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NEW ZEALAND INSTITUTE OF ECONOMIC RESEARCH

Valuing access to work

An NZIER report commissioned by the Blind Foundation for the Access Alliance

February 2017

What we do is accommodate any employee, whether they are disabled or not. Every employee gets what they need. When it comes to people with disabilities, it may be assistive technology or services. Even if you're not disabled – if there is something you need in order to make your job more productive, you would get it. Unnamed IBM Executive, 2007

About NZIER

NZIER is a specialist consulting firm that uses applied economic research and analysis to provide a wide range of strategic advice to clients in the public and private sectors, throughout New Zealand and Australia, and further afield.

NZIER is also known for its long-established Quarterly Survey of Business Opinion and Quarterly Predictions.

Our aim is to be the premier centre of applied economic research in New Zealand. We pride ourselves on our reputation for independence and delivering quality analysis in the right form, and at the right time, for our clients. We ensure quality through teamwork on individual projects, critical review at internal seminars, and by peer review at various stages through a project by a senior staff member otherwise not involved in the project.

Each year NZIER devotes resources to undertake and make freely available economic research and thinking aimed at promoting a better understanding of New Zealand's important economic challenges.

NZIER was established in 1958.

Authorship

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Key points

Purpose and scope

The Blind Foundation commissioned NZIER to analyse the economic impact of improved access for people with disabilities (PWD). Two scenarios were considered:

- Scenario 1 models the impact of increasing employment among PWD to show what might happen if the unemployment rate of PWD was equal to the national unemployment rate.
- Scenario 2 models the impact of an increase in productivity through improved educational outcomes for people with disabilities, which will enable them to increase their income levels.

We did not consider the impact of increasing labour force participation for PWD that are not participating in the labour force. Improvements in accessibility may encourage greater labour force participation by PWD. The potential benefits of increasing the labour force participation rate are not included in our estimates.

We also discuss improvements to accessibility in the context of tourism. The tourism industry has a large and growing market for accessible tourism. Accessibility improvements to the built-environment reduce the barriers to participation in work, leisure and tourism.

Finally, this report discusses the issues and approaches to determining the costs of increasing accessibility.

This is a hypothetical examination of 'what could be' if PWD, in time, participated in work to the same degree as the total workforce. The displacement effect of a large group of new workers is not considered. PWD realistically would only gradually increase the labour supply as educational outcomes, new technologies and an increased level of accommodations took effect and the number of jobs increased over time. We also expect that any changes to accessibility requirements for employers would be introduced with an adjustment period to phase-in the changes.

Findings

- 925,000 working age New Zealanders have a disability(ies).
- 40,000 PWD are unemployed.
- 184,000 PWD are not active labour market participants.
- The rate of unemployment for people with a disability is 50% higher than the unemployment rate of the total workforce.
- Decreasing the unemployment rate for PWD from (9.2%) to the national rate (6.1%) would reduce the number of people on benefits by 14,000.
- The absorption of 14,000 workers into the labour market over several years would not be a major adjustment given that the number of people employed increased by 51,700 from 2014 to 2015.

- If jobs were readily available, and no one was displaced from work, equalising the unemployment rate for PWD to the national rate would add $1.45 billion to real gross domestic product.
- If jobs were readily available, and no one was displaced from work, the fiscal savings from reducing the unemployment for PWD to the national average would be $270 million per annum from social support payment.
- The cumulative 10-year fiscal saving in this scenario to the social support ranges between $2.9 billion and $3.0 billion.
- The costs of equalising the unemployment rate for PWD depend on the interventions required for PWD to achieve an 'accessible journey' to work and accessibility at work.
- Improved education outcomes, new technologies and an increased level of accommodation provide the potential for getting more PWD into active labour market participation, both for those already looking for work and the larger group of PWD not currently looking for work.
- Overseas experience suggests that more attention needs to be given to the costs of improved access for PWD so that the most practical and beneficial actions are taken first.
- The summarised set of maximum *potential* benefits is:

Maximum potential benefits from employment and education scenarios

Scenario	Increase in employment (people)	Increase in real GDP ($ million)	Increase in real household consumption ($ million)	Fiscal savings from reduced benefit payments ($ million)
Scenario 1: equalising employment rates for PWD with the national rate	14,000	$1,454	$1,139	$270 in the first year $2,900 over 10 years*
Scenario 2: increased labour productivity of PWD by 2% through better educational outcomes	N/A	$862	$608	N/A

*Allowing for annual CPI adjustments to core benefit payments.
The results of the two scenarios are not additive. They were modelled as separate economic shocks.

Next steps

- The 'size of the prize', in terms of gains to GDP and reduced fiscal costs, mean that improved accessibility for PWD is worth further consideration by policy makers.

- There is a broad understanding of the types of barriers to employment experienced by PWD, but only a limited amount of detailed research into what might be the effective policy interventions.
- More research and policy development is needed before the cost of interventions can be estimated and compared to the benefits.
- The New Zealand Government has encouraged the use of the social investment approach for developing policy interventions. There is benefit from using the social investment approach because of the recent integration of data sets relevant to PWD and their outcomes.
- The range of interventions to support PWD into work will require business partnerships with education, transport, health and disability support providers, to achieve an 'end to end' result for PWD.

Contents

Appendices

Figures

Tables

1. Objectives and scope

NZIER was commissioned by the Blind Foundation to analyse the economic impact of the potential outcomes from improving access to employment for people with disabilities (PWD).

PWD are more likely to be not employed or in part-time employment than people without disability (PWoD). This impacts on the living standards experienced by individuals with a disability and government spending due to the fiscal liability of long-term welfare dependence.

The Government has set a goal of reducing the burden of long-term welfare dependency by reducing the number of people requiring income support.[1] Improving access to employment for PWD is one way to reduce their dependency on welfare and improve their living standards.

This report explores three key themes:

1. The economic impacts of increasing employment rates among PWD
2. The impact of adopting new accessibility standards on markets like tourism
3. The cost of changes to accessibility standards.

Scope

This report provides a high-level assessment of the potential benefits and costs of improving access to employment for PWD. In-depth policy analysis of any improvement in accessibility and lowering barriers to labour force participation is out of scope.

The Blind Foundation has commissioned the analysis of two scenarios:

- Scenario 1 models the impact of increasing employment among PWD to show what might happen to the economy if the unemployment rate of PWD was the same as the national unemployment rate.
- Scenario 2 models the impact of an increase in productivity through improved educational outcomes for people with disabilities, which will enable them to increase their income levels.

The results of these scenarios capture the market effects of increased consumer spending by PWD due to increased employment and incomes. We also discuss the potential role of accessibility improvements in attracting tourists, such as the elderly, who put a high value on accessibility.

Finally, we discuss the challenges in, and approaches to, determining the costs of change.

This is a hypothetical 'what-if' examination of the benefits of PWD being able to participate in work at the same rate as the total population. Jobs do not magically appear. The displacement effect of increasing the labour supply (i.e. the possibility that new PWD entrants into the labour force 'take' jobs from existing labour market participants) is not considered here. PWD, as a cohort, would only gradually increase

[1] http://www.ssc.govt.nz/bps-reducing-dependence

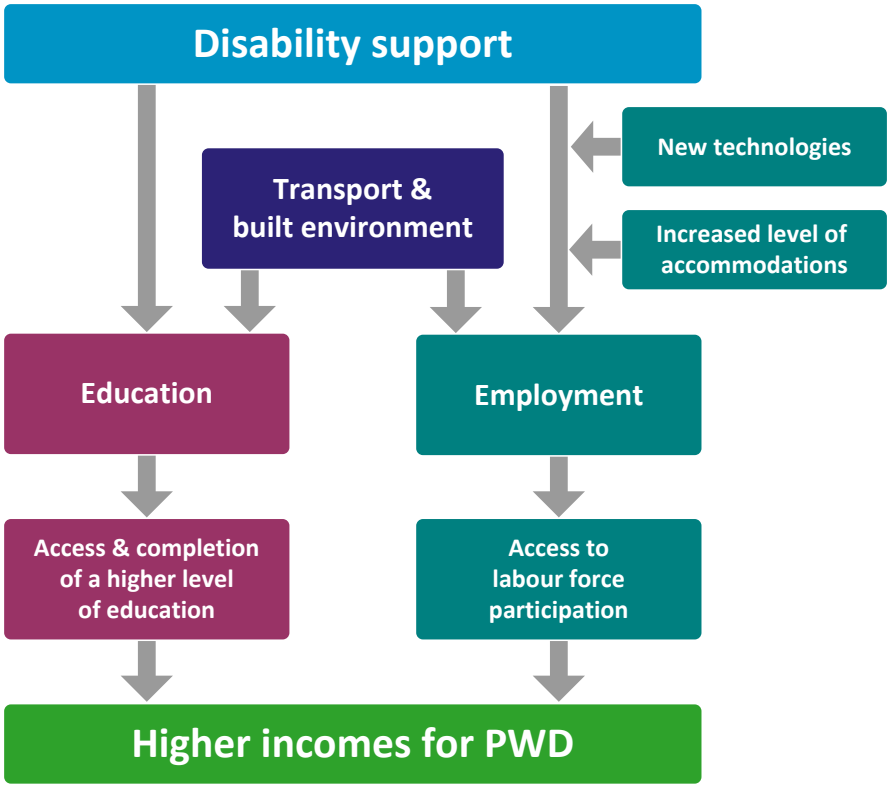
their participation in the labour market as educational outcomes, new technologies and job growth permit.

A detailed assessment of the cost of any change to a given accessibility standard requires specific information about the degree of change from the status quo that a new policy or standard would require. Examples are provided to indicate the level of costs and benefits associated with changes to accessibility standards.

2. Organising framework

Improving the social and economic well-being of PWD depends on having an intervention logic that is supported by a causal chain of *effective* interventions. The Martin Prosperity Institute (2010) has examined the case for intervention in Ontario and Deloitte Access (2011) considered the case for intervention in Australia. Both examinations show the magnitude of the opportunity and the key points for intervention. Neither of these reports considered the costs of the interventions. A framework for understanding the intervention logic is set out below.

Figure 1 An intervention logic for improved incomes for PWD



Source: NZIER, Martin Prosperity Institute

The Martin Prosperity Institute (2010) found that removing barriers to labour force participation for PWD would increase the GDP per capita of the province of Ontario by $600 per annum. Deloitte Access (2011) found that closing the gaps by increasing the labour force participation rate and decreasing the unemployment rate of PWD would increase Australia's GDP by A$12 billion in 2011.

3. Employment statistics

Understanding the jargon

Labour market statistics use some specific jargon. Understanding the jargon is essential for comprehending the scenarios and results discussed in this report. The key terms are defined in Table 1.

Table 1 Definitions of key terms used in labour statistics

Key terms	Definition
Working age population	All people aged 15 years and over.
Labour force	The employed plus the unemployed.
Not in the labour force	People are defined as not participating in the labour force when they: - are retired - have personal or family responsibilities such as unpaid housework and childcare - are attending educational institutions - are permanently unable to work due to physical or mental disabilities - are not actively seeking work.
Unemployed	People who are participating in the labour force but are not employed during the period of the Household Labour Force Survey.
Unemployment rate	The percentage of people in the labour force that are not employed at the time of the Household Labour Force Survey.
Labour force participation rate	The percentage of the working age population that are in the labour force.
Disability	In the Disability Survey, disability is defined as "an impairment that has a long-term, limiting effect on a person's ability to carry out day-to-day activities. "Long-term" is defined as six months or longer. "Limiting effect" means a restriction or lack of ability to perform. People were not considered to have a disability if an assistive device (such as glasses or crutches) eliminated their impairment.

Source: NZIER summary of definitions used by Statistics New Zealand

Unemployment rate among people with disabilities

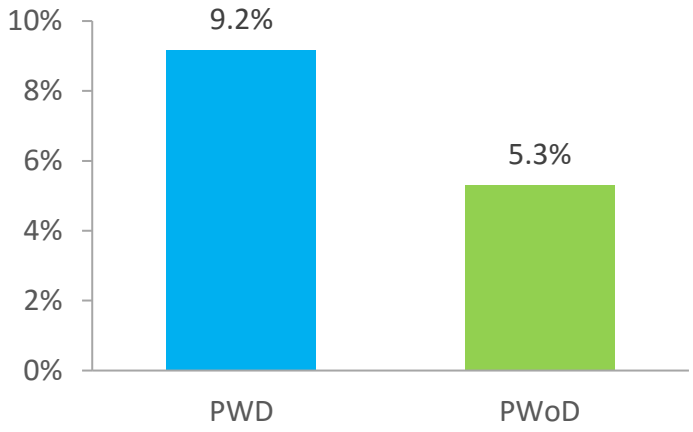
The latest available official data from 2013 shows that there are around 925,000 working age PWD in New Zealand[2]. Responses to the Statistics New Zealand Disability Survey 2013, show that 42,000 PWD aged from 15 years old were participating in the labour force, but unemployed. In comparison, 416,000 were in part-time or full-time employment.

PWD are more likely to be unemployed or not participating in the labour force than PWoD. The rate of unemployment of people in the labour force with disabilities is close to twice the rate among those without disabilities (see Figure 2).

[2] Statistics New Zealand Disability Survey 2013 labour force statistics

Figure 2 Unemployment rate

% of labour force

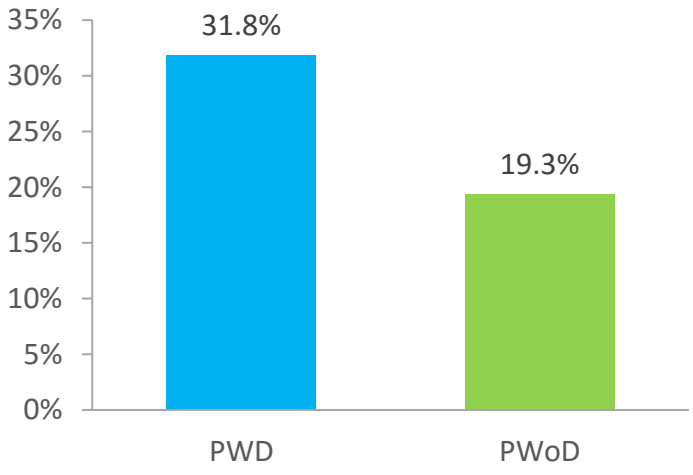


Source: NZIER analysis of the Disability Survey 2013

Figure 3 shows that 31.8% of PWD aged from 15 to 64 years[3] were defined as not in the labour force. Unsurprisingly, PWD are more likely to be defined as not participating in the labour force because one of the criteria for not being in the labour force includes permanent disability. But disability may not be the reason that they are not participating in the labour force. PWD may also be attending education courses, taking on personal or family responsibilities, not actively looking for work or in early retirement.

Figure 3 Not in the labour force

% of people aged 15 to 64 years' old



Source: NZIER analysis of the Disability Survey 2013

[3] People aged 65 years and over are excluded because retirement is a reason to be not participating in the labour force.

4. Employment and education scenarios

We used a computable general equilibrium (CGE) model to quantify the impact of our two scenarios[4]. The scenarios are intended to establish the potential 'size of the prize'. They indicate the upper limit of the potential benefits before considering the practical challenges and the cost of mitigating the challenges.

CGE models are our preferred method for assessing economic impacts and are used extensively in New Zealand and internationally. As a recent commentary noted regarding CGE modelling, "a well-designed model that is used by skilled practitioners to shed light on issues the model was designed to illuminate can make a significant contribution to policy debates and decision making".[5]

In the two scenarios run, there is an assumption that jobs are readily available – which is not the case. The scenarios provide a counterfactual 'what if?' By quantifying the 'what if' scenarios, insights are gained into whether improving labour market and educational outcomes for PWD is worthy of more detailed investigation by policy makers.

4.1. The impact of increasing employment of PWD

We model the economic impact of decreasing the unemployment rate for PWD from 9.2% to 6.1% (the national average at the time of the Disability Survey 2013). This scenario would increase the number of people employed by 14,000, which would be a material change to the economy. Table 2 summarises the inputs to the scenario.

[4] Appendix A contains more information about the model.

[5] Denniss, R. 2012 The use and abuse of economic modelling in Australia, Australia Institute Technical Brief No. 12.

Table 2 Scenario for increased employment

Factor	PWD	PWD and PWoD
Unemployed in labour force	42,000	144,000
Employed	416,000	2,232,000
In the labour force	458,000	2,376,000
Unemployed, %	9.2%	6.1%
'What if' scenario		
Unemployed, %	6.1%	
Increase in employment	14,000	
Increase in employment (%)	3.4%	0.59%

Source: NZIER

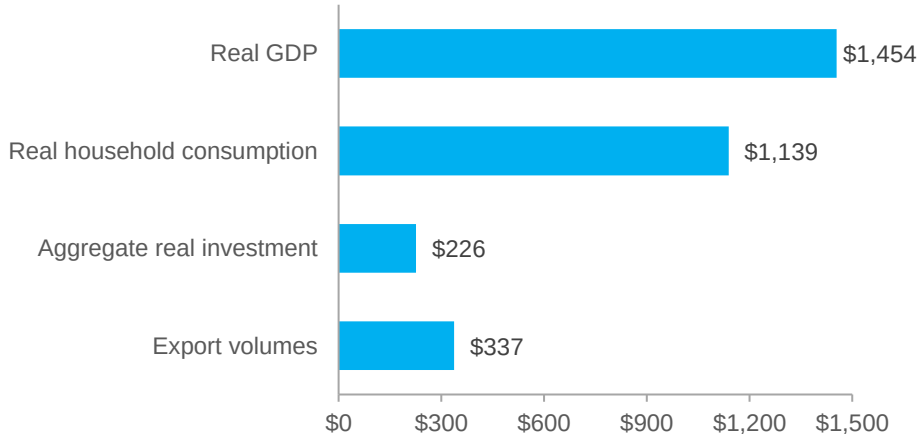
This scenario assumes that there are 14,000 new jobs in the economy and no displacement of existing employees. Therefore, it shows the impact on the economy of a larger labour force and assumes jobs are available without displacement of other workers. To put this increase in context, the number of employed people increased by 51,700 from 2014 to 2015.[6] An increase of 14,000 in employment is equivalent to a 27% of the increase in employment from 2014 to 2015.

Employment scenario results

Figure 4 shows the economy-wide impact of shifting from the 9.2% unemployment rate to a 6.1% unemployment rate compared with that in the 2015 baseline. Real GDP would be $1.45 billion higher than the baseline in 2015. Household consumption grows by $1.14 billion. Exports and investment grow by $337 million and $226 million, respectively.

Figure 4 The value of the employment effects

Change in economic output ($ million)



Source: NZIER

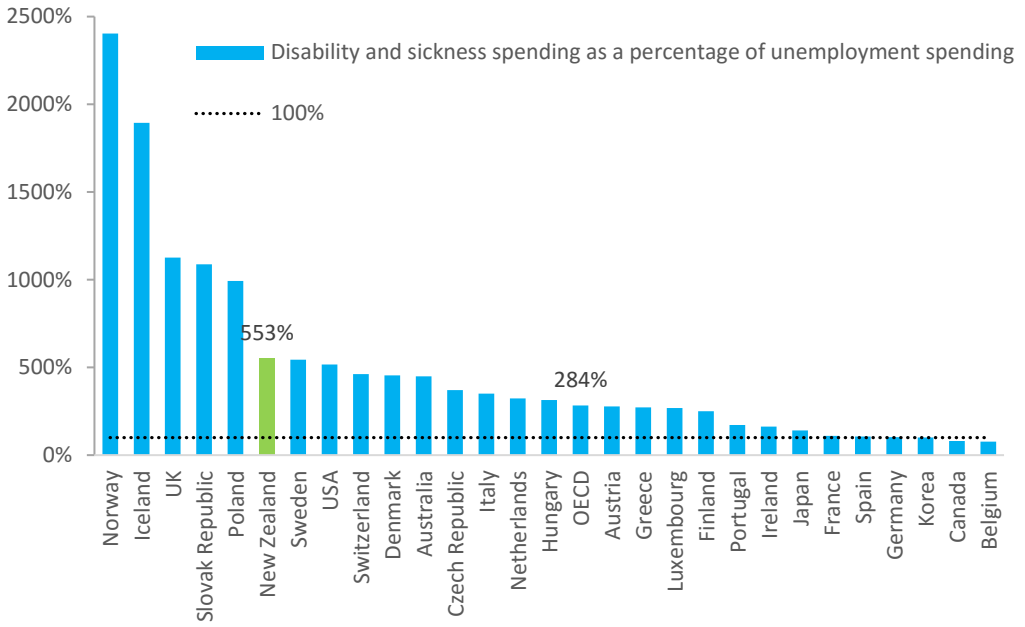
6 Statistics New Zealand, Household Labour Force Survey.

Fiscal savings from reducing benefit dependency

The fiscal cost of benefit dependency for PWD exceeds the cost of support for jobless PWoD. In 2007, New Zealand spent five times more on disability and sickness benefits, than on unemployment benefits. This phenomenon is common across the OECD. Figure 5 shows the level of spending on disability and sickness support payments as a percentage of unemployment spending.

Figure 5 Disability spending compared to unemployment spending

In 2007



Source: OECD (2010) Sickness, disability and work

During 2016 around 56,000 people received the Jobseeker Health Condition or Disability benefit.[7] Decreasing the unemployment rate of PWD (9.2%) to the national average unemployment rate (6.1%) would reduce the number of people on the benefit by around 14,000. We estimate the fiscal savings in 2015/16 from that number of people no longer requiring support to be $270 million.[8]

We estimate the cumulative fiscal saving over the next 10 years to be between $2.9 billion and $3 billion. The estimated is based on the average benefit increasing in line with the CPI index.[9]

Tax revenue is also expected to increase due to more people being employed. We estimate the employment shock will increase tax revenue by $387 million compared to the 2015 baseline.

7 Ministry of Social Development.

8 Based on the net Jobseeker Health Condition benefit for a single person aged 25 years and over; the disability allowance and an accommodation supplement of $100 per week.

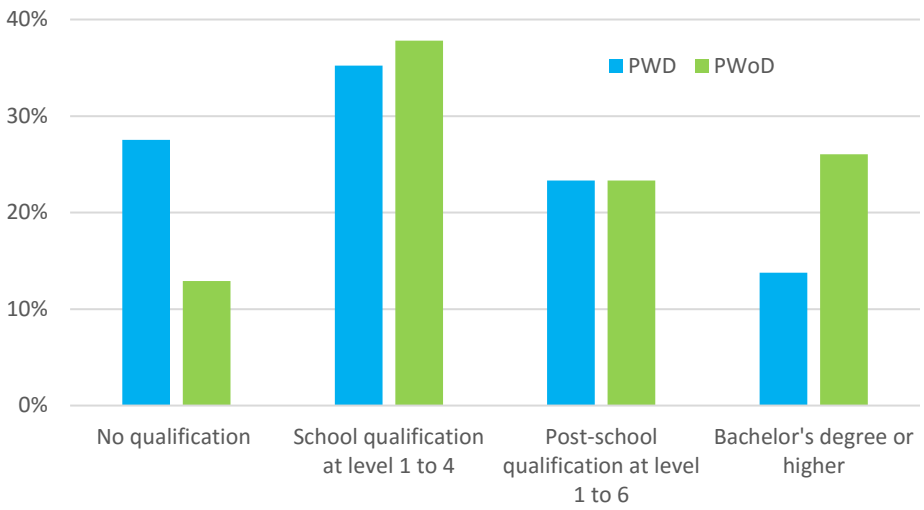
9 Consensus Forecasts, NZIER.

4.2. The impact of education

PWD as a cohort have lower levels of educational attainment than PWoD. Figure 6 shows that more PWD do not have a qualification and a lower percentage of PWD achieve a tertiary qualification, when compared to PWoD.

Figure 6 Highest qualification with and without a disability

Percentage of the population by highest qualification



Source: Statistics New Zealand Disability Survey, 2013

A minority of disabilities directly affect the ability to learn. The results of the Disability Survey 2013 show that:

- Intellectual impairments affect 2% of the population
- Intellectual impairment affects 3% of males and 1% of females
- Impairments that impact learning affect 5% of the population
- Impairments to learning affect boys (7%) more than girls (4%).

Barriers to educational achievement affect the productivity of PWD. Rycx et al (2015) found that there is a positive relationship between educational achievement and productivity. Education and the development of human capital is key to increasing productivity and stimulating economic growth (Barro and Sala-i-Martin 1995).

Increasing productivity

This section examines the economic impact of a 2% increase in labour productivity by PWD. The national annual average increase in labour productivity from 1987 to 2015 was 2.0%.[10]

Evidence that quantifies the impact of assistive technology and increased PWD productivity is scarce. The Rehabilitation Engineering Research Center on Workplace Accommodations reports that productivity gains from assistive technologies are

[10] Statistics New Zealand, Labour productivity: NZ progress indicators. June 2016.

possible and in one study cited, 'accommodations' yield $29 of benefits for every $1 of expense (Zolna, 2004). Examples of accommodations include modifying computer equipment, modifying bathrooms on the worksite, modifying individual work stations with lower desks, changing work schedules and providing information in alternate forms such as Braille.

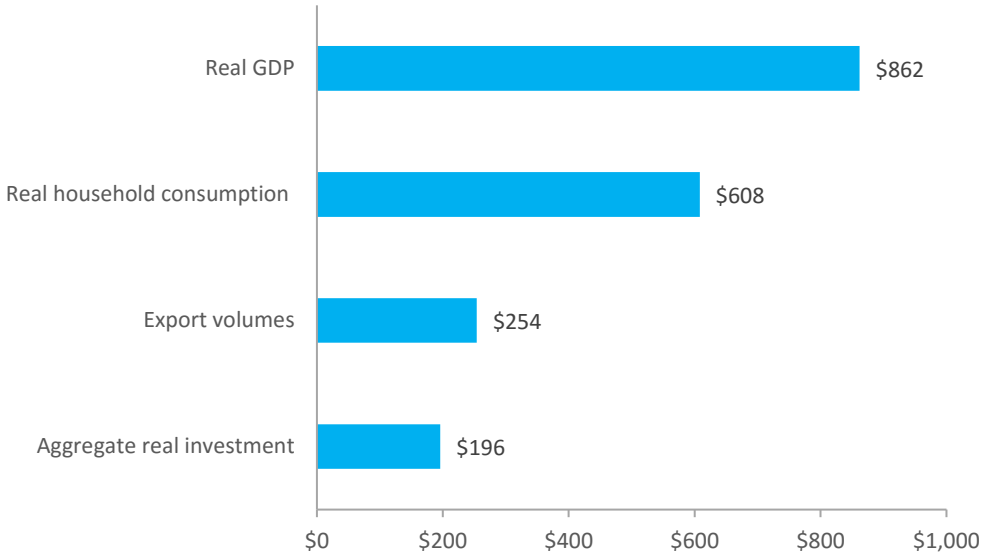
In a case study of eight companies, based on over 5,000 employee and manager surveys, and interviews and focus groups with 128 managers and employees with disabilities, both PWD and PWoD self-report that the accommodations improved their productivity (Schur et al, 2014).

In the absence of adequate data, the 2% figure we use here assumes that PWD have not benefited from labour productivity gains as much as the PWoD workforce and that unrealised gains are possible from education, new technology and an increased level of accommodations.

Figure 7 shows the economy compared with the 2015 baseline in dollar terms. A 2% increase in productivity for PWD translates to an increase in real GDP of $862 million. Household spending grows by $608 million. Exports are estimated to grow by $254 million. Household consumption, investment, and exports are all components of GDP. They are not additional to the impact on GDP.

Figure 7 The impact of increasing the labour productivity of PWD

Change from the 2015 baseline, $ million



Source: NZIER

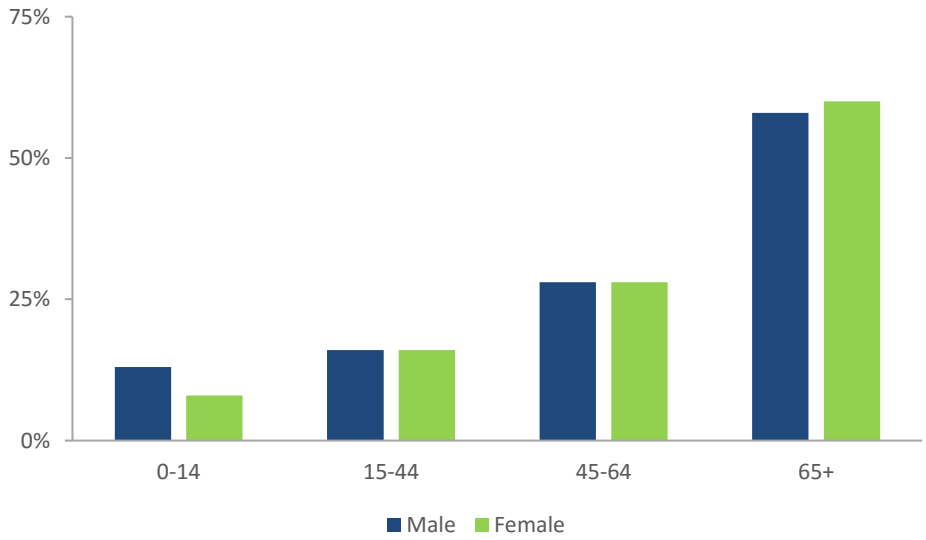
5. Tourism and accessibility

The downstream economic benefit from increased labour force participation and higher living standards for PWD is an improvement in their disposable income which could lead to an increase in spending on retail, leisure activities, travel and other consumption. There are also intangible benefits to self-esteem and the ability to belong to, and participate in, society.

The New Zealand population is ageing and the incidence of disability is positively correlated with age. This suggests that improvements to accessibility generally in New Zealand will have a positive effect on the social and economic participation of older people.

Figure 8 Disability and age

Percentage of the population with a disability



Source: Statistics New Zealand Disability Survey 2013

The World Health Organisation estimates that 15% of the global population has a disability and it expects the percentage to increase as populations age.[11] This is likely to have an impact on demand for services like healthcare, but it will also impact on consumption activities such as tourism. Dwyer and Darcy (2011) note that the contribution of disabled tourists to Australia's tourism GDP ranged between 11% and 18% of total tourism GDP in 2003/04.

Globally the tourism market has become increasingly aware of the market for accessible tourism. For example:

- accessible accommodation (http://www.cqwellington.com/facilities/accessibility.html)
- accessible tours (http://www.rollinasia-travel.com/en)

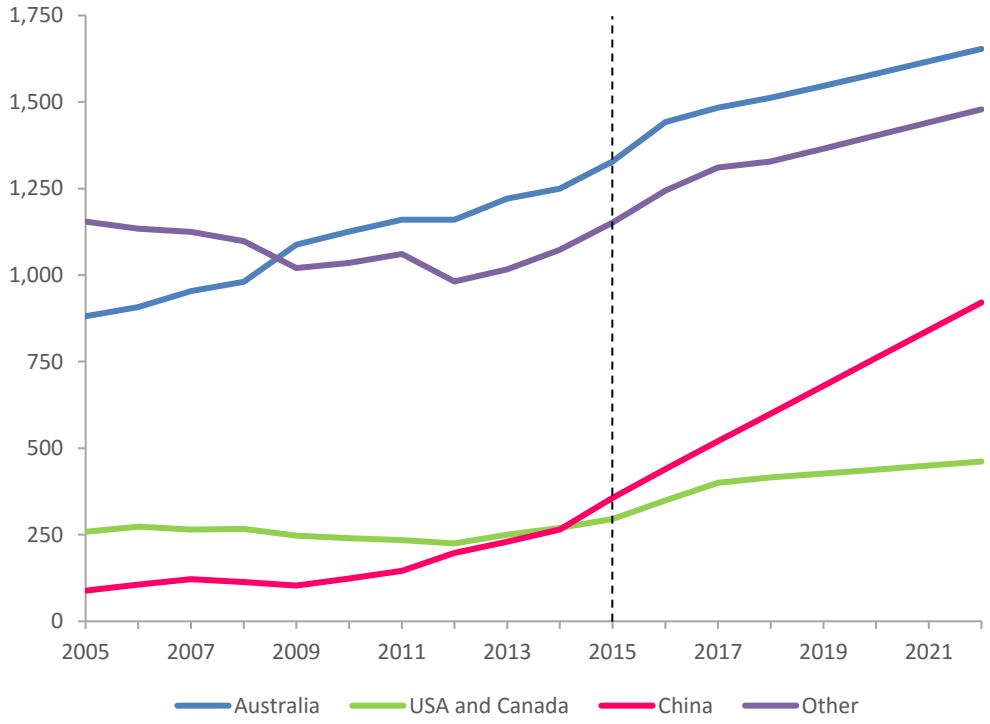
[11] WHO global disability action plan 2014-2021. Better health for all people with disability.

- accessible activities (http://seawolfadventures.net/accessadventure)
- accessible cities http://www.sansebastianturismo.com/images/ssturismo/pdf/accessible_tourism.pdf.

Tourism is one of New Zealand's most important sectors. Tourism directly contributed $12.8 billion to GDP in the year ending March 2016.[12] Visitor growth has been strong, and forecasts expect further robust growth.

Figure 9 Tourism forecasts

Visitor arrivals (thousands)



Source: MBIE Tourism Forecasts 2016-2022

An ageing population is an issue for many of our key tourism markets. Many accessibility improvements such as access to public buildings, transport and the urban environment will also benefit tourists with disabilities.

Accessible tourism is a competitive market. PWD have a choice of destinations. The relative accessibility of accommodation, the urban environment, transport options, tours and attraction will be factors in their travel choices. Therefore, improvements to accessibility in New Zealand will lower barriers to participation for New Zealanders and have flow-on benefits for visiting tourists.

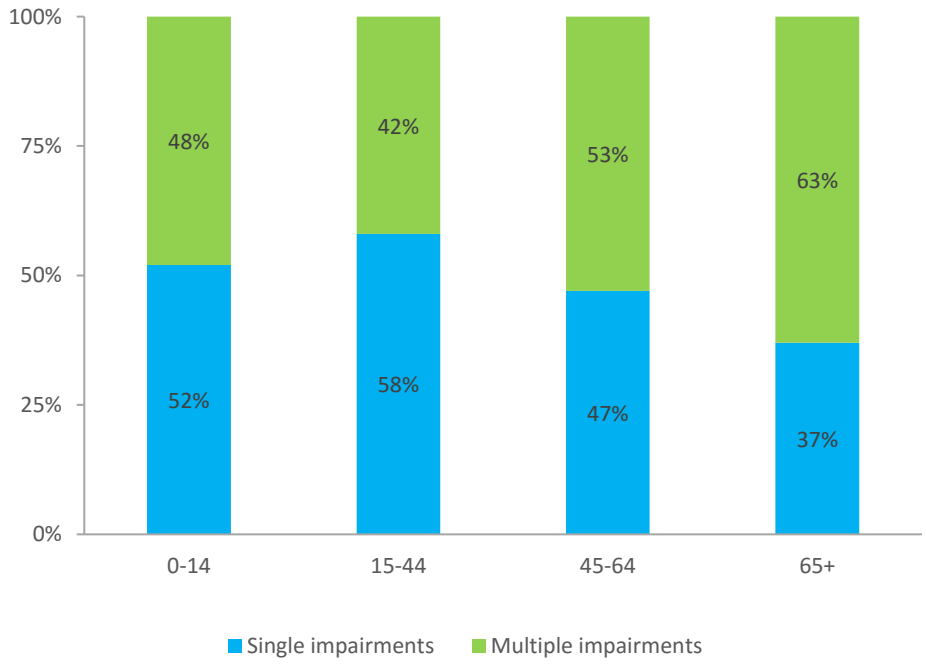
[12] Ministry of Business, Innovation and Employment. 2016. Tourism Dashboard.

6. Barriers to work

The preceding analysis shows that the size of the prize from increasing employment rates for people with disabilities is significant and therefore the opportunity warrants serious consideration by policy makers.

How this level of employment among people with disabilities may be achieved is not immediately obvious because of the unique nature of each person's disability(ies). If it was easy it would have been already achieved. Like other labour market challenges, such as youth unemployment, there is no quick fix and no 'one size fits all' policy solution. Overcoming disability can be a complex challenge. The nature and severity of disability varies on an individual basis and on average PWD have more than one type of disability (see Figure 10).

Figure 10 Proportion of PWD with single or multiple impairments



Source: Statistics New Zealand Disability Survey 2013

The costs of living with a disability also vary significantly depending on the nature and severity of the disability (see Table 3). Improving employment opportunities for PWD would help those individuals to be more independent. PWD who are in employment are known to source and fund their own equipment and services, even if public funding is available, because self-funding expands the options and reduces the transaction costs associated with public-funded equipment.

Table 3 Additional costs of a disability

Additional weekly cost estimates for a single person living alone. (Based on focus group responses)

Impairment type	Moderate needs	High needs
Physical	$639	$2,284
Vision	$353	$719
Hearing	$204	$761
Intellectual	$578	$2,568
Mental Health	$714	$2,413

Source: Disability Resource Centre (2010)

Understanding the barriers

Understanding the barriers to employment is crucial to overcoming these challenges and levelling the playing field. Barriers to participation in society are wide ranging. Barriers that prevent social participation can prevent work force participation as well. For example, transport barriers can affect leisure activities, access to services, access to educational institutions and access to employment opportunities. Ensuring point-to-point journeys are accessible is important because a single step or kerb can prevent access.

The New Zealand Standard Design for Access and Mobility – Buildings and Facilities defines an accessible route as:

> *"… a route that is usable by people with disabilities. It shall be a continuous route that can be negotiated unaided by a wheelchair user, walking device or by a person with a guide dog. The route shall extend from street boundary and carparking area to those spaces within the building required to be accessible to enable people with disabilities to carry out normal activities and processes within the building."* (Standards New Zealand, 2001, p. 12).

Barriers to participation are not limited to physical barriers. A barrier can take many forms include social misconceptions about and attitudes towards PWD. Accessibility Ontario[13] defines a barrier:

> *"a circumstance or obstacle that keeps people apart. For people with disabilities, barriers can take many forms including attitudinal, communication, physical, policy, programmatic, social, and transportation."*

There is limited research conducted in New Zealand about the barriers to employment for PWD. The research that has been done often draws heavily from international studies. Singley (2003) conducted a literature review of the international barriers to employment for long-term beneficiaries, including but not limited to those with a disability. The relevant findings on international barriers for PWD are summarised in Table 4. Singley found that some of the barriers identified in international research had not been identified by New Zealand research. More research is needed on mental health, social networks, social support, and long-term beneficiaries.

[13] https://accessontario.com/aoda/definitions/

Table 4 Barriers to employment

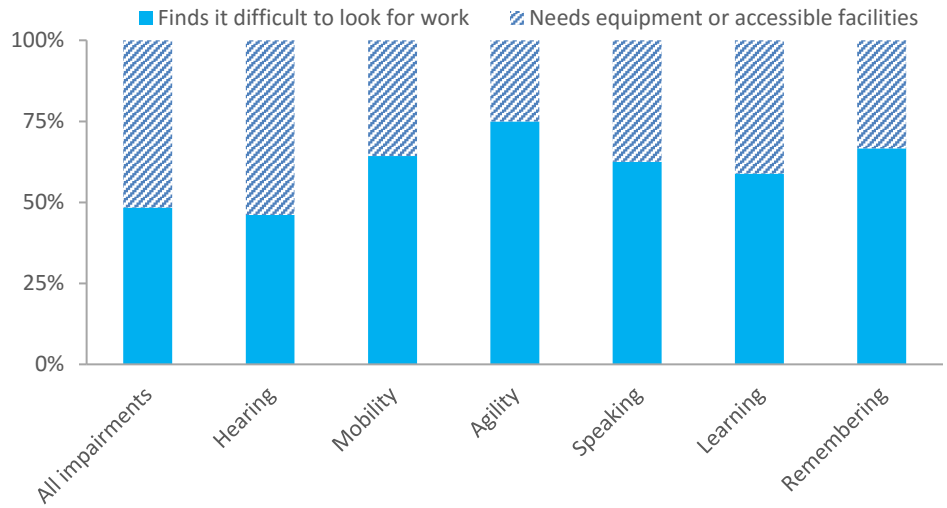
Personal barriers	Social and community barriers	Work-related barriers: individual and structural	Benefit system barriers
Poor health and disability Mental illness and psychological distress Learning disabilities Attitudes towards disability Transport barriers	Lack of access to or poorly developed social networks	Human capital deficits Labour market issues Actual or perceived discrimination Ineffective job search	Financial disincentives for employment Inadequate support and case management Lack of awareness

Source: Singley (2003)

The Disability Survey (Statistics New Zealand, 2013) provides some insights into the barriers identified by PWD aged from 15 to 64 who were unemployed and looking for work at the time of the survey. Figure 11 shows that it is common for a disability to present a challenge in the process of looking for work, before considering the accessibility of the job or facilities. This further reinforces the evidence that increasing labour force participation may require more than one point of intervention.

Figure 11 Self-reported impact of a disability on looking for work

Unemployed PWD aged 15 to 64 who are looking for work[14]



Source: Statistics New Zealand, Disability Survey 2013

[14] Responses for people with sight impairments were not published due to the small sample size for this group.

The impact of technology

Technology is an important tool for mitigating impairments. Some traditional examples include glasses, walking canes, wheelchairs and braille. Technologies for reducing the impact of impairments have advanced significantly in the information age. Some examples of tools for people with sight impairments include the following:

- Apps
- Screen readers
- Screen magnifiers
- Electronic braille devices.

Employment interventions

Singley (2003) concluded that addressing barriers to employment and the consequential dependence on social assistance requires a holistic approach, which means tackling personal, workplace, community and policies barriers together.

Miller (2006) completed an international literature review into approaches and interventions for sickness benefit and invalid's benefit clients. The scope of the review included PWD and people with temporary physical impairments such as those recovering from injuries. The recommendations of the review were:

- Early intervention to promote return to work
- Identification and provision of return to work assistance in conjunction with case management to achieve return to work goals
- Structuring health and cash benefits to encourage those with ill health or disabilities to return to work
- Corporate commitment to rehabilitation, maintaining communication between employer and employee throughout rehabilitation
- Implementation of work-based rehabilitation strategies.

The OECD (2010) investigated sickness, disability and employment. It concluded that employment was an effective way to support people with disability and that the policy focus should change from disability assessment to employment assessment. According to the OECD, the most important factor was developing the right financial incentives. The report (OECD, 2010, p.12) recommended that:

- for sick workers and disability beneficiaries, it must pay to remain in work, seek work or increase work effort
- for employers, it must pay to retain sick workers and help them back quickly into their job or to find another job, and there may need to be subsidies for hiring workers with health problems
- for benefit authorities, it must pay to assess people's work capacity rigorously and avoid the granting of a benefit just because this seems easiest
- for service providers, it must pay to reintegrate their clients into the regular labour market at a sustainable level.

7. Aggregate cost estimates of equalising access for PWD

7.1. Conceptual challenges

Establishing the costs of improving access/equalising employment rates between PWD and PWoD is largely unknowable without an understanding of the degree of change that any one policy/standard requires.

Ontario introduced wide-ranging accessibility legislation in 2005. The Accessibility for Ontarians with Disabilities Act (AODA) aimed to identify, remove, and prevent barriers for people with disabilities.[15] The AODA is comprised of five standards in the following areas:

- Employment
- Transport
- Information and communication
- Customer service
- Design of public spaces.

The standards are intended to provide an integrated regulatory framework. The AODA includes a schedule for compliance that is intended to give public and private organisations time to adjust. Non-compliance risks a substantial fine. A review[16] of the AODA found that the main implementation challenges were:

- Interpreting the requirements
- The lack of a mechanism for considering the cost of compliance
- Supply side factors such as the number of suppliers of specialised and customised equipment.

The lesson from the Ontario experience is that a good understanding of the costs and market effects of wide-ranging accessibility policy is important for successful outcomes.

Each of these standards has costs that are determined by the implementing agencies and businesses. A 2014 review of the legislation (Moran, 2014) concludes that:

> *One of the biggest weaknesses of the AODA, the Review heard from many, is that it does not contain any mechanisms to address cost*.

Determining the costs of implementation in Ontario has been hampered by incomplete implementation and enforcement. There are no reporting requirements to capture the costs and the system remains complaint based.

A similar situation prevails in New Zealand. For example, the New Zealand Government implemented new web standards in 2003 to improve readability and accessibility (Mallard, 2003). This initiative was not costed at the time of implementation.

15 https://accessontario.com/aoda.

16 Second Legislative Review of the Accessibility for Ontarians with Disabilities Act, 2005.

Government agencies made upgrades to meet these standards in the normal course of information technology upgrades. Costs were absorbed into baseline budgets.

7.2. Budgeted disability support examples

The cost of changes cannot be estimated until more work is done to research and scope the potential interventions to reduce the barriers and improve accessibility. Table 7 gives an indication of some of the Government-funded programmes that support PWD and improved access. The annual operating budgets/costs of these programmes provide a few examples of the order of magnitude of costs that might be associated with policies related to implementing any future disability access standards in New Zealand.

Table 5 Costs for selected disability related programmes

Standard / Access policy	Annual operating cost	Scope
NZ on Air disability services programming	$4.9m	29 hours of general programming.
NZ on Air TV captioning and audio description	$2.8m	300 Weekly captioned hours. 40 weekly audio description broadcast hours.
Health and disability regulatory and enforcement services	$24m	Implementing, enforcing and administering health and disability related legislation and regulations, and provision of regulatory advice to the sector and to Ministers, and support services for committees.
National disability support services	$1,158m	Delivery of disability support services provided through DHBs and third party service providers.
ACC social rehabilitation	$590m	Return to work and activities of daily living.
Human Rights Commission	$98.9m	In 2015/16 the most common area for human rights complaints or in enquires was employment. Disability was the most common ground for a human rights complaint.

Source: Treasury Vote Estimates 2016, NZ on Air Annual Report 2015/16, ACC Annual Report 2016, Human Rights Commission Annual Report 2015/16

7.3. Who is best placed to make decisions?

Individual businesses, along with PWD, are best placed to make decisions on disability access improvements because they understand their set of circumstances. They have the information and knowledge to apply scarce resources and take practicable steps that give the best return on any investment to improve disability access.

For Government agencies, a social investment approach is a sensible and practical way to assess and implement changes at the population level that make the greatest difference to the lives of people with disabilities. A social investment approach considers the opportunity costs of alternative choices so that scarce resources are put

the greatest effect. Where social investment differs from a standard cost-benefit approach, is that the social investment approach selects interventions on the basis that they will reduce costs to government and improve social and economic outcomes.

The New Zealand Government has encouraged the use of the social investment approach to develop policy interventions where there is social and economic data that can be matched to understand, quantify and track trends. Improving the employment outcomes of PWD sits well within the scope of social investment.

The Social Investment Unit describes the social investment approach as[17]: putting the needs of people who rely on public services at the centre of decisions on planning, programmes and resourcing by:

- setting clear, measurable goals for helping those people
- using information and technology to better understand the needs of people who rely on social services and what services they are currently receiving
- systematically measuring the effectiveness of services, so we know what works well and for whom, and then feeding these learnings back into the decision-making process
- purchasing outcomes rather than specific inputs, and moving funding to the most effective services irrespective of whether they are provided by government or non-government organisations.

The lessons learnt from social investment can be shared with businesses and PWD so that effective interventions are disseminated and implemented.

[17] https://siu.govt.nz/about-us/what-is-social-investment/

8. Next steps

We provide the following observations and actions for the Blind Foundation and its partners to consider for further development:

- The 'size of the prize' in terms of gains to GDP and reduced fiscal costs mean that improved accessibility for PWD is worth detailed attention by business and policy makers
- There is a broad societal understanding of the types barriers to employment experienced by PWD, but only a limited amount of detailed research into what the effective policy interventions might be
- More research and policy development is needed before the cost of interventions can be estimated and compared to the benefits
- Notwithstanding the need for more research, businesses and PWD in 'real life situations' have everyday opportunities to identify and make adjustments that improve accessibility in any particular workplace
- The New Zealand Government has encouraged the use of the social investment approach for developing policy interventions. There would be benefits from using the social investment approach to better understand the employment challenge and consider the potential policy interventions for PWD
- The range of interventions to support PWD into work will require business partnerships with education, transport, health and disability support providers to achieve an 'end to end' result for PWD.

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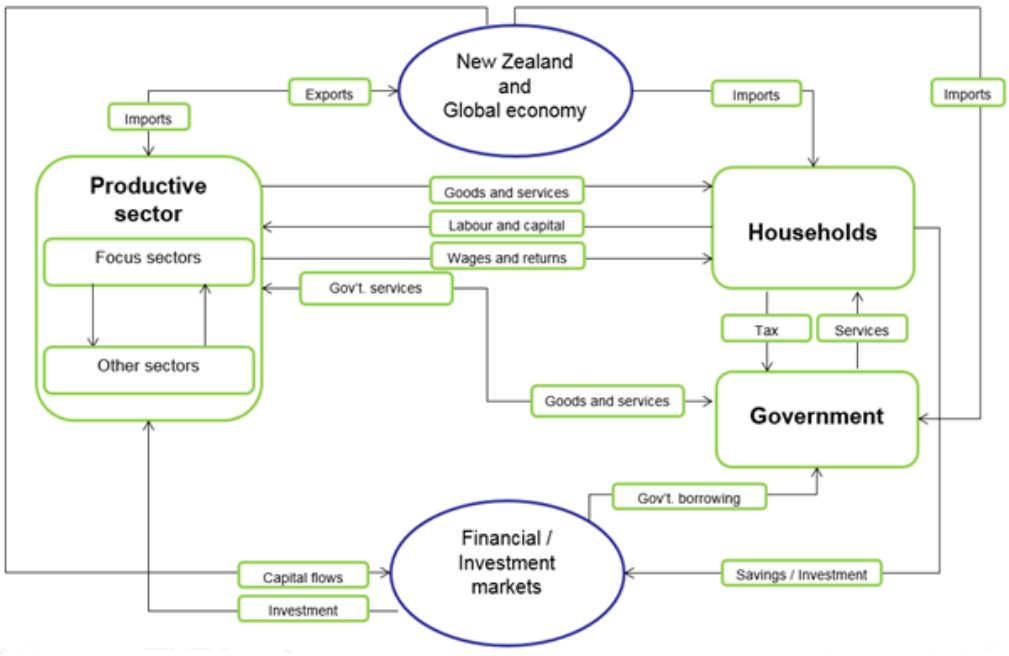
Appendix A

Our national CGE model

NZIER's national CGE model, ORANI-NZ,[18] is a top-down model of the New Zealand economy, which begins with components of the economy and sums them up to obtain an aggregate description of the economy. It is based on Statistics New Zealand's 2013 input-output tables, which have been updated to reflect the economy in 2015.

A visual representation of ORANI-NZ is shown in Figure 12. It highlights how the model can capture the complex and multidirectional relationships between the various parts in the economy and how they interact with the rest of New Zealand and rest of the world.

Figure 12 CGE models cover the whole economy



Source: NZIER

ORANI-NZ offers a unique capability to show how increasing PWD participation rate or productivity would impact on New Zealand economy.

The model includes 106 industries and 201 commodities in its standard form. Due to limitations on PWD employment data by industry, we aggregate the 106 industries into 20 broader sectors.

[18] ORANI-NZ stands was developed at NZIER based on the original Australian ORANI model created by the Centre of Policy Studies, Victoria University-Melbourne, Australia. http://www.copsmodels.com/term.htm. NZIER maintains close connections with the Centre, ensuring that our modelling techniques reflect international best-practice.