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Looking back on microeconomic reform: a skeptical viewpoint

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Abstract

Microeconomic reform dominated Australian economic policy from the early 1980s until the end of the 20th century. Despite strong claims of success, focusing on the economic expansion since 1992, and rapid productivity growth between 1993-94 and 1998-99, evidence of improvements in the performance of the economy as a whole is weak and inconclusive. For an adequate evaluation of the microeconomic reform period, it is necessary to distinguish several different phases of reform and to evaluate reforms on a case-by-case basis.

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Looking back on microeconomic reform: a skeptical viewpoint

The era of microeconomic reform in Australia began with a big bang – the floating of the dollar in 1983. It ended with another big bang – the package of tax reforms centred on the Goods and Services Tax (GST) which came into force in July 2000. The period between 1983 and 2000, roughly corresponding to the 1980s and 1990s, was one of systematic, though gradual, microeconomic reform affecting nearly all sectors of the economy.

There were isolated instances of microeconomic reform before the 1980s, notably including the Whitlam government's 25 per cent tariff cut (the primary motive here was macroeconomic, but the choice of instrument reflected microeconomic concerns). Similarly, the consequences of some microeconomic reforms initiated in the 1990s, such as National Competition Policy are still being worked through, and a few items on the microeconomic reform agenda, such as the full privatisation of Telstra, are still being debated. Moreover, movement in the direction of microeconomic reform was never uniform. The Prices and Incomes Accord constituted a major change in the way Australian labour markets operated, but was not generally considered as an instance of microeconomic reform.

Despite these qualifications, the 1980s and 1990s can reasonably be characterised as the era of microeconomic reform in Australia. Throughout this period, there was a steady movement in the direction of microeconomic reform, backed by a bipartisan, and almost monolithic, intellectual consensus, at least among policy elites. No such consensus existed before the 1980s.

Most economic evaluations of microeconomic reform in Australia and elsewhere, particularly those from official sources, have been favorable. Parham (2002a) is a good

recent example. In the light of this favorable evaluation, there have been calls for a renewed commitment to microeconomic reform (Dawkins and Kelly 2003). On the other hand, it is widely recognised that the Australian public is suffering from ‘reform fatigue’ and evinces little support for further microeconomic reform. In view of the fact that the public has had two decades to evaluate the effects of microeconomic reform, these observations pose a problem. Either the official estimates of the benefits of microeconomic reform are overoptimistic or members of the public have consistently misperceived the effects of reform on their welfare.

The object of this paper is to present a skeptical evaluation of microeconomic reform in Australia, without an initial presumption that reform is either beneficial or harmful. The paper is organised as follows. Definitions of the concept of ‘microeconomic reform’ are discussed and the policy agenda associated with this term is described. Several phases of microeconomic reform are distinguished. The program of microeconomic reform is then evaluated on a number of criteria, including impacts on macroeconomic performance, allocative efficiency, productivity, work intensity and consumer choice. Finally, some concluding comments are offered.

Defining microeconomic reform

Although microeconomic reform is notoriously difficult to define, the central idea is that policy should be directed to achieve improvements in economic efficiency, either by removing distortions in individual sectors of the economy or by reforming economy-wide policies such as tax policy and competition policy with an emphasis on economic efficiency (rather than other goals such as equity or employment growth).

Considering the term ‘microeconomic reform’ in more detail, the ‘microeconomic’ element is significant in two ways. First, the shift to a focus on microeconomic reform represented an acknowledgement that macroeconomic policies, and particularly Keynesian demand management, were no longer as effective as they had appeared to be during the

long postwar boom. Microeconomic reform was seen by some of its advocates as a way of removing structural barriers to the effectiveness of macroeconomic policy. Other advocates of microeconomic reform, influenced by new classical models, saw little role for macroeconomic policy, and argued that the main task of economic reform was to remove the distortions created by previous interventionist policies.

The term 'reform' literally means 'change of form'. However, in its positive uses, it embodies two additional connotations. The first is 'change for the better'. The second is the idea of change that is, in some sense, historically inevitable. Both of these elements were present in discussions of microeconomic reform particularly in the wake of the collapse of Communism, and were embodied in the slogan attributed (perhaps apocryphally) to Margaret Thatcher: 'There is No Alternative'. A more sophisticated version of the same claim was made by Fukuyama (1992). Critics of microeconomic reform, who had often been supporters of interventionist economic policies that were also described as reforms at the time they were implemented, initially resisted the use of the term 'reform' to describe policies they regarded as producing changes for the worse. However, the term 'microeconomic reform' is now used in much the same way by supporters, opponents and sceptics alike.

Microeconomic reform may be defined as *a systematic program of reform along market-oriented lines and focusing on microeconomic issues rather than macroeconomic policy.*

In the light of this discussion, the statement made above that 'the Prices and Incomes Accord ... is not typically considered as an instance of microeconomic reform' may be clarified. The Accord does not meet the definition of microeconomic reform partly because it was motivated by macroeconomic concerns and partly because it sought to produce outcomes different from those that would be generated by market forces.

More generally, on this definition, there was no systematic commitment to microeconomic reform before 1983, despite some policy initiatives consistent with the ideas

underlying microeconomic reform. Similarly, Australian state and national governments are no longer pursuing systematic programs of microeconomic reform.

International experience

Although the specific term ‘microeconomic reform’ is most popular in Australia, closely related policies were pursued throughout much of the world in the 1980s and 1990s, commonly described in such terms as ‘structural reform’. The policies adopted in Australia were largely modelled on those of the Thatcher government in the United Kingdom, which were also emulated in New Zealand and Canada. Radical market-oriented reforms were adopted in Eastern Europe and Russia after the collapse of communism, accelerating an earlier more gradual trend towards a larger role for the market. Under pressure from agencies such as the World Bank and the International Monetary Fund, many less developed countries also abandoned interventionist policies, such as import replacement and public ownership, and embraced policies of liberalisation and privatisation.

Debate over whether the effects of reform have been beneficial or harmful on balance has yielded little in the way of firm conclusions. This is unsurprising given the potential for disagreement over criteria, counterfactuals and measurement criteria, which will be discussed in more detail with respect to Australia.

Nevertheless, some countries have clearly performed better than others. For example, Australia has outperformed New Zealand. This fact has given rise to a debate over reform strategies, which has focused on two main issues. The first is the choice between radical restructuring (sometimes referred to as Shock Therapy) and gradual reform. Among advocates of gradual reform, there is a further debate about sequencing. The issue is whether it is preferable to delay some reforms to a later stage of the reform process and, if so, which (Buckle 1987)

The microeconomic reform agenda

The term ‘microeconomic reform’ encompasses a wide range of policies and the content of the microeconomic reform agenda has changed over time. Nevertheless, in most periods, one or two central themes have dominated the policy agenda.

Getting prices right

In the early phases of microeconomic reform, much attention was focused on ‘getting prices right’, and, in particular, on eliminating policies that unnecessarily ‘distorted’ the production and consumption decisions of private firms and households. The paradigmatic example of a ‘distorting’ policy was tariff protection. The case for tariff reform was bolstered by the argument that, if a government wished to assist particular industries it should do so through subsidies, which did not distort the prices faced by consumers.

Under the policy of ‘protection all round’, the impact of tariffs on agricultural producers had been partially offset by a range of price stabilisation and support policies. The gradual removal of these policies began with the Whitlam government’s controversial abolition of a bounty on purchases of superphosphate and the 25 per cent cut in tariffs, introduced in July 1973.

The consensus in favour of ‘protection all round’ had marginalised both advocates of the traditional free-trade alternative to protection and supporters of strategic industry policies and microeconomic planning. As a result, advocates of more comprehensive and systematic government intervention, such as Whitlam, initially made common cause with those who favoured extensive free-market reform. Both groups were classed as ‘economic rationalists’,¹ that is, advocates of rationally-designed policy, as opposed to the advocates of the status quo in which policy was driven by a mixture of historical precedent,

¹ For further discussion of the genesis of the term ‘economic rationalism’ see Quiggin (1997a) and Schneider (1998).

lobbying, and *ad hoc* responses to crises. Under the Fraser government, the free-market element of economic rationalism become dominant, and the term came to imply a desire to reduce the role of government rather than, as under Whitlam, to apply the power of government more rationally and systematically. Much later, following the popular critique of Pusey (1991), ‘economic rationalist’ acquired a primarily pejorative connotation.

Under the case-by-case approach pursued during the 1970s proposals for tariff reform were initially most successful in industries with relatively low protection. In the highly protected industries most threatened by import competition, such as motor vehicles and textiles, clothing and footwear, tariffs were supplemented by quotas. As a result, the variance of effective rates of protection increased substantially during the 1970s, as shown in Table 1. The first two rows of data show the mean and variance of tariff rates from 1971 to 1991.

Table 1: Effective rates of protection (%) 1971–91

	Year ending June 30				
	1971	1973	1983	1988	1991
Mean effective protection rate	36	27	25	19	15
Standard deviation of effective protection rates	25	20	43	36	29

Source: Industry Commission

It was not until 1988 that the case-by-case approach was replaced by a general program of reducing tariff rates across-the-board, a process that is still incomplete.

Corporatisation and privatisation

A second strand of microeconomic reform focused on improving the efficiency of government business enterprises. One of the first, and most successful, instances was the creation of the statutory authorities Australia Post and Telecom Australia from the former Postmaster-General's Department, a public service department under direct ministerial control. More generally, the reform of government provision of marketed services may be seen in terms of a spectrum. At one end is the traditional departmental structure of national, state and local governments. At the other end is a privatised firm, subject only to normal commercial regulation. The points on the spectrum include:

- (i) full cost pricing;
- (ii) competitive tendering;
- (iii) commercialisation;
- (iv) corporatisation; and
- (v) privatisation.

Each step along the reform spectrum involves an increase in reliance on profit as the primary guide to management decisions, and a reduction in direct public accountability. These two changes are directly linked: increases in profitability arise precisely because managers are not subject to constraints imposed through public accountability, and are therefore free to manage enterprises so as to increase revenues and reduce costs.

From the perspective of advocates of microeconomic reform, the object of reform has been to move as far towards privatisation as possible, subject to constraints arising from potential market failures or political restrictions. Under National Competition Policy, traditional arrangements are considered, *prima facie*, to be anticompetitive, and governments are required to consider options such as commercialisation and corporatisation.

For much of the 1980s and 1990s, it seemed that movement along the reform spectrum led inexorably to full privatisation. By the late 1990s, however, political resistance to privatisation had hardened. A central element in the decline of support for privatisation was the realisation that the budgetary arguments that had been used to justify early

privatisations in Australia and the United Kingdom were spurious. The budgetary conventions prevailing until the mid-1990s allowed the proceeds of asset sales to be treated as current revenue or, in some cases, negative expenditure.

In assessing the fiscal impacts of privatisation, the appropriate comparison is between the sale price and the present value of income foregone as a result of privatisation. In most cases, if this comparison is undertaken using the real bond rate as a discount rate, sale proceeds are less than the present value of earnings foregone on any reasonable estimate (Quiggin 1995; Walker and Walker 2000). The divergence is primarily due to the 'equity premium', that is, the difference between the real rate of interest on bonds and the rate of return demanded by investors in private equity. This difference, about 6 percentage points on most estimates, is too large to be consistent with the standard consumption-based capital asset pricing model, under which asset prices are determined by consumers rationally optimising the expected utility of lifetime consumption in efficient asset markets (Mehra and Prescott 1985; Kocherlakota 1996).

Moreover, the equity premium is independent of any divergences in public and private discount rates arising from differential taxation treatment and from transfers that may be associated with underpricing in cases of privatisation by public float. Differences arising from the latter sources should be netted out in the evaluation of privatisation.

There are strong grounds for supposing that observed market imperfections, such as transactions costs in household borrowing and lending (Constantinides, Donaldson, and Mehra 1998) and the absence of insurance markets for systematic risks such as unemployment and business failure (Mankiw 1986; Weil 1989; Grant and Quiggin 2002) play an important role in explaining the anomalously large equity premium. If so, as Grant and Quiggin (2002) observe, the appropriate discount rate for evaluating privatisation is likely to be close to the real bond rate, implying that most Australian privatisations have reduced welfare.

Supporters of privatisation have argued for a presumption in favour of the market

rate (Hathaway 1997), or have sought to change the focus of the argument away from fiscal impacts to broader efficiency effects (Officer 1999). In the absence of evidence supporting the use of the market rate, the first position is purely ideological. As regards the second, it is important to take account of impacts on consumers, employees and others. But assuming the sale price is equal to the private market value of earnings under privatisation, a comparison of this sale price with the present value of expected earnings under continued public ownership captures the main efficiency effects of privatisation.

Deregulation and reregulation

The first big instance of deregulation in Australia was the deregulation of financial markets in the 1980s, following the recommendations of the Campbell and Martin Committees of Inquiry and the decision to float the Australian dollar in 1983. Deregulation of the airline industry, and the abandonment of the long-standing two-airlines policy, followed in 1990.

Reforms to telecommunications and energy markets in the 1990s are also commonly referred to as 'deregulation'. In these cases, where a relatively simple, though highly restrictive regulatory regime, based on publicly-owned statutory monopolies, has been replaced by a complex set of regulations designed to facilitate competition, 'reregulation' might be a more appropriate term. Continued use of the term 'deregulation' reflects, in part, the idea that the new regulatory structures are interim measures, paving the way for the emergence of a fully competitive market.

Measured against the, admittedly ambitious, objective of a competitive outcome requiring only the basic regulatory functions of standard company law, deregulation in Australia has been almost uniformly unsuccessful. In banking, the position of incumbent firms has been strengthened, most notably by mergers allowed in anticipation of deregulation. Entry by foreign banks, regarded *ex ante* as the main source of competition, has been limited and transient. Competition has been further reduced by the virtual

disappearance of the building society sector when the regulatory costs of a banking license were removed, while the implicit Commonwealth government guarantee, arising from the Reserve Bank's role as lender of last resort, remained in place. This trend has been partially offset by the emergence of non-bank mortgage originators in the 1990s.

The abolition of the two-airlines policy induced a number of competitors to enter the market from 1990 onwards. The first two entries, both using the name Compass, were costly failures. Although external factors, such as the first Gulf War, played a role, the entrants were poorly capitalised and there were extensive barriers to entry, notably including the incumbents' control of terminals. Pressure to liberalise access to terminals developed in the wake of the Compass failures, but the incumbents built up alternative barriers to entry such as frequent flier schemes. A number of other enterprises announced plans to enter the market during the 1990s but failed to secure the necessary finance. A third failure was the attempt by regional airline Impulse to enter the capital city market, beginning in 2000. Shortly after Impulse commenced service, the fourth (and so far the only successful) entrant, Virgin Blue also entered the market. Unlike previous entrants, Virgin Blue had the backing of an international carrier.

The success of Virgin's entry depended on a series of adverse events that had fatally weakened one of the incumbent airlines, Ansett. The last of these was the terrorist attack of September 11, 2001, which occurred immediately after Ansett's declaration of bankruptcy, and ensured that attempts to refloat the airline would not succeed. Thus, the competitive entry of Virgin has resulted in the replacement of the symmetrical duopoly imposed under the two-airline policy with a Stackelberg leader–follower model.

The outcome in the telecommunications sector has been similar, with Telstra acting as a Stackelberg leader. Of course, this outcome represents an increase in competition relative to the starting point of statutory monopoly. Similarly, in the electricity sector, although there are more firms than before, most retail consumers are effectively dealing with monopolists.

Even on the more limited criterion of reductions in prices, success has been limited. The interest rate margins charged by banks to household customers rose in the aftermath of the speculative boom and bust of the 1980s. Although margins have subsequently fallen, this has been offset by a steady increase in fees and charges.

Business class and standard economy airfares have generally risen, but the proportion of discount fares and the size of discounts has increased. Using an index number approach, Quiggin (1997b) concluded that there had been no significant change in the cost of a standard basket of air fares, consisting of a mixture of business class, full economy and discount fares. Forsyth (1998) criticised the claim that discount fares should be treated as a separate commodity and concluded that average fares had fallen as a result of deregulation. Bailey (2003) finds little change in prices between 1992 and 2003.²

Prices of telecommunications services have fallen in real terms, but this reduction has merely continued a trend that prevailed throughout the 20th century. More precisely, the regulatory constraints on Telstra's prices embody a requirement to continue the rate of price reductions observed before the advent of competition. In most years, this constraint has been binding, implying that the aggregate impact of reregulation on prices has been zero. As with airlines, there has been a redistributive effect. Consumers with more elastic demand and lower marginal costs of service, have benefited at the expense of those with less elastic demand and higher marginal costs. In this case, unlike that of airlines, the redistribution has generally favored business at the expense of households. (In both cases, it must be assumed that reductions in business costs ultimately flow through to households.)

The most striking single outcome of deregulation was the speculative boom and bust in equity markets in the 1980s, the magnitude of which was largely attributable to financial deregulation. The rise of 'entrepreneurs' engaged in speculative takeovers was

² A more relevant comparison would be the change in airfares compared to that which would have taken place under continued regulation. Presumably this would have been relatively modest over the short period assessed by Quiggin and Forsyth, but might have been significant over the 1990s as a whole.

widely seen as a positive outcome of financial deregulation, imposing market discipline on lazy incumbent managers (Bishop, Dodd and Officer 1987). In retrospect, however, it is apparent that the entrepreneurs had little capacity to improve the value of the enterprises they controlled and primarily illustrated the maxim, attributed to JK Galbraith, that ‘genius is a rising market’. When equity prices declined after 1987, the corporate structures built up by the entrepreneurs collapsed with heavy losses.

No accurate estimate of the welfare loss associated with this episode has been made. However, Sykes (1994) estimates the volume of losses incurred by creditors and bondholders at \$20 billion or around 5 per cent of annual GDP in the 1980s.³ As was noted by Milbourne and Cumberworth (1992), much of this loss was transferred to retail customers of the banks in the form of increased margins between borrowing and lending rate.

Another substantial welfare loss arose from the parallel rollouts of hybrid fibre optic cable undertaken by Telstra and Optus in the mid-1990s. At a cost greater than would have been incurred in an orderly rollout of cable for all metropolitan areas, Telstra and Optus produced two sets of cables, each covering about half the population, with an overlap estimated at 90 per cent. The total welfare loss was at least \$4 billion and possibly as much as \$8 billion (1 to 2 per cent of GDP).

Against these losses must be set improvements in operating efficiency, associated with reductions in overstaffing and the elimination of restrictive work practices. Based on observed changes in prices, the net impact appears to be about neutral in the case of telecommunications and airlines. On the other hand, as noted above, financial deregulation produced a substantial welfare loss in its first decade from 1983 to 1993. Outcomes since 1993 appear more favorable, but a final evaluation must await the end of the current

³ Since other losses were incurred by employees, customers and so on, this is likely to be a lower bound estimate of welfare costs. On the other hand, in a complete analysis it would be necessary to take account of gains to ‘entrepreneurs’. Despite the fact that most of the leading entrepreneurs incurred personal as well as corporate bankruptcy, it appears that a number of them managed to retain significant personal wealth after the crash, in addition to consumption expenditure during the boom.

boom in housing prices.

Competition and competition policy

During the 1990s, the process of microeconomic reform changed radically, as did its content. Increasing public resistance to policies such as privatisation, combined with an upsurge of hostility to ‘economic rationalism’ in general, made it difficult to implement reform through political processes, except in a crisis atmosphere such as that following the collapse of state banks in Victoria and South Australia.

As a result, reform in the 1990s was often implemented without open political debate. The most notable example was National Competition Policy (NCP), which grew out of the report of the Hilmer Committee (Hilmer, Rayner and Taperell 1993), appointed in 1992 to inquire into and advise on appropriate changes to legislation and other measures in relation to the scope of the *Trade Practices Act 1974* and the application of the principles of competition policy. Advocates of reform within Federal government policy circles used the Hilmer Report as the basis for a renewed push for public sector reform, centred around the Council of Australian Governments (COAG).

By virtue of its reliance on inter-governmental negotiations and remoteness from open political debate, the COAG process permitted further extensions of reform to be presented as a *fait accompli*, embodied in the *Competition Policy Reform Act 1995*, and the associated Competition Principles Agreement. By the time its implications were realised, NCP was both Commonwealth and state law, backed up by the power of the National Competition Council (NCC) to penalise recalcitrant or tardy states.

This process in turn produced a counter-reaction, in which NCP became a scapegoat for all the adverse consequences of microeconomic reform and for many trends independent of microeconomic reform. A typical example was the closure of banks in country towns, which was due in part to financial deregulation and in part to long-standing demographic trends, but had nothing to do with NCP.

The NCP program had three main components. The first was a once-off review of all state and federal legislation, requiring that any legislation with anti-competitive effects should be justified on the grounds of public benefit. A notable outcome was the deregulation of the dairy industry, discussed by Edwards (2003). The second was a requirement for government business enterprises to adopt prices based on the principle of ‘competitive neutrality’. The third, and in the end the most significant, was the creation of a new system of regulatory oversight for public and private enterprises declared as monopolies.

At least at first sight, it may appear paradoxical that the ultimate outcome of NCP was a substantial expansion of regulation. The implementation of NCP required the establishment of the NCC and the formation of a more powerful Australian Competition and Consumer Commission (ACCC) from the former Trade Practices Commission and Prices Surveillance Authority. In addition, each of the states established regulatory bodies.

In one sense, this expansion of regulation represents a retreat from the original aspirations of advocates of microeconomic reform, who hoped to replace government monopolies with competitive markets. In most cases, it has now been recognised that the core functions historically performed by government monopolies are in fact natural monopolies, just as the advocates of government intervention had claimed.

However, the regulatory functions now being performed by bodies like the ACCC are not new. In the past, these functions were performed by the same statutory monopolies that provided the relevant services. From an engineering viewpoint, such integrated management has obvious advantages. In most cases, however, the accountability that arises from external regulation has yielded net benefits.

Labour market reform

As has already been noted, labour market policy under the Hawke government was an exception to the general trend towards more market-oriented policy. The Accord on Prices and Incomes strengthened the role of central wage fixation through the Arbitration

Commission. Moreover, the policy deals through which the government and the Australian Council of Trade Unions reached an agreed position involving low or negative growth in real wages typically included interventionist policy initiatives, of which the most notable were Medicare and compulsory superannuation.

The centralised approach was gradually abandoned in favour of a system of enterprise bargaining, which remains the most important institutional framework for wage-setting. Subsequent reforms, such as the introduction of Australian Workplace Agreements (individually negotiated employment contracts) have had only a modest effect.

The effects of labour market reform, in the strict sense of changes to industrial relations policies and institutional frameworks, appear to have been modest. However, the changes in labour markets arising, directly or indirectly, from microeconomic reform, have been dramatic. They include declining union membership, and a reduction in the proportion of the workforce with traditional full-time jobs (35–45 hours per week) offset by growth in both part-time (mostly casual) employment and in jobs with long working hours (45+ per week). Policies that have affected labour market outcomes directly have included competitive tendering, reductions in industry assistance and corporatisation or privatisation of government business enterprises. Indirect, but equally profound effects have arisen from financial market deregulation and the resulting increase in the influence of financial markets.

Microeconomic reform and macroeconomic policy

The term ‘microeconomic reform’ reflects a conscious contrast with the macroeconomic policies that dominated economic policy in Australia from World War II to the late 1970s. However, perceptions of the relationship between microeconomic reform and macroeconomic policy have changed over time.

The focus on microeconomic reform in the early 1980s reflected the failure of Keynesian stabilisation policies and the monetarist alternative of monetary growth rules

to reverse the rise in unemployment that took place during the 1970s. Along with the rapid growth of the current account deficit following the floating of the dollar, persistent high unemployment was seen as the product of structural rigidities which ensured that policies of macroeconomic stimulus would result in higher inflation rather than growth in output. Thus, microeconomic reform was initially advocated as an expansionary policy, to be combined with stimulatory fiscal policy and the wage and price restraint generated by the Accord on Prices and Incomes.

The favorable experience of the policy response to the 'Banana Republic' crisis of 1986, when a short-lived increase in interest rates succeeded in reducing the current account deficit without generating a recession, led to a new hypothesis regarding the impact of microeconomic reform. Many commentators, such as Higgins (1991) suggested that the economy had become more 'flexible' in its response to economic shocks.

Among other things, the optimistic view of the benefits of reform reflected in Higgins' assessment was used to justify the maintenance of high interest rates during 1989, as a response to inflationary pressures and current account problems. The resulting recession showed that the economy was not as flexible as had been hoped.

The recession was the longest and deepest in post-war history. The length and strength of the expansion of the 1990s can be explained, in large measure, by the severity of the preceding recession. The 10 years of expansion between 1993 and 2003 were just sufficient to reduce the rate of unemployment to 5.6 per cent, the same rate prevailing in 1989, before the onset of the recession.

Although there was some shift to fiscal stimulus during the early years of the recession, any systematic Keynesian policy was deprecated as 'pump-priming'. The government publicly adhered to a 'medium-term strategy', in which countercyclical fiscal policy was eschewed, until 1992, following the replacement of Prime Minister Hawke by Paul Keating. The medium-term strategy was generally supported by advocates of microeconomic reform who were concerned that the pace of reform might be slowed as

governments sought to respond to high unemployment. The failure of the medium-term macroeconomic strategy to offset the prolonged recession therefore undermined public support for microeconomic reform.

In the last few years, the history of the late 1980s has repeated itself. The experience of 1998, when Australia felt little impact from the Asian economic crisis has been interpreted as evidence of the flexibility generated by microeconomic reform, as was the successful management of the ‘Banana Republic’ crisis in 1986. Parham (2002a) observes:

Australia’s growth performance since the early 1990s has been exceptional. For nine years, annual GDP growth averaged just under 4 per cent – a performance not seen since the 1960s and early 1970s. Strong growth even persisted in the midst of the 1997 Asian financial crisis and the 2001 global downturn.

A surge in productivity growth has underpinned Australia’s good performance.

There are many reasons to doubt this analysis. First, because the Reserve Bank correctly allowed the Australian dollar to depreciate against developed-country currencies, the Asian crisis did not produce a net decline in export demand. Thus, the flexibility or otherwise of the domestic economy was not tested. Exporters had to redirect exports from Asian markets to developed countries, but given that many of these exports are commodities traded in fairly well-developed markets, this was not a miraculous feat.

The 1990s growth rate of 4 per cent per year is not remarkable for a period of economic expansion. The average growth rate in the 1980s expansion was about 4.5 per cent. Thus, the distinguishing feature of the period since the early 1990s has been the absence of a recession rather than the strength of normal economic growth.

On this point, there is no evidence for the general claim that ‘flexible’ free-market economies are less susceptible to macroeconomic shocks than others. New Zealand, where microeconomic reform was even more radical, but where macroeconomic policy was misjudged in 1997, experienced a significant downturn following the Asian crisis.

More recently, claims that the US economy was recession-proof have been shown to be baseless.

The experience of the past twenty years suggests that microeconomic reform can coexist with good, bad or indifferent macroeconomic policy and macroeconomic outcomes. Of course, the conclusion that microeconomic reform has had little impact on macroeconomic stability is not relevant to the critical question of whether, other things being equal, microeconomic reform helped to improve living standards. It is to this issue that we now turn.

The benefits and costs of microeconomic reform

Assuming that macroeconomic rather than microeconomic policy is the main determinant of aggregate employment levels, two kinds of benefits might be expected from a well-designed program of microeconomic reform. First, the removal of price distortions might be expected to improve allocative efficiency. Such improvements would increase welfare but might not be captured in measures of gross domestic product. Second, microeconomic reform might generate either static or dynamic improvements in technical efficiency, which would be captured in measures of GDP and also of multifactor productivity.

Allocative efficiency

The most important single policy designed to improve allocative efficiency was tariff reform, accompanied by reforms to agricultural price policy. *Ex ante* projections of the results of reforms to tariffs and price policy were radically divergent. Supporters of the existing policy regime predicted disaster (Warhurst 1982). Advocates of reform argued that the 'dynamic' effects of reform would lead to the growth of an innovative manufacturing sector producing elaborately transformed manufactured products for an essentially unlimited export market.

At least in the medium term, it now seems clear that the outcomes of price policy reform were consistent with a standard ‘static’ neoclassical model. The formerly protected sector, import-competing manufacturing, contracted sharply. Growth in imports was balanced by an expansion in exports, but manufactured exports did not expand as much as was expected by many proponents of reform. Dynamic effects, if any, were modest.

Using a Harberger triangle approximation, Quiggin (1996) estimated that the removal of tariffs generated a long-run net welfare gain equal to between 1 and 3 per cent of GDP. The short run impacts were less favorable. The period of tariff reform in Australia coincided almost exactly with the resurgence of mass unemployment throughout the developed world. In the presence of high unemployment the adjustment costs associated with tariff reform and other policies are higher than in the case of full employment.

Moreover, because the variance of effective protection rates initially increased, welfare was actually reduced under the case-by-case approach adopted during the 1970s, as is shown in Table 2, which contains three sets of estimates of the welfare cost of tariffs, calculated using the data presented in Table 1. The first set takes account of the mean effective rate of protection but not of the variance. The second set, referred to as the low range, is derived on the assumption that elasticities of demand and supply for individual manufactured items are equal to 0.5, the same as the aggregate elasticities for manufactured items as a group. The third set, referred to as the high range, is derived on the assumption that elasticities of demand and supply for individual manufactured items are equal to 1.0, twice the aggregate elasticities for manufactured items as a group.

The first row shows a monotonic reduction in the welfare cost of protection, with a cumulative benefit equal to 1 per cent of GDP by 1991. The second and third rows show a different pattern, in which welfare costs initially rose as a result of increasing variance in protection rates. To calculate the welfare impact of the entire process, it would be necessary to evaluate the present value of a stream of losses and gains. The results of such an evaluation are ambiguous and depend on the choice of discount rates.

Table 2: Estimates of welfare cost of protection (per cent of GDP)

	Year ending June 30				
	1971	1973	1983	1988	1991
Estimated welfare cost (mean only)	1.3	0.7	0.6	0.4	0.2
Estimated welfare cost (low range)	1.9	1.1	2.5	1.7	1.1
Estimated welfare cost ((high range)	2.5	1.5	4.3	3.0	1.9

An alternative view is that the most important indicator of the distorting effect of tariffs are the ‘peak’ rates on the most highly protected industries (motor vehicles, and textiles, clothing and footwear). These increased in the early period of tariff reform but declined from the mid-1980s, suggesting that the period of positive net benefits began earlier than estimated by Quiggin (1996).

Productivity — miracle or myth

A consistent theme in the advocacy of microeconomic reform has been the claim that reform would lead to a sustained improvement in rates of economic growth and would therefore permit growth in living standards. The first such claims were made by Kasper et al. (1980). In reality, the first decade of microeconomic reform in Australia, from 1983 to 1993 was characterised by poor productivity growth and weak economic growth. Some of this poor performance may have been the result of pre-existing problems, but the adverse impact of financial deregulation during the 1980s, and the rise of ‘entrepreneurs’ such as Bond, Skase and Elliott played a substantial role.

The response of advocates of microeconomic reform has been to ‘restart the clock’,

ignoring events before 1993, and focusing on performance during the economic expansion that began in the early 1990s.

The claim that Australia has experienced a ‘productivity miracle’ has been made repeatedly since the publication of ABS estimates suggesting that multifactor productivity (MFP) growth had reach an unprecedented annual rate of 2.4 per cent between 1993-94 and 1997-98, compared to a long-run average of around 1 per cent. Subsequent revisions and additional data yielded lower estimates of productivity growth, but no corresponding reduction in rhetorical claims.

Because estimates of productivity growth rates for the 1980s were also revised downwards, the measured change between the 1980s and 1990s was still large. Hence, there was a shift in emphasis from the rate of productivity growth to the rate of acceleration from the 1980s to the 1990s. The shift in attention from the first derivative of productivity (growth) to the second derivative (acceleration) raises complex problems of interpretation that have, in general, been disregarded.

A fairly typical statement of the case may be found in Parham (2002a).

After showing its weakest rate in the 1980s, Australia’s productivity growth accelerated to new highs in the 1990s — labour productivity growth at an average 3.0 per cent a year and multifactor productivity (MFP) growth at 1.8 per cent a year.

The most serious problem with this claim is that the term ‘the 1990s’, which would normally be used to described a decade, refers a period of only six years, from 1993-94 to 1998-99, identified by the ABS as a ‘productivity cycle’. In the previous cycle, which included the recession of 1989-90 the average rate of MFP growth was 0.7 per cent. In the current incomplete cycle, beginning in 1999-00, the rate has averaged 0.5 per cent, as is shown in Table 3.

The average productivity growth rate for the 1990s as a whole was well below that reported by Parham. Given that data are presented on a financial year basis, there is some

room for debate about the appropriate starting and ending years. However it is calculated, the rate of MFP growth for the 1990s as a whole is between 1.1 and 1.5 per cent, better than the 1980s, but scarcely 'exceptional' in either historical or international terms.

Even if all the above-average MFP growth observed during the productivity cycle from 1993-94 to 1998-99 were attributed to microeconomic reform, the cumulative benefit would be equal to only 4.8 per cent of GDP, well below widely-publicised official estimates for relatively minor parts of the reform program. For example, the Industry Commission (1995) estimated the benefits of 'Hilmer and related reforms' at 5.5 per cent of GDP. This estimate took no account of tariff reform, tax reform or financial deregulation.

In fact, however, at least part of the strong productivity growth of the mid-1990s must have represented the usual recovery in productivity that follows a recession. Moreover, given the poor productivity performance observed since 1998-99, it appears that some of the productivity gains realised during the 1990s were unsustainable or illusory. As is discussed below, productivity gains generated by increased work intensity are unlikely to be sustainable in the long run.

Quiggin (2000a) noted that mid-1990s productivity growth was partly illusory. The treatment of the of the business services sector, which grew rapidly in the mid-1990s as a result of contracting out, but was inappropriately excluded from the market sector, induced an upward bias in estimates of MFP growth. Inclusion of business services in the market sector would have reduced the measured annual rate of MFP growth for the period from 1993-94 to 1998-99 by around 0.5 percentage points. It is possible that the magnitude of the distortions associated with the treatment of the business services sector has declined since 1998-99, contributing to the reduction in measured productivity growth noted above.

Work and work intensity

The most salient costs of microeconomic reform have been those borne by workers in the form of increased stress and a faster pace of work. The increase in work intensity

implies that effective labour input has grown more rapidly than measured hours of work, while productivity and wages per unit of effort have grown more slowly than measured productivity and hourly wages.

Although anecdotal evidence of increases in work intensity abounds, statistical evidence is limited. The Australian Workplace Industrial Relations Survey undertaken in 1995 found that a majority of employees reported increases in stress, work effort and the pace of work over the previous year, while less than 10 per cent reported reductions in any of these variables (Morehead et al. 1997).

Dawson et al. (2002) examine the increase in working hours for full-time workers and conclude (p. 4):

For many Australian workers, their families and communities, extended working hours have lead to increased levels of fatigue and decreasing levels of social support. This in turn has the potential to compromise safety and the long-term health and wellbeing of workers and the organisations that employ them.

Similar evidence, based on time-use diaries, is provided by Bittman and Rice (2002).

Green and McIntosh (2001) provide evidence of increases in work intensity from the United Kingdom which served as the model for many Australian microeconomic reforms, notably including competitive tendering and contracting. Green and Macintosh observe that the increases in work intensity are associated with higher productivity (as would be expected) and are positively correlated with exposure to competition and with reductions in union density.

Further evidence may be obtained from movements in working hours for full-time workers. To the extent that an increase in working hours reflects a demand by employers for increased work effort, standard microeconomic reasoning implies that work effort per hour will also increase. Thus, we would expect to see work effort and hours of work move together in most cases.

Until about 1980, average hours of work for full-time employees had declined fairly steadily for more than a century. Although there are no formal measures for work intensity, any comparison of working conditions between 1980 and, say, 1950 or 1930 indicates a reduction in work intensity. Inadequate work intensity was frequently cited as a reason for poor economic performance by advocates of microeconomic reform, such as Blandy (1985).

Average hours of work for full-time employees rose between 1980 and 1994, reaching a peak of 45 hours per week, before stabilising in the late 1990s and declining slightly after 2000. Wooden and Loundes (2002) attribute the increase in working hours to an income effect arising from wage restraint during the Accord period. This seems plausible for the 1980s, but the continued increase in working hours after the end of the Accord is almost certainly due to employer demands. For example, analysis of enterprise bargaining negotiations at this time undertaken by the Australian Centre for Industrial Relations Research and Training (1993) showed that employer claims typically included items that would lead to longer and more flexible (at the employer's discretion) working hours.

Public concern about stress and the intensity of work rose steadily in line with the increase in full-time working hours. Concerns about inadequate work intensity, dominant in the 1980s, were replaced by discussion of excessive work intensity, which reached a high point in the late 1990s. The modest decline in full-time working hours that has been observed since then is consistent with the view that the increase in working hours in the early 1990s was a short-term response to the competitive pressure associated with microeconomic reform and to the increase in employer bargaining power following the recession.

Since the issue of increased work intensity as a source of measured productivity growth was first raised in the mid-1990s (see, for example, Quiggin 1996), one of the central points in the debate has been the claim that increases in productivity generated by increased work intensity are unsustainable. The strong form of this claim is that work

intensity will eventually return to levels more in line with workers' preferences, and that the measured productivity increases associated with increased work intensity will be reversed. The weak version is that, if work intensity stabilises at a higher level, the measured rate of productivity growth will decline in the absence of continued growth in unmeasured labour inputs. Conversely, as noted by Parham (2002b), continued growth in productivity would imply that unsustainable growth in work intensity was not a major source of measured productivity growth.⁴

Growth accounting appears to support the strong version of the unsustainability hypothesis. Full-time working hours declined after 1998-99 and it seems likely that work intensity also declined. At the same time, the rate of multifactor productivity growth fell below its long-run average.

The implications may be seen by supposing that increases in the pace of work contributed a 5 per cent increase in effective labour input during the period from 1993-94 to 1998-99 (roughly equivalent to the loss of two 10-minute tea breaks each day), and that half of this increase in work intensity has subsequently been reversed. If labour's contribution to MFP is weighted at 70 per cent, this would imply that increased work intensity contributed 3.5 percentage points of the 4.8 percentage point increase above the long-term MFP trend observed in the mid-1990s cycle, and that decreased work intensity contributed 1.75 percentage points of the 2 percentage point shortfall in MFP growth, relative to the long-term trend, observed since 1999-00.

Income and inequality

As Parham (2002b) observes, inequality in market incomes grew in both decades of the microeconomic reform period:

The distribution of earnings among individuals became more

⁴ To be more precise, it is necessary to focus on productivity growth in excess of the long-term trend growth rate of 1 per cent.

unequal in the 1990s. However, the increase was a continuation of the growth in earnings inequality during the 1980s, rather than a step up in the 1990s.

This finding is consistent with international evidence suggesting that market-oriented reform is associated with increasing inequality of incomes. Inequality has risen substantially in the United States, United Kingdom and New Zealand.

In Australia, until the mid-1990s, growth in earnings inequality was offset, at least in part, by changes in the tax and welfare systems that were on balance, progressive. Since 1996, a number of these changes have been reversed as a result of the extension of microeconomic reform into the tax-welfare system. The most important single changes have been the cuts in income tax rates for higher income earners introduced as part of *A New Tax System*, cuts in capital gains taxes and restrictions on access to welfare payments, generically referred to as 'mutual obligation'.

Consumer choice and welfare

In most, but not all, cases, microeconomic reform has been associated with an expansion of consumer choice. Although there are few well-established techniques for measurement of the benefits of consumer choice, standard revealed preference arguments imply that more choice is always beneficial. These arguments are based on the standard model of individual consumer sovereignty. In some cases, communitarian critics of such arguments may argue that the benefits of individual choice are offset by losses of community values.

The expansion of shopping hours provides an example. From the viewpoint of individual consumers, an expansion of shopping hours is certainly beneficial. Since this benefit is not taken into account in standard measures of the output of the retail sector, this is an instance where the productivity benefits of microeconomic reform are understated.

From a communitarian perspective, however, the expansion of shopping hours has

eroded traditional distinctions between weekdays and weekends, and undermined a range of community activities premised on the assumption that nearly everyone will have weekends free of work.

Summary

In aggregate, microeconomic reform has been associated with a modest increase in the rate of growth of labour productivity, most of which can be attributed to increases in the pace and intensity of work. The extra growth in MFP during the productivity cycle of the 1990s, equivalent to 4.8 per cent of GDP represents an upper bound for the aggregate benefits of microeconomic reform. A correct estimate would be closer to zero, and possibly even negative.

Rather than seeking to justify a comprehensive program of microeconomic reform in terms of largely spurious productivity benefits, or on the basis of unrelated arguments about macroeconomic performance, it is preferable to assess individual reforms on a case-by-case basis. As has been argued above, some reforms have yielded positive net benefits but others have not.

Concluding comments

The set of policy programs advocated under the banner of ‘microeconomic reform’ is too complex, and the associated set of outcomes too varied, to admit any simple characterisation. Microeconomic reform has been neither the success claimed by advocates such as the Productivity Commission, nor the disaster implied by many popular critiques of ‘economic rationalism’.

Taking the two decades of microeconomic reform as a whole, the aggregate impact of the reform program on the welfare of the Australian community has been small. Periods of strong growth in productivity and output, such as the mid-1990s, did little

more than recover the ground lost as a result of the impact of the activities of ‘entrepreneurs’ in the 1980s, and the associated ‘recession we had to have’. Much of the apparent productivity growth of the 1990s has been dissipated as workers find ways of winding back the increase in the hours and intensity of work extracted through the unilateral repudiation of implicit labour contracts in this period.

As with the curate's egg, the only verdict on microeconomic reform that is both brief and accurate is that it is ‘good in parts’.

References

- Bailey, D. (2003) *Is the Australian airline market contestable ?* Unpublished Honours thesis, University of Queensland.
- Bittman, M. and Rice, J. (2002), ‘The spectre of overwork: An analysis of trends between 1974 and 1997 using Australian time-use diaries’, *Labour and Industry* 12(3), 5–25.
- Bishop, S., Dodd, P. and Officer, R. R. (1987), *Australian Takeovers: The Evidence, 1972–85*, Centre for Independent Studies, St Leonards, NSW.
- Blandy, R. et al. (1985) *Structured Chaos: the Process of Productivity Advance*, Oxford University Press, Oxford.
- Constantinides, G. ., Donaldson, J., and Mehra, R. (1998), Junior can't borrow: a new perspective on the equity premium puzzle, NBER Working Paper Series No. 6617, National Bureau of Economic Research, Cambridge, MA.
- Dawkins, P. & Kelly, P. (2003) *Hard Heads, Soft Hearts: a New Reform Agenda for Australia*, Allen & Unwin, St Leonards.
- Dawson, D., McCulloch, K., and Baker, A. (2002), *Extended Working Hours in Australia: Counting the Costs*, The Centre for Sleep Research, The University of South Australia, Adelaide.
- Easton, B. (1997), *The Commercialisation of New Zealand*, Auckland University Press, Auckland.
- Forsyth, P. (1998), ‘The gains from the liberalisation of air transport’, *Journal of Transport Economics and Policy* 32(1), 73–92.
- Edwards, G. (2003), ‘The story of deregulation in the dairy industry’, *Australian Journal of Agricultural and Resource Economics*, 47(1), 75–98.
- Fukuyama, F. (1992) *The End of History and the Last Man*, The Free Press, New York.
- Grant, S. and Quiggin, J. (2003), ‘Public investment and the risk premium for equity’, *Economica*, 70(277), 1–18.

- Green, F. and McIntosh, S. (2001), 'The intensification of work in Europe', *Labour Economics*, 8(2), 291–308.
- Harberger, A. (1964), 'Taxation, resource allocation and welfare', in NBER (ed.), *The role of Direct and Indirect Taxes in the Federal Revenue System*, Princeton University Press, Princeton.
- Hathaway, N. (1997), 'Privatisation and the cost of capital', *Agenda* 4(1), 1–10.
- Higgins, C. (1991), 'Opening address to the Australian Economic Policy Conference', Centre for Economic Policy Research, Australian National University, Canberra.
- Hilmer, F., Rayner, M., and Taperell, G. (1993), *National Competition Policy*, Report by the Independent Committee of Inquiry, AGPS, Canberra.
- Kasper, W., Blandy, R., Freebairn, J., Hocking, D., and O'Neill, R. (1980), *Australia at the Crossroads: Our Choices to the Year 2000*, Harcourt Brace Jovanovich, Sydney.
- Kocherlakota, N. R. (1996), 'The equity premium: it's still a puzzle', *Journal of Economic Literature* 34(1), 42–71.
- Mankiw, N. G. (1986), 'The equity premium and the concentration of aggregate shocks', *Journal of Financial Economics* 17, 211–19.
- Mehra, R. and Prescott, E. C. (1985), 'The equity premium: a puzzle', *Journal of Monetary Economics* 15(2), 145–61.
- Milbourne, R. and Cumberworth, M. (1991), 'Australian banking performance in an era of deregulation', *Australian Economic Papers*, 30 (57), 171–91.
- Morehead, A. and others (1997), *Changes at Work : the 1995 Australian Workplace Industrial Relations Survey*, Longman, Melbourne.
- Officer, R. (1999), 'Privatisation of public assets', 1–22 in CEDA (Committee for Economic Development of Australia) (ed.), *Privatisation: Efficiency of Fallacy? Two Perspectives*,
- Parham, D. (2002a), 'Productivity growth in Australia: Are we enjoying a miracle?', paper presented at Melbourne Institute and The Australian Conference, Towards Opportunity and Prosperity, Melbourne, April.
- Parham, D. (2002b), 'Australia's 1990s productivity surge and its determinants', paper presented at NBER 13th Annual East-Asian Seminar on Economics, Melbourne, June.
- Pusey, M. (1991), *Economic Rationalism in Canberra: A Nation--Building State Changes Its Mind*, Cambridge University Press, Cambridge.
- Quiggin, J. (1995), 'Does privatisation pay ?', *Australian Economic Review* (2nd quarter), 23–42.
- Quiggin, J. (1996), *Great Expectations: Microeconomic Reform and Australia*, Allen & Unwin, St. Leonards, NSW.
- Quiggin, J. (1997a), 'Economic rationalism', *Crossings: The Bulletin of the International Australian Studies Association* 2(1), 3–12.

- Quiggin, J. (1997b), 'Evaluating airline deregulation in Australia', *Australian Economic Review* 30(1), 45–56.
- Quiggin, J. (2001a), 'The Australian productivity miracle: a sceptical view', *Agenda* 8(4), 333–348.
- Quiggin, J. (2002), *Submission*, to Victorian Parliament Public Accounts and Estimates Committee Inquiry into Private Sector Investment in Public Infrastructure
- Schneider, M. (1998), 'Economic rationalism', economic rationalists and economists', *Quadrant* October, 48–53.
- Sykes, T. (1994), *The Bold Riders*, Allen & Unwin, St Leonards.
- Walker, B. and Walker, B. C. (2000), *Privatisation: Sell Off or Sell Out? The Australian Experience*, ABC Books, Sydney.
- Warhurst, J. (1982), *Jobs or Dogma? : the Industries Assistance Commission and Australian Politics*, University of Queensland Press, St Lucia.
- Weil, P. (1989), 'The equity premium puzzle and the risk-free rate puzzle', *Journal of Monetary Economics* 24, 401–21.
- Wooden, M. and Loundes, J. (2002), 'How unreasonable are long working hours?', Working Paper 1/2002, Melbourne Institute of Applied Economic and Social Research, Melbourne.

	1964-65 to	1968-69 to	1973-74 to	1981-82 to
1984-85 to	1988-89 to	1993-94 to		
	1968-69	1973-74	1981-82	1984-85
1988-89	1993-94	1998-99	Full	
Labour productivity	2.5	2.9	2.4	2.2
0.8	2.0	3.2	2.4	
Capital productivity(f)	-0.8	-0.5	-1.4	-1.8
-0.2	-1.3	-0.1	-0.9	
Multifactor productivity	1.2	1.6	1.1	0.8
0.4	0.7	1.8	1.1	
GDP-market sector(h)	5.1	4.6	2.1	1.8
4.1	1.8	4.6	3.4	

Table 3: Average annual growth in output and productivity measures (%)

Cycle	1964-65 to 1968-69	1968-69 to 1973-74	1973-74 to 1981-82	1981-82 to 1984-85	1984-85 to 1988-89	1988-89 to 1993-94	1993-94 to 1998-99	1998-99 to 2002-03 ¹
Labour productivity	2.5	2.9	2.4	2.2	0.8	2.0	3.2	1.8
Capital productivity	-0.8	-0.5	-1.4	-1.8	-0.2	-1.3	-0.1	-1.4
Multifactor productivity	1.2	1.6	1.1	0.8	0.4	0.7	1.8	0.4
Market sector output	5.1	4.6	2.1	1.8	4.1	1.8	4.6	2.7

1 Incomplete