The Economic and Fiscal Dividends of a New National Reform Agenda

Department of Treasury and Finance
Victoria

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BACKGROUND

In August 2005, the Victorian Department of Treasury and Finance released a paper on *Rewards from Reform: Higher Productivity and Labour Force Participation*. This included preliminary results of modelling of the effect of a potential new reform agenda proposed by the Victorian Premier for COAG[1].

Since that time we have been increasingly in a position to gauge the nature of the reforms that could emerge, assuming successful negotiations in COAG, and have been refining the modelling accordingly[2]. We are not able in this paper to provide the full details of the reform agenda that we are modelling, as they are still the subject of confidential proposals being considered by COAG. When COAG announces an agreed reform agenda, it is planned to release a more detailed paper with our analysis of the potential benefits of that agenda.

Meanwhile, in this paper we present a summary of our results to contribute to the policy discussion about potential economic significance of a new reform agenda. As well as modelling the potential impact on GDP over a ten year period, as did our previous paper, we look at the longer term effects over a twenty five year period. The paper also focusses on the fiscal dividends that we expect to accrue from this reform agenda. This provides an indication of the extent to which governments should be able to take advantage of these fiscal dividends to support any investment in the new reform agenda to help produce the economic impact.

It should be added that, in order to achieve the long term gains estimated by the modelling, it is implied that jurisdictions vigorously pursue the National Reform Agenda. Therefore this paper presents a range of potential benefits, up to an "outer envelope"[3].

KEY POINTS

The key points arising from the modelling are:

- A new National Reform Agenda could add approximately 3 to 5 per cent to annual GDP, after ten years. This is of a similar order of magnitude to, and potentially larger than, the estimated benefits from National Competition Policy. The economic gains arise from a combination of improved business efficiency and competitiveness through policy measures such as reducing the administrative burden of red tape, and increased labour force participation through policies such as those designed to address incentives to work.
    - After ten years, reform could add between $6 billion and $10 billion to Commonwealth Government finances, and between $1.5 billion and

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1 Governments Working Together, A Third Wave of National Reform: A New National Reform Initiative for COAG, The proposals of the Victorian Premier. Victorian Department of Premier and Cabinet and Victorian Department of Treasury and Finance, August 2005.

2 We have also received very helpful comments on the earlier modelling work, which have resulted in some modifications to the modelling reported in this paper.

3 As a caveat, it has not been possible to model the potential effects of all the ingredients of the reform proposals under consideration by COAG. Thus the envelope could be larger.

$3 billion to combined State and Territory Government finances (see Chart 1 and Table 1).

  - Most of the economic and fiscal benefits after ten years would be delivered by a human capital agenda, especially from improving workforce participation (such as by reducing incentives for early retirement, and improving access to child care). See Charts 2 and 3.

- Over the longer period considered (25 years), the potential benefits of reform are much larger, potentially adding between 9 and 14 per cent to annual GDP. The economic contribution from reforms to education and health become relatively more important over this longer time frame. Higher education attainment levels mean more skilled workers and higher productivity, while improved health outcomes are associated with increased labour force participation.

  - Over 25 years, a National Reform Agenda could improve Commonwealth finances by up to $40 billion per year (of the order of more than 2 per cent of GDP), and State finances by up to $4.7 billion per year (see Chart 1 and Table 2).

  - Over the same period, improved education has the potential to contribute a substantial part of the gains to Government finances. However, the benefits of better educational attainment are also relatively slow to be realised (see Chart 3).

- After ten years, the ratio of fiscal benefits arising from reform is generally between 3:1 and 4:1, in favour of the Commonwealth. After 25 years, the benefits shift further in favour of the Commonwealth.

SUMMARY OF MODELLING APPROACH

The economic implications of a National Reform Agenda were estimated by DTF using the MMRF-Green computable general equilibrium model. The estimates of the fiscal impact of reform were derived from a framework developed by DTF that applies the estimated economic impact to a baseline forecast of Government finances obtained from the DTF-Access Economics State Inter-Generational Model. Hence, all the estimates in this paper represent deviations from a "business as usual" baseline, in which reform does not proceed.

The estimates of fiscal impacts take into account movements in non-discretionary spending, comprising employee expenses (the need for governments to pay market wages to retain employees), depreciation, and interest expenses. These are driven by changes in employment, wages, public sector capital stock and output. It is implicitly assumed that the share of public services in the economy is fixed. The fiscal impacts discussed in this paper are the "net funding" positions set out in Tables 1 and 2, which represent net additional revenue to the Commonwealth and State Governments, after non-discretionary expenses and re-distribution of GST to the States.

The remainder of this paper briefly summarises the modelling scenarios for each aspect of the reform agenda.

Competition policy

The competition policy reform scenarios represent the likely impact of confidential policy proposals being considered by COAG. The modelling focuses on the transport and energy sectors in particular. High and low cases are presented as a guide to the possible range of outcomes. These policy proposals can be expected to be announced when they receive endorsement.

Red tape

Cutting red tape is interpreted as reducing the *administrative* costs of regulation. This is assumed to be labour saving, and is modelled by a labour productivity improvement in the private sector. The high and low cases represent targets of a 25 per cent and 10 per cent reduction in the administrative burden on business caused by red tape, respectively.

Human capital

Health

Improvements in health service delivery (including preventative health) are assumed to reduce the number of people not participating in the workforce due to poor health. This is modelled by an increase in the participation rate of 0.3 percentage points after 10 years and 0.8 percentage points after 25 years. The size of these increases in participation is based on commissioned research by the Melbourne Institute for DTF[4].

Education and training

Reforms in the education and training sector are modelled as improving labour productivity and encouraging higher workforce participation. Higher educational attainment is estimated to add about 0.24 per cent to labour productivity after 10 years, and 0.66 per cent after 25 years, based on estimates from DTF and research by Dowrick (2003)[5]. Educational attainment is estimated to have little effect on participation after 10 years, but raises the participation rate by 2.6 percentage points after 25 years (based on Melbourne Institute research). An adjustment has been made to allow for workers at the margin to have lower productivity than the average of the existing workforce.

Work Incentives

Reform to work incentives includes removing incentives for early retirement, better access to child care, and welfare reform. The effects are modelled as participation increases (based on Melbourne Institute work for DTF). As with education and training, an adjustment has been made for the lower productivity of marginal workers. The estimates have been adjusted to exclude the effects of welfare reforms recently introduced by the Commonwealth Government.

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[4] Melbourne Institute of Applied Economic and Social Research, "The Impacts of Population Ageing on Labour Force Participation", Final report to the Department of Treasury and Finance, 2004. Available from the Victorian DTF web site at www.dtf.vic.gov.au.

[5] Dowrick, S. (2003), "Ideas and Education: Level or Growth Effects?", NBER Working Paper 9709, National Bureau of Economic Research, Cambridge, Mass.

The way forward

We plan to revisit this modelling work as the specific reform proposals of the new National Reform Agenda are developed and announced. This is intended to contribute to the ongoing policy discussion about the potential benefits of reform.

Chart 1: Distribution of Net Fiscal Gains from National Reform Agenda

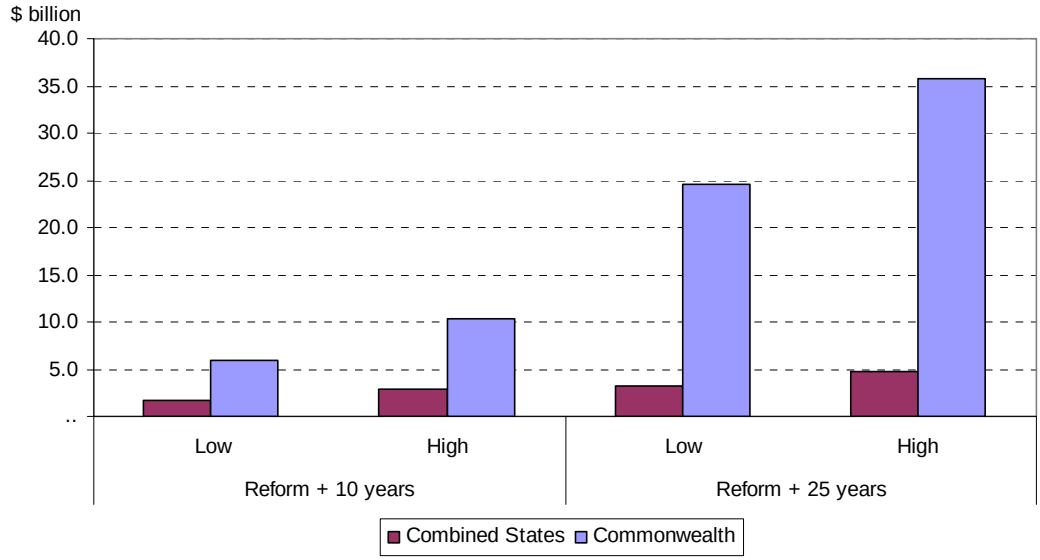
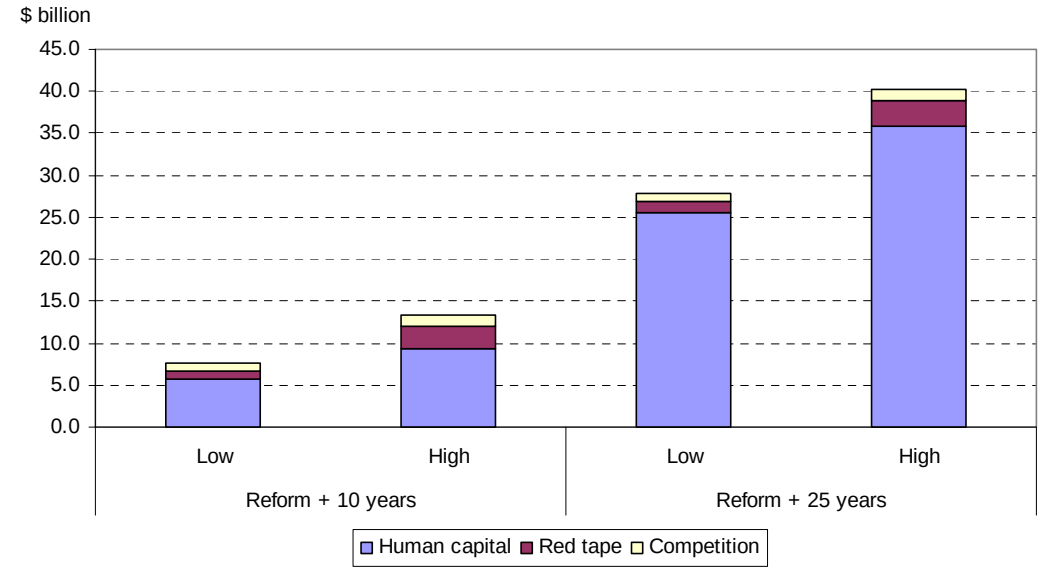


Chart 2: Fiscal impact of National Reform Agenda



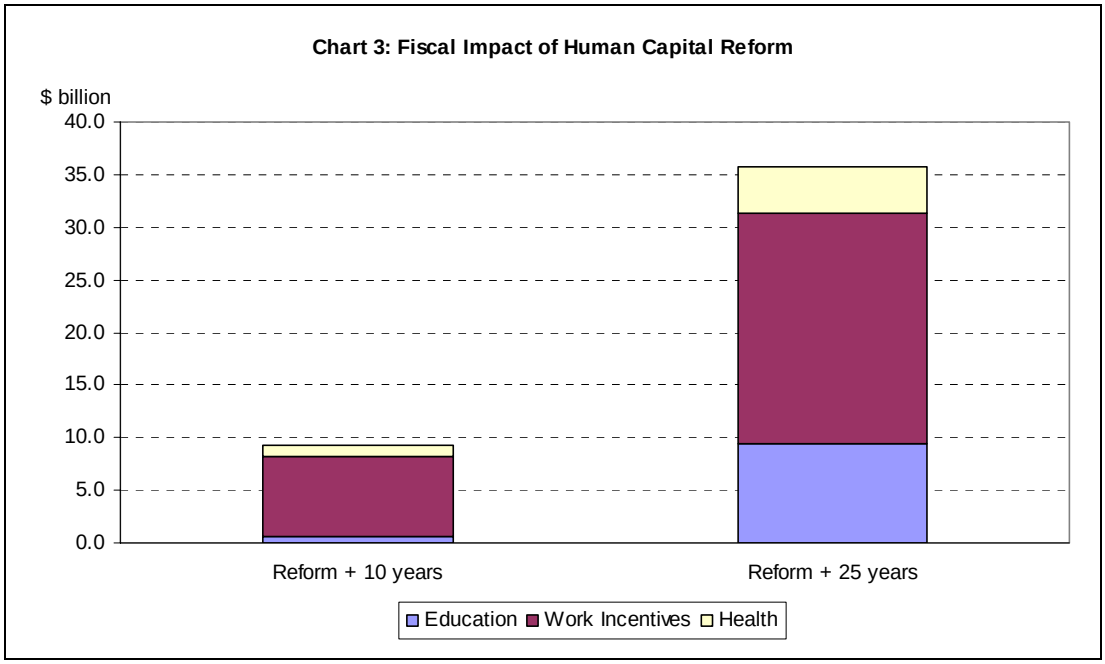


Chart 3: Fiscal Impact of Human Capital Reform
$ billion
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Reform + 10 years
Reform + 25 years
Education
Work Incentives
Health

TABLE 1. FISCAL IMPACT OF A NATIONAL REFORM AGENDA (AFTER 10 YEARS, 2005-06 PRICES[e])

Policy Simulation	Economic Impact	Fiscal Impact[a]									
			Revenue[b]				Non-discretionary Expenditure[c,d]		Available "Net Funding"		
	GDP (% change)		C'wealth (incl GST)	Combined States (incl GST)			C'wealth	Combined States	C'wealth	Combined States	Consolidated
				Total	GST Grants	Other					
A. Competition - High	0.3	$billion	1.4	1.1	0.3	0.8	0.4	0.8	1.0	0.3	1.3
		change	0.5%	0.8%	0.6%	0.8%	0.1%	0.5%			
Competition - Low	0.2	$billion	1.0	0.8	0.2	0.6	0.3	0.6	0.7	0.2	0.9
		change	0.3%	0.4%	0.4%	0.4%	0.1%	0.3%			
B. Red Tape - High Target: 25% reduction	1.1	$billion	2.7	1.5	0.4	1.1	0.6	1.0	2.1	0.5	2.7
		change	0.9%	1.0%	1.0%	1.0%	0.2%	0.6%			
Red Tape - Low Target:10% reduction	0.4	$billion	1.1	0.6	0.2	0.4	0.2	0.4	0.8	0.2	1.0
		change	0.4%	0.4%	0.4%	0.4%	0.1%	0.2%			
C. Human Capital - High	3.8	$billion	9.4	5.4	1.6	3.8	2.2	3.3	7.2	2.1	9.3
		change	3.1%	3.5%	3.8%	3.4%	0.8%	1.9%			
Human Capital - Low	2.4	$billion	5.8	3.3	1.0	2.3	1.3	2.0	4.4	1.3	5.7
		change	1.9%	2.2%	2.4%	2.1%	0.5%	1.1%			
=>Education	0.3	$billion	0.6	0.4	0.1	0.2	0.2	0.2	0.5	0.1	0.6
		change	0.2%	0.2%	0.3%	0.2%	0.1%	0.1%			
=> Health	0.5	$billion	1.1	0.7	0.2	0.5	0.3	0.4	0.9	0.3	1.1
		change	0.4%	0.4%	0.5%	0.4%	0.1%	0.2%			
=> Work Incentives - High	3.1	$billion	7.6	4.4	1.3	3.1	1.7	2.7	5.9	1.7	7.6
		change	2.5%	2.9%	3.0%	2.8%	0.6%	1.6%			
=> Work Incentives - Low	1.6	$billion	4.0	2.3	0.7	1.6	0.9	1.4	3.1	0.9	4.0
		change	1.3%	1.5%	1.6%	1.5%	0.3%	0.8%			
D. National Reform Agenda - High	5.2	$billion	13.5	8.1	2.3	5.7	3.1	5.2	10.4	2.9	13.3
National Reform Agenda - Low	3.0	$billion	7.8	4.7	1.4	3.4	1.9	3.0	6.0	1.7	7.7

Notes: a) The fiscal impact is presented in terms of deviation from a baseline estimated using the DTF-Access Economics State Inter-Generational Model.

b) The revenue impact estimates are based on the assumption that the various tax bases move with economic aggregates such as GDP, consumption, imports, gross operating surplus, employment, wage growth and dwelling investment. Non-tax revenue is also linked to movements in output.

c) The expenditure impact estimates are limited to the movement of non-discretionary spending comprised of employee expenses, depreciation, and interest expense. The key drivers are changes in employment, wages, public sector capital stock and output.

d) In this exercise, it is implicitly assumed that a part of the increase in public sector employment is non-discretionary to keep the proportion of public services to output fixed.

e) Nominal values were deflated using a 3% inflation assumption for 2005-06 and 2.5% inflation assumption for the forward years.

TABLE 2. FISCAL IMPACT OF A NATIONAL REFORM AGENDA (AFTER 25 YEARS, 2005-06 PRICES[e])

Policy Simulation	Economic Impact	Fiscal Impact[a]								
			Revenue[b]				Non-discretionary Expenditure[c,d]		Available "Net Funding"		
	GDP (% change)		C'wealth (incl GST)	Combined States (incl GST)			C'wealth	Combined States	C'wealth	Combined States	Consolidated
				Total	GST Grants	Other					
A. Competition - High	0.3	$billion	2.0	1.2	0.4	0.9	0.6	1.1	1.3	0.1	1.4
		change	0.5%	0.6%	0.6%	0.6%	0.1%	0.4%			
Competition - Low	0.2	$billion	1.3	0.9	0.3	0.6	0.5	0.8	0.9	0.1	1.0
		change	0.3%	0.4%	0.4%	0.4%	0.1%	0.3%			
B. Red Tape - High Target: 25% reduction	1.1	$billion	3.7	2.1	0.6	1.5	0.9	1.9	2.9	0.3	3.1
		change	0.9%	1.0%	1.0%	1.0%	0.2%	0.6%			
Red Tape - Low Target:10% reduction	0.4	$billion	1.5	0.8	0.2	0.6	0.3	0.7	1.1	0.1	1.2
		change	0.4%	0.4%	0.4%	0.4%	0.1%	0.2%			
C. Human Capital - High	12.2	$billion	42.0	24.3	7.2	17.2	10.4	20.0	31.5	4.3	35.8
		change	10.3%	11.4%	12.3%	11.1%	2.3%	6.6%			
Human Capital - Low	8.8	$billion	30.0	17.4	5.1	12.3	7.5	14.3	22.5	3.1	25.6
		change	7.4%	8.2%	8.8%	7.9%	1.7%	4.7%			
=>Education	3.2	$billion	10.9	6.3	1.9	4.5	2.7	5.2	8.3	1.1	9.4
		change	2.7%	3.0%	3.2%	2.9%	0.6%	1.7%			
=> Health	1.6	$billion	5.4	3.1	0.9	2.2	1.6	2.6	3.9	0.5	4.4
		change	1.3%	1.5%	1.6%	1.4%	0.4%	0.9%			
=> Work Incentives - High	7.4	$billion	25.6	14.8	4.4	10.5	6.2	12.2	19.4	2.6	22.0
		change	6.3%	7.0%	7.5%	6.8%	1.3%	4.0%			
=> Work Incentives - Low	4.0	$billion	13.7	7.9	2.3	5.6	3.3	6.5	10.3	1.4	11.8
		change	3.4%	3.7%	4.0%	3.6%	0.7%	2.1%			
D. National Reform Agenda - High	13.6	$billion	47.7	27.7	8.1	19.6	12.0	23.0	35.7	4.7	40.4
National Reform Agenda - Low	9.4	$billion	32.9	19.1	5.6	13.5	8.4	15.9	24.5	3.3	27.8

Notes: a) The fiscal impact is presented in terms of deviation from a baseline estimated using the DTF-Access Economics State Inter-Generational Model.

b) The revenue impact estimates are based on the assumption that the various tax bases move with economic aggregates such as GDP, consumption, imports, gross operating surplus, employment, wage growth and dwelling investment. Non-tax revenue is also linked to movements in output.

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