There have been various claims about the economic impact of the New Zealand Employment Contracts Act, 1991 (ECA). For instance, in *Free to Work: The Liberalisation of New Zealand's Labour Market*, Australian economist Wolfgang Kasper claims that the resulting industrial relations had economic benefits. He concludes, "[t]he Employment Contracts Act has substantially enhanced the productivity of labor and capital, output, and employment growth because it has been an essential ingredient in the transformation of New Zealand's institutional order to greater flexibility and competitiveness."

However, as this review will show, despite using Kasper's statistical criteria, the empirical evidence does not support his conclusions. There appears to have been little economic benefit, if any, from the ECA, other than perhaps for employers at the expense of workers. In particular, there is no evidence of significant productivity gains, an issue that is explored in this Paper. International comparisons support the likelihood that the ECA did not have an economic benefit.

**GDP Growth**

Kasper claims that the ECA has enhanced economic growth: "The projection is for the economy to keep growing for the remainder of the decade..."
at a trend growth rate of around 4 percent." Figure 1 repeats the first graph of Kasper's economic evaluation, but includes more recent (and revised) official data, including projecting the volume GDP figures through to March 1999, using the June 1997 N.Z. Institute of Economic Research (NZIER) consensus forecasts, which average the predictions of fourteen forecasters. In addition, a "trend" growth rate of 3 percent per annum is shown.

The story is clear enough. The New Zealand economy had been stagnated from 1990 (in fact earlier) through to the end of 1992. From late 1992, the economy began a rapid (and widely hailed) expansion. However, this expansion did not last long enough to catch up to the 3 percent trend line. After ten quarters, the growth petered out, expanding at about 1.5 percent in the year through March 1997. Further out, the NZIER expected growth to hover around 3 percent a year, in contrast to Kasper's claim of a sustainable 4 percent p.a. GDP growth rate.

REAL WAGES

Kasper used a different presentation for his second graph of real wages changes, his presentation having the effect of obscuring the minuscule real (income) wage growth over the period. As this Paper's Figure 2 shows, the increase amounted to a total of about 2 percent over seven years. Part of the gains are probably due to labor force composition effect. Thus, there was an increase as the economy contracted, resulting in lower paid workers being laid off, and a fall during the early part of the upswing. Kasper's own estimate is a .4 percent annual average growth of real wages. In summary, within the margin of error, and allowing for composition effects, real wages hardly increased over the period.

LABOR PRODUCTIVITY GROWTH

As the third of Kasper's graphs shows, employment numbers rose sharply from mid-1993, as one might expect in a cyclical upswing. Initially, firms expanded output by increasing the intensity of labor usage within the firm. As underutilized labor became exhausted, firms expanded extensively by hiring more workers.

However, Kasper seems quite oblivious of the implications of high employment growth with modest output growth. As Figure 3 shows, the pro-

4. Id. at 16.
5. See Figure 1, Appendix. NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH, CONSENSUS FORECASTS (July 1997).
6. See Figure 2, Appendix.
7. Kasper does not define his variables although there are a number of possibilities. The numerator of Figure 2 is Average Hourly Earnings (ordinary time); the denominator is the Consumer Price Index.
ductivity growth record for the New Zealand economy has been poor. In the seven years since 1990, there was a total gain of about 5 percent. The forecasters do not expect any major increases in the immediate future. It is also evident that the big gains came during the period of the early upswing, when firms used their existing labor force more intensively. It could be argued that the ECA enabled new work methods with the ending of restrictive practices that generated one-time increases in productivity. Distinguishing these gains from those that might result from a cyclical upswing is not easy, and has not been attempted. However, that the main gains coincide with the early part of the cyclical upswing rather than the years immediately after the introduction of the ECA suggests that the cyclical recovery had the stronger impact. But even if there were gains from the ECA, they were one-time, and not ongoing ones.

One might contrast the events portrayed here with the story which Kasper tells about the Australian economy. It has not been possible to check his statistics, but an examination of his data shows almost the same output growth over the period from 1990 to 1995, except that the Australian upswing was later and faster than the one in New Zealand. However, Australia experienced much less employment growth, by about 1 percent a year. Thus, Australian productivity growth outperformed New Zealand productivity growth by the same 1 percent a year.

Kasper not only ignores such data but insists there has been substantial productivity growth: "We can conclude that the Employment Contracts Act has substantially enhanced the productivity of labour . . ." The data, had he presented it, would have belied such a claim, or at best shown only small one-time increases. Indeed, if Kasper is to believed, the productivity gains are even less. He says, "[s]ome knowledgeable observers believe that employment statistics under-report employment growth since the ECA." He does not, however, say who these people are.

THE PRODUCTIVITY PUZZLE

Bryan Philpott’s detailed work has provided a productivity series for the New Zealand economy back to 1977/8. Three sectors—importables, exportables, and non-tradeables—are graphed in Figure 4. It is extremely hard to discern any significant change in the trend of any of the three series,

8. See Figure 3, Appendix.
10. Id. at 51.
11. Id. at 49.
13. See Figure 4, Appendix.
once allowance is made for cyclical effects and measurement problems.\textsuperscript{15} Despite the economic reforms of the last decade, there is no perceptible impact of the reforms on the long-run trend of overall productivity. This conclusion holds true for the post-ECA era, but also for the post-1984 era.

Philpott shows that there were significant productivity gains in a set of sectors—mining, forestry, electricity, and communications—which were largely government-owned in 1984. These sectors experienced a substantial increase in their productivity growth following these reforms, presumably as a result of the ensuing labor layoffs. This boost seems to have stopped after 1992/3. However, because the restructured sectors contributed only 10.3 percent to GDP in 1977/8 (rising to 15.7 percent in 1995/6), their substantial productivity gains did not impact greatly on overall economic performance.

**UNEMPLOYMENT**

As Figure 5 shows,\textsuperscript{16} there has been a substantial fall in the New Zealand unemployment rate since its peak in 1991 of 11 percent.\textsuperscript{17} The fall is not surprising, given the sharp rise in employment. Forecasters expect that the unemployment rate will hover above 6 percent throughout the late 1990s.\textsuperscript{18} In assessing the unemployment rate, it should be noted that it was probably below 4 percent in 1984 when the reforms began.\textsuperscript{19} As recently as 1988, the unemployment rate was below 6 percent, so that Kasper's graph does not show the rise which was occurring before 1990. The graph gives the impression that the fall was to levels that had not been previously attained.

**THE MALONEY STUDY**

Kasper quotes research by Auckland University economist, Tim Maloney, claiming that the ECA increased employment.\textsuperscript{20} A detailed econometric review of Maloney's study concluded that the econometric evidence is

\textsuperscript{14} The non-tradeable sector has higher labor productivity levels than the tradeable sectors because it includes the capital intensive energy, communications, and home ownership sectors.

\textsuperscript{15} See Figure 5, Appendix.

\textsuperscript{16} Kasper's data seem to be seasonally adjusted. (They have since been revised.) Indicative of his grasp of New Zealand data, Kasper graphs “white” male unemployment rates. Kasper, supra note 1, at 45, Fig. 2. “White” is not used in this context in New Zealand, and rarely in others, because of its racist connotations. New Zealand data is by self-categorized ethnicity, in which case Kasper is probably referring to the European/Pakeha rate.

\textsuperscript{17} See, e.g., supra note 5.

\textsuperscript{18} The particular data series does not begin until 1986.

flawed because some of the coefficients of the reduced form equations are theoretically wrong, implying that the remainder may be biased; many of the coefficients of the underlying structural form equations of labor supply and demand are theoretically wrong in magnitude and/or sign; the unionization data series is problematic, because it derives from two sources, with the juncture at exactly the point of the introduction of the ECA; and because the interpolation of the unionization data gives a spurious level of accuracy. 21

Thus, Maloney's Paper provides little scientific evidence that the Employment Contracts Act has impacted the level of employment. Maloney, himself, is aware of many of these problems. Indeed, he does not even reach the conclusion that Kasper suggests he does. Rather, after recognizing some of the weaknesses in his econometric conclusions, he writes, "suppose we accept that the ECA... has resulted in increases in employment?" 22 If the researcher has to suppose a proposition, then it cannot be claimed that he has demonstrated it, as Kasper asserts.

THE ECONOMY AND THE ECA

The data show that the post-ECA economy was in a stagnation phase until late 1992. It then began to expand rapidly, initially by using the internal resources of firms which had not been fully employed during the stagnation, but later by employing more labor. Productivity gains were not high, and those that occurred were of the magnitude and timing to be expected in a normal cyclical recovery of that strength. It would appear that this extensive rapid growth phase was over by the end of 1995. The forecasters' consensus is that the New Zealand economy has now settled down to a modest long-term growth rate of just under 3 percent p.a., based primarily on increased use of labor and capital, with no substantial increase in productivity growth. 22

Kasper is keen to credit this not very impressive expansion to the effects of the ECA. He concludes, "[i]t would be hard not to attribute most of this enhancement to the improved institutional framework surrounding labour markets." 23 Indeed, Kasper could have been more explicit by saying that it was "easy" to explain the enhancement by attributing it to the ECA. But easy explanations are rarely correct ones and often not supported by the evidence, as in this case.

A richer account of the New Zealand growth experience of the mid-1990s is that there was a bounce back from the contraction/stagnation phase of the late 1980s and early 1990s, fueled by a favorable fall in the real ex-

22. See, e.g., supra note 5.
23. Kasper, supra note 1, at 45.
change rate (which has since been reversed); a substantial improvement in the terms of trade (which were about 10 percent higher in the early 1990s compared to what they were in the late 1980s); and the upswing of the world economy, especially when the Australia expansion absorbed New Zealand manufacturing exports. The New Zealand expansion was based on additional applications of labor and capital, rather than improved productivity performance. When the available capital and appropriately skilled labor ran out, economic growth slowed down.

Which of these two accounts is to believed? The poor productivity performance discriminates between them. If the Employment Contracts Act had worked in the way its proponents claim, there should have been substantial and ongoing productivity gains. Such gains have not occurred.

**ENTHUSIASM FOR THE ECA**

Despite the lack of evidence of significant improvements in economic performance from the ECA, there remains considerable enthusiasm for the legislation in the business community. Undoubtedly, some arises as a result of the change in the industrial relations balance in managerial-employee relations.

A survey of managers reports "increased productivity and operational flexibility and greater training." However, no statistical evidence exists for substantial gains in productivity above the trend of previous years following the introduction of the ECA. This apparently misconceived enthusiasm may be explained by (1) managers attributing normal productivity gains to the ECA; (2) managers having greater freedom to manage than in the past, because they are less constrained by law and by unions, thereby assuming that these benefits to themselves must result in improved benefits to the firm in greater productivity; and (3) management confusing productivity with labor costs.

As Figure 6 shows, labor costs have been restrained. The real (income) wage (of Figure 3) divided by the labor productivity index (of Figure 2) gives a measure of the degree to which productivity gains had been shared with workers. The overall pattern is that the index fell about four percent in the mid-1990s, suggesting that workers' wages have not shared in the (albeit small) productivity gains over the period. It would not be unreasonable to attribute reduction in worker share of prosperity to the Employment Contracts Act. But while reductions in costs to a firm from lower remuneration rates may be of great importance to a firm, they are not

24. **NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH, QUARTERLY SURVEY OF BUSINESS OPINION (Mar. 1996).**
25. See Figure 6, Appendix.
26. Real income wages were used here because they were illustrated in Figure 2. Thus, the measure indicates that workers have not benefited from the productivity gains in their take-home pay.
the same thing as improvements in productivity.

I too have been astonished by the ECA's failure to have a perceptible impact on productivity since it was implemented. I have reexamined the numbers and adjusted the definitions in various ways. What I had assumed—what everyone had assumed—was that work practices workers had been able to impose in the old industrial relations system had reduced output. There are anecdotes to support this, and the generalization seemed safe. It seemed likely that managers would use the greater power the ECA gave them to eliminate such inefficient work practices, thus generating higher productivity. Again, anecdotes to that effect abound. But if there were such eliminations, they were apparently insufficient to accelerate overall productivity. Perhaps at best they generated a small one-time gain. Perhaps worker-controlled work practices did not affect the growth of productivity, which is not so surprising. Workers have an interest in higher productivity, because it enables them to extract higher pay. Perhaps there were only few or marginal occasions when they restricted efficiency in a way that reduced their pay, or the measures had short-term impacts on work effort, but sustained high levels in the long run. Insofar as any of these effects were significant, the primary gains to employers from the ECA have been lower pay and greater freedom to manage, not higher output per worker.

THE INTERNATIONAL EVIDENCE

The conclusion that the ECA has not contributed greatly to economic performance, except perhaps making the inflation goal easier to attain by increasing managers' ability to restrain labor costs, is not inconsistent with some of the international evidence on labor market flexibility. It is often claimed that the U.S. labor market is more flexible than Western Europe's, resulting in higher U.S. employment growth. But it is equally true that the U.S. economy experiences poorer productivity growth, as Table 1 shows.

At this stage, two tentative hypotheses are worth investigating. It is possible that there is no necessary connection between so-called labor market flexibility and productivity gains at all. Alternatively, it is possible that a negative relationship exists between this labor market flexibility and productivity performance.

Although economists write of "flexibility," this term is extremely difficult to define or measure. As a result, discussion tends to be anecdotal, something which the rest of this section cannot entirely avoid. The Concise Oxford Dictionary defines "flexible" as "that which will bend without breaking, pliable, pliant, easily led, manageable: adaptable, versatile; sup-

27. See Table 1, Appendix.
ple, complaisant." Economists probably have in mind the first group of meanings, specifically the ability of an economy to adjust to a shock without generating unemployment in the labor market, and equivalent disruptions in other markets. But some economic inflexibility may not be a bad thing. If one's home were to be totally flexible, it would fall down around one's ears. Similarly, firms consciously build inflexibility into their operations. Physical and human investment activities in a modern economy involve the transformation of resources with many possible uses into ones with much more dedicated uses, a transformation which results in loss of flexibility.

Labor market flexibility is not an easy notion to capture. The OECD defines the following five types of flexibility:

(1) External numerical flexibility: the number of employees is adjusted to needs; (2) Externalisation: part of the firm's work is put out to enterprises or individuals who are not bound by the contract of employment; (3) Internal numerical flexibility: the number of working hours is adjusted in line with needs, but the number of workers remains unchanged; (4) Functional flexibility: workers' job assignments are modified according to needs; (5) Wage flexibility: labour costs, and thus wages, are adjusted.

To simplify, we need to distinguish between short-term flexibility, such as that the ECA promotes, and long-term flexibility, which is about how a labor force increases its skills and ability to carry out a multitude of tasks. It is possible that long-term flexibility is undermined by short-term flexibility, which inhibits the worker from developing a loyalty to the firm, and the acquisition of firm specific skills, while also discouraging the firm from developing those skills in its work force. Insofar as this trade-off exists, the ECA (and, more generally, discussion on labor market flexibility which focuses on short-term flexibility) could undermine the development of long-term productivity. Advocates of the efficacy of the ECA may prefer to argue that the ECA has not affected productivity negatively, but the evidence bears out the conclusion that augmented productivity growth has not occurred.

In terms of the two possibilities, a recent OECD report has taken the cautious line that no correlation appears to exist between labor market flexibility and labor market performance. However, the second possibility must be left open. Excessive short-term flexibility may damage labor market outcomes.

28. CONCISE OXFORD DICTIONARY (7th ed. 1982).
30. OECD, EMPLOYMENT OUTLOOK (July 1997).
SUMMARY

Many advocates of economic reforms have tended to hypothesize certain benefits and then assume that these benefits have been necessarily realized after the reforms were implemented. They then selectively use anecdotes and statistics to buttress the case. Systematic empirical investigation, as presented here, often suggests otherwise. This pattern has been true among advocates of the ECA. On the basis of the empirical evidence and systematic analysis, it is very difficult to reach strong conclusions about the beneficial economic effects of the Employment Contracts Act. In particular, the poor productivity growth rules out the likelihood that the ECA was a major contributor to the macroeconomic expansion of the mid-1990s. However, the Act does seem to have contributed to the poor real wage growth and the failure of many workers to obtain a share in any increase in the prosperity of the 1990s.
Figure 1

REAL GDP
(March 1990 = 100)

Seasonally Adjusted

Figure 2

REAL WAGES
(March 1990 = 100)
Figure 3

PRODUCTIVITY
(March 1990 = 100)

MARCH QUARTER

Figure 4

The Productivity Puzzle

AVERAGE LABOR PRODUCTIVITY
$1991/2 (000) per FTE

MARCH YEAR
**Figure 5**

UNEMPLOYMENT

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of Labor Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>0.0</td>
</tr>
<tr>
<td>1991</td>
<td>0.2</td>
</tr>
<tr>
<td>1992</td>
<td>0.4</td>
</tr>
<tr>
<td>1993</td>
<td>0.6</td>
</tr>
<tr>
<td>1994</td>
<td>0.8</td>
</tr>
<tr>
<td>1995</td>
<td>1.0</td>
</tr>
<tr>
<td>1996</td>
<td>1.2</td>
</tr>
<tr>
<td>1997</td>
<td>1.4</td>
</tr>
</tbody>
</table>

**Figure 6**

WAGE COSTS TO PRODUCTIVITY
(March 1990 = 100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>94.0</td>
</tr>
<tr>
<td>1991</td>
<td>94.5</td>
</tr>
<tr>
<td>1992</td>
<td>97.0</td>
</tr>
<tr>
<td>1993</td>
<td>98.0</td>
</tr>
<tr>
<td>1994</td>
<td>97.0</td>
</tr>
<tr>
<td>1995</td>
<td>95.0</td>
</tr>
<tr>
<td>1996</td>
<td>96.0</td>
</tr>
<tr>
<td>1997</td>
<td>98.0</td>
</tr>
</tbody>
</table>