and government grants.

The fiscal accounts for each State and Territory Government also include, where relevant, those for local government.

B.1 Modifications made for this study

The version of the MMRF model used to assess the economy-wide effects of business regulation and VET reforms in this study is an updated and expanded version of the model used by the Commission to assess the economy-wide impacts of the National Reform Agenda (PC 2006).

The Terms of Reference for this stream of work direct the Commission to develop and maintain analytical frameworks appropriate for the quantification of the impacts and benefits of the COAG reform agenda, which is much broader the reforms contained in the letter of directions.

The Commission engaged the model developers, the Centre of Policy Studies (CoPS) at Monash University, to make the model better suited for assessing the impacts of this wider stream of work through time. The main modifications include:

- updating the reference year of the model database to align with the 2005-06 ABS input-output tables (ABS 2009)[1];
- introducing a dynamic modelling capability so that the model can now be run in two modes: *comparative-static* and *recursive-dynamic* — *comparative static* mode presents a snapshot of the economy with and without the longer-run effects of the policy being modelled; the *dynamic* mode traces out the time path over which the effects are likely to occur;
- including explicit modelling of demographic change;
- revising the modelling of energy;
- introducing transformation between occupations in labour supply; and
- introducing transformation between supplying domestic and export markets.

The supplement to this report provides additional detail on the modifications made to the MMRF model undertaken for this report.

The preliminary database used for the discussion draft has been updated by the Centre of Policy Studies for this final report.

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[1] ABS 2009, (*Australian National Accounts: Input-Output Tables — Electronic Publication, 2005-06 Final*, Cat. no. 5209.0.55.001).

References

Australian Government 2010a, *Australia's Federal Financial Relations, 2010-11*, Budget Paper no. 3, CanPrint Communications Pty Ltd, Canberra.

—— 2010b, *Intergenerational Report 2010*, Commonwealth of Australia, Canberra.

Australia's Future Tax System Review 2010, *Australia's Future Tax System: Report to the Treasurer*, Commonwealth of Australia, Canberra.

Banks, G. 2006, *Regulation for Australia's Federation in the 21st Century*, Presentation to the Melbourne Institute/The Australian Economic and Social Outlook Conference, Melbourne, 2–3 November.

COAG (Council of Australian Governments) 2007, *COAG Regulatory Reform Plan April* 2007, www.coag.gov.au/coag_meeting_outcomes/2007-04-13/docs/coag_nra_regulatory_reform.pdf.

—— 2008a, *Intergovernmental Agreement on Federal Financial Relations*, www.coag.gov.au/intergov_agreements/federal_financial_relations/docs/IGA_federal_financial_relations.pdf.

—— 2008b, *Communiqué*, Adelaide, 26 March, www.coag.gov.au/coag_meeting_outcomes/2008-03-26/docs/communique20080326.pdf.

—— 2009, *National Partnership Agreement to Deliver a Seamless National Economy*, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/Other/seamless_national_economy/national_partnership.pdf.

—— 2011, *National Partnership Agreement to Deliver a Seamless National Economy Implementation Plan*, Part 1 — Deregulation Priorities, www.federalfinancialrelations.gov.au/content/national_partnership_agreements/Other/seamless_national_economy/all_states_part1.pdf.

—— 2012, *Communiqué*, Canberra, 13 April, www.coag.gov.au/coag_meeting_outcomes/2012-04-13/index.cfm.

CoPS (Centre of Policy Studies) 2007, *MMRF: Multi-Regional Forecasting Model — An Applied General Equilibrium Model of the Australian Economy*, CoPS, Monash University.

CRC (COAG Reform Council) 2010, *National Partnership Agreement to Deliver a Seamless National Economy: Performance Report for 2009–10*, COAG Reform Council, Sydney.

—— 2011, *COAG Reform Agenda: Report on Progress 2011*, Report to the Council of Australian Governments, Sydney.

—— 2012, *Seamless National Economy: Performance Report for 2010–11*, COAG Reform Council, Sydney.

Henry Review 2010, see Australia's Future Tax System Review.

IC (Industry Commission) 1995, *Growth and Revenue Implications of National Competition Policy Reforms,* Report by the Industry Commission to the Council of Australian Governments, AGPS, Canberra.

NCVER (National Centre for Vocation Education Research) 2010, Australian Vocational Education and Training Statistics: Student Outcomes 2010, Adelaide, December.

—— 2011, Australian Vocational Education and Training Statistics: Student Outcomes 2011, Adelaide, December.

PC (Productivity Commission) 1999, *Impacts 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.

—— 2005a, *Review of National Competition Policy Reforms*, Inquiry Report no. 33, Canberra.

—— 2005b, *Economic Implications of an Ageing Australia*, Research Report, Canberra.

—— 2005c, *Australia's Health Workforce*, Research Report, Canberra.

—— 2005d, *Annual Report 2004-05*, Annual Report Series, , Canberra.

—— 2006, *Potential Benefits of the National Reform Agenda*, Report to the Council of Australian Governments, Canberra.

—— 2008, *Review of Australia's Consumer Policy Framework*, Inquiry Report no. 45, Canberra.

—— 2009, *Submission to the House of Representatives Standing Committee on Economics: Inquiry into Raising the Level of Productivity Growth in Australia,* Canberra.

—— 2010a, *Impacts and Benefits of COAG Reforms: Framework Report*, Research Report, Canberra.

—— 2010b, *Annual Report 2009-10*, Annual Report Series, Canberra.

—— 2011, *Identifying and Evaluating Regulation Reforms*, Research Report, Canberra.

Regulation Taskforce 2006, *Rethinking Regulation: Report of the Taskforce on Reducing Regulatory Burdens on Business*, Report to the Prime Minister and the Treasurer, Canberra.

Stevens, G. 2011, 'The Resources Boom', Presentation at the Victoria University Public Conference, Melbourne, February.

Treasury (Department of The Treasury) 2011, *Strong Growth, Low Pollution, Modelling A Carbon Price*, Canberra.