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ANALYSIS
Appraising the ACCC’s Caltex-Mobil Decision: An Alternative Measure of Competition Based on Networks

Harry Bloch and Nick Wills-Johnson¹

Abstract

On 2nd December 2009, the Australian Competition and Consumer Commission (ACCC) announced its intention to oppose the acquisition of Mobil’s Australian retail assets by Caltex, based in part on an assessment of the adverse competition effects in some local markets. The proposed merger was subsequently abandoned. The ACCC assessment was based on a standard structural measure of competition, the proportion of petrol stations within each local market that would become controlled by Caltex following such a merger. This paper applies an alternative concept of competition based on the position of each station within a network. Application of the alternative concept to the Perth market, which was excluded from the ACCC analysis, suggests a greater anti-competitive effect from the Caltex-Mobil merger than indicated by application of the standard structural measure of competition.

Introduction

On 2nd December 2009, the ACCC announced its intention to oppose the acquisition of Mobil’s retail network by Caltex, based at least in part on its considerations concerning competitive effects in local markets.² The ACCC deemed such effects likely if the post-merger share of Caltex-controlled outlets in the local market around each Mobil outlet was greater than one-half, and possible if it was greater than 40 per cent.

We suggest a different approach to assessing competitive effects, based upon representing market structure via a network, and looking at the position of each outlet in that network. To our knowledge this approach has not been previously used in assessments made in the application of competition policy, but it is

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² Available at http://www.accc.gov.au/content/index.phtml/itemId/904296, which also contains links to the various background papers underpinning the ACCC’s decision.
widely used in geography and mathematical sociology for analogous purposes. We compare the ACCC’s approach, based on market shares, with ours, based on position in a network, in a case study of the Perth market. Although the Perth market was not part of the ACCC’s investigation, excellent data are readily available. The focus on a market outside the scope of the ACCC examination means we are not in a position to second-guess the validity of their decision. However, it does allow a clear focus on the application of the alternative approaches to measuring market competitiveness, which is our particular purpose.

In this paper, we outline the ACCC decision in more detail and provide some background to the Perth market. We then show how a network summarising competition can be constructed and provide an overview of the measures that one can use to highlight structural advantage in that network. Following this, we compare our methodology with the ACCC’s in the Perth retail petroleum market, before presenting our conclusions.

The ACCC Decision

The proposed acquisition of Mobil’s retail assets by Caltex followed a corporate decision by Mobil to divest much of its downstream business in Australia, part of which involved selling its roughly 300 retail outlets. The ACCC’s investigation found that the acquisition of 53 sites by Caltex would be likely to have the effect of substantially lessening competition in the relevant local markets. The sites were in Brisbane, Sydney, Melbourne and Adelaide, the cities on which the ACCC analysis was focused. The ACCC was also concerned that the takeover would exacerbate co-ordination in retail petroleum markets, most particularly because Caltex is frequently a price leader when prices cycle upwards, and Mobil has, on average, lower prices than Caltex. In its press release, the ACCC expressed a preference that the retail outlets be taken over by a ‘maverick’ or aggressive discounter more likely to inject competition into the marketplace.

In undertaking its analysis, the ACCC looked at overall price levels in each of the cities analysed, determining which brands had the lowest prices. It also examined local market effects. It defined a local market as all the outlets within five kilometres of the outlet being analysed. It looked at idiosyncratic features of each local market, such as local geography and the number and nature of independent operators in each market, but its main focus was the market share of outlets controlled by Caltex before and after the merger. If this post-merger share was greater than 50 per cent, the ACCC suggested this would be likely to

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3 Our approach could be easily replicated for any of the cities which the ACCC does analyse by someone with the Informed Sources datasets that the ACCC used in its analysis. We do not have access to these data, so instead use the more readily available FuelWatch data from Perth.
result in competition concerns in that local marketplace, whilst for proportions between 40 and 50 per cent it suggested that the takeover may raise competition concerns. It was on the basis of this assessment that the ACCC made its decision.

Perth was not included in the ACCC’s decision. However, it has excellent data that we have used to explore market structure and its effects on pricing (see Bloch and Wills-Johnson 2010a, b, c, d). Thus, in this paper, we compare and contrast the ACCC’s methodology with our own by applying both to the Perth market. First, we describe in detail the Perth market and our methodology for determining market structure.

Background to the Perth Market

Retail petroleum outlets in Western Australia are governed by the FuelWatch scheme, whereby each outlet must advise the regulator (who publicises that price) of its next-day price and keep that price for 24 hours. The regime is described in detail in ACCC (2007) and controversies surrounding analysis of its impacts are discussed in Davidson (2008).

The data used in this study cover the period from 1st January 2003 to 14th March 2004. The start date is chosen as data on wholesale or terminal gate prices (the proxy for the marginal cost of retailers) are unavailable before this date, and the end date is chosen because the following day marked the conversion of some 40 Shell outlets into Coles Express outlets through a joint venture between Coles and Shell. The data do not cover all outlets in Perth, omitting some on the outskirts of the city, those for which the data series are incomplete (usually because they are new, or were closed for long periods during the sample period owing to a change in ownership) and those for which the retailing of fuel is not a core business (such as taxi depots and marinas). Data on demand come from the ABS Census (ABS 2006), whilst the remaining data come from FuelWatch, or are based on data in the FuelWatch database.4

Table 1 provides information on branding, ownership structures, the presence of convenience stores and location of competitors. Caltex has the largest number of stations, followed by BP and Shell. Independent chains (Gull, Liberty and Peak) make up roughly a quarter of the sample, making them collectively more important than Shell and slightly smaller than BP. Mobil is a relatively small player in the market, helping to explain why Perth was left out of the ACCC examination. Supermarkets are more prevalent today than in the dataset, which precedes the entry of Coles and is from a time when only a small number of Woolworths outlets existed. Today, the two comprise almost half of overall fuel sales in Australia (ACCC 2007).

4 The authors would like to thank the FuelWatch regulator for making this dataset available.
Company-controlled outlets comprise roughly half of those in Table 1, according to *FuelWatch*, which defines outlets owned directly by the Majors and outlets owned by their multi-site franchisees as being company-controlled. In WA as a whole, Shell owns eight sites, BP owns five and Mobil none. Thus, most of the outlets listed as company-controlled in Table 1 are owned by one of the multi-site franchisees. Caltex has no multi-site franchises due to the terms of its 1995 merger with Ampol (see Walker and Woodward 1996). Instead, it uses single-site franchises and a price-support scheme described in detail in Wang (2009).

**Table 1: Perth market summary (2003–2004)**

<table>
<thead>
<tr>
<th>Branding</th>
<th>Total</th>
<th>With Convenience Store</th>
<th>Ownership</th>
<th>Competitors within 5km</th>
<th>Distance to nearest competitor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Number of competitors</td>
<td>Frequency</td>
</tr>
<tr>
<td>BP</td>
<td>52</td>
<td>16</td>
<td>Branded Independent</td>
<td>23</td>
<td>up to 2</td>
</tr>
<tr>
<td>Caltex</td>
<td>57</td>
<td>29</td>
<td>Company-controlled</td>
<td>99</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Woolworths</td>
<td>4</td>
<td></td>
<td>Distributor-controlled</td>
<td>2</td>
<td>5 or 6</td>
</tr>
<tr>
<td>Gull</td>
<td>27</td>
<td></td>
<td>Independent</td>
<td>2</td>
<td>7 or 8</td>
</tr>
<tr>
<td>Independent</td>
<td>2</td>
<td></td>
<td>Larger Independent</td>
<td>37</td>
<td>9 or 10</td>
</tr>
<tr>
<td>Liberty</td>
<td>5</td>
<td></td>
<td>Price-supported</td>
<td>42</td>
<td>11 or 12</td>
</tr>
<tr>
<td>Mobil</td>
<td>13</td>
<td>11</td>
<td>Supermarket</td>
<td>4</td>
<td>13 or 14</td>
</tr>
<tr>
<td>Peak</td>
<td>13</td>
<td></td>
<td></td>
<td>15 or 16</td>
<td>17</td>
</tr>
<tr>
<td>Shell</td>
<td>35</td>
<td>8</td>
<td></td>
<td>&gt;16</td>
<td>7</td>
</tr>
<tr>
<td>Wesco</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Convenience stores attached to retail petroleum outlets are often an important source of profits for the brands which own them. Caltex has two convenience-store brands, whilst Shell, Mobil and BP have one apiece. Most Mobil outlets have a convenience store attached, as do around two-thirds of Caltex outlets. The shares for BP and Shell are each less than one-third. None of the independent brands has a convenience-store brand, though some (Gull, in particular) sell convenience-store items in many of their outlets.

Perth is a relatively low-density city and retail petroleum outlets tend to be located along highways or at the major shopping centres which exist in some suburbs. This is in part due to zoning laws and in part due to a desire to be located at nodes of demand. For this reason, distance to the nearest rival tends to be low (on average just over one km) and the average number of competitors within five kilometres is nine.
The Perth Market as a Network for Spatial Competition

An important aspect of this paper is the way in which we model competition. Rather than use an indirect measure, such as seller density, or the penetration of independents, we develop a simple theoretical model of bilateral interaction. We collect these bilateral links to form a network that summarises the structure of competition in the marketplace as a whole and use simple graph-cutting tools to delineate local sub-markets. We then use a number of measures of network structure taken from the geography and mathematical sociology literature, especially Gould (1967) and Burt (1992), respectively, to summarise the position of each retail petrol outlet in the overall structure of the global market and local sub-markets. We describe the process of network formation and division briefly below, and in more detail in Bloch and Wills-Johnson (2010c).

We start with a simple theoretical model of spatial competition based upon the work of Hoover (1937) and MacBride (1983), who study how spatial differentiation can give rise to local market power. Our point of departure is an assumption that consumers come to the retailer rather than having goods delivered to them. This requires the retailer to set a single price for all consumers.

Our model is of a duopoly where each firm sells one unit of an homogenous good to an homogenous set of consumers whose travel plans take them past one retail petroleum outlet, but who must deviate to frequent the other (meaning purchase from the former is costless but that from the latter is not). Each firm can match the price of its rival, set a higher price and collect rents from those customers for whom deviation to its rival is more costly or set a price lower than its rival and endeavour to steal market share. Bloch and Wills-Johnson (2010a) show situations whereby this will give rise to an Edgeworth Cycle in prices. Further, the minima of such price cycles are related across firms in a consistent fashion, with the minimum of each price cycle for each outlet in the duopoly the same if marginal costs and the proportion of consumers passing each outlet first are equal (for an illustration of this result, see Bloch and Wills-Johnson 2010c).

The spatial-competition model suggests a simple measure of connection. We first form the series of price cycle minima for each petrol station by taking its lowest price in the three days prior to each price increase of greater than five per cent. We then undertake a simple statistical test of the difference between the means for each pair of outlets within five kilometres of one another.

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5 An Edgeworth Cycle in prices is a pattern in which a substantial rise in price is followed by a series of small price decreases that more or less offset the original rise in magnitude.

6 Looking four days prior and using different magnitude of price increases makes little difference to results; the increasing phase of each price cycle is quite clear in the data.

7 The ACCC adopts this local market definition in a recent merger decision (see http://www.accc.gov.au/content/index.phtml/itemId/904296), and a similar distance is used to define local markets in the US literature
Where there is no statistically significant difference between the means, we deem the two outlets to be connected. By collecting these connected pairs, we are able to construct a network that summarises the patterns of connection in the overall market.

We divide this network into a series of sub-markets, using an approach pioneered by Gould (1967), and subsequently widely used in geography (see, for example, Cliff, Haggett and Ord 1979; Boots 1985; O’hUallachain 1985; and Straffin 1980). The network is first converted into an adjacency matrix; a symmetric, zero-one matrix where a zero in the \(ij\)th position indicates that nodes \(i\) and \(j\) are not connected, and a one indicates that they are. This adjacency matrix contains information about the connections between markets, but is unwieldy (the matrix for all stations in the Perth market has 208 rows and columns). Instead, we utilise information contained in the eigenvectors of this adjacency matrix. The first eigenvector of the adjacency matrix (that is, the eigenvector associated with the largest eigenvalue) has all positive entries, while the remaining eigenvectors contain positive and negative elements. We follow Gould (1967) in taking clusters of positive and negative eigenvector elements as indicating association in pricing and use these clusters as sub-groups within the network. The approach is somewhat judgemental, but Bloch and Wills-Johnson (2010c) show sub-markets thus created give a better characterisation of groups of like-priced outlets than does, for example, branding.

Figure 1 shows the eight sub-markets that result from dividing the market into sub-markets using clusters in the second to sixth eigenvectors (after which the signal to noise ratio makes it impossible to uncover further structure). The dark-grey area represents the Swan River, which divides the city North from South, and the light grey line represents the main north-south freeway, which divides East from West. Placement of each station is approximate, but roughly correlates to the physical shape of the Perth market. The different shaded dots represent different brands.

Having constructed the network and divided it up into sub-markets, a number of summary statistics can be calculated for the network as a whole and for each sub-market in isolation. Of particular use are Burt’s (1992) measures of efficiency.
and constraint, which have been widely used in the literature on networks, and Burt (2000, 2002 and 2005) contain reviews of empirical applications of his measures.

The efficiency of the network for a given node is its effective size divided by \( N \) (\( N \) being the number of stations in the sub-market), where the effective size of the network for the node is the sum of the direct connections to other nodes in the network. The effective size ranges from one to \( N \), so efficiency ranges from zero to one. In the context of a network of retail petrol stations, efficiency provides a measure of the proportion of direct connections between stations in the network as opposed to the number of connections that are indirect.

Constraint for a node is the extent to which a node that severs its direct connection with another node still has indirect connections. Burt’s (1992) measure of constraint increases with the number of redundant connections in a network. The more indirect are the connections between two nodes, the more redundant are these connections, as there are then many paths down which information can flow between the stations.

Elsewhere (Bloch and Wills-Johnson 2010d), we regress Burt’s measures of efficiency and constraint, along with a number of other independent variables, against price, using Hansen’s (1996, 1999, 2000) Threshold Regression Model to differentiate between effects that dominate in the upwards phase of the price cycle and those which dominate in the downwards phase. We find that global constraint (that is, Burt’s constraint score for each node in the network as a whole) has a negative coefficient during the downswing of the cycle, indicating that those outlets that are the bridges between sub-markets, and are hence least constrained, exhibit the highest prices. We also find that local efficiency and local constraint (that is, within each sub-market) have positive coefficients during the downswing.\(^{11}\) The former is consistent with the negative global constraint result, and suggests that those outlets for which the relevant local market is favourable are able to leverage their superior structural position into higher prices.\(^{12}\) The latter, however, does not fit this same picture. We suspect that what is happening is that the peripheral outlets, with access to customers outside the network in Figure 1, pay less attention to the pricing of their peers in each local market and concentrate instead upon reaping monopoly profits from these external customers for which they face limited competition.\(^{13}\)

\(^{11}\) None of the market structure effects are significant during the upswing, confirming Wang’s (2009) suspicion that it is only in the downswing that local market competitive effects are important.

\(^{12}\) Note that this result implies that stations with direct connections to a larger proportion of the stations in the sub-market tend to have higher prices in the downswing. Remembering that all stations in a sub-market are connected either directly or indirectly, this suggests that directness of connection, which might otherwise be a sign of greater competition, appear empirically as a factor leading to higher prices. Thus, price matching, which is the basis for classifying a link as direct, is associated with a lack of competition as expected if price matching signals collusion.

\(^{13}\) Eckert and West (2005) show that outlets on the peripheries of cities in Canada were less likely to close during the 1990s, pointing to similar effects as noted here.
Figure 1: Sub-markets in the Perth market network
Comparing the Network Approach with the ACCC’s Approach

From the perspective of an assessment of local market competition, therefore, we can now make a number of suggestions. The first is that the ACCC should look closely at globally unconstrained outlets, which sit at the bridges between sub-markets. If one player can capture many of these in a given market, it may be able to restrict the price linkages between sub-markets, even without owning a majority of outlets in any sub-market.

The second suggestion is that the ACCC should also look at the acquisition of outlets with high local efficiency scores. Possession of sufficient of these in a given local market may provide the relevant owner with sufficient leverage to extract rents from that sub-market without owning a majority of outlets within it.

The third suggestion is that the ACCC should show less concern for the acquisition of outlets on the market fringe. These are likely to have high prices regardless of their ownership. Thus, even if an acquisition of them results in a local market share of greater than one-half, overall competition within that local market is unlikely to be much affected.

Using these lessons, we now compare and contrast an application of the ACCC’s methodology in Perth’s retail petroleum market with an assessment based upon constraint and efficiency. In Figure 1, there are 13 Mobil outlets. If we define a local market in the same way that the ACCC does (all outlets within five kilometres of the relevant Mobil outlet) and examine the post-acquisition share of Caltex in each local market, then few competition concerns arise. In only one case (Outlet 69) would the ACCC’s threshold of 50 per cent be breached and in only three further cases (Outlets 99, 146 and 147 — with the latter two being essentially the same market) does market share exceed 40 per cent. For the other nine Mobil stations, the ACCC’s approach suggests no competition concerns.

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14 An anonymous referee notes that we have considered only demand aspects of the relationship among stations, excluding consideration of the supply side. We acknowledge this limitation and note that there is only one refinery in the Perth area, which is owned by BP. Limited supplies of refined products are also provided by imports through an independently controlled terminal. Thus, the supply side of the Perth market is highly concentrated. Whether regulation on access and pricing from refineries and import terminals negate the influence of this concentration on retail pricing in the Perth market is an issue beyond the scope of this paper, but one that has been widely discussed in reports by the ACCC and other organisations.

15 There are actually more Mobil stations in Perth, but only these 13 are considered in the analysis of Bloch and Wills-Johnson (2010b, c, d). Others are on the periphery of the city, or there are insufficient data to undertake econometric analysis.
Table 2: Local efficiency in the ACCC’s sub-markets for each Mobil station

<table>
<thead>
<tr>
<th>Station 14</th>
<th>Station 40</th>
<th>Station 51</th>
<th>Station 52</th>
<th>Station 203</th>
<th>Station 242</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stn No</td>
<td>Eff Score</td>
<td>Stn No</td>
<td>Eff Score</td>
<td>Stn No</td>
<td>Eff Score</td>
</tr>
<tr>
<td>15</td>
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<td>48</td>
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</tr>
<tr>
<td>16</td>
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<td>51</td>
<td>0.388</td>
</tr>
<tr>
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<td>0.5</td>
<td>52</td>
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</tr>
<tr>
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<td>0.469</td>
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<td>0.375</td>
<td>53</td>
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<tr>
<td>17</td>
<td>0.44</td>
<td>41</td>
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<tr>
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<td>0.333</td>
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<tr>
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<tr>
<td>119</td>
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<td>61</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Station 69</th>
<th>Station 91</th>
<th>Station 99</th>
<th>Station 146</th>
<th>Station 147</th>
<th>Station 179</th>
<th>Station 199</th>
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<tbody>
<tr>
<td>Stn No</td>
<td>Eff Score</td>
<td>Stn No</td>
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<td>Stn No</td>
<td>Eff Score</td>
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<td>146</td>
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<tr>
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<td>0.407</td>
<td>97</td>
<td>0.5</td>
<td>102</td>
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<td>147</td>
</tr>
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<tr>
<td>71</td>
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<tr>
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</tbody>
</table>

Note: Existing Mobil outlets are coloured light grey, and Caltex are coloured dark grey.

However, applying a network perspective with Figure 1 gives several reasons for competition concerns. Turning first to global constraint, Outlets 91, 199, 99, 69 and 179 all lie in the lower quartile of global constraint results. This suggests they may be able to use their position vis-à-vis the market as a whole to strategically control the prices that link sub-markets. For example, Outlet 91
appears to be one of the links for prices between the North and South of the Swan River. Its owner may thus have scope to restrict the link in prices from South to North. Moreover, following a merger, Caltex would control more than a third of these lower-quartile outlets; that is, as much as BP and Shell combined. There may thus be wisdom in excising these outlets from the sale, and requiring that they be purchased by independents, as they might have less interest in controlling the link in prices between sub-markets.

As noted above, local constraint is not an issue, but local efficiency is shown to have an increasing impact on price during the downswing of the price cycle. To explore this further, we calculate the local efficiency scores (the efficiency score for a station within its local sub-market) for each of the outlets in the 13 local markets created by following the ACCC’s market definition, and allowing every outlet within five kilometres to be connected.\(^\text{16}\) The results are shown in Table 2.

We do not present any definitive demarcation points, such as possessing more than half the total efficiency, as this would be arbitrary, in much the same way as the ACCC’s benchmark of half the market share is. However, in the case of the markets around Outlets 14, 203 and 99, there would appear to be few concerns, as Caltex is not acquiring any of the outlets with the top three efficiency scores. The markets around outlets 242 and 179 are also unlikely to pose much concern as, even though Caltex is acquiring outlets with high efficiency scores, there is not much difference between the largest and smallest scores. The same might be said of Outlet 91. For the remainder, however, Caltex is acquiring the most efficient and/or the second-most efficient outlet. In particular, in the case of Outlet 199, the Mobil outlet is much more efficient that others in its local market, and thus its acquisition may raise concerns, even though Caltex would only have two outlets in that market.

**Conclusions**

In its recent decision on the proposed takeover of Mobil’s retail sites around Australia by Caltex, the ACCC paid particular attention to the local market effects, examining whether the takeover would put Caltex in a position of having a greater than 50 per cent market share in any local market. This is appropriate if all outlets in a given local market are equal. However, clearly they are not. The ACCC endeavoured to account for this in a rather *ad-hoc* fashion by

\(^{16}\) The result is local markets that are a little more densely connected than the radius of five kilometres around each Mobil outlet in Figure 1 would suggest.
considering idiosyncrasies of each local market, such as the presence or absence of independents or particular geographic features (main roads, for example) that might influence competition.

Here, we present an alternative approach to account for the inequalities between outlets by modelling market structure more directly through the use of networks that are identified by correspondence in pricing behaviour, and considering market power to be related to positioning in that network. We compare and contrast our methodology with the ACCC’s own approach, using the retail petroleum market in Perth as a case study. It allows us to highlight two salient points. The first of these is that had the ACCC’s assessment included the Perth Mobil outlets, its methods would have missed a number of key outlets that sit at junction points between sub-markets and are thus potentially able to obstruct the linkage in prices between those sub-markets. The second is that, at the level of each local market, one can uncover elements of local market power deriving from the structure of the relevant local market that are missed by the ACCC’s approach.

The methodology presented here does not aim to present an infallible or complete picture of market dynamics. However, it does provide a way of capturing competitive behaviour in a formal manner, and bringing this information to bear in market power and merger analyses. Although we use a retail petroleum market as a case study here, the methodology has wide application whenever the competition between firms in a market has a spatial nature.

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ARGUMENT
The topic for this Symposium, ‘Does Australian public policy get the economics it deserves?’ has been partitioned into two questions. One asks whether public policy gets the economics it needs. The other, no doubt inspired by Alexis de Tocqueville’s famous observation about people and their elected governments, is whether Australian economics gets the public policy it deserves.

My answer to the first question came readily: in short, no — or at least not often. The answer to the de Tocquevillian one required reflection, however; not only about the state of public policy in Australia, but also about that of Australian economics. And my answer to that one is: I’m not sure!

Much could be said from both perspectives. In setting the scene, I will confine myself to some observations about what might be called the ‘contextual’ influences on public policy and its use of economics (or information generally).

My key message, which should not be surprising, is that systems determine outcomes. Public policy will only get the economics it needs, or indeed that society needs, if the processes, the institutions and the individuals responsible for developing it are receptive to good economics, and responsive to it. Equally, I’d argue that how ‘deserving’ Australian economics or economists might be — in other words, the health of the supply-side — is not independent of the incentives generated by the policy system — the demand side.

What Sort of ‘Economics’?

Now the term ‘needs’ might suggest that it is challenging to discover and apply this necessary economics. In some areas of public policy that may indeed be so, but in many cases the sort of economics needed to inform policy decisions isn’t very complicated or sophisticated.

Much public policy could go a long way with a few basic principles or precepts. I’ll just mention four.
• The most basic is that there is no ‘free lunch’. Economies have finite resources, which means scarcity and therefore opportunity costs to their use.

• A second principle is that prices matter in allocating scarce resources to where they can do the most good for an economy and society. Market prices signal both production costs and people’s valuations.

• Third, the responsiveness of people to relative prices — and to changes in relative prices — will vary, but the lower the price, generally the greater is demand: as economists put it, ‘demand curves slope down’.

• Fourth, no part of an economy is an island. What happens in one industry, sector or region affects and is affected by what happens in others.

One might say that all of these are just common sense. But we see policy proposals and decisions that violate those principles almost on a daily basis. We see policy proposals and decisions that seem to assume that there is no such thing as scarcity; that there are no substitution or income effects; and that there is no interdependence within the economy. Decisions based on such anti-economic thinking are not just a relic of the bygone era of ‘protection all round’.

The reality is that even the most basic economic concepts are not intuitive or self-evident to the average person (the ‘man on the Clapham Bus’, as my Welsh friend Steve puts it). Indeed, some economic principles and tools can be forgotten or lost even by people with economics training.

The foreword to my favourite economics primer, by Alchian and Allen (1969), cites Alain Enthoven, the Assistant Secretary of the US Defence Department, on the rationale for an economics PhD, as follows: ‘Many economists don’t believe what they’ve learned until they’ve acquired a vested interest in marginal analysis.’ (The Defence Department was a pioneer of cost–benefit analysis in the USA — contrasting somewhat with our own.)

We also need to acknowledge that art as well as science is called for in applying economic principles and frameworks to real-world problems: in relation to understanding the exact nature of those problems, assessing what will work best, and identifying the relevant impacts, given that there will be many influences at work. Policymakers must operate in what economists refer to as a ‘second best’ world. This calls for more than the textbook when contemplating additional government interventions. It calls for judgement; it calls for experience, and indeed it calls for incentives for decision-makers to make the best call (a point to which I’ll return). And, even when these conditions are satisfied, we can never be certain of the outcome. Good policy is not a one-off event: it requires ongoing review, and amendment in the light of experience (Banks 2010).
What Sort of ‘Process’?

That is why processes and institutions can be crucial to whether and how effectively economics is brought to bear on public policy. Good policy, and indeed having good economics behind it, requires good process. It may not be sufficient, but it is certainly necessary.

At face value, the requirements for good process in policymaking are not that demanding. The essentials are well described by the legendary American economist Frank H. Knight, in his book *Intelligence and Democratic Action* (Knight 1960). Knight sets out the conditions for what he describes as ‘intelligent’ — what we’d call today ‘well-informed’ — political decision-making.

According to Knight, ‘if policy is to have a reasonable chance of improving a situation, certain steps need to be followed’. The first of these is understanding what will happen without intervention and why. The second step is to decide what interventions are feasible; the third to assess their consequences; and the fourth to rank the alternatives, ultimately reflecting the value judgements of political representatives.

Easily Said

That sequence for ‘intelligent’ policymaking anticipated the ‘impact assessment’ framework for regulation-making that has since been embraced by many OECD countries, including Australia. Yet, we’ve struggled to inculcate such an approach within government, notwithstanding that these provisions commenced some 25 years ago. Often only lip-service is paid, or assessments undertaken after a policy decision has already effectively been made. Why is that so?

I’ve become fond of quoting the observation by Maynard Keynes that ‘There’s nothing a government hates more than to be well informed. It makes the process of arriving at decisions much more complicated and difficult’ (Moggridge and Johnson 1982). He might have added that it also makes the process more inconvenient, in circumstances where governments are keen to follow a course that good economics might not support.

The reality is that there is generally more vocal support within the electorate for bad policy than for good, reflecting well-known asymmetries in the impacts of policy and reform within an economy and community. We also often see political deal-making acquiring a life of its own within the Parliament, taking a policy in unfortunate directions, regardless of how good the starting point might have been.
It is therefore to be celebrated that in the 1980s and ’90s substantial headway was made against these forces, resulting in an important series of economic reforms from which we are still benefiting today. We’ve also seen those obstacles being overcome in some individual policy actions since then, but not a lot.

The principal success factors in what the OECD now calls the Australian Model of structural reform, arguably boil down to two: one is having solid research to identify the problems and their causes, and thereby to establish the case for reforms that would actually make things better. The second is the effective communication of this to the public, to build support based on the understanding that a policy that is being contemplated will indeed make people better off overall.2

How ‘Deserving’ are Australian Economists?

As indicated, the existence of good process or good policymaking systems is also relevant to the second question — whether Australian economics gets the public policy it deserves. I take this to mean the contribution of Australian economists, rather than some special Australian branch of economic theory. It is rather topical to be talking about this just now, given the Leader of the Opposition’s recent critical comment about the profession in Australia.

How deserving economists might be obviously depends on the quality of their contribution. However, I’d argue again that this is not independent from how demanding or ‘receptive’ the policymaking process itself has been. This has fluctuated considerably over time, but has arguably been trending down over the past several years.3

2 A referee has remarked that this assessment neglects ‘the lesson of political economy that, if you do not compensate them, the relatively few losers, who have relatively large stakes, can derail a policy’ and notes that ‘compensation also provides a crude test of Pareto superiority’. While compensation has indeed played a role in some areas (notably the GST), it has generally been a subordinate one, having more to do with implementation and transition than gaining acceptance of the need for reform itself. Compensation has only been explicitly addressed where a reform was seen to violate (de facto) property rights (for example, dairy deregulation, taxis) or to be unfair in its incidence. That said, transfers have been implicit in the gradualist approach that has typified some major Australian reforms (notably tariff liberalisation) and also in the ‘grandfather clauses’ used in tax reform and the ‘no-disadvantage test’ in labour-market deregulation. And the National Competition Policy was underpinned by ‘competition payments’ from the Commonwealth to State and Territory Governments, even though the latter were individually winners overall without it. (For a discussion of the role of compensation and adjustment assistance in structural policy reform, see PC 2001.)

3 Henry Ergas, in commenting on this presentation, raised whether this may be due to the lower opportunity cost of inefficiency in good times than in bad. He notes that our ‘golden ages’ of economics were times of economic crisis — the 1930s and 1980s — observing that strong terms of trade have been bad for Australian economics and, by extension, economic policy.
Australian economists have been very influential in relation to public policy and reform over the years. The question is whether they are less so today than in the past. There are four main sources of economic advice or analysis that I’ll go through in considering this.

The academics

The first is academia. Academic economists in Australia have played an important, indeed crucial, role in laying foundations of theory and research on which others, including economists in government, have depended.

Traditionally, academic economists were attuned to the particular policy needs of this country. Australian academics have produced seminal work in such areas as trade theory and protection measurement, agricultural economics, open-economy macroeconomics and CGE modelling.

Australian academics have also been directly engaged in the policymaking process over the years, including through stints within government itself. They have thereby had a significant impact not only through their writings, but also through more direct involvement in the policy process. That seems less evident today and may reflect a more general malaise in academic economics.

Observing from the ‘outside’, there appears to have been a loss of mainstream economics within many of our universities, both in teaching and research. Economics seems to have gone in two directions — a softer commerce-related direction, and a highly ‘mathematical’ one.

There is a question as to whether that has contributed to ‘economics’ becoming a less attractive proposition for many young potential students. We’ve certainly seen a drop-off in the number of economics graduates and in the number of young people choosing to study economics proper.

There is also a question as to whether enough academic economists in Australia are applying themselves to the policy issues of the day. If we think about the burning policy debates in relation to social and environmental issues, how prevalent are academic economists in these? Only a few come to mind as being active public contributors on such topics as education, health, welfare, migration and, even that most ‘wicked’ contemporary policy challenge of all, Australia’s response to global warming.4

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4 One of the commentators for this paper has explained this in terms of the incentives facing academics under ‘managerialism’ within universities, in which ‘Heads of Schools are given little scope to reward academics who contribute to public policy’. Another commentator notes the ‘emphasis put on work models, performance indicators and possibly even on what might be termed “political correctness”’. A third cites in particular ‘the ERA journal-ranking exercise’ as influencing what academics do. And a fourth speculates whether ‘the rising proportion of non-Australian origin academics is playing any role’, noting their ‘lack of context and therefore lack of confidence in adding their voices to public debate’.
Another issue is whether the long-standing existence of different ‘camps’ and dissenting views within the profession may have weakened its collective influence. Are we fuelling the public’s perception of economics as a ‘two-handed’ discipline, one that rarely ends up coming to decisive conclusions or policy solutions to real-world problems? Of course that would not be a new perception: recall George Bernard Shaw’s quip that ‘if economists were laid end to end they would not reach a conclusion’.

You may also recall comments last year by then Treasury Secretary Ken Henry indicating some frustration that the Government’s major policy initiatives on mining taxation and carbon abatement at that time were not receiving stronger support from the economics fraternity, given that the core economic principles in those areas — related to economic rent and market-based mechanisms — are ones that economists would generally all accept at some level. This suggests that policy in Australia may not be getting the economists it deserves.

However, it is not at all clear that the dissenting views of some of the leading protagonists have been about matters of little consequence. For example, while ‘economic rent’ is a well-defined concept in theory, its identification and extraction in practice through government taxation — such as to avoid impacts on production or investment decisions — are very difficult, if not impossible, and will depend crucially on the detailed policy design. Equally, while market-based mechanisms have superior economic credentials for addressing pollution, and thus also in principle for reducing carbon dioxide emissions, their form, scope and timing are all germane to their efficacy and efficiency in practice.

Further, returning to one of my themes, it is questionable whether there was sufficient opportunity for such differences to be debated (in the Knightian sense) before the policies in question were fully formed. And, as we have seen, if there is no great effort made to attain some resolution among economists and other experts early on, later resolution among politicians and key interests may well generate outcomes that would satisfy no economist.

The bureaucrats

A second key source of economic advice is the bureaucracy. This has traditionally been a stronghold of economic thinking and application. During the reform era of the 1980s and early ’90s, several ‘practising’ economists headed key departments of State. Economists were also commonly key advisors in ministers’ offices.

At the departmental level, I think Treasury is now the last refuge of economists — in terms of a working environment in which economic thinking is central — and lawyers and publicists now greatly outweigh economists among ‘political staffers’.
Beyond the departments, there is the Reserve Bank, which does excellent research and brings a measure of contestability to macroeconomic policy debates. And there are those research agencies that are adjuncts to particular departments, though these appear to have become less independent and influential over time.

Finally, I shouldn’t omit my own organisation, the Productivity Commission, which continues to apply economics and evidence to a range of key policy questions through its public inquiries and other studies.

The scope of the Commission’s work has widened considerably over time, extending well beyond its predecessors’ staple fare of industry assistance and economic infrastructure, to important areas of social and environmental policy. There are a number of reasons for this. I’d like to think that a key one is greater recognition of the value of the Commission’s evidence-based and consultative approach to policy development on the ‘hard’ (complex and contentious) policy issues. But this has no doubt been reinforced by a loss of research capability elsewhere in the public service.

One likely cause of that is the blunt, across-the-board cutbacks in funding of government departments and agencies that have taken place over recent years in the name of ‘efficiency’. These have tended to fall more heavily on research, it being seen as a more dispensable activity. Another may be the lack of what I’d call a ‘hospitable’ working environment for young economists seeking to make their mark on public policy.

Economists are often seen as mainly useful for generating numbers. Mike Finger, an American economist who worked with the World Bank for many years, has given a delightful account of a public hearing at the old US Tariff Commission in the early 1980s, in which the petitioning industry’s flashy advocates ask their dowdy, hushpuppy-wearing economist, “How many chickens were there in Georgia in 1947, Dr. Brown?” (Finger 1984).

And David Henderson’s depiction of the ‘do it yourself economics’ prevailing in the UK Civil Service, contains heartfelt insights about how the discipline is perceived (Henderson 1986). While science, engineering or accounting are seen as areas requiring trained specialists, economics is often regarded as something that anyone can pick up on the job (or on the run).

A good example of this is the confident assertion by non-economists of ‘market failure’ rationales for government intervention. Any deviations from perfect competition, or even failure of private firms to supply a good or service seen as desirable, can be cited as instances of ‘market failure’ justifying government action. There is much less recognition or acceptance of government failure — of the costs of intervention, of concepts like optimism bias and the scope for unintended consequences.
The consultants

Economic consultants and consulting firms are a third source of economic advice. The decline in economic capacity or capability within government has seen a parallel rise within these firms. Consulting firms have attracted many of Australia’s best economists from academia and government. Indeed, in a number of cases government officials have left the public service to set them up. (I recall that the IMF, on one of its periodic visits to Australia some years ago, greatly offended senior Treasury officials by referring to Access Economics as the Treasury ‘A Team’).

While the rise of economic consultancies as a source of policy analysis and advice has brought benefits, there is a risk of governments becoming too dependent on such external expertise, at the expense of their own core policymaking capability. There is a related concern about the capacity of the public sector to effectively monitor and evaluate the work it commissions externally. Poor quality control invites poor quality. And that can be damaging when the advice relates to important areas of public policy.

The journalists

The final category of economic advice and analysis that I want to mention is the media. I think Australia has been well served over the years by its economic journalists. They have been few in number, but disproportionate in impact. Among other things, they have played a valuable role as translators and simplifiers of economic concepts and jargon.

They have been important in that respect not only in educating public opinion, but also political opinion. On a number of occasions it has transpired that a politician’s understanding of one of our tomes has been acquired through newspapers, rather than from reading our work directly. That is not necessarily a problem if the reporting is accurate, though it has encouraged us to do better in summarising our own reports! The reality, though, is that in many cases such articles tend to be partial accounts at best, or actually get it wrong.

The facts are that, outside the small number of ‘economist-journalists’, the typical treatment in the press of economic ideas is not very good and often not even very accurate. That may partly reflect the nature of the medium. Newsworthiness and accurate information don’t always coincide. This is particularly evident within the electronic media and especially television, where the ‘grab’ is not compatible with complexity, and there is a desire to identify adversaries and conflict to make a ‘story’.
Good economics is generally only ‘news’ when things have reached such a sorry state that basic economic logic appears novel. I like to think that that is why the Productivity Commission’s reports can find themselves on the front page as headline news. However, I would not agree that the media has debauched our political or policy processes to the extent that Lindsay Tanner has recently described (Tanner 2011). I see it more as a reflection of these developments than the instigator; a mirror on reality, that hopefully may enable us to gain an understanding of the problems and the need to do better.

The Bottom Line

I’ve given a longish explanation for my very short initial answers to the two questions I was asked to address. My bottom line is that economics — good economics — can only flourish in the market for public policy if governments demand it. While this may not be the norm, Australia has benefited from creating policymaking environments in the past in which good economics has indeed flourished. It is timely to consider what may be needed to regain this in the future.

References


More Guns Without Less Butter: Improving Australian Defence Efficiency

Henry Ergas and Mark Thomson

Abstract

Defence outlays amount to 1.8 per cent of Australia’s GDP. Nonetheless, the processes by which those amounts are allocated, and the efficiency with which they are used, have received very little attention outside of the defence sector itself. This paper identifies the major issues involved in securing efficiency in defence expenditure and surveys efforts to ensure that the Australian defence establishment makes good use of public resources. Recommendations are made regarding the operation of the Department of Defence and the scrutiny of crucial defence decisions.

Introduction

Military service can teach you a lot. A little over 20 years ago, one of the authors of this paper was taught how to replace a flat battery in an army diving watch. The technique involved placing the watch on an anvil and hitting it with a hammer. This seemingly counterintuitive approach arose because irrepairable watches were replaced gratis from a central store, whereas new batteries had to be purchased locally from limited unit funds. Unintended consequences such as this are only one of the many impediments to defence efficiency.

This paper explores Australian defence efficiency and the prospects for its improvement. While there is an extensive literature in Australia on the strategic issues associated with national defence, little has been written on the economic and financial aspects of defence decisions. This both reflects and perpetuates a lack of serious scrutiny of resource allocation to and in defence. This article seeks to explain these issues to a non-specialist audience and propose remedies.

There is much at stake. The Department of Defence (Defence) currently spends around $26.5 billion a year — equivalent to 1.8 per cent of GDP — and directly

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or indirectly employs close to 1 per cent of the Australian labour force. The immodest goal of this massive diversion of human and financial resources is to be able to defend Australia from attack.

Given the high cost and potentially grave consequences of failure, there are strong incentives to make our defence effort as efficient as possible. Quite apart from the substantial opportunity cost, greater efficiency allows stronger defence within a given budget.

The paper first surveys some economics of defence and recounts past attempts by Australian governments to improve defence efficiency. It then examines current arrangements within Defence from an economic perspective, taking account of recently announced reforms. We conclude with four recommendations.

**Economics of Defence**

Defence is a public good. Once provided, additional individuals can consume it without diminishing the amount available to others and, in practice, no individual can be excluded from its benefits. Thus, defence is manifestly non-marketable and it therefore falls to national governments to deliver. Consequently, the usual market imperative which ensures that products are produced at minimum cost (production efficiency) and in the quantities and type desired relative to alternatives (efficiency in the product mix) is lacking. Instead, what is produced and how is determined by one group of people — the government and the military — spending other people’s money.

Reflecting this fact, defence efficiency is hampered by widespread principal–agent problems. Those problems arise when one party (the agent) undertakes a task on behalf of another (the principal) and two conditions are met: first, the principal and the agent have different preferences (or more generally, differing valuations of outcomes) and, second, the principal cannot costlessly monitor the agent’s characteristics or performance.

Principal–agent problems expose the principal to the risks of ‘adverse selection’ and ‘moral hazard’. Adverse selection arises when the principal cannot confidently select the most productive agent nor pay them accordingly. Moral hazard occurs when incomplete monitoring allows agents to pursue their own outcomes at the expense of the principal. As these problems will be anticipated by the parties, or at least encountered by them in the course of their interaction, they give rise to ways of structuring and implementing relationships which cannot fully secure the potential gains from trade.
While principal–agent problems are not unique to defence, they are especially acute therein because performance is hard to define, let alone monitor. Not only does defence entail highly specialised knowledge, but — in peacetime at least — it lacks the sort of tangible public feedback available in areas such as health and education. To make matters worse, to the extent that performance can be and is measured, the results are all too often withheld from the parliament and public (and sometimes even the government — see Smith and Clare (2010)). Even more critically, defence capability is frustratingly hard to measure; it only has utility relative to that held by countries we might go to war against, and then only in the context of dimly foreseeable contingencies with difficult-to-estimate likelihoods, consequences and outcomes.

To complicate matters further, the competing agenda of entities within a defence organization (not least the individual services) means there is little alignment of interests and incentives. Even when this multiplicity of agents does give rise to competition, that competition may well be inefficient, for instance, as each unit imposes unnecessary costs on others. And no less often, it may instead give rise to collusion at the expense of the principal.

Pervasive principal–agent problems coupled with the absence of market dynamics in defence (1) compromise efficiency in the product mix, and (2) hamper production efficiency. The former arises in the selection of military capabilities for the defence force. While the outcome sought — defence of the nation — is relatively clear, the military force best suited for that purpose is as much a matter of judgement as analysis. One risk is that strategic imperatives will be ignored because of institutional inertia or subordinated to narrow professional military aspirations.\(^2\)

Production efficiency — minimising the cost of outputs — is eroded in several ways. To begin with, governments themselves often pursue inefficient options to satisfy political imperatives — especially regarding the location of facilities and the sourcing of defence materiel. Naval shipbuilding, for example, has been and still is being undertaken in Australia even when doing so involves Effective Rates of Assistance well in excess of 100 per cent, which hardly seems consistent with the public interest (Pappas 2009: Chapter 14).

No less problematic than the relationship between the community (as the principal) and government (as its agent) is that between the government (as the principal) and its defence organization (as the agent). Absent effective oversight of performance, defence organizations have few reasons to strive for higher

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\(^2\) History is replete with examples of military technologies, such as cavalry and battleships, which were retained long after obsolescence at the insistence of the military. See, for example, Weinberg (2009). A good exploration of how single-service mindsets can unprofitably skew decisions about the structure of armed forces is Builder (1989).
productivity (at least in peacetime). Rather, they face many temptations to do the opposite. Apart from the natural tendency to build and multiply bureaucratic fiefdoms — over the past 12 years the number of deputy-secretary and military equivalents in Australia’s defence hierarchy has more than doubled — it is almost always easier to have more people doing a job than fewer, and likewise easier to tolerate poor performance than to manage it: all forms of empire-building one might expect from simple public-choice models of bureaucracy. At the same time, there are few incentives for defence managers to take risks with cost-reducing innovation and process improvement, and they rarely do. Indeed, serious defence reform usually only occurs after a government circumvents or at least tries to ameliorate principal–agent problems by soliciting third-party advice from external reviewers or consultants; that is, by trying to reduce the information asymmetry between itself as the principal and Defence as its agent.

The standard remedy for public-sector inefficiency has been to outsource activities with the goal of achieving private-sector productivity levels through competition and high-powered incentives for cost-minimisation. Of course, success then depends (among other things) on the acumen with which contracts are struck and managed, all the more so as the high-powered incentives create risks that added profits will be sought from inflating charges to taxpayers. Ultimately, outsourcing exchanges one set of problems for another, and the problems associated with contracting for the supply and support of defence materiel can be acute. As we note below, this has most obviously been the case with materiel which is specific to the defence context (indeed, possibly specific to the Australian forces), involves high sunk costs and long delivery schedules, has performance characteristics difficult to fully specify in advance and is supplied under conditions that are remote from perfect or even effective competition.

Finally, the structure of a defence organization is important. First, because different distributions of activities can be more or less efficient depending on the extent of duplication, internal transaction costs, administrative overheads and economies of scale. Second, because structure determines the extent and nature of internal principal–agent relations within the organization.

A central issue in this respect is the balance between eliminating duplication, usually with a view to achieving economies of scale, and securing economies of scope.3 Consolidation almost always increases the separation between those nominally accountable for delivering military outputs and those responsible for pooled supporting activities such as materiel sustainment, corporate

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3 Economies of scope are the gains that come from undertaking activities jointly.
services and garrison support. In turn, that separation reduces the alignment of incentives between the providers of those services and the providers of military outputs, thereby creating difficult contracting issues.

The Long Search for Efficiency

The Australian defence organisation (Defence) has been shaped by the efforts of successive governments to improve efficiency, beginning with the amalgamation of the Army, Navy and Air Force departments into a unitary department in the early 1970s under the Tange reforms (Tange 1973). While not explicitly aimed at improving efficiency, the amalgamation sought to ‘strengthen central control of military operations and of resources allocated to defence activities’ (Tange 1973: para 20). And in tacit recognition of the principal–agent problem, the first aim of the reforms was ‘an organisation that will place control in the hands of responsible government’ (para 24). This was by contrast to a structure that was viewed as primarily driven by the interests of the individual services, with insufficient coordination between them and little effective oversight of overall effectiveness.

The Tange reforms created a federated structure with centralised policy development and financial management. As a result, the services retained control over most of their day-to-day activities but lost formal responsibility for force development (the evolution of the force structure through the acquisition and disposal of military equipment). In principle at least, the size and shape of the defence force would henceforth be planned centrally rather than emerge from the separate plans of the navy, army and air force.

Subsequent reviews and reforms in the 1970s and 1980s tinkered with the model (Andrew 2001), including hiving off materiel production to form the Department of Defence Support before reattaching it to Defence proper in 1984. But it was not until close to the end of the 1980s that the search for efficiency gained real momentum. Figure 1 shows the key milestones thereafter.
First came the 1986 Cooksey Report (Cooksey 1986), which recommended the corporatisation and subsequent privatisation of the government’s (notoriously inefficient) shipyards, aircraft factories and munitions plants. Through the 1990s, this saw around 20,000 workers taken off the public payroll. Next came the 1990 Wrigley Report (Wrigley 1990), which led to the Commercial Support Program leading to the market testing of more than 16,000 uniformed and civilian positions, of which around 66 per cent were ultimately transferred to the private sector. Activities transferred ranged from equipment maintenance to catering and cleaning.

But the most far-reaching reforms of Defence as such followed the 1997 Defence Efficiency Review (Department of Defence 1997) which saw the accelerated out-sourcing of support activities and the sale of surplus real estate under

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5 Department of Defence (2004).
the subsequent Defence Reform Program (DRP). More critically, Defence was restructured to remove duplication between the three Services and create a central delivery model for a range of support activities.

For a variety of reasons that need not concern us, it is questionable whether the DRP achieved the savings that had been promised. Of the $941 million in planned savings, only $644 million was ever reported as achieved, and most of this was used to reverse planned military personnel reductions for no visible increase in military capability. Nonetheless, the DRP significantly changed the way Defence operates. Most directly, by moving to a shared services model it stripped the services of control of many of the resources necessary to deliver their capability outputs, including garrison support, information technology, personnel services, and equipment repair and maintenance. The result was an internal command economy run from the centre. This arrangement replaced vertical principal–agent relationships within the services with tripartite arrangements between central planners and suppliers and consumers across the breadth of the organisation.

Less visible was the amalgamation of previously duplicate civilian and military policy development functions such as personnel policy and force development. While the removal of duplication reduced overheads temporarily, it removed the civilian oversight that was intrinsic to the arrangements established by the Tange reforms a quarter-century earlier. The unstated purpose of civilian oversight was to constrain the risks inherent in having the military setting its own agenda. This found its clearest expression in 1986, when senior bureaucrat Paul Dibb was asked to review the structure of the defence force (Dibb 1986). Moreover, prior to 1997 it was standard practice for civilian analysts to scrutinise and contest force-development proposals from the military. The DRP saw responsibility for advising government on force-development proposals pass from senior civilians to military officers (Davies 2010).

Subsequent reforms focused on equipment acquisition and support. First, a review by accounting firm KPMG led to the amalgamation of the materiel sustainment and acquisition functions to create the Defence Materiel Organisation in June 2000. Subsequently, the 2003 Kinnaird (Department of Defence 2003) and 2008 Mortimer (Mortimer 2008) reviews, initiated in the wake of successive defence procurement bungles, led to further reforms to the planning and delivery of materiel acquisition and sustainment, including the re-establishment of DMO as a quasi-independent agency.

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7 A less sympathetic interpretation of the influence of civilians before 1997 can be found in; James (2000).
8 The Defence Materiel Organisation is a prescribed agency under the 1997 Financial Management and Accountability Act. In other regards, its CEO reports to the Secretary and Chief of the Defence Force under the 1903 Defence Act and 1999 Public Service Act.
An external Defence Management Review occurred in 2007 (Department of Defence 2007), but despite broad terms of reference it did little more than increase the number of senior executives and officers. Between 2000 and 2008, there were a series of ‘savings programs’ as part of the annual budget process.9 These various programs are claimed to have delivered around $600 million in recurrent annual savings — though this is highly implausible given the absence of substantive changes to business practice and continued strong growth in the budget and workforce.10

In effect, not since Vietnam has Australian defence funding increased as quickly as it has over the past decade: an effective annual rate of 4.4 per cent above inflation exclusive of operational supplementation (see Figure 1). As the Defence Management Review wryly observed in 2007, the ‘current comparative wealth of Defence means that there is now less concern about efficiency than in the past’. Consistent with this, administrative overheads grew rapidly during that time, as measured by the proliferation of senior executives, middle managers and non-combatant civilians (see Table 1). The rates of growth are reminiscent of the classic 1950s satirical work *Parkinson’s Law: The Pursuit of Progress* (Parkinson 1958), which purported to show that the number of admiralty officials was inversely proportional to the number of capital ships in the Royal Navy.

### Table 1: Workforce Growth 2000–200911

<table>
<thead>
<tr>
<th></th>
<th>2000/01</th>
<th>2009/10</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top executives</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian</td>
<td>11</td>
<td>16</td>
<td>45%</td>
</tr>
<tr>
<td>Military</td>
<td>5</td>
<td>7</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Senior executives</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian</td>
<td>103</td>
<td>164</td>
<td>59%</td>
</tr>
<tr>
<td>Military</td>
<td>120</td>
<td>173</td>
<td>44%</td>
</tr>
<tr>
<td><strong>Middle managers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian</td>
<td>3317</td>
<td>5534</td>
<td>67%</td>
</tr>
<tr>
<td>Military</td>
<td>1415</td>
<td>1937</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Other staff</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian</td>
<td>12 872</td>
<td>14 360</td>
<td>12%</td>
</tr>
<tr>
<td>Military</td>
<td>48 820</td>
<td>55 587</td>
<td>14%</td>
</tr>
</tbody>
</table>

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9 Thomson 2008: Section 3.
10 Ibid.
11 Top executives are three-star military officers and above, and civilian deputy-secretary and equivalent and above. Senior executives are star-ranked military officers and civilian Senior Executive Service employees. Middle managers are military colonel and lieutenant-colonel equivalent and civilian executive level 1 and 2 employees.
Funding has been so generous that on a number of occasions Defence has literally been unable to spend its annual budget by a substantial margin. This is indicative not just of the rapid growth in funding but also of Defence’s incomplete understanding of its costs — neither of which bodes well for efficiency.

The seeming generosity of that funding notwithstanding, as the end of the last decade approached the view emerged that the government’s long-term goals for the defence force could not be afforded within planned funding. Costs continued to rise rapidly and there was a growing perception that inadequate account had been taken of the cost of crewing and maintaining a wide range of new platforms scheduled to enter service.

Figure 2: Baseline Defence Funding and Savings 2000–18

Reflecting those concerns, in 2008 the government, as it began work on a new Defence White Paper, commissioned an independent Defence Budget Audit. The audit identified between $15 and $20.7 billion of possible savings over the forthcoming decade (Pappas 2009). The subsequent 2009 Defence White Paper (Department of Defence 2009a) set out a 21-year plan for the defence force contingent on savings from what is called the Strategic Reform Program (SRP). The SRP claims to be generating gross savings of $20.6 billion in the decade to 2018–19, all of which are to be retained by Defence to help cover new spending initiatives arising from the White Paper, including both new capability and

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12 Department of Defence (2009b); Department of Defence (2010b).
remediation of corporate infrastructure. Since no money is actually returned to the government, the ‘savings’ are an accounting exercise calculated relative to a business-as-usual estimate of what costs would have been absent reform.

Initial reports of SRP savings were encouraging. In 2009/10 gross savings of $1022 million were claimed compared with a target of $797 million. But in 2010/11, Defence found itself in the embarrassing position of handing back $1.5 billion of unspent money. The most likely explanation is that Defence asked for and was given more money than it needed in the 2009 Defence White Paper — at least for the near term. The government appears to agree; they responded by deferring $1.3 billion of capital investment and reducing recurrent funding by $3.3 billion over the next 10 years.

Given Defence’s demonstrated failure to understand its near-term financial needs, the massive savings being claimed under the SRP are almost certainly exaggerated — dependent as they are on easily manipulated long-term estimates of business-as-usual costs. Be that as it may, for our purpose what matters is the potential for the SRP to improve Defence’s efficiency rather than the quanta of savings so derived. In the next section, the efficiency of current arrangements within Defence is examined, taking account of the likely impact of planned reforms.

The Current Situation

Accountability, governance and structure

Issues of accountability and governance within Defence are inextricably entwined with its structure. Defence is made up of 14 major business units called ‘groups’: five which directly deliver outputs (navy, army, air force, operations and intelligence); four which materially support the delivery of those outputs (science and technology, materiel sustainment/acquisition, non-materiel support and IT services); and five administrative groups which largely, but not exclusively, develop policy and coordinate activity.

Were they fully efficient, the supporting groups would provide the mix of inputs that best meets the needs of the output groups at minimum cost. This demands that the mix of potentially substitutable inputs minimises the cost of the final output. It falls to the central planners in the administrative groups to orchestrate this by allocating resources and setting performance targets for both the supporting and output groups.

13 Thomson 2011: Chapter 4.
14 Ibid: Chapters 1 and 2.
Four problems arise. First, Defence’s central planners lack reliable information about costs and performance across the organisation. Second, even if the central planners were omniscient, they lack the economic and commercial expertise to even begin to ensure efficiency (as evidenced by the 2008 Budget Audit). Third, there is no single central planner in defence. Indeed, there is no single central plan beyond the financial budget. Instead, a series of loosely connected plans for personnel, preparedness, finance and investment are developed in parallel and cobbled together to form the so-called Defence Planning Guidance document. Moreover, there is no single headquarters or chief administrative officer. Instead, the five administrative groups exist in parallel to each other and those they seek to administer, with no coordinating function below the departmental Secretary and military Chief (known collectively as the ‘diarchy’). Governance is achieved through an unwieldy Defence Committee with 16 members plus a Chiefs of Service Committee of six members for exclusively military matters (a questionable concept). Below these two committees there are hundreds of subordinate committees, working groups and forums. As a command economy run as a federation, it is inevitable that extensive resources are devoted to intra-departmental coordination, in a process characterized by widespread bargaining inefficiencies.

Fourth, Defence lacks the sanctions and incentives used by the private sector to ensure compliance and drive performance. Although this is mitigated somewhat in the military through centralized promotion and career management, incentive problems pervade Defence’s civilian workforce. More generally, public-service employment practices limit Defence’s ability to attract high-performing individuals from the private sector or remove underperforming ones from within its ranks. Related to this, it is not uncommon to find relatively junior public servants and military officers, with little or no commercial experience, supervising projects worth many millions of dollars.

To make matters worse, the government is decidedly poorly placed to monitor Defence’s day-to-day performance. The spectacular — and for the government entirely unexpected — failure of the entire amphibious lift fleet in early 201115 is testament to the difficulty of monitoring Defence’s performance. The subsequent external report (Rizzo 2011) into the collapse of the amphibious capability contains clear evidence of not only inadequate communication but of profound organisational dysfunction within Defence consistent with the discussion above.

15 The failure of the amphibious capability is recounted in a speech by Defence Minister Stephen Smith on 15 February 2011. More revealing still is the explanation from Defence released the same day by the Minister, available at www.defence.gov.au/media/docs/causalFactors.pdf (accessed 9 November 2011).
The SRP includes a number of initiatives to improve accountability and governance within Defence. Management information systems are to be improved, measures of effectiveness are to be developed, costs are to be made more transparent, roles and responsibilities are to be clarified, internal service-level agreements are to be negotiated and documented, and committees are to be made more effective. A subsequent external review of accountability (Black 2011) in Defence reinforced and expanded the reform agenda, including by recommending a reduction in the number of committees and the introduction of a corporate plan.

As far as they go, the raft of planned reforms is entirely sensible. But most of the initiatives have been promised repeatedly over the past decade yet never delivered. Unless the government drives the changes, there is every chance that things will remain as they are. Moreover, most of the initiatives are about making existing arrangements work better without addressing the underlying dysfunctions.

Critically, the proposed reforms do too little to ameliorate the internal principal–agent problem between the support and output groups. The 2008 budget audit recommended moving to an ‘output-focused’ budget framework that would give greater control of resources to the output groups\(^ {16} \) (effectively removing the central planner from the triangle). That would have raised difficult implementation issues but would at least have forced Defence to tackle many of the issues raised above. It now appears that something less substantial is envisaged.

Finally, and most importantly, the present package of reforms does nothing to address the principal–agent problem between the government and Defence — the problem which creates the environment that allows all the other maladies to persist.

**Productivity: ensuring the efficient use of resources**

Quite apart from the structural impediments to efficiency built into Defence’s business model, there is the question of how efficiently individual activities are performed within Defence and on Defence’s behalf by the private sector.

It is beyond the scope of this short paper to canvass the efficiency of the extensive range of activities that Defence undertakes — the 2008 Budget Audit devoted 141 pages to the question and was not comprehensive. Briefly, the SRP plans to boost efficiency by imposing greater cost-consciousness, introducing more commercially astute practices, and making more-efficient use of labour. All

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\(^{16}\) Pappas (2009).
of this is sensible and to be commended. That said, the recent announcement of the creation of two new associate secretary positions erodes hope that the disproportionate growth in executives will ever be stemmed.

What is worrying is that there is no mechanism to secure ongoing improvements in production efficiency beyond the present round of externally conceived initiatives. In the absence of more effective governance and accountability, there is a risk that Defence will gradually return to the comfort of doing less with more.

In any case, there are the practical limits of what can be achieved. While worthwhile savings can be anticipated from the SRP, they are of secondary importance to the prime determinants of defence costs: namely, the range and scale of capabilities possessed. In practice, the bulk of the costs associated with a military capability are fixed by the decision to own and operate the capability. The dominance of fixed costs elevates the importance of achieving efficiency in the product mix in defence planning.

**Capability planning: achieving efficiency in the product mix**

Within Defence, literally hundreds of people work on developing strategic policy and translating it into concrete plans for the development of the defence force (Department of Defence 2006; 2010a). The result is the Defence Capability Plan (Department of Defence 2011), which is a decade-long program of major acquisitions.

Were that plan efficient, it would ensure two things. First, that the ‘right’ defence capabilities are sought consistent with prevailing circumstances and strategy. Second, that planned defence capabilities are deliverable within available resources — financial, human and bureaucratic.

That these criteria are closely related is obvious. Thus, in a perfect world, budgets would be allocated between the various objects of public expenditure such that the marginal dollar of expenditure yielded the same benefit across all programs, projects and project elements. In practice, however, the allocation of public expenditure is a sequential process, and it is the task of each budget holder to make efficient use of a predetermined budget by seeking to secure the most output — in our case the most defence — for the outlay available.

At least, that is how such a planner might act were the resource constraint ‘hard’; that is, not vulnerable to renegotiation in response to decisions that can be taken by defence itself. In contrast, with a soft budget constraint, the incentive, rather than being to secure the most defence from the given budget,
will be to try to expand the budget itself, including by capability commitments that can force the hands of future governments as and when the money runs out. Those capability commitments may bear little or no relation to opportunity costs as defined by the initial resource constraint.

Past experience is consistent with the foregoing analysis. Throughout almost all of the preceding two decades, it was clear that the government’s plans for defence were unaffordable, in the sense of being inconsistent with likely future budgets, and those rare occasions where things appeared otherwise (such as immediately after the 2000 White Paper) proved to be delusions. Similar problems have long arisen in both the United Kingdom (Gray 2009) and the United States. Although optimism bias has probably played an important role (Flyvbjerg 2006), it is equally likely that Defence carelessly, or perhaps even deliberately, committed the government to higher than acknowledged costs — as might be expected from an agent operating in an environment with unenforceable budget constraints and where spending targets are subject to renegotiation and the political costs of cancelling programs is high once they have been announced.

The 2009 Defence White Paper introduced a ‘capped budget’ funding arrangement whereby ‘shortfalls against the White Paper funding plan will be offset by Defence’ — presumably to avoid the pitfalls of a soft resource constraint. But although this may encourage greater rigour on the part of defence planners in the near term, it is unlikely to have anything like the effect of an actual hard budget constraint in the long run. Not only is the capped budget rule weakened by the periodic reviews of funding and plans, but the risks associated with poor planning are inevitably borne by the government. Put simply, as both sole customer and shareholder, the government cannot allow Defence to fail if it runs out of money. The capped budget is ultimately unenforceable and known to be.

It remains to be seen if the plans set out in the 2009 White Paper are affordable. On the basis of historical trends in the cost of acquiring and operating military equipment, it appears as though long-term funding was inadequate to start with (Lynn and Davies 2009). Conversely, the recent substantial hand-back of funds demonstrates that Defence has more than enough money for the moment at least. The situation is further complicated by Defence’s acute inability to progress acquisitions according to plan — irrespective of the availability of funds. Only time will tell whether current plans are affordable or not, though we have good grounds to suspect they are not.

More difficult to assess, and even more critical, is whether plans maximise defence output for the available budget. As matters stand, these plans have

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18 Thomson 2011: Chapter 3.
elicited at least as much criticism as support.\textsuperscript{19} And while critics rarely agree on what the alternative should be, many cite logical disconnects in the official explanations given for the planned force. The suspicion is that Defence’s labyrinthine planning processes result in little more than the three services colluding to divide up available resources in order to replace existing assets and maintain their respective shares of the total resource pool. That suspicion is consistent with Australian experience over the years.\textsuperscript{20}

Regrettably, there is little evidence that governments bother to grapple with the issues themselves, content instead to leave force structure planning to Defence. It is noteworthy that Defence’s manual for capability development assigns the government the surely subordinate role of ‘endorsing’ Defence’s plans (Department of Defence 2006). Moreover, there is no sign that the central agencies of Treasury, Finance, and Prime Minister and Cabinet have any influence beyond setting limits on aggregate defence spending. This at least partly reflects an underlying information asymmetry that gives Defence almost unchallenged influence over multi-billion dollar procurement decisions, with all the dangers that entails.

There is, however, some prospect for improvement. As a consequence of the recent review of accountability in defence, the government has decided to reinstitute civilian scrutiny of capability planning within Defence (Smith 2011). While this cannot be a panacea, if properly implemented it will inject much-needed objectivity into a process that has tended to produce plans that are of questionable strategic merit, exceed available budgets and cannot be delivered in a timely way.

**Capital procurement**

The acquisition of military equipment is costly and risky.\textsuperscript{21} At present, Australia spends more than $5 billion a year on around 190 major projects ranging from naval destroyers to fighter aircraft. Regrettably, defence projects frequency encounter delays and cost increases and, on occasion, fail to deliver the capability sought.\textsuperscript{22}

\textsuperscript{19} A variety of perspectives on the 2009 Defence white paper can be found in Security Challenges Vol. 5, No. 2 (Winter 2009). For a critical analysis, see Davies (2010). For a broadly supportive view, see Sheridan (2009). See also the speeches by Hugh White and Paul Dibb at the National Press Club, Canberra, on 24 June 2009.

\textsuperscript{20} A brief analysis of how institutional inertia has previously prevented the alignment of capability and strategy in Australia can be found in Thomson (2007).


\textsuperscript{22} Cost increases usually arise before a project is put to contract; while schedule delays accumulate continuously through the life of a project from conception to delivery; see Thomson (2008), Section 7.
Government concerns over these problems led to the Kinnaird and Mortimer reviews of defence procurement. At the risk of oversimplification, the reforms fall into two categories: (1) the operation of Defence’s acquisition and sustainment agency, the Defence Materiel Organisation (DMO); and (2) the processes for project development and approval.

Broadly speaking, the reforms to DMO seek a more professional and commercially adept procurement agency. As far as they go, the reforms are sensible and worthwhile. The critical question is how effective they can be so long as DMO remains constrained by Public Service practice and dependent on military officers (whose primary expertise lies elsewhere) in project manager roles. The successful introduction of more sophisticated contracting, for example, arguably demands greater private-sector experience. Both the Kinnaird and Mortimer reviews recommended hiving DMO off as a separate entity from Defence to give it greater independence and freedom on personnel matters. But the difficulties of making DMO an independent agency are several and serious, and the recommendations were rejected. While this was probably the right decision, the downside is that DMO still lacks the flexibility it needs to manage its workforce effectively.

As a result of the Kinnaird review, major defence projects are considered at least twice by the government prior to approval. Previously, projects were often approved in batches and considered only once. So far, the new process has been accompanied by very substantial delays. Moreover, it is doubtful that Ministers are well placed to deliberate on the commercial and technical details of defence acquisitions anyway, especially with the government’s central agencies poorly equipped to provide independent advice on Defence proposals. However, as already mentioned, the reintroduction of internal civilian scrutiny of capability planning has the potential to improve decision making — though perhaps at the cost of still further delays.

Four Reforms

In the current fiscal environment, there is little doubt that the government wants to trim as much fat from the defence budget as it can. The cuts imposed earlier this year are a good start; austerity and expenditure constraints are blunt but effective tools. But more can be done, especially in the so-far sacrosanct Defence workforce. The potential for further reductions should then be explored as a priority, with a focus on trimming the bloated managerial overhead. In terms of the operational military workforce, the demarcation between the Reserve and Regular force should be revisited, along with the potential for greater contractor support to operations.
In the longer term, sustaining efficiency in Defence will demand processes, incentives and administrative structures that orient production to efficient solutions. The following four recommendations focus on the key opportunities to improve efficiency in Defence.

1. **Embrace output-focused budgeting**

As a first step, output-focused budgeting should be fully embraced. Unless the individual services control the inputs to their activities, they cannot be accountable for the quality or cost-effectiveness of what they deliver. At very least, budgeting and management information systems need to allow the military to understand the cost of inputs and alter the mix accordingly.

In addition, Defence’s long-standing policy of centralising support services such as garrison support and materiel sustainment should be searchingly reviewed. Where pooled service delivery is not justified by substantial and genuine economies of scale or reduced overheads, the activity should be returned to the individual services: Army, Navy or Air Force. In some cases it may be more efficient to consolidate command and support administration locally than to aggregate administration of support across disparate geographic locations.

An output-focused business model as outlined would entail a high degree of autonomy for those responsible for delivering the capability outputs. No longer would the military be passive consumers of ‘free’ goods in a command economy. At the same time, central control would need to be strengthened through a regime of financial and non-financial performance measurement to allow productivity and efficiency to be monitored and reported.

Consistent with the proposed output-focused business model, Defence’s present ‘federated’ approach to governance should be replaced by a more disciplined corporate model build around a designated headquarters. The current unwieldy Defence Committee should be replaced by a much smaller board that includes the Service Chiefs and a limited number of key people.

Finally, with an effective regime of performance measurement in place, private sector-style rewards and sanctions could be used to drive individual performance at senior levels. Apart from better aligning individual and corporate goals, such an approach would better enable Defence to compete for specialist talent in the broader labour market. Over time this would allow the development of a leaner and flatter workforce.
2. Increase transparency and external scrutiny

The surest way to address the principal–agent problem between Defence and the government/taxpayer is to increase the transparency and external scrutiny of Defence. Australia is fortunate to have a number of think tanks and academic institutions working on defence matters — not to mention an active media — but their efforts are severely hampered by small scale and by secrecy surrounding almost all aspects of Defence.\footnote{In recent years the level of detail provided on financial and non-financial performance has declined significantly from what was an already low base. To make matters worse, frequent changes to the structure of Defence’s output structure make it impossible to construct financial time-series at other than the most aggregated level.} Notwithstanding recent improvements to freedom-of-information access, the government withholds much more information about Defence than can be plausibly justified on the basis of national security or commercial confidence — a case in point is the heavily redacted 2010 incoming government brief.\footnote{Department of Defence (2010c).} By withholding all but the most anodyne details of Defence’s performance, the government denies itself (and taxpayers) the benefit of third-party scrutiny and informed debate.

The paucity of information also compromises parliamentary examination of Defence: members and senators simply don’t know what to ask. Apart from boosting transparency, the existing Parliamentary Library and proposed Parliamentary Budget Office should be properly equipped to analyse defence issues. The goal should be to replicate a capability akin to that held by the Congressional Research Service, Congressional Budget Office and Government Accountability Office in the United States.

Proper disclosure of Defence’s performance is unlikely to occur without external involvement. Fortunately, the Australian National Audit Office (ANAO) is well placed to play a role. Since 2008 the ANAO has reported annually on the performance of the 20 largest Defence projects.\footnote{Australian National Audit Office (2010).} The obvious extension would be to have the ANAO report annually on the cost and performance of major in-service defence capabilities.

3. Get the force structure right

No matter how efficiently defence outputs are produced, the effort is ultimately futile if the resulting force structure is not suited to Australia’s needs. For this reason, the government should take a more direct interest in defence planning than it does at present — especially given the risks of moral hazard inherent in allowing the military to self-direct. It is difficult to be optimistic, however. The
low political priority accorded defence policy is reflected in the revolving-door appointment of defence ministers that has seen seven defence ministers in a period covered by two treasurers.

In addition to taking responsibility for the overall size and shape of the defence force, the government needs to do a better job of directing Defence’s multi-million dollar acquisition program. Many of the gaps in today’s force structure are the result of failed, faltering or seriously delayed defence projects. At the risk of complicating an already labyrinthine process, the government could seek independent external advice prior to the approval of key projects.

4. Appoint a Defence chief economist

Defence employs more than two thousand scientists, yet there are no designated positions for economists apart from those working on foreign intelligence. So that while almost any significant technological issue is subjected to detailed scientific analysis, almost 2 per cent of the nation’s income is disbursed with scant use of microeconomic analysis. Instead, resources are allocated within Defence by military personnel, generalist public servants and a handful of accountants. The result is a primary emphasis on accounting standards and limited regard for efficiency.

Economic analysis is relevant to resource allocation at every level of Defence. At the strategic level, the techniques of cost–benefit analysis and program planning and budgeting have much to offer. At the operational level, economics is relevant to everything from commercial contracting to supply-chain management.

One way to introduce the requisite expertise would be to appoint a Chief Defence Economist with broad responsibility for monitoring, benchmarking and advising on Defence’s efficiency. This would hardly solve the problems discussed above, but it would at least allow those grappling with them to benefit from the insights economic analysis can provide.

Postscript

It is not known whether the army still uses ball-peen hammers to replace watch batteries. We can only hope that the confusion between panel beating and horology has been resolved. But you would not want to bet on it. The Royal Australian Navy is presently replacing its fleet of 16 Seahawk helicopters at a cost of several billion dollars because the aircraft have become difficult to maintain — despite the aircraft having only flown half their designed hours.
Such inefficiency is truly the enemy within; it would be a pity if the Australian defence establishment, which has so often proven its value in the field, could not do better against that adversary.

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CRITIQUE
A Defence of Contemporary Economics: Zombie Economics in Review

Stephen D. Williamson

Introduction

John Quiggin wants what fundamentally all economists want. He would like to make society better off. Of course, economists differ over how that goal should be accomplished. Quiggin thinks that society would be better off if income and wealth were redistributed from the currently rich to the currently poor, if there were a larger role for the government, and if fluctuations in aggregate employment were mitigated or eliminated entirely.

But Quiggin is dissatisfied. There are obstacles which impede progress. In particular, according to Quiggin, there are some widely accepted ideas in contemporary economics that are obviously wrong, yet economists and policymakers cling to those ideas. The solution to Quiggin’s problem is that we kill the offending ideas — zombie ideas — and in Zombie Economics: How Dead Ideas Still Walk Among Us (Quiggin 2010) he also proposes how we should fill the void.

Quiggin frames his thinking in terms of five zombie ideas:

1. The Great Moderation
2. The Efficient Markets Hypothesis
3. Dynamic Stochastic General Equilibrium (DSGE)
4. Trickle-down Economics
5. Privatization.

In Zombie Economics, a chapter is devoted to each zombie idea. The idea is laid out — its intellectual origins, and the basic outlines of how the idea has been used in economics. Then, Quiggin makes the case for why the idea is a zombie idea. A genuine zombie idea must be clearly useless; indeed, Quiggin sometimes wants to make the stronger case that the idea is actually dangerous. Further, the zombie walks; that is, economists and others cling to the bad idea in spite of
strong evidence that reveals the zombie idea to be silly. Much of the evidence Quiggin has in mind relates to the recent financial crisis. Finally, he offers some proposals for how the perceived deficit in ideas can be remedied.

Thus, *Zombie Economics* is not only a critique of a set of economic ideas; it is a condemnation of economic science as a whole. If economics were a healthy science, then economists would be skilled at separating the wheat from the chaff — embracing good ideas, throwing out bad ideas, and developing and expanding on the good ones.

Is *Zombie Economics* a good book? Our assessment must depend on how the standard is set. In this case we should expect a lot. Quiggin is an economist with a recognised record of peer-reviewed published work, and has received prestigious awards, including recognition as a Distinguished Fellow of the Economic Society of Australia and Fellow of the Econometric Society. Unfortunately, *Zombie Economics* is a big letdown. Parts of it are poorly written and confusing, if not self-contradictory. Sometimes the zombie ideas themselves are not clearly elucidated, so that it is hard to understand whether Quiggin is obfuscating or just confused; Quiggin is not always clear on where the zombie ideas go wrong; and his solutions are typically vague, misguided, or are not new.

What follows is my critique of Quiggin’s critique. I will provide my own take on contemporary economics, what it contributes and where I think it can be improved, along with some discussion of aspects of the financial crisis and how it should shape our thinking.

## The Great Moderation

### Self-congratulation

The Great Moderation is typically taken to be the time period in the United States following the ‘Volcker recession’ in the early 1980s, until the most recent recession — a period characterized by low inflation, by low variability in inflation, and by low variability in real GDP about trend.

In *Zombie Economics*, Quiggin seems to want to question whether that characterization is correct, but the Great Moderation is indeed a fact; its rough characterization is something that is obvious to the naked eye from aggregate time series, with any reasonable filtering of the data.

Now, of course we should be suspicious of anyone who argues that we have observed a discrete and permanent change in macroeconomic performance, and
sometimes the pronouncements of such people look silly in retrospect. One of the people that appears to look silly in the wake of the financial crisis is Ben Bernanke, who spoke as a Federal Reserve Governor in 2004 (Bernanke 2004) on the Great Moderation and its causes.

Bernanke argued that the Great Moderation could be attributed significantly to good policy, good luck, and to structural change in the economy. In particular, he thought that the Fed could claim a good part of the credit for the good macroeconomic performance of the previous 20-plus years. Bernanke did not state outright that the Great Moderation represented a permanent change in the operating characteristics of the US economy, but certainly his discussion of the role of monetary policy and structural change seemed to indicate that he thought those developments were permanent. Bernanke did not say that a financial crisis could not happen, but perhaps we can fault him for not having discussed the possibility. Did the possibility of a financial crisis not enter his mind at the time? Did he think of a financial crisis as a piece of bad luck that the Fed could deal with after the fact, using standard tools? Of course we cannot read Bernanke’s former mind, so who knows?

Is the notion that the Great Moderation represented a permanent change in macroeconomic performance a zombie idea? Recall that a genuine zombie idea must be widely held, it must be wrong, and the idea must persist in light of clear evidence that it is wrong. To answer the question, it helps to think in terms of Bernanke’s three contributing factors: policy, luck, and structural change.

On the question of the policy contribution, macroeconomists were somewhat divided at the time Bernanke made his speech. There was wide agreement that the Volcker/Greenspan period represented a marked change in inflation control by the Fed, for the better. However, the sizeable fraction of macroeconomists who were sceptical about the Fed’s ability to influence the behaviour of real GDP were inclined to attribute the low volatility in real GDP during the Great Moderation to good luck and/or structural change rather than to monetary policy.¹

On structural change, it is not a new idea that an economy open to international trade in goods and assets might experience more volatility, or that deregulation might be a two-edged sword. For example, the Deregulation and Monetary Control Act (MCA) of 1980 removed Regulation Q, a well-known source of aggregate volatility in the United States. Prior to 1980, a ‘disintermediation’ phenomenon occurred, whereby an increase in nominal interest rates would cause a withdrawal of funds from accounts in savings and loan institutions (S&Ls) subject to interest rate ceilings. Much of those withdrawals would typically find

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¹ There is a literature in which vector autoregression approaches are used to account for the causes of the Great Moderation. See Stock and Watson (2002), and the references cited in that paper.
their way into money-market mutual funds, with the result being a contraction of mortgage market credit. The MCA eliminated Regulation Q, thus curing the disintermediation problem, but the Act also deregulated S&Ls, making them more like commercial banks. The downside of the MCA was that the regulators of S&Ls did a poor job of correcting the moral hazard problem associated with deposit insurance among the newly deregulated S&Ls. The result was a wave of S&L failures, beginning in the late 1980s, and a massive federal government bailout of S&L depositors — a financial crisis, as it were.

So, we might say that the notion of a permanent change in macroeconomic performance was widely held, with some qualifications. But Quiggin is incorrect in stating that this view persists today, whether he can find a quote to support that view or not. I do not see many economists convinced that the United States will ever return to the trend growth path of about three per cent real GDP growth per year to which it adhered fairly closely after World War II, let alone a vociferous group willing to make forecasts about the long-run volatility of real GDP. On the future path of inflation, the forecasts are all over the map. Old Keynesians, including Paul Krugman, worry about inflation being too low. Old Monetarists, and some recent dissenters on the Federal Open Market Committee (the decision-making arm of the Fed) are concerned that policy mistakes could make the inflation rate much too high.

**Keynesianism, new and old**

So, there does not appear to be a genuine zombie idea associated with the Great Moderation. But does Quiggin have anything useful to say about the related issues? Well, not really. Quiggin views the period after World War II until 1970 as a ‘Golden Age of Keynesianism [that] delivered big increases in living standards throughout the developed world.’

So, why does Quiggin not address the fact that in the United States, the pre-1970 growth path does not look so different from the post-1970 growth path (leaving out the recent financial crisis and recession)? The answer is that this does not conveniently fit into his narrative. As becomes clearer later in *Zombie Economics*, Quiggin likes Old Keynesian economics (though he wants some changes) but he is not a big fan of post-1970 macroeconomic thought, nor of New Keynesian economics.

The key ideas in New Keynesian economics are laid out in Woodford (2003) and Clarida, Gali and Gertler (1999). New Keynesians built on post-1970 developments in macroeconomics to come up with a modern representation of Keynesian ideas that they intended for use by practical-minded central bankers.

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The approach, like the ‘neoclassical synthesis’ of the 1960s that attempted to integrate the ideas of Old Monetarists and Old Keynesians, was put forward as a framework which would satisfy Keynesian critics while also articulating a role for activist policy.

There was a problem though. On the one hand, New Keynesians were speaking to the Keynesian critics of the 1970s and 1980s and telling them that they had a point. On the other hand, the message that Old Keynesians were getting from the New Keynesians was that they should not worry. The New Keynesians would look after the troublesome critics, and Old Keynesians should feel free to stay on course. New Keynesianism in reduced form (Clarida, Gali and Gertler 1999) looks much like Old Keynesianism. There is an IS curve, and there is a Phillips curve. The LM curve disappears, to be replaced by a Taylor rule, but otherwise the language is Old Keynes, and any Old Keynesian would feel at home with it.

Since 1970, monetary policy in the United States has been driven more by the Old Keynesian neoclassical synthesis than by any other paradigm. Thus, while Quiggin may like to lay blame for the complacency of the Great Moderation period on new paradigms, and attribute any success in dealing with and understanding the financial crisis to Old Keynesianism, he cannot have it both ways. Bernanke’s complacency was an Old Keynesian complacency. Further, Quiggin may think that ‘the end of the Great Moderation has forced policymakers to relearn the basic lessons of Keynesian economics’, but Old Keynesian economics has little or nothing to say about financial intermediation, incentive problems, moral hazard, too-big-to-fail, and aggregate risk-bearing, which lie at the heart of the financial crisis and the ensuing recession.

The Efficient Markets Hypothesis

This chapter in Zombie Economics seems the most confused, or confusing, depending on how one looks at it. In an attempt to simplify matters in the mind of the reader, Quiggin has gathered a number of ideas under the efficient-markets umbrella that do not belong there, thus sacrificing clarity. However, Quiggin may in fact be confused himself about what the efficient-markets hypothesis entails, or he may have conflated some different ideas intentionally, in an effort to hoodwink us. In any case, this chapter should not be your source of information if you want to learn what financial economists mean by ‘efficient markets hypothesis’.

In finance, the theory of asset pricing is typically couched in partial equilibrium terms. Prices are determined by arbitrage, as, for example, in a Black-Sholes

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option pricing model, where the stochastic process for the price of the underlying stock is treated as given, and then a pricing formula is derived for the price of an option written on that stock. The efficient markets hypothesis, as the practitioners of finance see it, simply comprises the testable implications of arbitrage. To derive these arbitrage relationships we need optimisation and equilibrium. Rational financial market participants have some objective function(s), they optimise, and in equilibrium they exhaust all available profit opportunities.

In Lucas’s asset-pricing model (Lucas 1978), which is well-known to economists and often referred to as the intertemporal capital asset-pricing model (ICAPM) by finance theorists, we obtain a more general type of asset-pricing relationship. Lucas’s notion of asset pricing is very useful as it links asset prices to aggregate risk and the role of assets in smoothing the consumption of individuals over time. In Lucas’s framework, assets are more desirable if they have big payoffs in states of the world when aggregate consumption is low, as those assets are very useful in smoothing consumption. Then, the terms on which an individual consumer is willing to hold an asset — the asset’s expected return — is determined by the covariance of the asset with the consumer’s intertemporal marginal rate of substitution. There is an equation determining the price of an individual asset — essentially an intertemporal arbitrage condition — the logic of which can be transferred to a wide range of general equilibrium applications.

Economists have notions of efficiency, of course, which are quite different from arbitrage-pricing efficiency. The standard such notion is Pareto efficiency, which is known — or should be known — to every economics undergraduate. Typically, when an economist speaks of ‘efficiency’, he or she means an allocation of resources to productive activities, and of produced goods and services to individuals that cannot be Pareto-dominated; that is, which has the property that there is no other allocation that will make everyone no worse off, while making at least one person better off. Thus, Pareto efficiency and arbitrage pricing (the ‘efficient markets hypothesis’) are quite different concepts.

Here is where the confusion starts. Quiggin first gives us this definition (p.35):

The Efficient Markets Hypothesis says that financial markets are the best possible guide to the value of economic assets and therefore to decisions about investment and production. This requires not only that financial markets make the most efficient possible use of information, but that they are sufficiently well-developed to encompass all economically relevant sources of risk.

This is not helpful: it is not that the ‘market’ guides us about the ‘value’ of the asset. The price of the asset is determined by how the market participants value
it. How they come up with that valuation is the interesting part. The second sentence in the quote requires some work to interpret. By ‘encompassing all economically relevant sources of risk’ I think Quiggin means that standard arbitrage pricing requires the ability to perfectly diversify risk, which is indeed true. The risk that gets priced in standard asset-pricing theory is non-diversifiable risk. For example, in Lucas (1978), the non-diversifiable risk is associated with the variability in aggregate consumption. However, it is not difficult to extend basic asset-pricing ideas in models where there are frictions that prevent economic agents from diversifying perfectly.

In the above quote, Quiggin’s crime is just bad writing, but the offences in the following (p. 42) are more serious: ‘The Efficient Markets Hypothesis provides a case against public investment in infrastructure and implies that macroeconomic imbalances, such as trade and current account deficits, should not be regarded with concern and, provided they arise from private sector financial transactions, are actually both beneficial and desirable.’

First, Quiggin is conflating the implications of arbitrage from the efficient markets hypothesis with Pareto efficiency. But these implications are consistent with Pareto inefficiency. Arbitrage pricing can explain asset prices in the context of the standard deficiencies in the private sector that economists use to determine the appropriate role for the government — externalities, informational advantages for the government vs. the private sector, and so on. In some analyses we may uncover a relationship between a failure of some standard arbitrage-pricing theory to match the data, and an inherent advantage of the government over the private sector, but it is easy to write down counterexamples to show that arbitrage asset pricing does not rule out a role for the government.

Second, the question of whether a current account deficit (or a deficit on trade in goods and services), in itself, represents a problem is a Pareto efficiency issue and is not fundamentally an issue related to arbitrage asset pricing. It certainly is true that we get some important insights from basic frictionless models in which countries trade with each other, and the equilibrium outcome is Pareto efficient. In such an environment, countries borrow and lend on world capital markets, and if a country is running a current account deficit it is doing it for a sound reason — that country is smoothing the consumption of its residents over time and investing to grow in an efficient way. That is useful to know: we need not think of a current account deficit as a bad thing.

But public policy discussions are laced with talk of imbalances, as if a world with countries running current account deficits and surpluses is in fact bad. What are those people getting at? To think about that, we need to depart from the frictionless world and consider the consequences of debt obligations and the possibility of default. For an individual country, running an unsustainable
current-account deficit may be a bad thing. The deficit may have arisen because of a large government budget deficit, with the government borrowing abroad to finance its spending. The deficit may in fact be unsustainable, and at the point where foreign lenders decide that is the case, the price of the country’s sovereign debt drops and the country is driven into default. That is certainly not a good result, as it impairs the country’s ability to smooth consumption, invest by borrowing abroad, and so on. That is, the things we know from the basic frictionless models are a key function of borrowing on foreign markets.

Does the departure from the frictionless model require that we throw out what we learned about arbitrage pricing? Not at all. While we are now in a world where some financial claims — debt obligations — are non-contingent, the same principles apply. We can still think about financial market participants who optimize and eliminate the profits from arbitrage. However, there may be a limited set of financial markets on which these participants can trade, or private information may put additional constraints on what participants can do.

**Asset price bubbles**

Quiggin moves on to a discussion of asset price bubbles, something we hear about a lot in discussions of the run-up to the financial crisis in the United States. One popular view is that the rapid increase in the price of real estate in the US, ending in 2006, was a kind of mania, or phenomenon of irrationality, and Quiggin appears to share that view. That might seem to be at odds with arbitrage pricing, in which the world is populated by rational individuals eliminating profit opportunities.

In my view, irrationality is the great cop-out, and simply represents a failure of imagination. Rationality is so weak a requirement that the set of potential explanations for a particular phenomenon that incorporate rationality is boundless. If the phenomenon can be described, and we can find some regularity in it, then it can also be described as the outcome of rational behaviour. Behaviour looks random only when one does not have a theory to make sense of it, and explaining it as the result of rational behaviour is literally what we mean by ‘making sense of what we are seeing’. If we are accustomed to observing people who do not have schizophrenia, we might describe a schizophrenic as ‘irrational’, but for a trained psychiatrist, a schizophrenic behaves in predictable ways. The schizophrenic has his or her own rationality, and hard work by scientists in the field of psychiatry has taught us how to intervene in the lives of people with this mental illness to make them better off.

What do we know that can make sense of the ‘bubble’ in the price of real estate in the US, say over the period 2000–2006? First we need a definition for ‘bubble.’ To get at this, define an asset’s fundamental price as what standard
arbitrage pricing would deliver — that is, the fundamental price is the expected discounted valued of the future payoffs associated with the asset, using the appropriate discount factors from the model environment we are dealing with. Then, a bubble exists if the actual price of the asset exceeds its fundamental price. Now, monetary economists know a great deal about this kind of bubble. Valued fiat money is a bubble. The fundamental price of fiat money is zero — it has no intrinsic payoffs — but the price of money is positive in terms of goods and services. Another way to think about the ‘money bubble’ is that the difference between the price of money and its fundamental represents a liquidity premium; that is, the value of money in exchange.

We can expand on this idea to think about assets that have intrinsic payoffs. Consider mortgage-backed securities (MBS), for example. The underlying payoffs come from payments made by mortgage-holders to the institutions that are servicing the mortgage loan contracts. Those payoffs are then dispersed in complicated ways that are determined by how the MBS was constructed. But the MBS is more than just a vehicle for diversifying the riskiness in those individual payoffs, as the MBS is also a tradeable security used in financial exchange. Indeed, before the financial crisis (as is well known) even MBS with potentially very risky underlying individual payment streams were perceived as safe assets.

Now, where would a real estate bubble come from? MBS were used extensively in financial-market asset trading prior to the financial crisis, and small quantities of MBS could potentially support a huge amount of financial exchange, as one MBS can potentially be used many times as collateral, through the process of rehypothecation (see Gorton 2010). Since MBS had value in exchange, there was an MBS bubble, and this fed back into the market in mortgage originations. Because the MBS sold at a high price reflecting their high liquidity premium, competing mortgage originators were willing to grant good terms on mortgage loans, many borrowers could finance real estate purchases who would not otherwise be able to do so, and prices of real estate shot up. Of course, the underlying mortgages, particularly in the subprime market, did not generate the promised payoffs, there were a series of fatal incentive problems in the chain of financial transactions that created some MBS, and the MBS ultimately were no longer perceived as safe, liquid assets. A huge quantity of financial exchange went away, and the bubble ‘burst,’ so to speak.

Now, nowhere in my story did I invoke irrationality, nor did I violate any basic principle of arbitrage pricing, though certainly there are frictions that play a key role in the story. Asset bubbles, as monetary economists understand them (see Williamson and Wright 2010, 2011) arise because of information frictions — limitations on recordkeeping and information flows. As well, the
basic financial market incentive problems associated with the financial crisis were moral hazard and adverse selection, which are the key private information frictions that economists know a lot about.

Quiggin (p.67) draws some policy conclusions about bubbles: ‘If a real estate bubble is under way, for example, central banks must have the power and willingness to direct bank lending away from the overheated sectors without unnecessarily constraining productive investment.’

As should be clear to the perceptive reader, a real estate bubble could potentially be a good thing. The reason the bubble that developed in the US over the period 2000–2006 was a bad thing was not because it was a bubble, per se, but because the bubble was built on false pretences. We should not be directing central banks to kill all the bubbles they see.

Financial regulation and narrow banking

Finally, in this chapter Quiggin addresses some issues associated with financial regulation, and comes out in favour of ‘narrow banking’ proposals. This raises some interesting issues. One of Quiggin’s themes has to do with the destruction he sees as the result of a move toward ‘market liberalism’ in the world, beginning in about 1970. However, Milton Friedman, perhaps the most prominent proponent of market liberalism of all time, was actually also a key proponent of narrow banking (see Friedman 1960). Friedman proposed separating the transactions activity of banks from their portfolio activities by requiring that transactions accounts be backed one-for-one with reserve balances; that is, he argued for a 100 per cent-reserve requirement. Friedman argued that this would provide financial stability, and he used Old Monetarist principles to support his argument.

Contrary to Friedman, most monetary economists tend to think of the 100 per cent-reserve requirement as wrongheaded. Friedman neglected the important role of banks as financial intermediaries which channel savings from the holders of transactions accounts to ultimate borrowers. Thus ‘separating money from credit’ can generate clear inefficiencies (see, for example, Sargent and Wallace 1982).

Contemporary proposals for narrow banking — coming, for example, from Paul Volcker or Gorton and Metrick (2010) — are different from what Friedman had in mind, but share some of the same motivation, and the same problems. We can design a regulatory structure that narrowly defines particular kinds of financial intermediation activities, with the regulators then charged with the job of making sure that the financial industry stays within these particular confines.
However, private financial intermediaries are very clever at finding ways of undoing restrictions like this, as recent history illustrates, for example in the case of the development of ‘shadow banking’.

The alternative to narrow banking, of course, is broad banking, which is roughly the Canadian approach, whereby entry is restricted into the financial intermediation industry, which is dominated by a few big players. Those big players are permitted to engage in a wide range of intermediation activities, but are closely supervised by a regulator that has broad discretion to prevent financial intermediaries from engaging in practices that are deemed too risky. The Canadian approach has certainly been successful in generating stability. Since the beginning of the twentieth century there have been three chartered bank failures in Canada: there were none in the Great Depression, and the Canadian banking system emerged virtually unscathed from the recent financial crisis.

Of course, we can debate whether the Canadian approach sacrifices innovation for stability. However, the key point is that narrow banking is by no means a clear solution to perceived financial instability.

**Dynamic Stochastic General Equilibrium**

**Microfoundations, optimization, and commitment**

The watershed in modern macroeconomics came with two publications, which were the ‘Phelps volume’ (Phelps 1970) and Lucas (1972). It is useful at this point to extract the key ideas that evolved in the ensuing research program.

The first key idea in modern macro is that ‘microeconomic foundations’ are important — so important, in fact, that calling these ‘foundations,’ or making the distinction between what is micro and what is macro, misses the point. The economic theory used in modern macroeconomics is an integrated whole: this is not the cement that was poured to form the foundation; it comprises the walls, the floors, and the roof, along with the plumbing and electrical work. The force of the approach removes the distinction between macroeconomics and microeconomics; economic methods comprise a single set of tools, and the differences in research programs pertain only to the particular problems addressed.

Why use the available economic theory to address macroeconomic (aggregative) problems? One reason is pure efficiency. Economic theorists have put a considerable amount of thought and hard effort into developing general
equilibrium theory, information economics, mechanism design, and the theory of contracts, for example. It would be silly for macroeconomists to turn down the gifts theorists have given us, and to go about reinventing wheels.

A second reason is one emphasised repeatedly by macroeconomists, and here the macroeconomists have something to teach some (but by no means all) microeconomists. The Lucas critique (Lucas 1976), for which we can find roots in the earlier work of the Cowles Foundation, is an argument for the use of structural models in the evaluation of macroeconomic policies. By ‘structural’ we mean that the features of the model are invariant with respect to any change in government policy that we are contemplating. This idea can be applied to the analysis of any type of policy change (for example, the effects of a change in the minimum wage), but in macroeconomics the potential problems produced from an astructural approach are all the more damning. In particular, due to the forward-looking behaviour of firms and consumers in a dynamic economy, the behaviour of different individuals and activity in seemingly separated markets is intertwined in complex ways. To sort out this complexity, we need to be specific about the basic building blocks of our model economy: preferences, endowments, technology, information structure, and equilibrium concept.

A second key principle in the post-1970 macroeconomic research program is adherence to optimisation — a key organising principle in all of economics. We should not base macroeconomic policy on the idea that the government can systematically fool people or can convince people to do something they might later regret. Consumers and firms do the best they can with the information they have available. That information may be quite bad, and if this seems important to the question at hand, then we should model it. Again, economic theorists have given us some useful tools for dealing with behaviour under private information, and we should use those tools when appropriate.

Finally, the ability of government policymakers to commit, and the design of mechanisms to produce commitment, is a critical element of modern dynamic macroeconomics, as first argued by Kydland and Prescott (1977). Later development of the idea (for example, Chari and Kehoe 1990) used the theory of dynamic games to help specify a game between a policymaker and the private sector. In this game, the inability of a benevolent policymaker to commit could lead to a bad outcome, but good behaviour could sometimes be supported in an equilibrium in which the loss to the policymaker of a good reputation is simply too much to bear.

What does Quiggin think of all this work? Not much, apparently. He has particular disdain for the Dynamic Stochastic Equilibrium (DSGE) Approach, by which he means the set of competitive equilibrium models developed by
Kydland and Prescott (1982), building on the established neoclassical growth framework, and later extended by New Keynesian economists (such as Woodford 2003) to incorporate Keynesian elements.

What is it that Quiggin does not like? He comes up with some items on the usual list of complaints, for which there are standard defences. (i) We can observe economic agents behaving irrationally, so what is all this rational agent stuff about? Answer: If you think you are observing irrational behaviour, you just have the wrong model. Think harder. (ii) In the world, there is more than one economic agent; what kind of stupid model would start with a representative agent? Answer: Indeed, that is a starting point, and it is a very instructive one. We understand some basic ideas, and we also see what is missing, so we can proceed to expand the model on dimensions where we find it lacking. Almost no contemporary macroeconomic models actually conform to the representative agent paradigm; where they do, that is because it is a useful abstraction in the context of the problem addressed.

Here is a particular prescription for macroeconomic model-building that Quiggin puts forward (p.105): ‘In many ways the way of doing this [building a good macro model] would be to incorporate ad hoc descriptions of aggregate relationships that fitted observed outcomes, even if it could not be related directly to individual optimization.’

What can we say? Go back and read Lucas (1976), John Quiggin. The Phillips curve is indeed an ad hoc description of an aggregate relationship fitted to observed outcomes. Samuelson and Solow, two well-respected economists whose contributions were later rewarded with Nobel prizes, proposed (Samuelson and Solow 1960) that policymakers treat that ad hoc description as a policy menu. That prescription went haywire in a big way, for reasons that have some general implications, as of course Lucas (1976) pointed out.

As relates to the financial crisis, Quiggin has this to say: ‘The obvious criterion of success or failure for a macroeconomic theoretical framework is that it should provide the basis for predicting, understanding, and responding to macroeconomic crises. If that criterion is applied to the current crisis, the DSGE approach to macroeconomics has been a near total failure.’

But prediction need not always be the criterion for success of an economic model. Clearly, if we are judging a forecasting model, we want it to predict well, in some well-defined sense. But in other cases forecasting is not the name of the game. In arbitrage pricing, under some assumptions the model implies that changes in asset prices cannot be successfully forecast. By the criterion of prediction,
the model is indeed a total failure. It tells you that a monkey could do as well at predicting asset prices as an economist who understands the model. Yet the model is actually not a failure, as it teaches us something interesting.

With financial crises, a similar issue arises. By its nature, a financial crisis is an unpredictable event. We could have an excellent model of a financial crisis. The people living in the model world where the financial crisis can happen know it can happen, but they can't predict it, otherwise they could profit in advance from that prediction. Similarly, an economist armed with the model will not be able to predict a crisis in the real world. A nice example is in Ennis and Keister (2010), which is a variant of a Diamond-Dybvig (1983) banking model. In Ennis and Keister’s world, a rational and benevolent policymaker and a set of rational consumers live in an environment where a banking panic can happen. When the policymaker sees the beginnings of a panic, he or she starts to intervene, but rationally discounts the severity of the panic until the panic is too full-blown to actually prevent. Thus, the panic can happen even if the policymaker has the right model, and the policymaker with the right model indeed cannot predict the panic.

Next, arguing that standard DSGE models are not useful in understanding crises is a bit of a cheap shot. The basic real business-cycle model (see Prescott 1986, for example) was not designed for the purpose of understanding financial crises, but for understanding some of the basics of business-cycle phenomena. Granted, if regular financial crises are deemed an important feature of business cycles, then it would certainly be useful for a business-cycle model to include such phenomena. That does not mean Prescott (1986) is not useful, or not instructive. That paper is included on many reading lists in graduate programs in economics for good reasons — and not because it is some ‘zombie’ that macroeconomists refuse to kill. The basic real business-cycle model gives the student an insight into dynamic optimisation in a general equilibrium context, intertemporal substitution, and allows us to consider the possibility that business cycles might indeed be phenomena we simply need to tolerate.

Where do we look for improvements?

Though it is silly to dismiss post-1970 macroeconomics as a waste of time, it is certainly reasonable to task New Keynesians to neglect financial and monetary factors in their models (see Williamson and Wright 2010). Such models were designed specifically to be used in guiding monetary policy, but were not very useful in providing prescriptions for dealing with the financial crisis, since they left out the details of credit market activity, monetary and asset exchange, and financial intermediation. In fact, one would think such features would be at the heart of what a central banker should be concerned with, financial crisis or
not. However, that need not cause us to deem all of post-1970 macroeconomics useless. Indeed, Williamson (2011), for example, makes headway in analysing the financial crisis and monetary policy in the context of the crisis, in a way that conforms to the post-1970 macroeconomic research program.

Quiggin finds fault with New Keynesians, but wants to go in another direction (pp.128–29):

If there is one thing that distinguished Keynes’s economic analysis from that of his predecessors, it was his rejection of the idea of a unique full employment equilibrium to which a market economy will automatically return when it experiences a shock. Keynes argued that an economy could shift from a full-employment equilibrium to a persistent slump as the result of the interaction between objective macroeconomic variables and the subjective ‘animal spirits’ of investors and other decision-makers. It is this perspective that has been lost in the absorption of New Keynesian macro into the DSGE framework.

It is indeed true that New Keynesian models, which build on a basic real business-cycle framework, typically do not have ‘persistent slumps’. A New Keynesian model focuses on the sub-optimality that comes from the relative price distortions arising from price and wage stickiness. However, there is a large and successful research program that deals with exactly the mechanism that Quiggin describes. The multiple equilibrium coordination-failure models of Bryant (1983), Diamond (1982), Cooper and John (1988), and the quantitative sunspot-equilibrium model of Farmer and Guo (1994), for example, either exhibit multiple steady states, or multiple equilibria driven by extrinsic uncertainty of the kind studied by Cass and Shell (1983) and Azariadis (1981). In the case of Diamond (1982), there are multiple Pareto-ranked steady states; for example, there can be a steady state with a high level of aggregate economic activity that Pareto-dominates a steady state with a low level of aggregate economic activity.

Further, the coordination-failure literature fits firmly in the post-1970 macroeconomic research program. Typically all of the economic agents in those models optimise, there is a well-defined equilibrium concept, and all of the behaviour is fully specified in terms that economic theorists would recognize. As well, those models do not provoke the unanswered questions that pop into our heads when we confront New Keynesian models. What economic forces would make a producer want to fix his or her price in nominal terms for extended periods of time? Why is a producer with a fixed price willing to accommodate all of the demand that arises for his or her good at that price? Why will would-be buyers and sellers in the labour market forgo Pareto-improving exchange? In the model in Diamond (1982), for example, we do not have to ask...
those questions. A Pareto improvement is possible, but to achieve that Pareto improvement requires collective action, which the specified environment does not permit.

Keynesians essentially dropped coordination-failure models in the mid-1990s in order to pursue the New Keynesian program. But that does not give Quiggin licence to ignore the coordination-failure literature. The spirit of that literature lives on, for example, in recent work by Roger Farmer (Farmer 2011), and the models are there to use.

Finally, Quiggin would in general like macroeconomists to think outside the box. The box he seems to have in mind is the competitive paradigm, but there has actually been plenty of broad exploration outside of those particular confines. For example, macroeconomists interested in labour market issues have long been attracted to models of search and matching, including the work for which Peter Diamond, Dale Mortensen and Christopher Pissarides received the Nobel Prize in economics. As well, Monetary economists use developments from the information economics literature and mechanism design, and macroeconomists who study credit markets and debt take an interest in models of limited commitment with strategic behaviour. Though Quiggin claims he would like to see more work using developments from decision theory, much of that has in fact been done. For example, Epstein and Zin (1989) applied non-expected utility preferences to asset pricing, in well-received work, and Krusell, Kurusku, and Smith (2010) study tax policy in the context of self-control.

Quiggin would like to see other broad exploration; for example, models that capture the ideas in Akerlof and Shiller (2009) or more applications of behavioural economics in macroeconomic modelling. My impression is that many macroeconomists are not so inclined to pick up the ball in those respects, though behavioural economics seems to have become popular in the field of finance. For many economists, I think Akerlof and Shiller’s work crosses the boundary into weird economics, and behavioural economics may be seen as leading us down a slippery slope. At the bottom of that slippery slope, we conclude that everyone is stupid — individual consumers, firms, and policymakers — and we stupid economists should just close up shop and go home. For an interesting take on the state of behavioural economics, a good read is Levine (2011).

Of course, given an optimal state of affairs in economic research, we should observe economists pursuing a diverse set of ideas and research programs. Ideas that seem weird today may be the path-breaking ideas of tomorrow. However, in this chapter Quiggin fails to make the case that macroeconomic thought is infused with sub-optimality and in need of his visible correcting hand.
Trickle-down Economics

What does Quiggin mean by ‘trickle-down economics?’ In his introduction (p.2) he states that this is: ‘…the idea that policies that benefit the well-off will ultimately help everybody’.

But in this chapter he also states (pp.146–47): ‘The self-evident and weak version of the trickle-down theory starts from the observation that we all benefit, in all kinds of ways, from living in an advanced industrial society, with access to modern medical care, consumer goods, the Internet, and so on.’

We could also state this as ‘a rising tide lifts all boats’, which most of us have also heard before.

According to Quiggin, there existed a golden age of social democracy when things were more egalitarian, but since then there has been backsliding, driven by bad economic ideas, and we need to find ways to get back to the golden age. To evaluate that claim, it will be useful to review what economists have learned about the causes and consequences of economic growth, the differences in income and welfare across countries, and explanations for recent changes in the income distribution.

Hsieh and Klenow (2010) provide a nice summary of how received economic research views the determinants of income differences across countries. According to them, about 10–30 per cent of the differences are accounted for by human capital, about 20 per cent by physical capital, and the bulk — about 50–70 per cent — by total factor productivity (TFP). Thus, countries that are rich tend to be those with high TFP, which makes it clear what motivates people to move from, say, Malawi to the United States. Even if I am low-skilled — that is, I have accumulated a small quantity of individual-specific human capital — my market wage will be much higher in the high-TFP US economy than in the low-TFP Malawi economy, and I will be much better off as a result. Further in the high-physical-and-human-capital and high-TFP US economy, because the opportunity cost of providing public goods — law enforcement, fire protection, roads, bridges, parks, healthcare — is lower, more of those public goods are provided, per capita, than is the case in Malawi. This provides all the more inducement to migrate.

Thus, in line with Quiggin’s ‘weak’ statement above, some basic economics makes it clear that a rising tide raises all boats, and that things are trickling down, or perhaps flowing in a gushing torrent. But there is also a clear set of facts, particularly for the United States, pointing to an increase in the dispersion
in income across the population in recent history. For example, wage data show
an increase in wage dispersion, and in the skill premium, beginning perhaps
about 1970 and increasing more dramatically from 1980 on.

Part of Quiggin’s case seems to be that ‘market liberalism’ was responsible for
much of the increase in income dispersion in the United States. Certainly changes
in the structure of US income taxation and in trade barriers could be considered
elements of market liberalism, but a good portion of the increase in income
dispersion is accounted for by technological and structural change. Quiggin
claims not, however (p.171): ‘The term technology is often used to describe
these changes, but this is just a catch-all residual term. There has been little if
any evidence linking the growth in inequality to any particular technological
innovation.’

It is hard to know how ‘particular’ Quiggin wants to get, though one gets
the idea that he would never be satisfied. However, a substantial volume of
excellent work in macroeconomics has been addressed to understanding the
role of technical change in explaining the rise in the skill premium in the United
States. Krusell et al. (2000), for example, is an important contribution.

What if, in fact, we think there is some sub-optimality related to the distribution
of income in the United States? How could we quantify the effect of the income
distribution on aggregate economic welfare? What would be the consequences
of trying to make things more egalitarian, through various means? Is it possible
that we would do more harm than good by attempting a move to greater
egalitarianism? Unfortunately, Quiggin does not give us much in the way of
sound economics to help us address these questions. Fortunately, however,
some other excellent economists have given us a lot to go on.

Recent work by Jones and Klenow (2011) develops, using some standard
economic theory, a measure of aggregate economic welfare that represents an
alternative to our standard measure — real GDP per capita. The Jones-Klenow
aggregate welfare measure takes account of consumption, leisure, inequality,
and mortality. As our intuition might tell us, this measure, for example, shrinks
the differences between Western Europe and the United States that we would
see if we only looked at real GDP per capita. Americans consume more, but
take less leisure, have higher inequality, and tend to live shorter lives than do
Western Europeans.

A key question then would be whether, if the United States could make itself
look more like Western Europe in inequality terms, it would look just like
Western Europe in terms of the Jones-Klenow aggregate welfare measure, or
whether in fact it could do much better according to the measure than it does now. Apparently Quiggin thinks that most economists would predict the former, while he would predict the latter.

What does Quiggin propose as effective tools for reducing inequality? One suggestion of his is to make taxes more progressive. However, as economists are well aware, increased progressivity comes at a cost. There is no doubt that an increase in the progressivity of the tax system has a negative effect on aggregate economic welfare by way of incentives.

Progressive taxation affects incentives through three key means: labour supply at the intensive margin; labour supply at the extensive margin; and human capital accumulation. Labour economists typically think of the intensive margin effect as small; workers at various income levels do not vary their hours of work much in response to after-tax wage rates, so higher marginal tax rates will have little effect. The extensive margin effect is another matter. Workers may choose to stay out of the labour force, retire early, or begin a career later in response to higher marginal tax rates, and those effects could be significant. For example, Prescott (2004) argues that higher marginal tax rates in some European countries are the key explanation for why Americans work so much more in total than in do the residents of those European countries. Prescott may be using a labour supply elasticity that is on the high side of consensus, but the effect he studies may nevertheless be quantitatively important.

In any event, the key effect of greater progressivity may come from changes in human capital accumulation — effects that we will see only over a long period of time. There is some evidence in support of this idea, in the work by Manuelli, Seshadri, and Shin (2011), for example. Thus, while it could be the case that an engineer may not vary his hours of work much, nor retire early if he or she faces a higher marginal income tax rate, those contemplating a career in engineering and facing a more progressive tax system might choose to take the easier and quicker route and opt for a career in plumbing instead. In the aggregate, this effect lowers the average level of skills in the economy, and not only makes the rich poorer, but reduces the tax base that is the source of revenue to give to the poor.

A second tool Quiggin would like to see used to promote equality is the promotion of union membership. Likely Quiggin thinks — and he would be correct — that most economists have the opinion that unions perform no useful economic role in modern society. While one could argue that unions played a crucial early role in the adoption of humane work practices and workplace safety, in most developed economies there is a well-established structure of laws and enforcement that deals effectively with safety on the job, workplace
harassment, and other issues. A good case can be made that unions act mainly
to stifle competition, to inhibit innovation, and to slow technological advance
(see Holmes and Schmitz (2010), for example).

Two nations

That said, one can construct a sound economic rationale in support of the
idea that there are key problems that we can successfully address, related to
the distribution of income and wealth, particularly in the United States. The US economy can actually be characterised as consisting of two segmented
economies — a rich economy and a poor one. In the rich economy, the average
person is Caucasian, has acquired a large quantity of human capital, and is very
well off, with access to a wide array of consumer goods and services, and also
with access to some very sophisticated financial services. In the poor economy,
the average person is African American or Hispanic, and has acquired a small
quantity of human capital. This person also potentially has access to some of
the same consumer goods and services as do the rich people, but access to the
sophisticated financial services is much more difficult in the poor economy
than in the rich one. Indeed, in the United States, a significant fraction of
the population is ‘unbanked’; that is, has no relationship with conventional
financial intermediaries.

Are there policies governments can enact that will, possibly at little or no cost to
the rich economy, make the poor economy look more like the rich one, perhaps
by starting up a self-propelling engine of growth in the poor economy? Of
course, this is the same question we ask concerning less-developed countries.
What can we do to make Malawi look more like the United States? However, the
problem of making the poor-economy US look more like the rich-economy US
may in fact be much more tractable. If we think of income differences between
the rich and the poor in the US as arising from differences in TFP, in physical
capital, and in human capital, surely those differences are accounted for much
differently than when we account for development differences across countries.

In particular we should expect that TFP differences between the rich US
and poor US would not account for much of the income differences, except
to the extent that financial effects are reflected in TFP. Physical capital must
account for something, but our conjecture is that the key explanation for US
income dispersion is a human-capital gap. But how could this human-capital
gap be narrowed? Quiggin thinks that there are problems in the United States
with access to elite higher education. However, work by Heckman (2011), for
example, suggests that the most efficient way to narrow the human-capital gap
is not by sending more poor people to Harvard, but by investing more public
resources in early-childhood education.
Further, ideas related to the income distribution in the United States and the recent financial crisis that run counter to Quiggin’s are those of Rajan (2010), for example. Rajan argues that concern with an increase in the dispersion in income in the United States led to passage of the Community Reinvestment Act, to huge growth in FNMA (Fannie Mae) and FHLMC (Freddie Mac) — government-sponsored enterprises (GSEs) specialising in mortgage-market financial products — and to an expansion of the activities of the GSEs into activity targeted at low-income mortgage borrowers. These developments in turn, as Rajan argues, contributed directly to the financial crisis.

An alternative hypothesis comes from Acemoglu (2011), who argues that what has been going on at the very top of the US income distribution is critical to understanding the financial crisis. Acemoglu claims that a large increase in wealth in the financial sector was used by the participants in this sector to lobby the federal government for legislative action, and to put pressure on regulators. As a result, innovative financial institutions found themselves in an environment where they could take on large amounts of risk, hide the fact that they were doing so, reap the benefits in good times, and then appeal to the government’s too-big-to-fail instincts to make out like bandits in bad states of the world.

Though Acemoglu seems to think that his ideas and Rajan’s are mutually exclusive, it seems there are elements of truth in both. For example, Fannie Mae and Freddie Mac, which Acemoglu seems to want to absolve, were indeed part of the phenomenon he addresses. These are very large financial institutions which lobbied the federal government intensively so as to retain the advantages that had been carved out for them by the federal government through implicit guarantees, tax advantages, and so on. The too-big-to-fail problem associated with large commercial banks, investment banks, and insurance companies was also a problem for Fannie Mae and Freddie Mac, which have been under government conservatorship since September 2008 and receiving a steady and large flow of federal government bailouts. The GSEs, in their former life, could not only appeal to the instincts of legislators for less regulation, but to their instincts to help the middle class and the poor, giving them a very large base of support.

A key area of neglect in this chapter in Quiggin’s book is the consideration of how some standard economics can be used to address resource-allocation and income-distribution issues associated with the financial crisis. A book review by Robert Solow (Solow 2010) highlights some of the issues nicely. Basic economics, from the time of Adam Smith, tells us that unfettered markets, with self-motivated participants, can act to channel available resources to their best uses, and it is this set of ideas that motivated what Quiggin calls ‘market liberalism’. Economists also know that things can go wrong with unfettered markets. One of
the things that can go wrong is theft. Thieves are indeed self-motivated market participants who are exploiting profit opportunities. However, theft is a pure social loss. The time and effort of thieves is a direct waste, as this time and effort merely transfers goods and services from one person to another, and could be better allocated to productive uses. Further, there is indirect loss, as theft diminishes the profit that can be gained from socially useful economic activity, thus giving us less of it.

What do economists know about theft? Standard economics has been used by economists to explain criminal activity and to evaluate solutions to the social waste problem, at least since the early work of Becker (see Becker 1968, and Becker and Landes 1974). In analysing the financial industry in particular, we would like to know what financial activities are socially useful, and which activities are essentially theft, and how this socially wasteful theft may have contributed to what we know as the Global Financial Crisis. Now, when Ben Bernanke in 2004 spoke of ‘the increased depth and sophistication of financial markets’, clearly he was not thinking about theft, social waste, and the creation of financial instability. He had in mind the depth and sophistication of financial intermediaries in channelling savings efficiently from ultimate borrowers to ultimate lenders, and in shifting the burden of aggregate risks to those most capable of bearing them. But Bernie Madoff was a thief. Large financial institutions that took on excessive aggregate risk and received bailouts at taxpayer expense were also thieves, and their activity acted to concentrate aggregate risk and make the financial system less stable rather than more so.

If we want to analyse the financial crisis, isolate the problems, and propose solutions, applying ideas from the economics of crime will surely help, as this focuses attention on the right set of issues. How do we eliminate waste — theft — while retaining the elements of the financial system that actually produce social value-added? Transparency in financial arrangements is like providing outdoor lighting — it is harder to commit crimes in public view. We need to write appropriate regulations into law and make sure they are enforced. One thing is certain though: the Quiggin solutions of more progressivity in the tax system and more union membership are non-solutions which do not address the problems at hand. If the problem is theft by financial institutions and individuals, it is not efficient to solve the problem by taxing all rich people, only some of whom are thieves, nor is it helpful to unionise the cafeteria workers at Goldman Sachs.

Which economists are the bad guys?

Now, Quiggin’s case in part involves an indictment of a particular group of economists who he associates with the five zombie ideas. This group of
economists is apparently complicit in the conspiracy to make the rich richer by robbing the poor. However, in this respect it seems hard to square Quiggin's narrative with the facts. For example, Lawrence Summers is considered by many as an instrument of the financial community, as he played a key role in the late 1990s in blocking the regulation of the over-the-counter derivatives market. Such derivatives trading was an important contributor to the financial crisis. But Summers is also a famous critic of modern macroeconomics (see, for example, Summers 1986), which Quiggin also detests. Further, he appears to be sympathetic to Old Keynesianism, as is Quiggin. So does Quiggin think Summers is a good guy or a bad guy?

Here is another example. A key early contribution to the literature on the moral hazard problem in banking was Kareken and Wallace (1978), which showed how deposit insurance leads to excessive risk-taking. This idea can be extended in a straightforward way to address too-big-to-fail, which is essentially the same problem. When Kareken and Wallace wrote the book, both were affiliated with the Minneapolis Federal Reserve Bank. In 2004, then-President of the Minneapolis Fed Gary Stern, and Ron Feldman, Senior Vice President of the Minneapolis Fed, published Feldman and Stern (2004), which warned of the potential dangers of the too-big-to-fail doctrine and bank bailouts, well in advance of the financial crisis. Now, the Minneapolis Fed also provided research support for some of the key developments in modern macroeconomics. An early draft of Lucas (1976) was famously left behind at the Minneapolis Fed, and Thomas Sargent, Edward Prescott, and Neil Wallace, among others, who contributed crucial elements to the post-1970 research program in modern macro, were (and, in some cases, are still) on the payroll of the Minneapolis Fed. It seems Quiggin should be sympathetic to the idea that too-big-to-fail is a key source of financial instability and plays a role in making the rich richer, but again he detests modern macroeconomics. So is the Minneapolis Fed a good-guy institution or a bad-guy institution?

A broader point here is that, to the extent that individual economists influence politicians in Washington D.C., the Ivy League, or Ivy-League-educated, interventionist economists, rather than the Midwestern laissez-faire economists, have the bigger voice. Democratic administrations tend to bring on board academics such as Lawrence Summers and Christina Romer, and some of the conservative economists hired by Republican administrations, including Gregory Mankiw and John Taylor, are actually Keynesians when it comes to macro policies.

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4 According to Tom Sargent.
Privatization

This final chapter of *Zombie Economics* represents the closest thing to normal economics in Quiggin’s book. Indeed, his discussion of the standard role of market failures in the determination of what the government should do and what it should not would fit well in any introductory undergraduate economics textbook. Arrow-Debreu, externalities, information economics, and monopoly power, for example, are discussed in a fairly conventional way.

The question which one should ask here is: if normal economics is so useful in telling us what the government should own (what it should not own and, more generally, what the government should take on), why can we not use normal economics to address macroeconomic questions? Presumably any role for the government in smoothing business cycles, for example, should be motivated by the existence of some market failure or failures, just as we would motivate government intervention in other respects by the existence of market failures. That is a basic principle of post-1970 macroeconomics — that is, that macroeconomic ideas should be subject to the same rigorous scrutiny as ideas in any other branch of economics.

While most economists would agree with Quiggin’s general outline of how we should think about the role of government activity, he (taking the same kind of approach as elsewhere in his book) misrepresents a very extreme view as mainstream. He states (p.186):

> When all the spurious arguments for privatization are stripped away, the central tenet of the ideology of privatization is simple. It is the claim that an economy in which all major decisions on investment, employment, and production are left to private firms will outperform a mixed economy where governments play a significant role in such decisions. Provided private firms are free to compete on a ‘level playing field,’ this means they will always have a higher value than they would under public ownership.

There must be an economist whose ideas match what is written in that paragraph, but the identity of that person appears to be a well-kept secret. Not even Milton Friedman thought that the government should play no ‘significant role’ in the economy.
Conclusion

The target audiences for this book appear to be those interested in the financial crisis (almost everyone), lay people with perhaps some specific economic knowledge, and economists in general. People tend to enjoy stories about incompetence and conspiracies, and in those respects Zombie Economics has the ingredients for success. But, as economists, we are looking for something more. First, we would like such a book to represent the economics profession well to lay people. We do not need to be depicted as angels, but the book should be honest. Second, since the book deals explicitly with the financial crisis, we would like it to use relevant economics to make sense of the crisis and construct well-thought-out solutions to the problems the crisis highlights. Third, the book should provide useful guidance for economic researchers.

Unfortunately, Quiggin’s urge to construct a simple narrative, and his political goals, get in the way of sound economics. Quiggin would have us believe that financial economists, macroeconomists, and various other economists enamoured with the theoretical beauty of well-functioning markets, have constructed tools which, if we use them, will lead us astray. In particular, the poor will suffer, and society will be worse off as a result.

Nothing could be further from the truth. The tools of modern finance and macroeconomics are not the instruments of conservative elements in society, serving only to bludgeon the working class. These in fact are the tools of science, and as such they can be used effectively by liberals and conservatives alike to make the world a better place. Misrepresenting the tools of science as the products of some vast conspiracy is as anti-intellectual an activity as the promotion of ‘intelligent design’ as science, or the dismissal of informed scientific views on climate change.

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RETROSPECT
The Australian Conference of Economists at 40: The State It’s In

Alex Millmow

Foundation

It was 1970. It was the Age of Aquarius. The Boeing 747 was introduced into intercontinental service. In Australia, the Federal Treasurer, Les Bury, began to notice that inflation and unemployment were rising simultaneously. And Australian students began studying economics using a localised adaptation of Samuelson’s classic textbook.

Something unusual, too, was stirring at the University of Melbourne. It was there that the first Conference of Australian and New Zealand Economists would take place. The Conference would arise from the feeling that the Australian economics profession ‘had reached a state of development where a regular meeting was needed for technical discussion’. Indeed, the new decade would see a remarkable flowering of the Australian economic talent. Names like Corden, Dixon, Groenewegen, Gregory, Gruen, Harcourt, Hogan, Kemp, Nevile, Pagan, Pincus, Porter and Snape would become famous. Each held a depth of loyalty to the Economic Society. They were also committed to the idea of an annual conference as a form of branding for the profession.

1 University of Ballarat, a.millmow@ballarat.edu.au. The author is the President of the History of Economic Thought Society of Australia. He has attended 15 ACEs, and delivered papers at 10. The author must thank many people who forwarded old Conference brochures or rendered their vivid memories of Conferences. They are: Peter Abelson, Harry Bloch, Harry Clarke, William Coleman, Owen Covick, Max Corden, Dietrich Fausten, Richard Garner, Peter Groenewegen, Geoff Harcourt, John Lodewijks, John Madden, Terry Maidment, John Nevile, Neville Norman, Jonathan Pincus, Michael Potter, Michael Schneider, Bill Schworm, Martin Shanahan, David Spiers, Jackie Tuck, Shann Turnbull, Steven Turnovsky and Ross Williams. The author also thanks the editing of Amanda Maclean.

Most of the archival material necessary to write this paper is held in the University of Melbourne Archives, where the records of the Victorian branch of the Economic Society of Australia are kept. Some further Economic Society matters were found in the Prest papers and the Downing papers kept in the same archive. The adjoining Baillieu Library also has the papers from the fourth to the twenty-second Conference of Economists on microfiche. However, within this set, there are years missing (1989 and 1991) and one or two other years have an incomplete set of the papers given. Jane Oldroyd kindly allowed the author to examine the remaining records of the NSW Branch of the Economic Society.

The paper has been commissioned and supported by the ACT Branch of the Economic Society of Australia, to mark the occasion of the fortieth Australian Conference of Economists. All opinions and errors are the author’s.

The Conference of Economists, as it was to become known, would be similar to its American and British counterparts. Until that time, Australasian economists had met as a group under Section 24 of the Australian and New Zealand Association for the Advancement of Science (ANZAAS). ANZAAS welcomed economists into its fold (some economists gave papers at the 1970 ANZAAS held in Port Moresby), and conducted an annual Giblin Lecture (named after one of the founding fathers of Australian economics). But Robert Scott, the honorary National Secretary of the Economic Society, voiced the sentiment that there was a need for a sharper difference in focus between ACE and ANZAAS, where Australian economists had been giving papers since the 1920s. The latter was an opportunity where economists presented their views to non-economists, while a conference of economists would provide an opportunity for members of the economics profession to talk more technically to one another. In the event, ANZAAS was to cede the field to the new conference: by 1984, the organizer of the fifty-fourth ANZAAS informed the Economic Society that there were very few papers being offered to ANZAAS, and that he was now reliant on invited speakers. As we shall see, the ACE has ironically suffered a similar process.

The inaugural 1970 Conference was born in the wake of the approval by the Central Council of the Economic Society of Australia and New Zealand of a proposal by the Victorian Branch that ‘annual or other regular conferences should be held, separate from and additional to the periodic meetings which take place at the ANZAAS meetings’ (Scott 1990: 47). The Victorian Branch had been running day-long autumn forums on economic policy-related issues since 1958, and the New South Wales Branch had been running winter schools even longer. But this new event would be something grander, showcasing Australian academic economic research. And long before the revolutions in communication technology, this Conference would be an opportunity to network and convey research to other specialists.

Organised by Norman Fisher, the first Australian Conference of Economists (ACE) was held at the University of Melbourne over three days, 27–29 May 1970. Interestingly, three of the figures on the committee organising the Conference were not from academia but the private sector. The Conference comprised a collection of 30 high-quality papers from various Australasian economists including Dean Terrell, John Nevile and Adrian Pagan. Here, econometrics made a strong debut with papers (distributed in advance of the Conference) that reflected the latest econometric techniques from abroad. The ACE proved to be a

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3 During the mid-seventies the key architect of the Economic Society of Australia, Douglas Copland, also had an oration named after him. However, it was discontinued after the Committee of Economic Development of Australia (another institution which Copland had founded) established a Copland Lecture series. Similarly, after the ANZAAS Giblin Lecture had become defunct, the Tasmanian Branch of the Economic Society and the School of Economics and Finance revived it in 1996.

4 A. J. Kaspura to B. Jordan, 22 March 1984, ESA Victorian Branch UMA.
‘resounding success’ with the 290 delegates drawn from universities, businesses and government. Interestingly, the revelry came before the toil; the Conference Dinner, which was booked out with 185 attendees, was on the first night, before any papers were presented. The first after-dinner speaker was the redoubtable Colin Clark.

On the following morning, the inaugural ACE got down to business. The first offering reflected the fashion of the age, a paper on ‘Indicative Planning: Recent New Zealand experience’, given by A. R. Low from the Reserve Bank of New Zealand, that was published in the June issue of the *Australian Economic Review* (things were quicker then). There followed three concurrent sessions on rural economies, macroeconomic analysis and seasonal adjustment. Thus, even from the first Conference economists had to practise what they preach — efficient choice. After lunch came two concurrent sessions: one on the teaching of university economics; the other on land economics. In the first session, Michael Schneider spoke about the new Bachelor of Economics at La Trobe University.

Some of the contributors who graced that first Conference are still alive, and some are still actively researching — names such as Gregory, Harcourt, Ironmonger, Nevile, Norton, Pagan, Sampson, Schneider, Terrell, Tisdell and Wallace. There was a unanimous decision taken at the end of the function to hold another Conference in Sydney the following year. The success of the second ACE, held at the University of Sydney, supported the view that Australian economics had reached a state of development where regular annual meetings were needed for technical discussion.

## Function

In the first decade of the Conferences, there was strict control over what submissions were to be presented.

## Submission quality

Economic Society members deemed from the outset that the Conference should satisfy three criteria. First, that there would be a collection of papers reflecting the interests of Economic Society members; second, that the papers were circulated beforehand; and third, that there be enough time for discussion.

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5 While a New Zealander had launched the proceedings of the inaugural Conference, the New Zealand component of the operation quickly faded and the Conference of Economists was soon an exclusively Australian undertaking. The high cost of Trans-Tasman airfares precluded more New Zealanders from attending the early Conferences.
Invitations for submissions were sent to university economics departments. There would be no guarantee, however, that all submitted papers would be accepted. The organisers of the fourth ACE, held at the ANU, for instance, invited submissions but made it clear that ‘those papers chosen for presentation at the Conference will be selected by the programme subcommittee on the basis of merit, general interest and originality of research content’. At the fifth Conference, held at the University of Queensland, some 120 papers were submitted but only 80 were accepted for presentation. The issue of the ‘variable’ quality of papers was first raised in 1978 by Peter Groenewegen and Frank Collins in their review of the seventh ACE, held at Macquarie University. They concluded that refereeing would be time-consuming, and that it was hard to judge a paper’s suitability by merely reading an abstract. One committee member suggested that a submission fee might eliminate ‘frivolous’ papers. The committee also noted that the Society’s commitment to hold annual Conferences would probably mean a reduction in the quality of subsequent papers.

The matter resurfaced at the tenth ACE, held at the ANU, where more than 100 papers were presented. The organising secretary for the Conference, Lee Martin (of the Industries Assistance Commission), told the Central Council that he had some qualms about the quality of the papers given. He urged that a two-tier format be considered, with some papers being refereed while others were submitted without such scrutiny. He also proposed the commissioning of keynote papers from celebrated speakers (Scott 1990: 61). Max Corden disagreed, but did like the proposal to have specialist speakers, urging the Central Council to consider having six or seven invited speakers give keynote addresses pertaining to the theme of the Conference.

The issue of the quality of papers resurfaced again after the 2003 ACE. There, 181 papers were presented and it seemed to some present that quantity, not quality, was the goal, and there were ‘widely perceived … problems in content and organisation’. Just as sponsors of the Conference were questioning the quality of some of the submissions and the value in underwriting the event, so too were academics asking what they learned by attending. There were concerns expressed not only about the number of papers but also the huge number of concurrent sessions and low attendance per session — surely the dread fear for any presenter. Following disquiet among sponsors and participants alike, these matters were raised at the Central Council by the President of the NSW Branch, Nigel Stapledon. The Central Council acted quickly and it was agreed that from 2004 submitted papers would be subject to a ‘light refereeing’ process to ensure

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6 ‘Programme Committee Final Report and Conference Evaluation of the 7th Conference of Economists’, 3 April 1979, ESA Papers, UMA.
7 Economic Society of Australia files, Victoria Branch, UMA.
8 Minutes of the Central Council of the Economic Society of Australia, 31 March 2004, UMA.
the ongoing reputation of ACE, which was considered a necessary condition for receiving annual funding from several leading institutions. Refereeing on submissions began in earnest in 2004: of some 305 papers submitted, 105 were rejected and 32 withdrawn.

There has been the odd free spirit or maverick whose paper, somehow or other, passed the gatekeepers. One humorous case was that of a Sydney-based data processor who presented two papers at two different Conferences eight years apart but, on both occasions, his contributions left the audience unmoved, perhaps mystified. He took the matter up in a letter to the Council of the NSW Branch of the Economic Society:

> My disappointment dates back to 1978 when I presented a paper to the Seventh Conference of Economists. This paper was obviously on the right track towards solving the problems of inflation and unemployment though it did not get there in certain respects. Yet no senior economist showed any interest or offered any help. By 1986 I had ‘perfected’ the solution and presented it in a paper at the 15th Conference of Economists. Again no senior attendance at the paper, and no response from anyone although several showed some interest and promised to let me have some comments. For a paper that promised a guaranteed solution to inflation and trade cycle unemployment in Australia’s economic predicament, I think that this was disgraceful — in fact a dereliction of duty on part of the Society.

The complainant threatened to take the Economic Society to court unless the President of the NSW Branch distributed the paper to members of the Council. This he subsequently undertook but no comment was forthcoming from Council members.⁹

### Conference themes and controversies

One of the ACE’s main purposes has been to canvass and reflect upon the economic challenges facing the Australian economy. Speakers from all over the globe — and from academic, government, business and not-for-profit sectors of Australia — would discuss their research findings on contemporary policy issues facing Australia and the world, and enunciate new ideas on how better to understand and predict the economic decisions.

The 1970s was a poor decade in terms of macroeconomic performance; and although the 1980s fared little better, some important economic reforms were undertaken, towards which the Conference could play a significant part.

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⁹ A. B. Jacobs to President of the NSW Branch of the ESA, 18 April 1987, NSW Branch Papers.
Economists felt it was their duty to point out imperfections in both scales of economic management. Apart from grappling with the scourge of stagflation, economists exposed the costs of tariff assistance and pushed for greater trade liberalisation for the Australian economy. (Policy advocacy was nothing new for Australian economists: in June 1930 economists at the ANZAAS conference prepared and issued a memorandum enlightening Australians of the dire state of the economy.)

The third ACE, held in Adelaide in 1973 and attracting 60 papers compressed into three days, was book-ended by a Conference Dinner on the Monday evening (with an after-dinner speech by Peter Karmel), and an enjoyable tour of the Barossa Valley on the Friday. Among the plenary offerings were Bruce McFarlane on ‘The Swedish School’; Bob Gregory and Peter Sheehan on ‘The cyclical behaviour of the Australian labour market’; and Peter Groenewegen on ‘The feasibility of a net worth tax’.

The following year, ACE met at the ANU, with 45 papers presented. Alan Fels presented a paper on the Prices Justification Tribunal; David Clark had a paper on economic growth; while Colin Clark spoke on inflation and declining profits. Geoff Harcourt presented a paper on the aftermath of the ‘Cambridge vs. Cambridge’ capital theory controversies.

In 1975, the economists gathered at the University of Queensland, where some 80 papers were presented. Gavin Butler and Frank Stilwell spoke on the teaching of political economy at Sydney University, but did not discuss the controversy of establishing PE courses there. Chris Caton and Chris Higgins gave a paper on the Treasury’s economic modelling; Richard Snape spoke on property rights and rent seeking; Jonathan Pincus and Michael Porter gave a paper on the assignment principle and social welfare; and Yew-Kwang Ng deliberated on the Benthamite social welfare function.

After slipping a year, the sixth ACE took place at Hobart in May 1977, where Peter Dixon and his team gave papers on the Orani model. In August of the following year, Macquarie University hosted its one and only Conference on its campus at Ryde. There were 419 registrants, with just one plenary session per day. The eccentric John Blatt, a professor of mathematics at the UNSW, gave a paper on ‘The Utility of Being Hanged on the Gallows’, a satirical piece on the logical content of contemporary utility theory as used in welfare economics. The organising committee held a special commemorative lecture to honour one of Australia’s distinguished economists, Timothy Coghlan, a pioneer in national income accounting. Appropriately, Colin Clark was invited to give the address.
The key address, though, was that given by the then President of the Economic Society, Max Corden, on ‘Wages, Unemployment and Macroeconomic policy: The Great Debate’. In this, the first presidential address given at the ACE, Corden encapsulated the contentious issue of how to cure unemployment by either real wage restraint or demand stimulation. The Economics Editor of the *AFR*, Paddy McGuinness, believed that the address marked ‘the gradual conversion of the Australian academic economics profession to the proposition that real wages had to fall temporarily if unemployment [was] to be overcome’.  

The eighth ACE, held in 1979 at La Trobe University, attracted a relative blaze of media attention, and not just because Colin Clark and Richard Lipsey gave addresses on the relatively new problem of stagflation. Lipsey reflected on the miserable progress being made to combat it, along with the blight of poor productivity growth and industrial disputation that characterised the seventies. The Conference brochure advertised plenary sessions on economic modelling; the 1979 Federal Budget and state of the economy; Australia and Asia; the Australian manufacturing industry; and two expert surveys on the monetary theory and policy and the balance of payments presented by Michael G. Porter and Jocelyn Horne, respectively. James Perkins spoke on his macro-mix of economic stabilisation, while the Reserve Bank of Australia’s Peter Jonson and Bill Norton reported on their institution’s economic modelling.

The Conference was the venue for a battle royal between two contending econometric models of the Australian economy: the Impact model of Peter Dixon and Alan Powell versus the Institute Multi Purpose (IMP) model of Peter Brain. For all that, Richard Lipsey noted the general disappointment empirical economists felt about the outcome of econometric research. In the Conference Oration, Alan Powell dwelt upon technological change, protection and real wages and put to the sword four fallacies then extant in popular Australian economic debate.

From its inception Conference sessions were not always decorous affairs. They were the testing grounds for young economists; but they also gave short shrift to wrong-headed notions. The first evidence of how heated debates could get was in one session of the third ACE in Adelaide where an official from the Federal Department of Labour giving a paper on the rationale of the newly established Prices Justification Tribunal was met with loud dissent. The Tribunal was described as ‘a toothless tiger and a diversion from the real cause of the

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11 Someone collected the press coverage of the Conference for the ESA. There were about 15 cuttings from the Australian press.
problem’.

At the seventh ACE, at Macquarie University, some were accused of being ‘Kindergarten Keynesians’ after David Clark and Paddy McGuinness earlier dismissed the Sydney PE movement as ‘Kindergarten Marxists’. At the 1979 ACE Conference, two of Australia’s greatest economists, Colin Clark and Trevor Swan, clashed after Clark asserted that public servants who administered import controls were corrupt. Swan stormed out of the lecture theatre.

In the ACE held at Monash in 1986, a ‘packed’ plenary session on ‘Economic policy formulation: Policies and Institutions’ saw Tom Valentine attack the Federal Treasury for its secrecy and incompetence. The Deputy Secretary of the Treasury, Chris Higgins, described Valentine as ‘a monetary expert who still doesn’t know what the monetary base is in Australia and how to measure it.’

The ninth ACE, held at the University of Queensland, was the first to adopt an overarching theme; namely, ‘Economic Challenges of the Eighties’. Some 99 papers were presented over three and a half days, with four concurrent sessions running and each presenter given the luxury of 45 minutes. Bill Norton of the Reserve Bank gave a paper on the erosion of economic stability in Australia and overseas. Max Corden and Peter Dixon unveiled their tax-wage discount plan for Australia, which they hoped would rid the economy of persistent stagflation. John Nevile reflected on the parameters of fiscal policy when fighting inflation, while Ian McDonald revealed his research on wages, trade unions and employment. Colin Clark and Noel Fletcher presented a new econometric model of the Australian economy with Keynesian and monetarist features.

At the following ACE, held at the ANU in August 1981, the 1980s resources boom was a favourite topic among the 113 papers presented. The overriding theme was ‘Economic Policy Issues of the Eighties’. Craig Emerson (the current Federal Minister for Trade) and Peter Lloyd gave a paper on optimal mineral-income taxation. Bruce Chapman and Ken Clements made their debut by giving papers.

In 1982 ACE went, for the first and only time, to Flinders University. The rather dull Conference theme was ‘Policies for Economic and Social Development’, with a few of the 71 papers focusing on structural change, new technologies and the economics of communication and information technology.

In 1983, the focus shifted to Hobart, where the overarching theme was of ‘Economic Policies for Recovery’. To mark the centenary of Keynes’ birth, Groenewegen gave an invited paper on the General Theory. In another evening plenary, Barry Hughes squared off with John Hewson on the Federal Budget.

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15 This is more than can be said for another disputant who, in a different Conference, having had enough of one speaker’s tirade against Keynesianism, could not find an unlocked door to exit from!
Apart from the two evening sessions, the Hobart Conference adopted the strategy of having two plenary sessions per day so that registrants stayed on campus. Bob Gregory and Peter Jonson gave a session on ‘The Thirties and the Eighties’. In another plenary, Jonathan Pincus and Mike Porter spoke on ‘Regulation and the Role of State Enterprise’. This Conference was also noteworthy because it was the first to reach out to business economists and the business community by having a public-policy symposium.

In 1984, the Western Australian Institute of Technology (now Curtin University) hosted the thirteenth ACE under the grand theme of ‘Public Policy for Sustainable Growth’. There was a modest registration of 212 people, 75 per cent of whom came from interstate. This Conference was one of the few occasions when a federal politician, the Minister for Finance, John Dawkins, spoke. There were several papers on stagflation but perhaps the showpiece event was that given by the outgoing Secretary of the Treasury, John Stone, who gave the Shann lecture. It was standing room only for the lecture entitled ‘1929 and all that’.

(A few years later, at the thirtieth ACE, in Perth, another recently retired Treasury Secretary, Ted Evans, gave another Shann address entitled ‘Shift in the focus of government economic policies’.) The UNSW hosted the fourteenth ACE, with 335 full registrants. The Conference theme was pure beige: ‘Economic Management for Business and Government’. There were to be plenary sessions and two semi-plenary sessions which would cover such issues as libertarian economics; political economy; financial deregulation; tax and social welfare; and wages and industrial relations. There was also a symposium held in downtown Sydney on ‘The State of the Profession: Technicians, Theoreticians and Educators — who should rule?’

In 1986, the year of Mr Keating’s ‘banana republic’ speech, Monash University played host to the fifteenth Conference, at its Clayton campus. Despite the campus being 20 kilometres from Melbourne’s centre, and having only college accommodation in the vicinity, it attracted 364 registrants and 103 contributed papers. Fred Gruen, whose presidential address was entitled ‘Our present discontents’, an abridged version of which was later published in the *Australian Financial Review*. Two Treasury officers, including Ken Henry, presented the case for a broad-base consumption tax.

In 1987 it was the turn of the Queensland branch to host the Conference, which was held on the Gold Coast. Some 91 papers were presented.

In Australia’s bicentennial year there was something regal to match the occasion — an ‘Australian Economic Congress’. It was organised by and included the participation of econometricians, agricultural economists, economic historians

and, of course, economists. Of the nearly 1000 registrants, 41 per cent were academics, 35 per cent public servants and 22 per cent business people. Only six per cent of the delegates were from abroad, half of whom were from New Zealand. The Federal Treasurer, Paul Keating, hosted cocktails in the Great Hall of the newly opened Parliament House. The Prime Minister, Bob Hawke, opened the proceedings with an address that spoke of an Australia undergoing a historic period of reconstruction and reform but still to face its biggest challenge — not becoming too dependent on a narrow range of commodity exports. Hawke urged economists to write papers encouraging increased multilateral free trade. Corden spoke about Australian macroeconomic experience, while Groenewegen spoke about 200 years of Australian economics. John Pitchford questioned the direction of current economic policy with his paper ‘Should the current account be a target of macroeconomic policy?’

Michael Stutchbury saw the 1988 congress as prefacing an era of synthesis between Keynesian and neo-classical theories. David Clark, now a journalist with the *AFR*, was more provocative, deriding many of the papers for their irrelevance. He, like McGuinness, lamented the obsession with quantification and methodology and the general neglect of economic history. He proposed that there be more interplay between university economists and the Treasury, Reserve Bank and the media through the secondment of staff.

The nineteenth ACE was held at the UNSW in September 1990. Some 400 delegates attended and heard papers on issues such as the Accord; the trade deficit; oil; the current account deficit; global warming; financial deregulation; economic rationalism; and tax reform. Some of the best papers were later published in a volume (Johnson *et al.* 1991), a project which arose from a concern that economy-related issues being researched within Australian universities were underexposed to the wider community. Ironically, the project never kept to its promise of being an annual publication. Much later, the Economic Society asked those giving papers to submit them for possible inclusion in a special Conference issue of the *Economic Record*, a practice which has been observed

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18 The four societies involved were the Economic Society of Australia, the Econometric Society, the Economic History Society of Australia and New Zealand and the Australian Agricultural Economics Society.
19 J. Macleod to P. Abelson, 8 October 1988, NSW Branch, Economic Society of Australia, UMA.
20 This foreshadowed his 1990 *History of Australian Economic Thought*, co-authored with Bruce MacFarlane.
23 Many of the keynote addresses by leading international scholars who had attended the 1988 Conference were published in the *Economic Record* in 1989.
since the 2002 Conference. The idea of having a Conference volume was again
designed to encourage academics to come to the Conference with a paper of
publishable quality.24

The twenty-third ACE, held in September 1994 at Surfers’ Paradise, convened
under the theme ‘New Directions in Policy; Challenges, Issues and Analysis’. A
highpoint of the Conference Dinner was the the evergreen Heinz Arndt being
made a Distinguished Fellow of the Economic Society.

The following ACE, in Adelaide, was coupled with the first meeting of the
Australian Economics Education Symposium.25 The overall theme of the
Conference concerned Asian economies and the relations between Australia
and Asia. In the plenary sessions, Geoff Harcourt spoke on ‘Keynes after 60
years’, while Bernie Fraser, then the Governor of the RBA, gave a keynote
address entitled ‘Central Bank cooperation in the Asian region’. This Conference
was also notable for hosting the first Australian sessions of the Society for the
Advancement of Socio-Economics (SASE). SASE was essentially a reaction
against rampant market ideology and was linked to Amatai Etzioni. Eventually,
SASE would cluster under the Society for Heterodox Economics, which Peter
Kriesler established in 2001.

The next landmark Conference was perhaps in 1996 when the ANU hosted 450
registrants attending either the Conference or symposium. This Conference was
noteworthy because it was one of the first managed by professional organisers.

The 1997 Conference, in Hobart, adopted the rather banal theme of ‘Policy
Challenges of the New Century’. The following year, at the University of
Sydney, there were plenary sessions on unemployment, social welfare and
income redistribution; tax reform; macroeconomic policy in a global setting;
and labour market reform. Among the key themes at the 1999 Conference, at
Latrobe University, were recovery from the Asian economic crisis; the economics
of education; experimental economics; and the economics of addiction.

Attendance at the thirtieth ACE, held at UWA in September 2001, was affected
by the fallout from the September 11 terrorist atrocities in New York and by the
collapse of Ansett Airlines. Nonetheless, some 275 delegates made it to Nedlands
and discussed such topics as whether Australia was an old or a new economy.26

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24 The first special issue of the Economic Record, entitled ‘Selected Papers from the National Conference of
Economists’, was edited by M. K. Lewis, M. P. Shanahan, R. Bareto and P. D’arcy.
25 The 14 papers presented at the symposium were later published in M. P. Shanahan and J. Cowie (eds)
Australian Economics Education Symposium Proceedings. This group of economists now meet separately under
the banner of the Australian Teaching Economics Conference, and recently held their 15th Annual Conference.
The syllabus of the following ACE, which took place in a hotel at Glenelg Beach in Adelaide in 2002, focused upon the new agenda of the new millennium, namely: the electricity market; the economics of wine; the supply and use of water; fiscal equalisation; and the Japanese economy. The principal keynote speaker was David Card, whose research with Alan Kruger called into question the assumed negative correlation between minimum wages and employment. The accompanying public-policy symposium looked at the economic and business implications of ageing baby-boomers.

The 2003 Conference was hosted by the ACT Branch of the Society in association with the Economic History Society of Australia and New Zealand. The public-policy symposium was on ‘The Role of Economics and Public Policy’ and featured the heads of Treasury, the Department of Prime Minister and Cabinet, the Productivity Commission and the Australian Competition and Consumer Commission.

In an appraisal of the following year’s Conference, at Sydney University, Neville Norman, then President of the Victoria Branch of the Society, approved of the papers and the quality of the presentations, commenting that ‘even theoretical papers in advanced mode had something for the more general economist’. He also noted that some of the ‘superstars’ had made a ‘huge effort’ to encourage younger economists with their comments in the general sessions.27

When in the following year the Tasmanian branch had to withdraw from its hosting duties at short notice, Melbourne stepped into the breach and produced an outstanding Conference. The agenda revolved around topics such as free-trade agreements; unemployment in Australia and other nations; labour market reform; the economic status of indigenous Australians; superannuation; the control of illicit drugs; water pricing; and taxation. These issues, along with climate change and well-being, would dominate subsequent Conferences. In 2007 the plenary sessions in Adelaide focused on the economics of happiness; corruption; skilled labour migration; emissions trading; water pricing; and consumption and taxes of drugs.

Conference Dinner and ancillary activities

Paul Samuelson was fond of saying that the favourite topic of conversation among economists was other economists. The Conference Dinner has proved itself an excellent opportunity for economists to network and gossip. Like the Conference itself, it assumed particular resonance before the revolutions in communication technology. Presentations at the Conference Dinner include a prize for the best article in *The Economic Record*, an award for the best young economist, and a prize for the best young economist.

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27 N. Norman ‘ACE04 was ACE!’ *Ceteris Paribus*, October 2004.
The Australian Conference of Economists at 40: The State It’s In

An economist under 40, as well as an honorary fellow award. Conference Dinners usually featured an eminent after-dinner speaker. Award winners and honour awardees were also expected to make speeches. There is no record, though, of the wise utterances and reflections having ever been recorded. As the report of the first Conference put it: ‘The success of such a conference is not only in terms of number and quality of the papers, or the number of people attending, but by the formal and informal gatherings of people.’

In 1974, the Conference Dinner was made somewhat disagreeable when the after-dinner speaker, an animated Bob Hawke, then President of the ACTU, rebuked his hosts for perpetrating the mathematisation of the discipline. This was not reported in the press. In the 1978 Conference at Macquarie the ‘modest farmer’ and later ‘modest member of Parliament’ Bert Kelly, an ardent free-trader, was the after-dinner speaker. In 1983, the speaker was the Tasmanian Governor, Sir James Plimsoll, who initially trained as an economist. He established the precedent that whenever the ACE was held in Hobart there would be a cocktail reception at Government House.

The 1987 Conference Dinner was noteworthy because it was preceded by the awarding of the first Distinguished Fellow of the Economic Society of Australia. The first recipients were Colin Clark and Trevor Swan; two economists whom many in Australia fondly thought were contenders for the Nobel Prize in economics. Bob Hawke presented the awards before giving the after-dinner speech. Unfortunately, illness prevented Colin Clark from appearing to receive his award but this saved the ceremony from potential embarrassment as he had been Hawke’s somewhat disgruntled supervisor at Oxford.

In 1992 economists were gently mocked in a more humorous vein by the Melbourne lawyer-turned-comedian, Campbell McComas, who was adept at portraying fictional characters to suit the audiences he was entertaining. It was he who referred to gatherings such as the ACE as a ‘recession of economists’. The Adelaide Conference in 1995 featured the Federal Treasurer Peter Costello as after-dinner speaker. John Kerin, the last Federal Treasurer in the Hawke Government, did the honours at the 1991 ACE in Hobart. Astonishingly, in the first decade of the ACE, the last day of proceedings was assigned to giving registrants a tour of the environs. This was optional, of course, with some registrants opting to return home. In those days, Conference

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29 Communication with two Australian economists, 12 April 2011.
30 Bob Hawke has appeared at more ACE functions than any other Australian politician. Peter Yule (2011) who is writing a history of the ANU College of Business and Economics, has uncovered that in 1958 Heinz Arndt, then at the Canberra University College, offered a job to Hawke as a lecturer in industrial relations. Hawke opted for the position of research officer at the ACTU instead. P. Yule ‘Hieser, Hawke and Harsanyi’, *The Margin* 3: 22–3.
registration was done manually, and a whole afternoon might be allocated to this task. At the 1977 ACE in Hobart, a visit to Port Arthur was included in the Conference proceedings. As the Conferences became more professional, however, the contributed papers and plenary sessions were gradually compressed into three days, rather than being week-long affairs. The three-day time period resembled that of the AEA meetings, but the Economic Society of Australia has never contemplated holding proceedings over a weekend in what is still the land of the long weekend.

One area of perennial concern for the Economic Society was how to ensure that the ACE had some forums geared towards ‘downtown’ economists and to the media. Thus, since the 1983 Conference, organisers have included a business symposium (sometimes dubbed a ‘public-policy symposium’) which could be held at the Conference or at a different location. Unlike the actual Conference of economists, the symposium always has a theme which is rigidly enforced. As public-sector and market economists assumed a growing proportion of membership of the Economic Society, it was felt that Conferences needed to be held in more convivial locations than the groves of academe. Sometimes the public symposium ran alongside the contributed-paper session, as happened in the 1992 ACE held at Melbourne University. At the 1986 ACE at Monash there was, for the first time, the attraction of book publishers showing off their wares, as well as a display of ‘micro computer’ software applications.

Venue, timing and pricing

In its first 10 years of life, the ACE Conferences were held exclusively at university campuses, despite the logistical difficulties involved in getting the registrants there and accommodating them in student quarters. Today, universities with front-rank economic departments often host Conferences at convention centres, hotels or at an integrated facility, as opposed to holding them on campus. Off-campus locations can present fewer logistical problems, and offer increased media exposure. For this reason, a number of universities with leading economics departments, including James Cook University, Deakin University, RMIT University, the University of Newcastle, UTS, the University of New England,\(^{31}\) the University of Western Sydney, the University of Wollongong, and the University of South Australia, have never hosted or sponsored an ACE.\(^ {32}\)

The first of the Conferences to be held off campus was hosted by the Queensland branch of the Society in 1987, when ivory towers gave way to the concrete towers of the Gold Coast. The Holiday Inn in Surfers Paradise had a banner

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\(^ {31}\) In August 1974 the Central Council of the Economic Society agreed to hold a future Conference of Economists at UNE following a proposal to that end lodged by Professor Drake. ESA papers, UMA.

\(^ {32}\) Victoria University in Melbourne will host the ACE in 2012.
over its entrance proclaiming ‘Welcome Economists!’ ‘Where else,’ David Clark mischievously asked, ‘would economists be received so charitably?’ He supported the idea, however, of the off-campus Conference. Despite the glitzy locale, the attendance suggested it was a success and the Queensland branch, in league with its universities, would nominate the Gold Coast as their preferred location from there on. However, in 2010 the Central Council of the Economic Society resolved that university campuses would be the preferred location for future Conferences, reflecting a sense that the academic atmosphere of the Conference is diminished in other venues.

The timing of ACE has been problematical. Initially, the Conferences were held in May; then it was decided that August or September was better because there were common breaks from teaching for Australian academics (some Australian universities ran on semesters, others on terms). In 2000 the ACE held on the Gold Coast was switched to July because the Sydney Olympics were scheduled for September. It has been often argued that holding the ACE in the Australian spring made it difficult for Conference organisers to attract guest speakers to come down under because it was term time in Europe and North America. The Central Council recently resolved to switch the ACE to a mid-year date. Another problem with timing was ensuring Australia’s premier economic Conference fell at a time when there were no rival conferences. For instance, while the 1986 ACE was under way at Monash, econometricians were hosting their own conference at the University of Melbourne. In 1981 Max Corden prompted the Economic Society to give the ACE early publicity so to avoid clashes with other conferences. It was argued that the 1980 ACE had been affected by ANZAAS Golden Jubilee Congress, held three months earlier in the same place, where some 30 economics papers were presented.33

In recent years there have been concerns raised about the standard registration fees (see Table 1) for attending the ACE, especially in the sense that they have been outpacing the rate of inflation and, therefore, affecting attendance.

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33 Minutes of the Central Council meeting, 28 August 1981, Economic Society of Australia papers, UMA.
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<td>SA</td>
<td>September 2002</td>
<td>207</td>
<td></td>
<td></td>
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<tr>
<td>32/ACE03</td>
<td>ACT/ANU</td>
<td>ACT</td>
<td>September 2003</td>
<td>181*</td>
<td>$620</td>
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<td>33/ACE04</td>
<td>Sydney</td>
<td>NSW</td>
<td>September 2004</td>
<td>148</td>
<td></td>
<td></td>
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<tr>
<td>34/ACE05</td>
<td>Melbourne</td>
<td>VIC</td>
<td>September 2005</td>
<td>187</td>
<td>$600</td>
<td></td>
</tr>
<tr>
<td>35/ACE06</td>
<td>Curtin</td>
<td>WA</td>
<td>September 2006</td>
<td>153</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36/ACE07</td>
<td>TAS</td>
<td>September 2007</td>
<td>145</td>
<td>$675</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37/ACE08</td>
<td>QLD</td>
<td>September 2008</td>
<td>138</td>
<td>$755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38/ACE09</td>
<td>Adelaide</td>
<td>SA</td>
<td>September 2009</td>
<td>145</td>
<td>$700</td>
<td></td>
</tr>
<tr>
<td>39/ACE10</td>
<td>Macquarie</td>
<td>NSW</td>
<td>September 2010</td>
<td>162</td>
<td>$800</td>
<td></td>
</tr>
<tr>
<td>40/ACE11</td>
<td>ACT/ANU</td>
<td>ACT</td>
<td>July 2011</td>
<td>259</td>
<td>$650</td>
<td></td>
</tr>
</tbody>
</table>

* Includes public symposium papers.

** The figures cited are the standard registration fees for Economic Society members.

Sources: Compiled from a number of ACE brochures and Economic Society Victorian Branch papers, University of Melbourne Archives and Economic Society NSW Branch, courtesy of Jane Oldroyd.

In 1970 fees were a modest $9 but by 2008 they had soared to $755, which meant that, with airfares and accommodation, interstate delegates were looking...
at a figure greater than $1500. The considerable jump in fees between the years 1985 and the mid-1990s presumably reflected the fact that during this period the Conference arrangements were assumed by professional event organizers. Registration fees have risen 800 per cent in real terms since 1970. Since 1996, however, the rise has been more modest. Since the outset, fee discounts have been offered to Society members and to students. Later there was a discount offered to those who registered early. The Conference Dinner has often been cross-subsidised.

**International speakers**

By the late eighties there was an expectation that the Conference hosts would recruit at least three internationally renowned speakers. In the first decade of Conferences, however, there were relatively few international drawcards (David Laidler 1977, Richard Lipsey 1979, William Poole 1980). From 1980 onwards, organisers began to seek major international economists as keynote speakers. In 1985 Dietrich Fausten, convenor of the ACE at Monash University, proposed that the state branch hosting the Conference bring out eminent scholars to the Conference and be responsible for the costs. Even with the power of the internet and virtual technologies, nothing beats having speakers present in the flesh. (The ESA-organised tour of Joe Stiglitz in 2010 surely confirmed this.) It was believed that the presence of international speakers would generate interest. While there were problems attracting international speakers, they did come. The honorarium for international speakers in 1988 was, on occasion, $3000; 10 years later, it could be as high as $10 000. Yet some international speakers have continued to donate their time gratis. The 1988 Australian Economic Congress commanded an international guest list of 14 eminent scholars.

Table 2 lists some of the international speakers invited to address ACE.

**Table 2: Invited International Speakers at the Australian Conference of Economists, 1970–2010**

<table>
<thead>
<tr>
<th>Conference Year</th>
<th>Host University</th>
<th>Invited International Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>La Trobe</td>
<td>Christopher Pissarides, John Taylor, Steven Turnovsky, Tun Thin</td>
</tr>
<tr>
<td>1981</td>
<td>ANU</td>
<td>Robert Eisner,</td>
</tr>
<tr>
<td>1982</td>
<td>Flinders</td>
<td>Michael Artis</td>
</tr>
<tr>
<td>1984</td>
<td>WAIT/Curtin</td>
<td>Mancur Olsen Jr., Paul Heyne</td>
</tr>
<tr>
<td>1986</td>
<td>Monash</td>
<td>Al Harberger, Avinash Dixit, Anne Kruegar, Rod Dean</td>
</tr>
<tr>
<td>1987</td>
<td>Surfers</td>
<td>W. Isard, D. Smyth</td>
</tr>
</tbody>
</table>

34 Minutes of Victorian branch of the ESA, July 1985, UMA.
### Conference Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Host University</th>
<th>Invited International Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>UNSW</td>
<td>Ed Nell, Wilfred Beckerman, Shaun Hargraves Heap</td>
</tr>
<tr>
<td>1992</td>
<td>Melbourne</td>
<td>Charles Goodhart</td>
</tr>
<tr>
<td>1995</td>
<td>Adelaide</td>
<td>John Siegfried, William Becker, Jim O'Neil</td>
</tr>
<tr>
<td>1997</td>
<td>UTAS</td>
<td>William Baumol</td>
</tr>
<tr>
<td>1998</td>
<td>Sydney</td>
<td>Ken Arrow, Anne Kruegar, Jean-Jacques Laffont</td>
</tr>
<tr>
<td>1999</td>
<td>La Trobe</td>
<td>Chris Pissarides, John Taylor, Stephen Turnovsky, David Greenaway</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td>Alan Kreuger, Robert Gordon, Gary Becker, Stan Metcalfe, Peter Sinclair, Art Goldsmith Chris Snyder, Jacob Frenkel</td>
</tr>
<tr>
<td>2002</td>
<td>Adelaide</td>
<td>David Card, E. Barbier, Bob Nobay, Albert Breton</td>
</tr>
<tr>
<td>2003</td>
<td>ACT/ ANU</td>
<td>Paul Ormerod, Richard Freeman, Deidre McCloskey, Larry Meyer, Peter Neary, Jeffrey Williamson, Stanley Fischer</td>
</tr>
<tr>
<td>2004</td>
<td>Sydney</td>
<td>Robert Hall, Partha Dasgupta, Robert Frank, Paul Milgrom</td>
</tr>
<tr>
<td>2005</td>
<td>Melbourne</td>
<td>James Galbraith, Olivier Blanchard, John Sutton, James Robinson</td>
</tr>
<tr>
<td>2006</td>
<td>Curtin</td>
<td>Arjo Klamer, George Mailath, Mark Killingsworth</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td>Anne Krueger, Richard Blundell, Dilip Mookherjee</td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td>Adonis Yatchen, Charles Perrings, Kathryn Dominguez</td>
</tr>
<tr>
<td>2009</td>
<td>Adelaide</td>
<td>Edward Lazear, Lorraine Dearden, Lin Zhou, Robert Shimer, Lee Ohanian, Brian Copeland, Orley Ashenfelter</td>
</tr>
<tr>
<td>2010</td>
<td>Macquarie</td>
<td>Peter A. Diamond, Michael Keane, Carol Walsh and Linda Tesar</td>
</tr>
<tr>
<td>2011</td>
<td>ANU</td>
<td>Hal Varian, Glenn R. Hubbard, Larry Iannaccone, Stephen D. Williamson, Peter Klenow</td>
</tr>
</tbody>
</table>

### Media

The Australian media have taken a somewhat schizoid view of the ACE. At times they would provide good press coverage, while at others they simply decided not to show up. One of the reasons for this in the early years was perhaps best summed up by Paddy McGuinness in 1979. After attending the La Trobe Conference that year, an event which had been advertised in the *AFR*, McGuinness noted that contemporary concerns — inflation, unemployment and energy policy — were not major topics of interest amongst presenters and that Conference proceedings were so theoretically obscure as to make them useless for the purposes of contemporary policy debate. There was a delay, he
suggested, in academic economists turning to these concerns. His colleague David Clark took an even more scathing attitude. ‘Economic conferences’, he opined, ‘are usually just curriculum vitae padding opportunities for academics and an excuse to catch up on the latest gossip at taxpayer expense. This is why private sector economists stay away from them in droves.’ However, the Conferences of the 1980s made for good copy, as McGuinness, Clark and Michael Stutchbury regularly attended the ACE. The 1986 ACE, for instance, was featured in five newspaper articles. Stutchbury reported on some of the more interesting contributions, remarking that for all the output, ‘None of the competing economic paradigms offer a solution to Australia’s balance of payments crisis.’ Clark also reported on Ian Castles’ paper entitled ‘Fact and fantasies about Bureaucracy’. The paper argued against Donald Horne and Hugh Stretton’s criticisms of the economic policy departments, particularly Treasury. In contrast, there was no newspaper coverage of the 1991 or 1992 ACE, and it has been somewhat sporadic ever since.

Organisation and process

Organisationally, the Central Council of the Economic Society adopted the principle that each of the seven Australian branches take it in turn to host the Conference, and be responsible for all administrative and financial arrangements. In this scheme of things, Central Council would advance a sum to the state branch organising the Conference and subsequently share in any profit. In 1971, for instance, the NSW Branch repaid its loan of $200 to the Central Council, along with the sum of $175 as its share of the profit. The very first Conference made a profit of $100. Since then the ACE has always been profitable and branches have been reluctant to pass up an opportunity of a septennial windfall. Up until 2003, an annual appointment system operated before an amenable rotation system was implemented under the auspices of Neville Norman. After 40 Conferences, as Table 1 shows, the share going to all seven branches is almost uniform, with NSW hosting seven and the rest hosting six apiece, except for the Tasmanian and Western Australian branches which have held five and four Conferences respectively.

36 This might have been the inspiration for the statement by an unnamed ANU professor against Clark (which Clark himself caught wind of) ‘That Clark has done more to harm the public standing of academic economists than anyone else in Australian history’; cited from ‘Wanted: ambidextrous economists’, AFR, 30 September 1991.
40 H. Bell, Circular to Branches and Central Council, no.1 1972, ESA Papers, UMA.
While the very first Conference required only six months to prepare, Conferences today usually need 18 months to arrange speakers, venues and logistics. The Central Council has established a convention where Conference organisers could draw upon the wisdom and experience of the immediate past Conference.\textsuperscript{41} Additionally, a report on the preceding year’s Conference has been presented for the purview of the Central Council.

Strangely, despite the outstanding success of the first few Conferences, there were no Conferences in 1972 or 1976. What happened in 1972 is unknown, but the regular ANZAAS meeting went ahead, with some economists presenting. There had been a last-minute attempt in November 1975 to commission a Conference for 1976 but a lack of time and unfavourable finances meant that the W.A. Branch could not deliver.\textsuperscript{42} There was, however, an ANZAAS Conference, with the economics section being arranged by Gerald Firth from the University of Tasmania.

**Does life really begin at 40 for the ACE?**

Until the 1980s the ACE was the grand premier show in town as far as Australian economists were concerned. In 1972 there were concerns expressed over whether the Australian economics profession could sustain a high-quality conference at yearly intervals. However, it was pointed out that in 1971 the profession had been able to hold three conferences of high quality: ANZAAS in May; the Monash econometrics conference in early August; and the second ACE later that month.\textsuperscript{43} That busy year, however, pales into insignificance compared with today. Now ACE faces a plurality of specialist conferences and workshops which must have some adverse impact on numbers attending its Conference. A crowding-out phenomenon is at play. Before ACE40 began, in Australia in 2011 there had already been a host of specialist conferences/workshops, both domestic and international, for local economists to attend. This is a perfectly natural development and reflects well on the depth and plurality of the Australian economics profession.

However these developments pose danger to the status of the ACE. The econometricians now have their own conference, and some feel that this development has lowered the technical pedigree of the ACE. Some of these other conferences are regarded by practitioners as a must-attend, and young

\textsuperscript{41} In 1976 the former Secretary of the NSW Branch and convenor of the second ACE, Frank Collins, produced a handbook on the original intent of the Conference. Neville Norman would prepare another operational manual in 2007, outlining procedural matters.

\textsuperscript{42} B. Parmenter to R. H. Scott, 17 November 1975, ESA Archives, UMA.

\textsuperscript{43} H. Bell Circular to Branches and Central Council No, 1, 1972, ESA Papers UMA.
and aspiring scholars swear to the benefits of attending them — in particular, the annual Ph.D Conference in Economics and Business held alternately at UWA or the ANU. Most of these specialist conferences have a more rigorous referring process than the ACE, often with single, rather than concurrent, sessions. Consequently, those giving papers there can expect to have both high-quality feedback and networking opportunities. This counts for something when the race is on to publish in high-ranking journals. It also counts if academics have limited funding and elect to go to the conference which offers the greatest value to their individual areas of research. Another dynamic is that the faculty at leading economic departments within Australian universities are increasingly internationalised, and thus have no particular interest in or loyalty to the Economic Society (Millmow 2010).

The Excellence in Research Australia process and the shadow system that now follows in its wake can also be expected to exert some detrimental influence upon conference selection. Conference funding in the better-ranked economic departments will be channelled to high-ranking publishers, who may well prefer specialist conferences over ACE. There is additionally the strategy of concentrating effort on particular ‘research codes’ and this, in turn, will influence the sort of papers that are presented in future. There may be a narrowing of fields of research than are usually available at ACE, or the fact that the papers being presented are likely to be geared towards publication in high-ranking journals will mean that while the technical quality will be high they will be less policy-orientated and possibly armed with North American data. The business economists have, for the most part, gone off to their own forecasting conferences and, interestingly, these tend to attract the officials from both the RBA and the Treasury to address them — again this is quite understandable.

Nevertheless, the power of instantaneous communication and blogging has not reduced the value and attraction of an interactive conference, of seeing presentations by leading scholars in the flesh.

In a paper to the Central Council of the ESA, Jonathan Pincus suggested that the ACE would be given even greater international profile if the date were changed to mid year so that more international scholars from the northern hemisphere could attend. While this is now in place, the fact remains that a trip from Europe is, logistically, still an ordeal. Moreover, holding a Conference in mid winter might deter attendance. Pincus, however, went further, wanting to imitate the Allied Social Sciences Association (ASSA) in the United States by encouraging all economists, whatever their specialisation, to meet under the one roof, and suggesting this occur for 2015. However, the different field societies

might reject the idea of a grand conference because each field conference is strongly linked with its own unique identity. A compromise, of course, would be to expand the size of the ACE by having dedicated sessions for the history of economic thought, economic history, agricultural and resource economics, health economics, and so on. This has occasionally been done but no society would be prepared to throw in their lot entirely with the ACE. Moreover, Pincus reminds us that a somewhat similar body to ASSA in Australia was ANZAAS, which has become moribund, with the last congress taking place in 1997. Could its demise portend the future of ACE? Pincus is probably right in lamenting that the federal structure of the Economic Society, with each state entitled to conduct a Conference every sixth or seventh year, impairs the Society from running successful and grander-scale Conferences. It is apparent, for instance, that Conferences on the eastern seaboard tend to be better attended than those held elsewhere.

ACE will survive, not least because of its use of conference managers, but also on account of the policy of continuous auditing and long lead times in planning future Conferences. It will also prosper because despite the attraction of more specialist conferences the ACE, like the Australian economics profession, still punches above its weight.

References


Reviewed by Selwyn Cornish

W. K. (Sir Keith) Hancock, a founder of the Australian National University, is sometimes regarded as Australia’s pre-eminent historian. His work, however, is not as well known as that of some other Australian historians, among them Manning Clark and Geoffrey Blainey. And while he produced a number of autobiographical works, important details of his life remained obscure. This new biography by Jim Davidson, comprehensively researched and beautifully written, should help to make Hancock’s life and work better known, though the scale of the book, and the academic nature of its contents, will doubtless limit its readership. Even so, it deserves to be widely read. Australians are generally reluctant to praise tall poppies, preferring instead to cut them down. But as we mature as a nation our failure to accord due recognition to those who have achieved excellence in intellectual pursuits might change. This book will assist us, for Hancock deserves our admiration for his outstanding historical research, which Davidson discusses at great length and superbly well.

Hancock was born in Melbourne in 1898 and died in Canberra in 1988. The son of an Anglican clergyman, he spent his early years in Bairnsdale, Victoria. He attended Melbourne Grammar and later the University of Melbourne, where he was a resident at Trinity College. Majoring in history, he graduated with first-class honours. Upon the completion of his degree he accepted a temporary lectureship at the University of Western Australia, a position offered to him by Edward Shann, the university’s professor of history and economics. Shann urged him to apply for a Rhodes scholarship, which he did, and he was successful. Hancock then went to Balliol College, Oxford, where he was influenced by the Master of Balliol, the redoubtable A. L. Smith, and by the historians Humphrey Sumner and Kenneth Bell. Taking first-class honours in modern history, he was immediately elected to a Prize Fellowship at All Souls College, the first Australian to become a Fellow of All Souls, one of the most prestigious academic appointments in the world. After a visit to Tuscany he became interested in nineteenth-century Italian political history and wrote his first book on *Ricasoli*.

1 Research School of Economics, College of Business and Economics, The Australian National University; Selwyn.Cornish@anu.edu.au.
and the Risorgimento in Tuscany (1926). After marrying an Australian, Hancock returned to Australia to take up the chair of modern history at the University of Adelaide. Aged 24, he was the youngest professor in the British Commonwealth.

In Adelaide, Hancock wrote his second book, and perhaps his most enduring work, a history of Australia since the foundation of European settlement. It remains, as Davidson rightly adjudges, ‘one of the classic accounts of this country’. More recently, the book, entitled Australia (1930), has acquired something of a cult status, especially among those who are opposed to government intervention in the economy. In it, Hancock was critical of key elements of the ‘Australian settlement’, the collection of economic policies that were adopted in large measure after the devastating depression of the 1890s. They included tariff protection, compulsory arbitration and state socialism. These policies, Hancock contended, had restricted competition, inhibited productivity growth, and would lead ultimately to stagnation. He preferred the more open society that had emerged in Australia during the nineteenth century, dependent as it was on an economy devoted to international trade, free markets and private ownership. This form of economy had transformed Australia from a penal settlement to a nation possessing the highest standards of living in the world, a remarkable feat that had taken scarcely a century to achieve. Hancock’s pursuit of this central theme owed much to his earlier association with Shann, whose Economic History of Australia, published in the same year as Hancock’s book, followed a similar theme. Shann had disparaged policies underpinning what he called a ‘hermit economy’; Hancock shared the same disdain for excessive regulation. It was also Shann, it seems, who opened Hancock’s eyes to the critical importance of economic history for the comprehension of historical processes.

After tiring of Adelaide, and disappointed with the limited engagement by Australians in intellectual discourse, Hancock returned to England, where he was appointed to the chair of modern history at the University of Birmingham. There he was invited to undertake a survey of political, economic and social affairs in the British Commonwealth. This work entailed extensive international travel, especially to such trouble spots as Ireland, Palestine and South Africa. It resulted in the Survey of British Commonwealth Affairs, a massive work published in two volumes between 1937 and 1942 (volume 2 was so extensive that it had to be published in two parts). This acclaimed work led to his recognition as the world’s leading authority on the history of the British Empire and Commonwealth. It led as well, in 1941, to his appointment as General Editor of the civilian volumes of the Official History of Britain in the Second World War. From an office in Whitehall he commissioned and edited 27 of the 28 volumes in the series and, with Margaret Gowing, he wrote the volume on the British economy during the war. In 1944 he was appointed Chichele Professor of Economic History in the University of Oxford.
When the war ended, Hancock was invited to become one of the four so-called maestros appointed to advise the Interim Council of the newly established ANU. Hancock was assigned responsibility for planning the creation of the Research School of Social Sciences (RSSS), one of the original four research schools. It was expected that he would become the Foundation Director of RSSS, but he initially declined the offer, finally taking it up in 1957, when he was also appointed inaugural Professor of History. His reluctance to join the ANU at its foundation arose in part because of problems he encountered when attempting to recruit staff of the quality he thought should occupy senior academic positions in RSSS (this reviewer has written about Hancock’s difficulties with the appointment of the first professor of economics at ANU). There were also disagreements with the Interim Council, among them its rejection of Hancock’s idea that the RSSS and the Research School of Pacific Studies should have the same director (namely Hancock), at least in the university’s formative years.

Instead of joining the ANU in the late 1940s, Hancock became the director of the new Institute of Commonwealth Studies, and Professor of British Commonwealth Affairs, in the University of London. There he wrote and edited historical works on the British Commonwealth. In 1954 he was invited by the governor of Uganda, Sir Andrew Cohen, to conduct a mission to resolve a constitutional dispute between the governor and the Kingdom of Buganda. The mission was a success, with Hancock brokering an agreement that was acceptable to the parties involved. Before he embarked on the mission, he had accepted an invitation by Cambridge University Press to write a major biography of the South African Prime Minister and statesman, Field Marshall Jan Christian Smuts. After completing the biography, and following his retirement from the chair of history at ANU, Hancock wrote a pioneering work of regional and environmental history, *Discovering Monaro* (1972). In his retirement he also wrote several books of essays on various topics, historical and political, as well as additional autobiographical pieces. Before his retirement, he had taken the leading role in the creation of the *Australian Dictionary of Biography*, one of the great national publishing enterprises arising from the ANU, and was one of the founders of the Academy of the Humanities. In his later years, he became an environmentalist and a peace activist, opposing the building of the telecommunications tower on Black Mountain in Canberra, and writing and speaking against the spread and use of nuclear power and weapons.

Davidson devotes a separate chapter to Hancock’s difficult marriage to Theaden, his first wife. They had met at Melbourne University in 1918 when they were both studying history; they graduated in the same honours class. The marriage lasted for 40 years, ending with Theaden’s death from cancer after a long illness. Both wanted to have children but they remained childless, their hopes finally
being dashed when Theaden was advised to have a hysterectomy. Hancock’s career dominated the marriage. He dedicated himself to his work and Theaden felt neglected. She began to paint, and was moderately successful. Within hours of her death, Hancock destroyed all their letters to each other, and he quickly remarried his research assistant. This correspondence, had it survived, would have opened up Hancock’s private life to greater scrutiny; as it is, we know little about it.

From the available biographical material Davidson distils a number of central themes. One is the difficulty Hancock experienced when coming to grips with the fact that he was both an Australian and an historian, what Davidson refers to as Hancock’s ‘attachment to Australia and advancement in England’. Hancock himself confessed that he was ‘in love with two soils’. He called his major work in autobiography *Country and Calling*, which illuminates this ambiguity. Hancock was an Australian historian but, unlike Clark and Blainey, he never wanted to be regarded simply as an historian of Australia. His writing embraced a number of countries, and he worked for most of his professional life outside Australia. Davidson seeks to capture the essence of this ambiguity, between love of country and desire for professional recognition overseas, in the phrase, *A Three-Cornered Life*, which he adopts as the title of his book: England, Australia and Italy (later replaced by South Africa) were the three corners of Hancock’s world. He frequently referred to himself as an ‘independent Australian Briton’, a phrase that had been coined by Alfred Deakin, Australia’s second prime minister.

Attention is also drawn to Hancock’s upbringing in a strong Christian household and the influence of his father in the moulding of his ethical and moral outlook. Hancock’s ‘Christian-based liberal humanism’ is mentioned several times in the book. ‘Liberalism’, Davidson contends, ‘was the projection of such values into the public arena; it had become predicated on an applied Christian ethic’. According to Davidson, ‘Hancock provides a text-book stance of how old-fashioned liberalism was predicated on traditional Christian values’. A senior Oxford historian (Reginald Coupland) wrote of Hancock that ‘Any book of his is — as he puts it — a confession of faith’. An ANU colleague (Robin Gollan) wrote that Hancock was ‘driven by a moral impulse which found expression in his work as a rare mixture of science and art’.

Davidson’s coverage of Hancock’s work, and his recording of the major events in Hancock’s life, is generally done well. And yet, Hancock remains an enigma. His autobiographical writing, like Davidson’s biography, rehearsed aspects of his work and career. But not much was revealed about his inner thoughts and motivations. The same can be said of Davidson’s biography. We are told that Hancock was ambitious: one his colleagues at All Souls (A. L. Rowse) said about Hancock that ‘If a door opened before him, he could not but go through
it’. We know that he was a brilliant historian: an Australian historian (Stuart MacIntyre) has said that ‘If there were a Nobel Prize for history, Hancock would surely have won it’. He was knighted twice and received from the Republic of Italy the Order of Merit; nine universities conferred honorary doctorates upon him. He was strongly committed to his academic work: his impressive list of published work is testimony to that. As to his private thoughts and feelings, they remain a mystery.

Reference

The fundamental shortcoming of this book is that it is based upon an idea that is simply too good. It is almost inevitable that one is disappointed in the execution. As a graduate student, I was immensely impressed by those professors who could summarise a complicated economic argument with a picture or diagram. To this day, although I find graphs and pictures extremely powerful, I feel much more comfortable expressing my economic intuition algebraically than geometrically. For these reasons, I was very attracted to this book.

I suppose that teaching here at the Australian National University has evolved much like teaching in other places. Although we formally require our entering students to have achieved certain competencies in mathematics, we have little faith in their actually having acquired them and thus eschew the use of algebra in our early-year economics courses. Instead, we opt for graphical analysis, which is supposed to be more intuitive and less demanding on the feeble skills of our students. Pedagogically, I was thus also interested in this book. I do worry, though, that our students’ geometry skills might leave them unable to appreciate or fully understand many of the figures that we use.

There are reasons not to like pictures and some of them are pointed out in this book. A picture may be worth a thousand words, but it can distort the truth as well. One of my favourite series of Calvin and Hobbes comic strips has Calvin taking pictures of himself in a cleaned-up room, dressed in a suit and tie, playing baseball, and leading a ‘normal’ childhood. He explains to Hobbes that a fake photographic record will be useful if he ever decides to be a public figure later in life.

The introduction of this book discusses how algebra is both more precise and more general (p.8) and provides an example (the Law of Diminishing Returns) where the standard textbook exposition in the 1950s was based upon a geometric proof which was, in fact, incorrect. Thus, in economics at least, geometry is more frequently used as an expository device rather than a means of proving results.

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1 The Australian National University; robert.breunig@anu.edu.au. Richard Cornes contributed several ideas to this review.
Overall, the book covers a tremendous amount of ground, with 58 separate chapters, each one treating a figure in economics. Contrary to the book’s title, many of these figures would hardly qualify as ‘famous’. Most of the figures that one might think of are included in the book. One omission is the Kolm triangle, used to describe the allocation between private and public goods in a two-person game. Also, contrary to the book’s claim, the authors don’t always really seem to be ‘experts’ with respect to the particular figure being discussed. Over half of the contributors are Australian or Australia-based. It seems hard to believe that expertise in graphical analysis of economics is so concentrated in the antipodes; however, for the Australian reader the local feel of the book is not necessarily unpleasant.

Chapter quality is very uneven. Perhaps that is only to be expected in such a broad work. I most enjoyed those chapters which spent a fair bit of time on the history and development of the figure rather than those which spent a lot of time trying to describe the economics of the figure and its various permutations. Some of the figures were so complicated that they demanded pages and pages of explanation just to understand them. I offer the chapter on ‘The theory of the second best and third best’ as one that is impenetrable. This figure muddies the waters more than it clarifies them. Reading the book did bring me to the conclusion that simple figures are illuminating but really complicated figures, with lots of lines and labels and vertices, are only interesting as abstract art.

The introduction to the book may be my favourite part. The overview of the role of figures, the anecdotes provided, and the chronology of Appendix 0.1 are all fascinating. The chapters stand alone. Whether one likes any particular chapter or not probably depends a great deal upon taste. It’s a bit like reading the newspaper; the more one knows about a story, the less likely one is to be satisfied that it has been treated thoroughly and correctly. My favourite chapters are ‘Indifference curves and isoquants’, ‘Homothetic production and utility functions’, ‘Backward-bending labour supply curves’, ‘Reswitching and reversing in capital theory’, ‘The Edgeworth box’, ‘The utility-possibility frontier’, ‘Pareto efficiency’, ‘The UV or Beveridge Curve’, and ‘The IS-LM diagram’.

It’s fun looking through the references. Joan Robinson appears 18 times across several different chapters: amazing for someone who once wrote a textbook, *Exercises in Economic Analysis*, with no figures, only providing written instructions on how to draw them. Lerner was involved in the development and popularizing of many figures. Unsurprisingly, Hicks and Samuelson pop up a lot, too.

The book does abound with interesting trivia, making it a good fireside flip-through. I learned that the convention of putting quantity on the horizontal axis
came from the German economists Rau and Mangold. Cournot, and other French economists following him, correctly were putting the dependent variable on the vertical axis. Marshall followed the Germans, undoubtedly another important consequence of the never-ending animosities from the Hundred Years’ War. Joan Robinson was the first to draw backward-bending supply curves; I would never have guessed that.

The book seems like such a good idea. But I expected something a little bit more interesting than this. Nonetheless, the book is good fun and there is a lot here to enjoy, and plenty of references for those who wish to explore any particular diagram in more depth.