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Executive Summary

The economic cost of red tape in Australia is estimated at $176 billion per annum, or 11 per cent of GDP.

Red tape costs translate into $19,300 for each household in this country.

The economic costs of red tape (11 per cent of GDP) exceed the size of the Australian agriculture and mining sectors put together (nine per cent of GDP), and is almost double the manufacturing sector (six per cent of GDP).

Red tape costs ($176 billion pa) vastly exceed the costs of major Australian taxes – including personal income tax ($166 billion in 2013-14), company tax ($71 billion), the GST ($56 billion) and payroll tax ($21 billion).

The costs of red tape to the Australian economy also exceeds major items of government spending, such as social security and welfare ($156 billion in 2013-14), health care ($106 billion), education ($81 billion) and defence ($22 billion).

Recent estimates of red tape costs produced by the federal government understate the economic costs of red tape by a wide margin.

The Annual Deregulation Report series ignores state-local government compliance costs and the non-compliance costs of federal, state and local red tape, while the survey methodology used by the government is potentially dubious.

Given the scale of these red tape cost estimates, governments at all levels should reinvigorate deregulation and red tape reductions to promote future economic growth and productivity.
Introduction

This is the first of a series of papers investigating the dimensions of red tape costs in Australia.

There is widespread concern that government red tape imposes substantial costs upon the Australian economy. These costs typically come in the form of paperwork, labour retraining and other compliance burdens, the costs of delaying production, and the diversion away from more entrepreneurial and innovative activities.

In response to the concerns governments have attempted to estimate the costs of regulations they impose on businesses and individuals, with a view to managing them as part of formal red tape reduction programs. The Commonwealth government, for example, has estimated the annual compliance costs of its red tape to be in the order of $65 billion per annum.¹

Despite these efforts in red tape cost estimation, this paper shows the costs presented by the government are likely to be understated by a wide margin. This is because the costs of red tape compliance and management not only exerts direct costs upon individuals and businesses, but also has an adverse impact on broader economic activity.

Based on international econometric studies of red tape costs it is estimated the economic costs of red tape in Australia is at least in the order of $176 billion per annum (11 per cent of GDP). In other words, official estimates have understated Australian red tape costs by at least $110 billion. The cost estimate presented here translates into red tape costs of about $19,300 per Australian household.

Estimating the economic cost of Australian red tape

This paper draws upon time-series, cross-country (or panel) regression analysis to estimate the economic cost of red tape, using an estimation approach that has been presented in a 2014 paper by American economists Mark and Nicole Crain.²

The regression model used by Crain and Crain estimates the relationship between real GDP per capita and an index measure of regulatory burdens devised by the World Bank. The study includes 34 OECD countries, including Australia, and covers a period from 1996 to 2013. (Further information about the Crain and Crain model can be found in the Appendix.)

The World Bank’s ‘regulatory quality index’ captures perceptions of the ability of a government to formulate and implement sound policies and regulations that permit and promote private sector development, incorporating measures of regulatory impact relevant to such areas as business licensing, competition, financial, tax, and trade policy.³

The World Bank index is scaled such that higher index values reflect better quality economic regulations. The index value for Australia in 2012 was 1.77 and the maximum index value (consistent with least stringent regulations) is 2.50,⁴ hence there is a ‘gap’ of 0.73 points between Australia and a regulatory environment with the relatively fewest restrictions.

Crain and Crain found that a positive relationship between the value of the regulatory quality index and real GDP per capita. On the basis of the estimated regression coefficient, closing the gap of 0.73 points between the two regulatory quality index values would correspond with an increase in Australia’s GDP per capita. Using the value of Australia’s GDP in 2012 (converted to 2015 Australian dollars), the estimated cost of economic red tape as reflected in lost output totalled $175.8 billion (or 10.9 per cent of GDP).

Putting the economic cost of red tape in perspective

The estimated cost of red tape, of $176 billion in today’s dollars, is unquestionably a large figure representing a significant dead weight upon the Australian economy in the form of foregone national output. To obtain a better perspective of the sheer scale of the economic cost of red tape impositions, we apportion the cost amongst certain segments of the population as well as compare the total against other major economic and fiscal aggregates.

According to various Australian Bureau of Statistics sources, there were 9.1 million households in Australia as at June 2015. Apportioning the $176 billion economic cost of red tape translates into $19,334 in regulatory costs for each household.

In effect, the cost of red tape represents foregone opportunities for Australian families to enjoy the fruits of productive effort - meaning less food, clothing, and housing and other consumables than would otherwise be available, as well as the likes of fewer education, health, policing and transport infrastructure services.

³ For more details about the methodological approach used to develop the World Bank regulatory quality index, see http://info.worldbank.org/governance/wgi/index.aspx#doc (accessed 31 March 2016).
It can also be shown that red tape costs exceed the level of productive, value added activity of several key Australian industries such as agriculture, mining, retail trade, transport, and utilities (Figure 1). In fact, the estimated economic cost of red tape (10.9 per cent of GDP) is larger than the combined size of agriculture and mining (9.1 per cent) and is almost double the size of Australia’s manufacturing sector (6.4 per cent).

Figure 1: Red tape economic costs compared with selected industry gross value added


Red tape is imposed by government for the purposes of fulfilling their policy objectives, and so it is reasonable to compare the dollar value of its costs against other forms of government intervention namely taxes and spending.

Figure 2 compares the red tape cost estimate in this paper against major forms of taxation and expenditure. As is shown in the Figure, red tape costs exceed the likes of income tax, company tax and GST collections and also greater than combined federal-state-local spending on functions such as social security, health, education, public housing, and defence.
Taxation and general government sector expenditure figures are for the 2013-14 fiscal year. 

Explaining the missing billions

Red tape cost estimates produced by the Commonwealth Government

This paper indicates that commonwealth estimates of red tape costs fall short of the economic costs of regulation by a significant margin. Specifically the official count of the cost of red tape is at least $110 billion lower than the economic cost presented here, so by no means should the publicised official figures be construed as a comprehensive estimate. This numerical shortfall is informed by the limitations surrounding the design of the compliance cost stocktake survey commissioned by the commonwealth government for its own agencies.

Commonwealth estimates exclude state and local red tape compliance costs

State, territory and local governments continue to regulate a wide array of activities, including building and construction, consumer protection, land use development and planning, natural resources management, public health standards, transportation, welfare and community services, and so on.

Although estimates of the compliance costs of state-local regulation in the Australian context are limited, there is little doubt in aggregate terms these are both large and excessive. Surveys of businesses in recent years have indicated that complying with state and council red tape can be particularly burdensome.

The figures originally provided in commonwealth government’s 2014 Annual Deregulation Report, and repeated in the 2015 Report, do not include the compliance costs of red tape imposed by state and local governments. In addition, they do not reflect a large number of government-to-government regulations which reflect the requirements commonwealth agencies impose on ... other levels of government in Australia.

Commonwealth estimates exclude non-compliance red tape costs

As mentioned previously the costs of red tape are multi-faceted in their nature and can affect individuals and businesses in different ways depending upon their economic and other circumstances. Although there is no uniform terminology used when describing the costs of regulation they may be usefully classified in the following forms:

- Compliance costs of meeting red tape requirements and standards, including administrative (or paperwork) costs of filling forms and providing records and substantive costs of staff training, maintaining plant and equipment, asset hoarding costs and income losses associated with regulation-induced delays in projects, and using professional services to meet red tape requirements.
- Economic costs arising from red tape distorting the utilisation of resources within the economy, as well as the efficient use of resources over time affecting competition, innovation, and entrepreneurial conduct.

The 2014 Annual Deregulation Report makes it plain that several costs associated with red tape impositions are not considered in their analysis:

“the ... [regulatory burden measure] ... is a conservative measure of the cost of regulation
which does not capture all costs. It excludes the cost to government of administering regulation, direct financial costs (including taxes and levies paid) as well as some of the wider, more difficult to measure considerations like wider opportunity costs including those that affect productivity.”

In fairness, there are very few studies (and this paper is no exception to this rule) which purport to provide a comprehensive estimate of all government regulations however such limitations should be made explicit in the interests of better community understanding about the scale and dimensions of regulatory burdens.

Other methodological issues make it difficult to vet the government’s approach

The methodological approach used by the commonwealth government to estimate the compliance costs of its red tape can be described as a ‘bottom-up’ approach to cost estimation, which has been adopted in other countries.⁹

Under the guidance of the Department of Prime Minister and Cabinet and through the aid of ‘deregulation units’ established in each government portfolio, a two-stage process of stocktaking regulations was performed during 2014. First, red tape deemed to impose a compliance burden on non-government entities and individuals were counted and assessed and, second, the compliance burden of red tape was costed.

In the 2014 Annual Deregulation Report a ‘coordinated, yet flexible approach’ to red tape stocktaking and compliance cost estimation was lauded ‘to enable portfolios to complete the stocktake process. It allowed portfolios to best respond to the diverse regulations and frameworks administered within their portfolios providing a fair and accurate assessment of the stock of regulation, whilst retaining appropriate consistency with a general whole-of-government approach.”¹⁰

Whether an accurate assessment of compliance costs has been effected is disputable, since the ‘price’ of the flexibility afforded to agencies has been that not all red tape (defined primary and subordinate legislation, and quasi-regulations such as codes of practices and guidance notes) was stocktaken and costed. Indeed, it is telling that the government itself conceded:

“the scale of the number of regulations administered by most portfolios meant that an estimate of the cost of complying with each regulation was not feasible or cost effective for all portfolios.”¹¹

To counter this problem, the government permitted agencies to undertake stratified samples of the red tape they enforce. Under this approach red tape initially grouped by criteria (e.g., type of obligations imposed, regulatory complexity, reach of regulation) were segmented into smaller homogenous groups and, later, these smaller groups are sampled to make extrapolative judgments about the compliance costs imposed by the broader group of red tape.

The government states in the 2014 Annual Deregulation Report that ‘[u]nder the right circumstances, stratified sampling can lead to better estimates of population than may be achieved from sampling from the overall population.”¹² From the standpoint of statistical theory the crucial caveat is that the government’s approach adhered with the ‘right circumstances,’ with the literature pointing to potential biases arising from unclear stratification categories and similar complexities when researchers are attempting to fit, in this case, heterogeneous red tape within categories of relatively homogenous characteristics.

It is difficult for red tape policy experts and parties directly affected by red tape, let alone interested members of the general public, to scrutinise the effectiveness of the government’s sampling approach. Very little information had been supplied in relation to which frameworks were identified by agencies as imposing no red tape burdens and thus excluded from subsequent sampling, and there was a lack of consistency in agency level reporting about the approaches employed in respect to the sampling process.

These and similar issues would need to be redressed in the event of future official stocktakes of red tape costings.

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⁸ Ibid.
¹¹ Ibid., p. 31.
¹² Ibid., p. 29.
Conclusion

Drawing upon recent econometric approaches to measure the effect of regulation, it is found that red tape costs upon the Australian economy cost in the order of $176 billion which is equivalent to about 11 per cent of GDP.

The magnitude of these costs is large, even when compared against the aggregate value generated by major Australian industries and elements of fiscal activity by government. The implied economic costs of maintaining Australia’s regulatory state also serves as a major impost on businesses, households and individuals.

There has been a growing awareness in recent years that Australia’s economic performance has been unsatisfactory, and that a new round of reforms focussed upon limiting the reach of government into the economy are needed to enable entrepreneurs to best capitalise on future opportunities.

Given the sheer scale of the cost red tape presented here, it is essential that governments at all levels give urgent priority to deregulatory reforms and the elimination of burdensome red tape to help secure the next wave of growth and productivity opportunities for all Australians.
Appendix:

Explaining estimation technique for economic cost of Australian red tape.

Data and model specification

In a study for the United States National Association of Manufacturers, W. Mark Crain and Nicole V. Crain derived an estimate of the aggregate impact of economic regulations on output.¹³ To do this, they specified a panel regression model for 34 OECD countries (including Australia) covering a period from 1996 to 2013.

The regression model used by Crain and Crain estimates the relationship between real GDP per capita, denominated in constant 2005 United States dollars, and an index measure of regulatory burdens devised by the World Bank.

The World Bank’s ‘regulatory quality index’ captures surveyed perceptions of the ability of a government to formulate and implement sound policies and regulations which permit and promote private sector development. The index incorporates measures of red tape impact relevant to such areas as business licensing, competition, financial, taxation, and trade policy. The World Bank index is calibrated on a -2.5 to 2.5 scale, with increases in index values corresponding with improvements in red tape quality.

To account for potential omitted variable bias, the researchers also included a range of control variables which influence the level of economic activity – such as investment, labour force size, economic openness, a population’s age dependency ratio, and taxation revenue to GDP ratio (as a proxy for the fiscal size of government).

¹³ Crain and Crain, op. cit.
Results

The econometric results for estimating the model are shown in Table A.1

Table A.1: Impact of World Bank Regulatory Quality index on economic performance

<table>
<thead>
<tr>
<th>Dependent Variable: GDP per capita (constant 2005 US dollars)</th>
</tr>
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<tbody>
<tr>
<td>Constant</td>
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<tr>
<td>World Bank Regulatory Quality Index</td>
</tr>
<tr>
<td>Investment to GDP ratio</td>
</tr>
<tr>
<td>Labour force</td>
</tr>
<tr>
<td>Openness (trade to GDP ratio)</td>
</tr>
<tr>
<td>Age dependency ratio</td>
</tr>
<tr>
<td>Tax revenue to GDP ratio</td>
</tr>
<tr>
<td>Tax revenue to GDP ratio squared</td>
</tr>
<tr>
<td>2008 year dummy</td>
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<tr>
<td>2009 year dummy</td>
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</tbody>
</table>

Observations | 355
R² Within | 0.04
Between | 0.66
Overall | 0.59

Model estimated using panel data for OECD countries for which data are available for the years 1996, 1998, 2000 and 2002-13. Each independent variable is lagged one year. GDP per capita and labour force variables entered into regression as natural logarithmic transformation. z-statistics are shown in parentheses, where ** indicates statistical significance at the one per cent level and * indicates significance at the five per cent level.

The coefficient on the World Bank index is positive and statistically significant at the one per cent confidence level. This indicates that superior systems of regulatory management, with less red tape, are associated with increasing economic activity as reflected in real GDP per capita.

As described in the main text of this paper, the estimated coefficient for regulatory quality is used to calibrate the cost of economic red tape (in terms of foregone output) in Australia.

The index value for Australia in 2012 was 1.77 and the maximum index value (consistent with least stringent regulations) is 2.50, hence there is a ‘gap’ of 0.73 points between Australia and a regulatory environment with the relatively fewest restrictions. Using the estimated coefficient value it is calculated that the estimated cost of economic red tape, as reflected in lost output arising from not attaining a 2.50 index value, was $175.8 billion (or 10.9 per cent of GDP) in 2012.
Qualifications

As with any other econometric study, the Crain and Crain regression analysis is subject to various limitations principally surrounding the study methodology, selection of data, use of synthetic variables and the specification of the regression equation, among other issues.

The original Crain and Crain study, as applied here, represents in effect a ‘top-down’ approach to assessing the economic costs associated with the regulatory state. In this case, the economic cost of regulation is derived from examining macroeconomic relationships between measures of economic performance (in this case, real GDP per capita) and a proxy measure of the extent of red tape (in this case, the World Bank regulatory quality index). This is in contrast to the ‘bottom-up’ approach of aggregating up information about red tape costs typically from those government agencies responsible for the design and enforcement of regulations.¹⁴

The inadequacies of the ‘bottom-up’ approach to red tape cost estimation is highlighted in the main text of this paper, with respect to the methodology employed by the commonwealth government to derive its compliance cost estimates. Relative estimation simplicity and the capability of capturing broader, more indirect effects of regulation are advantages of the ‘top-down’ approach but it, too, has its limitations.

Issues concerning the suitability of data rank among the greatest of concerns with any ‘top-down’ study of red tape costs.

The sparsity of reasonable measures of red tape burden may tempt an empirical researcher to extend the coverage of countries studied, in order to gain a sufficiently tractable sample size for estimation purposes. Given the significant differing levels of economic development particularly between developed and developing economies, and the potential for endemic corruption and violations of the rule of law within certain countries, it is advisable to restrict samples to countries sharing similar levels of economic development (say, advanced economies only). However, this leads to an unavoidable restriction of sample size which may affect the precision of empirical results.

Every econometric study is afflicted with the basic problem of addressing the need for proper model specification. To what extent is the observed magnitude of the dependent variable (in our case, real GDP per capita) explained by all the independent variables? Are all the relevant independent variables included in the regression? Careful judgments must be applied in relation to this matter, ensuring that the potential for biased regression results are minimised.

But perhaps the greatest limitation with ‘top-down’ red tape cost studies is the selection of an appropriate proxy indicator which will adequately capture the extent of red tape burden, the effects of which are indirect and, oftentimes, unobservable.

As noted in this paper, Crain and Crain rely upon a synthetic index of red tape quality, devised by the World Bank, as their preferred measure. However there is debate as to whether this index accurately reflects the costs of regulation.¹⁵

The 2014 American study by Crain and Crain, and previous versions thereof, has been subjected to often strident criticisms especially (but not exclusively) from progressive left think tanks and some academics. To their credit Crain and Crain have painstakingly responded to their critics, accepting the criticisms where they found them to be valid and refuting them otherwise.

Crain and Crain have found the World Bank’s measure of regulatory quality to be highly correlated to other synthetic red tape burden measures, suggesting ‘even if the World Bank surveys did not intend to capture the regulatory environment, … analysis suggests that it does.’

There is little doubt that the debate surrounding the validity of red tape cost estimates will continue. Some perspective in relation to the issues has been forwarded by American economist Wayne Crews with his conceptualisation of regulatory costs as provisional ‘placeholders’ (or ballpark estimates) subject to revision in light of methodological developments and empirical innovations.

In a similar spirit, this paper represents an attempt to provide a ‘placeholder’ estimate of the costs associated with the red tape management system, which we conceive to be reasonably well in excess of official estimates of commonwealth government red tape compliance costs.
