NEW ZEALAND COUNCIL OF TRADE UNIONS
Te Kauae Kaimahi

Submission of the
New Zealand Council of Trade Unions
Te Kauae Kaimahi

to the

Productivity Commission

on the

Second Interim Report on Productivity in the Services Sector: Competition and ICT topics

P O Box 6645
Wellington
February 2014

Contents

1. Introduction

1.1. This submission is made on behalf of the 37 unions affiliated to the New Zealand Council of Trade Unions Te Kauae Kaimahi (CTU). With over 330,000 members, the CTU is one of the largest democratic organisations in New Zealand.

1.2. The CTU acknowledges Te Tiriti o Waitangi as the founding document of Aotearoa New Zealand and formally acknowledges this through Te Rūnanga o Ngā Kaimahi Māori o Aotearoa (Te Rūnanga) the Māori arm of Te Kauae Kaimahi (CTU) which represents approximately 60,000 Māori workers.

1.3. We submitted on the first part of your inquiry. This submission is in addition to the earlier one and is limited to points that are of interest or concern to us.

2. Competition in the services sector

2.1. This theme focuses on the use of heightened competition to raise the productivity of the services sector. Methods recommended tend to focus on reducing 'barriers' to increased competition, identified mainly as regulatory 'barriers'.

2.2. Given that many services are (and will continue to be) natural monopolies or have very restricted competition for structural reasons, and many have significant positive and negative externalities (as we noted in our previous submission), it is not clear to us that a case has been made that increased competition is the answer in all service sectors, even if limited to the private sector.

2.3. There appears to be an imbalance in the analysis as to whether the benefits of the various regulations in place outweigh any costs such as reduced productivity.

2.4. To give a topical example, there is now evidence that the financial system can reach a size that harms productivity in the rest of the economy.

2.5. Two papers[1] on the theme "Too much finance?" have recently been published by researchers in the two main international monetary institutions: the Bank of International Settlements and the International Monetary Fund. Apparently independently, they came to the conclusion that there could be "too much finance". After a certain point, the size of the financial sector relative to the size of the economy is a drag on economic growth. It comes as little surprise that countries like the US, Iceland, Ireland, the U.K., Spain, and Portugal figured high in the list of those well over the critical point, but New Zealand is there too. The BIS report (p.4) estimates that for New Zealand the growth in the size of the financial sector since the early 1990s "created a drag of nearly one half of 1 percentage point on trend productivity growth". This is a huge drag given annual productivity growth as they measured it (GDP per worker) averaged just 1.1 percent over the period.

2.6. Increasing competition in the sector by encouraging new services and new entrants is likely to increase the size of the sector. More appropriate is regulation to manage the size of the sector and its effects on the rest of the economy. That regulation may well be contrary to growth in the industry and neutral or even negative for its productivity (for example if the size and interdependence of financial institutions is restricted), but positive for the rest of the economy.

2.7. For other industries the externalities may not be as directly related to productivity but could be as important in their impacts on many aspects of life such as sustainable agricultural practices, liveable urban environments, distribution of income, and access to services.

2.8. We are not discounting the use of comparative web sites and reducing switching costs in some markets, though in the New Zealand electricity market, we believe the evidence is not yet available to conclude they have

[1] Cecchetti, S. G., & Kharroubi, E. (2012). *Reassessing the impact of finance on growth* (Working Paper No. 381) (p. 22). Bank for International Settlements. Retrieved from http://www.bis.org/publ/work381.htm and Arcand, J.-L., Berkes, E., & Panizza, U. (2012). *Too Much Finance?* (Working Paper No. WP/12/161) (p. 49). Washington DC, USA: International Monetary Fund. Retrieved from https://www.imf.org/external/pubs/cat/longres.cfm?sk=26011.0

been successful in reducing price levels, as opposed to prices for individual consumers when they switch. The costs of such facilities may also be high compared to the savings. They may however have intrinsic merit for consumers.

2.9. However other methods could be considered. For example Hirschman[2] proposed the alternative of enabling consumers to exercise 'voice' instead of 'exit' to raise the performance of institutions including firms. That is, standard competition approaches such as described in the report give consumers an opportunity to 'exit' from one supplier of a service (or good) to another, thus giving both firms an incentive to improve their products. An alternative is for consumers to complain or make suggestions to the firm about its services. Where there is limited competition or 'connoisseur goods' (as Hirschman describes them) in which the quality of the product is more important than the price, this is likely to be a more potent force. Even where competition nominally exists, more complex services such as those creating a 'client' relationship (requiring the provider to build a more individual knowledge of the client, as opposed to simply a 'consumer' one) may fall into this category. Such services are often provided by the professions, in education and in health. Individuals or firms with a high reputation (such as highly regarded architects and lawyers) might also fall into this category.

2.10. In those cases, setting up systems that more effectively empower the 'consumer' or client to complain or comment may be more effective than encouraging them to switch or encouraging new entrants. Existing complaints services, the regulatory bodies of professions which take complaints, banking and insurance ombudsmen and whistle-blowing legislation (in a slightly different way) are existing examples. Some of these models could be extended and given more powers, but methods with lower thresholds for use and which encourage suggestions as well as complaints could also be considered.

[2] Hirschman, A. O. (1970). Exit, voice, and loyalty: responses to decline in firms, organizations, and states. Cambridge, MA: Harvard University Press.

2.11. Occupational qualifications and regulation are important methods to provide information and assurance to consumers about the quality of complex services, in which trust in the professional providing them is necessary because the consumer is not in a position to judge whether the advice or course of action is appropriate. We would be very concerned, given New Zealand's recent history of widespread regulatory failure (see our earlier submission), at steps to reduce regulation of this kind to a narrow licensing of areas of "restricted work". As we have stated, competition in providing such services may not be the primary public interest in them when they have significant externalities or other important considerations such as the safety of clients is at stake. Reducing regulation would come in an environment of increasing financial stringencies on central and local government which will tend to reduce their capacity to oversee and enforce licencing and regulations. However that capacity must be *greater* the lighter the regulation, in order to safeguard the public interest.

2.12. In general we are concerned at the focus on regulation. The 'productivity paradox', which the Commission examined in its recent symposium, is in large part a contrast between New Zealand's poor productivity performance and the recommendations of the OECD and other agencies for increasingly light-handed regulation of the kinds recommended here and which New Zealand has adopted more than most other countries. The approach has evidently failed not only in raising productivity but also safeguarding the public. The costs of failures such as mining and forestry deaths, leaky buildings and finance company collapses could well have exceeded any gains in 'innovation' (which too often can be a euphemism for dangerous corner-cutting). The marginal gains to further rounds of regulatory change must be very small. It is important to observe that Figure 2.3 shows there can be an enormous productivity range for countries of similar degrees of 'restrictiveness' of product market competition – between US$20 of GDP and over US$60 per hour for countries of regulatory 'restrictiveness' similar to New Zealand's. This suggests that the measure of 'restrictiveness' has low validity or that the relationship with productivity is very weak. It is time we looked well beyond such approaches.

2.13. We note your comments that foreign competition is an important factor. It is notable that in some sectors (such as banking and insurance) it is small New Zealand competitors that are leading the market in improving quality and driving down prices, so your conclusion is by no means generally true in New Zealand's context.

2.14. The foreign direct investment screening requirements are rarely a factor in dissuading such investment: no applications have ever been turned down, except where 'sensitive' land is involved, and then rarely. No approval is required for applications under $100 million (and $477 million for Australian investors). A more effective approach would be for investors to be required to demonstrate the benefits of their investment (such as its effect on competition) in order to gain approval.

2.15. We agree that competition law needs revision as either the law or its enforcement is failing in many areas. This is highlighted by the evidently greater willingness of Australian competition authorities to take action on a broad range of matters which appear to be allowed to continue here. The supermarket industry is one example.

3. ICT and productivity in the services sector

3.1. Our main comments on this theme concern the effect on people.

Management

3.2. We agree that "people management practices are particularly important" (p.7), and also agree that "New Zealand management practices, particularly people management practices, are relatively poor". We may however have different views on what constitutes good people management practice: for example a narrow focus on individual performance is not suitable for many industries.

3.3. Poor management may well be a significant factor in New Zealand's poor productivity performance. It is worth an investigation in its own right.

Active labour market policies

3.4. We agree that adoption of IT (Information Technology) can lead to job losses and "adjustment costs" (p.135ff).

3.5. However "adjustment costs" is understating the issue. Job loss can lead to long term losses income and employment. Dixon and Maré (2013) found that for employees who had been in their job for at least one year before they lost their jobs, that

> the employment rate of displaced workers was on average 27 percentage points lower 0–1 years after displacement, 14 percentage points lower 1–2 years after, and 8 percentage points lower 2–3 years after, than that of the matched comparison group. The average wage of re-employed displaced workers was 12 percent lower 0–1 years after displacement, 11 percent lower 1–2 years after and 7 percent lower 2–3 years after.[3]

3.6. An earlier study by Dixon and Stillman found the loss in earnings and employment was significant even after four years after the job loss[4]:

> We find that job loss due to firm closure has persistent impacts on the subsample of workers who were most likely to have experienced a complete firm closure. The employment rate for these workers is 17 percent lower one year after the firm closed than those for comparable workers at non-closing firms, and remain 12 percent lower four years after the closure. Similarly, monthly earnings are 22 percent lower one year after the closure and 16 percent lower four years after the closure.

---

[3] Dixon, S., & Maré, D. C. (2013). *The Costs of Involuntary Job Loss: Impacts On Workers' Employment and Earnings* (Working Paper No. 13-03). Wellington, New Zealand: Motu Economic and Public Policy Research. Retrieved from http://www.motu.org.nz/publications/detail/the_costs_of_involuntary_job_loss_MotuWP

[4] Dixon, S., & Stillman, S. (2009). *The Impact of Firm Closure on Workers' Future Labour Market Outcomes* (p. 66). Wellington, New Zealand: Statistics New Zealand. Retrieved from http://www.stats.govt.nz/browse_for_stats/income-and-work/employment_and_unemployment/the-impact-of-firm-closure-on-workers-future-labour-market-outcomes.aspx

The benefit receipt rate is 45 percent higher one year after the closure, although this increase is from a very low base.

3.7. There are similar findings in the US[5]. The income and employment losses represent productivity losses. The cost of job losses therefore has implications not only for those losing their jobs for a considerable length of time, but also the economy as a whole.

3.8. New Zealand already has among the shortest job tenures (and so greatest employment churn) in the OECD, comparing tenure data from the December 2012 Survey of Working Life with similar OECD surveys in 2010[6]. Only Denmark, Australia, Mexico, Turkey and South Korea have a greater proportion of people in jobs for less than a year, and only Australia and South Korea have a smaller proportion with a job tenure of 10 years and over. LEED data shows an even more extreme concentration of New Zealand employees with short tenures. For the year ended 31 March 2011, for example, it estimated 38.7% of employees were in their first year of a job, and only 7.9% had over 10 years of service – compared to the 2012 Survey of Working Life which showed 19.9% in their first year and 21.5% with over 10 years of tenure. The productivity losses of such churn cannot be ignored. Neither can the effect on the affected workers and their families.

3.9. The Commission should therefore not be recommending actions that lead to even higher turnover and dislocation.

3.10. We welcome the fact that the Commission discusses the need for assistance for workers made redundant as a result of the adoption of new technology and for other reasons, and looks favourably at the active labour market policies of the Scandinavian model (p.136), but the discussion misses some

[5] E.g. Davis, S. J., & Wachter, T. M. von. (2011). *Recessions and the Cost of Job Loss* (Working Paper No. 17638). National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w17638

[6] New Zealand Council of Trade Unions Te Kauae Kaimahi. (2013). *Under Pressure: A Detailed Report into Insecure Work in New Zealand*. Wellington, New Zealand: New Zealand Council of Trade Unions Te Kauae Kaimahi, p.12-13. Retrieved from http://union.org.nz/underpressure.

of the most important principles underlying it and its stark contrast with New Zealand.

3.11. Firstly, the principle adopted in the 'Scandinavian' model is that of employment security rather than job security. That is, the system acknowledges that employees may have to change jobs frequently but it offers considerable income protection and other assistance to ensure they do not bear the burden of employers' demands for flexibility in their workforces. The cost is recognised as one that should be shared by society because of the needs of the economy, and not left to be born by individuals unfortunate enough to be caught up in the latest restructuring.

3.12. The phrase "low employment protection" should be understood as "low job protection". It is mainly about dismissals rather than other employment conditions. The Scandinavian countries have high levels of unionisation and centralised collective bargaining for example, with many other employment conditions similar to those lost in New Zealand as a result of the Employment Contracts Act. According to OECD data for 2010 (the latest complete year), Denmark had a union density of 68.5%, Norway 54.8%, Sweden 68.2% and New Zealand 20.8%. Unions are deeply involved in retraining and other aspects of industry development as part of their accepted role as a social partner[7].

3.13. It is misleading to describe the Scandinavian support available on job loss as just a "safety net". Income protection has provided replacement levels of over 80% and although some replacement rates have been reduced following the Global Financial Crisis they are still much higher than New Zealand's. According to the OECD, in 2010 Denmark for example provided up to 2 years unemployment benefit at a rate of 90% of previous gross earnings less their 8% social security contributions.[8]

---

[7] E.g. McLaughlin, C. (2009). The Productivity-Enhancing Impacts of the Minimum Wage: Lessons from Denmark and New Zealand. *British Journal of Industrial Relations*, *47*(2), 327–348. doi:10.1111/j.1467-8543.2009.00726.x

[8] See http://www.oecd.org/els/soc/benefitsandwagescountryspecificinformation.htm and http://www.oecd.org/els/benefitsandwagesstatistics.htm

3.14. There are also much more active, broad and generous support mechanisms for those unemployed to retrain and find work.

3.15. There are emerging concerns that the Scandinavian active labour market model has been severely modified in some countries to reduce the extent and availability of income support on the one hand and to increase the requirements to accept employment options that the person does not regard as suitable.

3.16. However the model is a useful basis for discussion.

3.17. A long-run comparison[9] shows that during the 1960s, New Zealand had one of the most generous unemployment benefit entitlements in the OECD, being the most generous in 1963. But New Zealand's benefits fell in their ranking over the whole period, and by 2006 (when the comparison finishes) were 16th out of 29 OECD countries on this measure. Over that period the replacement rate of 16 of the 21 countries in the series rose, while only those of 5 including New Zealand's fell – and New Zealand's fell the most.

3.18. A more detailed comparison for 2011 shows that during the initial stages of unemployment (such as the 2 years in Denmark's case) New Zealand ranks 25 to 28 out of 33[10] OECD countries for a single parent with two children, and ranks 32 or 33 (last) for a two-earner couple with two children. A one-earner married couple with two children in New Zealand was estimated by the OECD to receive 58% of the average wage from an unemployment benefit with housing assistance and social assistance "top ups", whereas the median for the OECD was 72% of the country's average wage. For Denmark it was 94%, Norway 72% and Sweden 63%.

3.19. Returning to the job tenure data (by survey), while Denmark had an even higher proportion of the workforce that had been in a job less than a year

[9] The Gross Replacement Rate using Average Production Worker earnings to measure previous earnings.

[10] Depending on whether the benefit is compared with 67%, 100% or 150% of the average wage. The comparison is "after tax and including unemployment and family benefits. Social assistance and other means-tested benefits are assumed to be available subject to relevant income conditions. Housing costs are assumed equal to 20% of average wage".

(20.5% in 2010) than New Zealand (19.9% in 2012), it had a much more generous unemployment benefit and support system to assist people when they lose their jobs. Further, it has a significantly greater proportion of workers who have been in their jobs for more than 10 years (27.3% compared to 21.5%), so appears to be obtaining not only supported flexibility but the benefits of holding on to experienced workers. Norway had a below OECD-average proportion of short-tenure workers (14.9%) and slightly above-average proportion of 10 year-plus workers (33.6%) while Sweden's respective figures were 18.5% and 38.0%.

3.20. New Zealand's policy environment has therefore obtained the worst of all worlds. It has very high churn in its workforce without compensating benefits of maintaining experienced workers, very likely leading to significant productivity losses, and its workers bear the brunt of insecure jobs more than most other OECD countries (and much more than the Scandinavian countries). It has both employment and job insecurity and a poor productivity and income distribution record.

Employment protection

3.21. The Report advances the view (p.137) that "labour market regulation that directly increases adjustment costs has been found to have negative impacts on technology adoption" but fails to analyse the costs of reducing such (unidentified) regulation. The Commission is also apparently unaware of evidence to the contrary – that security of employment may encourage employees to take the risks necessary for innovation. For example Acharya, Baghai and Subramanian (2010)[11] provide evidence that

> Stringent labor laws can provide firms a commitment device to not punish short-run failures and thereby spur their employees to pursue value-enhancing innovative activities. Using patents and citations as proxies for innovation, we identify this effect by exploiting the time-series variation generated by staggered country-level changes in

[11] Acharya, V. V., Baghai, R. P., & Subramanian, K. V. (2010). Labor Laws and Innovation. *National Bureau of Economic Research Working Paper Series*, *No. 16484*. Retrieved from http://www.nber.org/papers/w16484

> dismissal laws. We find that within a country, innovation and economic growth are fostered by stringent laws governing dismissal of employees, especially in the more innovation-intensive sectors. Firm-level tests within the United States that exploit a discontinuity generated by the passage of the federal Worker Adjustment and Retraining Notification Act confirm the cross-country evidence.

3.22. The international practice of various forms of tenure in universities also encourages such intellectual risk-taking. Findings of the 2010 Crown Research Institute Taskforce which agreed with OECD recommendations in 2007 to reduce the contestability of their funding hinted at this, stating that

> Contestable funding directed to specific projects makes it harder to accept best-practice research management techniques that involve regular 'stop-go' decision taking. Research is risky and a large number of projects will not deliver the anticipated results. Researchers manage this risk by halting unpromising research at an early stage, and reallocating funds to new – more promising – lines of enquiry. Under a contestable funding model, scientists have no incentive to halt their research.[12]

3.23. The statement (p.169) that "firms instead of academic institutions are driving IT innovation" comes without evidence, and ignores the different types of innovation that different institutions are best at. Firms will (at most) focus on innovation though development, commercialisation and refining existing products, processes and services, while academic institutions focus on innovation through basic research, some of which will be commercialised or be incorporated into the innovations in firms. Basic research is essential to the eventual creation of many new products.

3.24. It then states that New Zealand labour market regulation is "generally rated at the 'flexible' end of the spectrum in international comparisons". In fact in

[12] Crown Research Institute Taskforce. (2010). *How to enhance the value of New Zealand's investment in Crown Research Institutes: Report of the Crown Research Institute Taskforce*. New Zealand. Retrieved from http://www.msi.govt.nz/assets/MSI/CRI/Report-of-the-Crown-Research-Institute-Taskforce.pdf

the OECD's Employment Protection Database 2013 update[13], New Zealand has the lowest protection against collective dismissal in the OECD with a score of zero along with Chile and non-OECD countries like Indonesia and Saudi Arabia. It compares to an OECD average of 0.83 and a maximum of 1.46 in Belgium. Denmark scores 0.82, Norway 0.71 and Sweden 0.71. Protection against collective dismissal is the most relevant in considering the flexibility of firms to restructure. Individual dismissals should be for performance or disciplinary reasons but even there, New Zealand has very weak protections, ranking 31 out of 34 OECD countries. Overall New Zealand ranks weakest in the OECD.

3.25. The Scandinavian countries clearly do well with significantly better protections.

3.26. OECD researchers Koske, Fournier and Wanner[14] find that in general, higher union density (particularly if it is concentrated among lower and middle income earners) and stronger employment protection legislation for temporary and low paid workers (particularly alongside minimum wages) reduce income inequality. Stronger, effective active labour market policies reduce unemployment and thus labour income inequality.

3.27. International Monetary Fund's researchers are increasingly clearly of the view, based on a variety of evidence, that, to quote a Staff Discussion Note published this month (February 2014), "lower net inequality is robustly correlated with faster and more durable growth for a given level of redistribution", and that there is "a tentative consensus in the literature that inequality can undermine progress in health and education, cause investment-reducing political and economic instability, and undercut the social consensus required to adjust in the face of shocks, and thus that it tends to reduce the pace and durability of growth." Their research also finds that "redistribution appears generally benign in terms of its impact on growth;

[13] http://www.oecd.org/employment/emp/oecdindicatorsofemploymentprotection.htm

[14] Fournier, J.-M., & Koske, I. (2012). Less Income Inequality and More Growth – Are they Compatible? Part 7. The Drivers of Labour Earnings Inequality – An Analysis Based on Conditional and Unconditional Quantile Regressions (Working Paper No. 930) (p. 88). Paris, France: OECD. Retrieved from http://dx.doi.org/10.1787/5k9h28s354hg-en.

only in extreme cases is there some evidence that it may have direct negative effects on growth. Thus the combined direct and indirect effects of redistribution – including the growth effects of the resulting lower inequality – are on average pro-growth".

3.28. Any further attacks on working conditions in New Zealand would be destructive of social and employment cohesion and would be strongly resisted. It would be sacrificing human needs to questionable economic gain and benefit for a relative few, increasing inequality. It would destroy any possibility of consensus over the need to enhance productivity as it would confirm many workers' views that raising productivity is inevitably connected with job loss and increased insecurity.

3.29. It seems an absurd grasping at straws to suggest New Zealand should go further down the path of worsening labour rights and employment security when the evidence is that New Zealand already has an extreme position on these matters which has failed to show the claimed benefits in more rapid productivity growth but has undoubtedly contributed to existing high levels of inequality and employment insecurity. Indeed, we have presented evidence that New Zealand has gone too far down this path implying that any change should be to increase both job and employment security. The Commission has seemingly failed to learn from both the 'productivity paradox' and the latest evidence.

3.30. On the other hand we welcome the discussion of active labour market policies as used in Scandinavia. We believe that a Scandinavian-like model are the basis for real change in the possible approaches New Zealand can take to improving its economic performance in an inclusive way which begins to address both the weak productivity performance and the high levels of employment insecurity and income inequality which blight New Zealand society. It would however be a caricature of Scandinavian policies to suggest they require rock-bottom employment rights and conditions, and poverty-level benefits which unfairly place the burden of change on workers and their families, often those least able to shoulder such burdens.

IT Skills

3.31. Regarding skills for IT, we recognise that this is an important issue.

3.32. The industry has been plagued by boom and bust cycles. The Commission mentions the dotcom boom, but at least as material around the change in millennium was the 'year 2000 bug' which led to a huge IT effort to ensure software changed to the year 2000 without causing serious problems due to software being based on 20th century (19xx) dates. This required both a major maintenance effort and replacement of many items of software. This boom then died following the year 2000. A more intrinsic problem has been the continuing appearance and disappearance of IT firms which survive for several years by living on capital obtained from investors on the promise of future profits. While it is sometimes defended on the basis that IT is the 'new economy' and is 'different', the dotcom crash provides compelling evidence for suspicion that it is little different from other highly speculative ventures.

3.33. This does not encourage workers to enter the industry, and the shortage of graduates following the dotcom/year 2000 crash is understandable in this light, much though it is regrettable. Whether there is anything that can be done about this in a policy sense is questionable, although a healthy degree of public scepticism which encouraged IT firms to be more realistic in their claims might help. So might more generous active labour market policies such as those in Scandinavia in that they would encourage prospective IT workers to weigh more favourably the risks they are taking.

3.34. The report (Chapter 8) discusses the gap between the skills of new tertiary graduates and the needs of employers, which include many job-specific skills. This is of course not unique to IT, nor to 2014. Even from an employer's viewpoint there is always a tension between, on the one hand, a desire to have employees with a strong understanding of the relevant subject and skills which allows the employee to adapt to changing requirements, and on the other the desire to have employees who are 'work ready' with the specific skills needed for the particular job. From the employee's point of

view, generic skills will be much more portable while specific skills may be lost on change of job.

3.35. It is not possible in a course of finite duration to cover every specific skill required, and even if it were tried, the skills could well be out of date by graduation in a context of fast-changing technology. The gap between general and specific skills for recent graduates will always exist. It is a much sounder and more cost-effective strategy to teach concepts and personal skills that allow graduates to learn new specific skills quickly. Internships may help but may in fact solve the specific skill problem for only the one employer or perhaps a small group of them. It is inescapable that most specific skills must be taught by the employers themselves, and the report notes (p.170) that some larger employers in fact do so. What does appear to be different to 20-30 years ago is that employers seem to be reluctant to take on this responsibility. This would seem to be the most fruitful place to seek change.

3.36. What is probably different about IT is that the specific skills required are very varied and under continuous change. The observation (reported on p.169) that "IT does not have well-established institutions and practices that help students bridge the gap between academic learning and work" may be a reflection of this – namely that even the IT industry itself does not recognise enough common employer-specific skills to make cooperation worthwhile. It may also be a reflection of the market failure for general training described on p.135. However it is not entirely true there is failure here. Tutoring for commonly used commercial technologies such as operating systems (such as Windows and Linux), programming languages, web tools and hardware (such as routers and other network components) is frequently provided at least in Auckland and Wellington by the agents for the products themselves and/or by third party trainers. Some tertiary institutions include certification in the more common of these commercial products as part of a general course. We agree that this will still not cover all the specific needs of different IT employers.

3.37. Small firms appear to find it difficult to teach their employees the specific skills required. We wonder why the State, having paid the majority of the cost

for the education of the graduates they employ, should then take on the additional cost of training for their specific skill needs. Perhaps we have too many small firms that do not have the management and financial capacity to survive. Perhaps, along with Ryan (2012[15]), we should ask "does New Zealand have too many entrepreneurs?" After noting the potential damage to productivity due to failure, including the lost productivity of the employees of failed ventures, he concludes: "Successful innovation policy should not only support our courageous entrepreneurs; it should also protect us from foolhardy adventurers."

Immigration

3.38. From the data provided in the report (p.165, 166), the IT industry has become very reliant on immigration for skills. Despite relatively high salaries, not far from Australian counterparts for some occupations, just over 30% of New Zealand IT graduates with a bachelor degree have moved overseas five years after graduation, compared to 28% of all bachelor degree graduates, and after seven years, 36% of computer science graduates had been overseas for at least three years compared to 23% of all graduates. A greater proportion of IT graduates do not return (p.165).

3.39. The average growth rate in the number of ICT workers in the period 2004-2013 was 3.7% (reaching 68,193 workers in 2013) or approximately 1,800 to 2,400 workers per year. There were 5,623 Immigrant ICT workers over four years 2008-2012, or an average of about 1,400 a year. So it appears that in effect over half the growth in ICT employment has come from overseas.

3.40. While the need to recruit from overseas is understandable in the circumstances, there should be greater expectations on employers to employ local graduates, and if necessary provide training, as first preference. Care must be taken in the longer run that New Zealand students, already difficult for tertiary institutions to recruit to take IT subjects, are not further put off by falling job prospects and downward pressure on wages.

[15] Matthew Ryan. (2012). Do we have too many entrepreneurs? Beware the downside of innovation. *University of Auckland Business Review, 15*(1), 6–14.

Cloud computing

3.41. A significant barrier to the use of cloud computing based overseas is the national security apparatus in those countries. In particular, recent leaks and revelations about the eavesdropping and potential interference with the data of foreign nationals by the NSA in the US and GCHQ in the UK, along with US intrusive laws empowering authorities to demand personal information from telecommunications providers, will leave a feeling of intense uneasiness among many users. Privacy and freedom of speech are issues of real concern. These are significant barriers to use of overseas data storage. We believe the New Zealand government was correct in ensuring its data is held locally.

3.42. Freedom of international data flows, recommended by the Commission, also carries privacy concerns because at times there may be no other way to protect privacy than interrupt flows. Such 'freedom' also carries implications for New Zealand's ability to collect taxes, to monitor and if necessary control international financial flows, and in the prudential management of financial institutions.

3.43. The recommendation to pursue international rules guaranteeing the free flow of data (p.187 and implied in R9.2) should be reconsidered.

Transfer pricing and tax evasion

3.44. We agree with the Commission's concerns regarding transfer pricing and tax evasion, emphasising that it is not unique to the IT industry. We have noted the potential conflict between freedom of data flows and effective tax collection.

3.45. We also agree that an effective response requires international action by multiple governments and hence support recommendation R9.3 though we would extend it to activities beyond 'digital services'. However international action may be slow in coming and less than effective. Authorities in New Zealand should also be seeking effective actions they can take unilaterally or in partnership with key countries that are willing.

4. Conclusion

4.1. We have submitted on specific topics, mainly concerning the effect of the Commission's recommendations on people.

4.2. We are particularly concerned at the prospect of yet another assault on working conditions and employment security, but welcome the step to open a discussion of Scandinavian types of active labour market policies.

4.3. We have also discussed a number of issues regarding ICT and IT, particularly with regard to skills and education.

4.4. We are disappointed at the lack of fresh thinking in the report, and reliance on ideas that have been tried and found wanting in New Zealand, many of which are being rethought internationally.

4.5. We would be happy to discuss any of these matters.