



## BEYOND UNEMPLOYMENT: MEASURING REGIONAL LABOUR MARKET PERFORMANCE

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### Abstract

*High performing regional labour markets support the shift towards greater value and improved rewards for businesses, workers and communities. This occurs through gains in productivity achieved through sectoral economies of scale and more efficient regional environments which provide the climate for global skills and talent. As such they are an important contributor creating: competitive sectors and regions, thriving communities and make significant contributions to national economic output. In the long-term, economic growth, increases in living standards and economic wellbeing depend on sustained growth in productivity and the significant contribution that sectors and regions make. This paper presents an initial investigation into measuring the performance of New Zealand regional labour markets. New Zealand contains many local and regional labour markets which operate at a variety of geographic levels. The paper discusses the concept of "high performing" labour markets and investigates and considers a general framework which can, in principle, be applied to consider the performance of the labour market at any geographic level. The framework identifies the key characteristics of high performing regional labour markets and suggests how these can be measured in terms of supply, demand and functionality characteristics.*

### Introduction

The evaluation of labour market performance is essentially comparative, assessed over space (countries, regions and urban areas) and temporal (previous decade, year and month). Performance is also multi-dimensional and labour markets may perform well in some domains but poorly in others. Thus, a single indicator, such as unemployment, can only provide a limited, one-sided view of labour market performance (for example, see Watson, 2000 for a critique of using only the unemployment rate as a measure of performance and for an earlier critique in the New Zealand context see Morrison, 1997). However, the use of multiple indicators can create ambiguity, since each indicator may rank labour markets differently. Without assessing the relative

value of each measure it is not possible to identify one labour market performance that dominates another. The well-established use of composite indicators for assessing differences in deprivation and well-being (for an international example see Osberg and Sharpe, 2002) has more recently been applied to simplify the monitoring of labour market performance. Composite labour market indices have received most attention in European labour market research (see Tronti, 1998), where the focus has been on developing effective labour market benchmarks, from which the impact of national labour market policies on labour market convergence can be assessed.

The form of a benchmark depends crucially on which labour markets and what labour market features are being



compared. Composite frameworks can be constructed to monitor performance of a single labour market over time. For example, Watson (2000) considers the Australian labour market from 1988-1999. Alternatively, Storrie and Bjurek (2000) compare labour markets over countries in the EU and Osberg *et al.* (2002) use spatial and temporal comparisons when analysing the national labour markets of the US and Canada. Definitions of performance vary considerably between studies. Mosley and Mayer (1998) follow targets set out by EU labour market guidelines, whereas Watson (2000) considers the 'health' of the labour market using measures of the quantity and quality of employment; an approach that has been widely adopted at regional level in the United Kingdom. In contrast, Osberg *et al.* (2002) focus on the labour market well-being of workers, which is assessed using the domains of returns from work, accumulation, equality and security.

All the above studies, however, share the notion that labour market performance can be assessed using outputs of the labour market production process. Schmid *et al.* (1999) discuss an alternative, the employment systems approach, which considers the set of institutions that determine employment. This approach is intended to provide a broader framework for benchmarking, with greater theoretical content. The wider economic environment is taken into account and concepts such as efficiency can be considered. For example, GDP is decomposed into efficiency measures of employment and quantity employment measures.

#### *Defining a 'High Performing Labour Market'*

*Better Work Working Better (BWWB)* provides an overview in terms of what a high performing labour market can contribute to the New Zealand economy and society as a whole. *BWWB* describes a range of characteristics in order to achieve such an outcome comprising the nature of employment, skills and abilities of the workforce, the kinds of workplaces and working environments and the sector, industries and regions people work in. These have been taken into account into to the construct and working hypotheses.

The notion of a 'high performing labour market' provides the foundation to the framework and this section explores how this concept will support sustained economic performance, competitiveness, greater social cohesion and quality of life. A high performing labour market must also support the essential services supplied by the public sector, private sector, voluntary and community groups, vital to the fabric of communities and regions as a whole.

There is no single accepted definition of a 'high performing labour market' in the existing literature. Indeed, the term 'high performing' is not widely used to describe labour markets. Far more common are words such as 'successful' 'efficient', 'effective', 'flexible' on the one hand, or 'rigid', 'tight', 'depressed' 'overheated' *etc.* on the other, which are used to describe different

labour markets in different times and places. However a considerable amount of research in this area has been conducted in the United Kingdom, Canada United States and New Zealand to support regional labour market development. This section draws on these experiences and learnings.

A key question, therefore, is to establish what the notion of a 'high performing labour market' might convey in the context of regional activities in general, and the development of regional labour market strategies for New Zealand. While there will clearly be different views as to what 'high performing' in this context consists of, it seems reasonable to expect that it is not only to do with 'success' on the standard indicators on the demand and supply side (relating to employment levels and growth, skill levels and quality *etc* but is also to do with:

- **Balance** – in the sense that the success of one part of the labour market is not purchased at the expense of the failure of another part. For example, in a high performing labour market growth in high skilled, high paid employment should not operate as to exclude lower-skilled workers from the labour market.
- **Internal coherence and harmony** in the functioning of the labour market – in the sense that the different parts of the labour market function well together and not against each other. For example, a region may have a high level of labour demand generating many high-skilled jobs, and a high-potential workforce, but if the education and training institutions are not responsive to the needs of both employers and individuals, the labour market may experience persistent and serious mismatches.
- **Sustainability** – in the sense that any short-term labour market successes can be sustained over the medium and longer term. So, for example, attracting a large inward investor provides jobs, but in some sectors subject to high levels of global competition (in product and labour markets) there may be concerns about the susceptibility of those jobs to subsequent relocation of employment.

The notion of a 'high performing labour market' is intended to broaden the process of judging how well a regional labour market is performing by drawing attention to these latter factors relating to balance and labour market functioning, and by emphasising an audit of the regional labour markets which relate not just to economic success, but also to social cohesion and sustainability. A further interpretation might be a high performing labour market exists when a dynamic balance has been achieved between the skills and aspirations of the workforce and the changing needs of employers within a competitive economy. A further important factor is the emphasis on moving the labour market up the skills and value chain and ensuring that there is an upwardly mobile progression route for those who choose to take it.



## Key Characteristics of High Performing Labour Markets

Drawing on the above discussion, and existing research on the functioning of regional labour markets - high performing labour markets adapt smoothly to change to ensure the most effective balance between the jobs and skills needed for the development of a diverse, innovative and productive economy, and the number and skills of people available for work.

Crucially, however, the notion of a 'high performing' labour market in the sense discussed above, reflects not just the strength of the two sides of the labour market, but also the way in which the institutions of the labour market function to bring the two sides together.

Much of the debate about the relative merits of different approaches to managing and regulating the labour market focuses on what is the right balance between efficiency and equity in the labour market. This question, for example, underlies the comparison between the Anglo-American-New Zealand approach with its emphasis on job growth through deregulation and flexible labour market functioning (at the possible cost of high levels of inequality in the labour market), and the continental European model with its emphasis on regulation, social protection and cohesion (at the possible cost of less rapid job growth).

A high performing labour market is one which:

- functions efficiently and equitably to match demand with supply;
- has a strong employer led demand for labour, in terms of the quantity, quality and diversity of jobs generated by the labour market;
- has a strong supply of labour, in terms of the number and characteristics of skilled people available to take jobs;
- generates a market in which there are appropriate supporting conditions for education, training and workforce development, welfare benefits and childcare provision; and adequate provision of housing, employment land and transport infrastructure; and
- functions both efficiently and equitably, through intermediary institutions and interaction with other labour markets to bring the demand and supply sides of the labour market together.

A high performing labour market consists of:

- employers (demand side) from the private, public, voluntary and community sectors who engage with intermediary agencies which design and operate initiatives that shape the supply of skilled workers that businesses need to compete in competitive national and global markets;

- members of the workforce (supply side) located in regions;
- individuals who recognise the need to constantly update and improve their skills to maintain and boost their employability;
- a culture of enterprise and innovation that is highly prized and recognised as the foundation for success for both employers and employees; and
- supporting agencies (and supporting strategies) that are knowledgeable and responsive to market failure through the design of solutions that are timely, effective and sustainable.

A high performing labour market also requires:

- appropriate supporting conditions. These are factors which, although not part of the labour market system itself, may operate to enhance or impair the performance of the labour market, they must be acknowledged as important influences on the performance of regional labour market development. Some of these external factors are determined at national (or even international) level, and the extent to which they can be steered from within a region may be limited; and
- an effective system of education, training and workforce development, supporting skill development on the supply side in response to the needs of the demand side, is a crucial influence on the performance of the labour market.

Other key elements effecting the functionality include:

- a stable macro-economic and regulatory environment;
- the structure and operation of the system of benefits, welfare provision and regulation;
- availability and cost of childcare provision and other factors enabling participation in the labour market by all;
- the demographic structure and dynamics of a region, e.g. age structure, size and growth of working age population and flows of immigration to and emigration from the region, economic and social drivers; and
- the housing, transport, renewal infrastructure, employment land opportunities as well as aspects of the physical environment of the region.

Inevitably indicators are not always available in the ideal format. To conduct a measurement of Regional



Performance, decisions will need to be made to deal with issues such as classification changes and small area confidentiality. Once the available measures have been identified, an evaluation of these measures will need to be conducted. Should these measures prove insufficient, additional regional measures may need to be developed.

New Zealand, like other countries, has a wide range of characteristics displayed across the country. Differing characteristics inevitably lead to the requirement for differing techniques to approach the goal of a 'high performing labour market' at a regional level. In this environment of regional difference, the variables used to evaluate performance of a region need to be able to compare regions in a consistent manner.

Table 1 of the appendix summarises the internal elements of the construct: namely the demand and supply sides, and the mechanisms which brings the two sides together. It could be argued at this point, that a watertight distinction between demand and supply sides cannot be made in practice, and that all we can observe is in effect the outcome of the interaction between the demand and supply side. While this is true in a purist sense, the value of the making the distinctions in the construct below is that they enable us to distinguish between the roles played by the key actors in a high performing labour market namely: employers on the demand side, members of the work force on the supply side and the various institutions of the labour market (which influence both demand and supply side interaction).

The objective is to set out a general construct which can, in principle, be applied to consider the performance of the labour market at **any geographic and sectoral level**. The effectiveness of such a construct will be dependent how it can be operationalised.

The construct within Table 1 is operationalised as Table 2 and Table 3 of the appendix. The set of measures covers the spectrum of demand and supply side variables, as well as how these measures interact. A measure of Regional Performance must fulfil a series of different characteristics if it is to be useful as part of a national scheme to evaluate regions on an equal and comparable basis. Ideally, Regional Indicators must show:

- **Transparency** - the method of collection and calculation must be clear to all
- **Simplicity** - the easier to calculate and explain the indicator, the better it is
- **Relevance** - if the indicator isn't relevant, it should not be included. Efficiency in the number of indicators is optimal
- **Reliability** - the indicator must be able to be relied upon for accuracy.
- **Consistency, Comparability and Continuity** - the indicator must not change in calculation or classification over time. The longer the measure is available, the more useful it is

- **Timeliness** - the indicator must be released in a timeframe that allows it to have value
- **Interpretability** - the indicator must be able to be consistently and easily interpretable to all users

The indicators as listed in Table 4 of the Appendix have been identified based on their linkage to the seven characteristics above. While not all measures meet all characteristics, they are the best data sources available. The list within Table 4 should be seen as a first step in an evaluation process with the final point being a set of fully available and comparable data variables.

## Further Research

The next step in the process to enhance measurement of regional indicators is to operationalise the Indicator framework. Watson (2000) and Mosley and Mayer (1998) propose alternative methods of presenting data for interpretation. We will populate the indicator framework with New Zealand data and compare and contrast the differing methods of presentation. Also, by populating the model, gaps in data availability will be identified.

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**Appendix – Framework of regional Labour Market Characteristics**

**Table 1: Components of a High Performing Labour Market.**

<b>DEMAND SIDE OF THE LABOUR MARKET</b>	<b>FUNCTIONING OF THE LABOUR MARKET</b>	<b>SUPPLY SIDE OF THE LABOUR MARKET</b>
<p><b>Adequate volume of jobs</b></p>	<p><b>Labour market efficiency</b>            effectively matches jobs to people (advice, guidance, placement services)            flexibility and adaptability            enables career progression and work-life balance</p>	<p><b>Adequate volume of supply</b>            workforce size and location            economic activity rates</p>
<p><b>Balance/quality of jobs</b>            range of industries/sectors/clusters            range of skill requirements            range of pay levels            range of working arrangements (full-time/part-time; employee/self-employed)</p>	<p><b>Labour market equity</b>            even and fair distribution of opportunities for individuals            even and fair distribution of opportunities for localities</p>	<p><b>Adequate quality of supply</b>            basic skills            vocational skills            higher level skills            attitude            motivation            workforce health/well-being            voluntary/unpaid labour</p>
<p><b>Dynamism of the labour market</b>            entrepreneurship/ innovation            new firm generation</p>	<p><b>Effective and balanced interaction with other labour markets</b>            in adjacent regions            nationally/internationally</p>	<p><b>Responsiveness of supply</b>            renewal of skills            lifelong learning</p>

**Table 2: Demand Side characteristics.**

<p><b>Regional economies generate a wide range of sustainable employment opportunities</b></p> <ul style="list-style-type: none"><li>▪ A regional economy will have a diverse employment structure, with a significant proportion of its businesses in growing industries</li><li>▪ A regional economy will have high performing business start up rates and take full advantage of its concentration of Tertiary education and associated research and development</li><li>▪ A region will have an effective and speedy planning system and employment land opportunities</li><li>▪ A region will have a strong culture of community and social enterprises which thrive</li><li>▪ Workplaces will provide a safe and high performing environment for all their employees</li><li>▪ A region will have an effective and high class public sector that exhibits the highest levels of productivity, customer service and delivery</li><li>▪ Workplaces will be family-friendly, taking account of workers' family responsibilities, including childcare</li><li>▪ A full range of employment opportunities will be accessible to all regardless of age, gender, ethnicity, religion, disability, etc.</li></ul>
<p><b>Regions will have a culture of enterprise and creativity</b></p> <ul style="list-style-type: none"><li>▪ Centres of excellence, linked to Universities and Tertiary institutions, research institutes and other initiatives in excellence will work with industry resulting in a step change in investment in innovation, and R&amp;D by the region's businesses</li><li>▪ All those people that have the potential will have a real chance of starting their own business and their businesses surviving</li><li>▪ Community and social enterprises will reflect the diversity of the region – from the existing workforce, the potential workforce and most importantly the hitherto under-utilised potential of marginalised groups, including minority communities and people with disabilities</li></ul>
<p><b>Regional businesses can compete globally</b></p> <ul style="list-style-type: none"><li>▪ A region's businesses will have high levels of productivity, be forward looking and value their workforce as their key asset – adaptive capability</li><li>▪ Businesses will take advantage of technology, constantly innovate and work closely with the region's education and training providers</li><li>▪ Improve productivity through effective use of new technologies and new product/service development</li><li>▪ A region will be a strong exporter of goods and services</li><li>▪ A region will have effective links with supporting bodies to respond to skills issues</li><li>▪ Businesses will clearly articulate their current and future skills requirements</li><li>▪ Boosting of management and leadership skills at levels to increase productivity and innovation</li></ul>
<p><b>Regions offer substantial opportunities for inward and indigenous investment</b></p> <ul style="list-style-type: none"><li>▪ There will be a wide choice of redevelopment land and premises</li><li>▪ There will be a ready supply of skilled and responsive labour</li><li>▪ The education and training infrastructure will be highly regarded, substantiated by strong attainment levels with skills for today and tomorrow</li><li>▪ A region will be perceived as offering a high quality of life as well as an ideal location in which to do business</li><li>▪ Regions will have a strong integrated ICT infrastructure which enables efficient movement of people, goods and information</li><li>▪ Housing quality supply will be sufficient to attract and retain people and encourage inward and indigenous investment within the region and will be located near appropriate public transport links</li></ul>



**Table 3: Supply-side characteristics.**

<p><b>Education, learning and skills are highly valued by individuals and business</b></p> <ul style="list-style-type: none"> <li>▪ Individuals recognise the value of skills and commitment to lifelong learning in relation to employment opportunities, earnings and career development</li> <li>▪ High quality, timely labour market information and intelligence will be coherent and accessible, allowing individuals, businesses, communities and stakeholders to make informed decisions</li> <li>▪ Intelligent, impartial and informed advice and guidance will be available to all</li> <li>▪ Businesses will recognise the value in developing and investing in workforce skills (both for their existing workforce and potential new entrants) in relation to increased productivity, improved products and services, customer service, employee commitment and profitability</li> <li>▪ The quality of learning provision will meet demand (individual and employer) and recognised quality standards</li> <li>▪ The value of vocational skills will be widely recognised</li> <li>▪ Progression routes and pathways for learning will be clear and easily accessible</li> </ul>
<p><b>Strong educational attainment and vocational skills amongst labour market entrants</b></p> <ul style="list-style-type: none"> <li>▪ Early years' education and interventions will inspire children to be creative and enterprising</li> <li>▪ Strong performance will occur in educational and vocational attainment from schools, colleges, tertiary institutions and training providers</li> <li>▪ Labour market entrants will possess core transferable skills: literacy; numeracy; interpersonal; ICT; employability and 'thinking skills'</li> <li>▪ Regions will have high quality, flexible and responsive (demand led and future focussed) education, learning and skills infrastructure</li> <li>▪ Education and training providers will have access to Labour Market Intelligence that enables them to anticipate economically driven demand</li> <li>▪ There will be clarity of role and responsibilities in delivery of education and training; to avoid overlapping or duplicated provision</li> <li>▪ Public, voluntary and community sector provision will have more flexibility in funding provision that can respond quickly to demand requirements (recognising that the pace of change can be dramatic)</li> <li>▪ Employers will better forecast their needs and will be committed to facilitating employees to meet those needs</li> <li>▪ The style of education, learning and skills delivery will meet learner needs - flexibility</li> </ul>
<p><b>Regions will have a skilled and flexible workforce that can adapt to change and respond quickly to economic opportunities</b></p> <ul style="list-style-type: none"> <li>▪ The skills profile and aspirations of the region's workforce will reflect the requirements of the existing and potential economy – future scoping</li> <li>▪ Range of opportunities for different age groups e.g. youth, ageing population</li> <li>▪ Employers and employees will have the skills to respond to change/rapid change</li> <li>▪ A region's workforce will embrace the concept of portfolio career development rather than "jobs for life"</li> <li>▪ People will be able to progress through learning in non-linear ways after the age of 16</li> <li>▪ Individuals will take ownership of their learning and responsibility for skill development</li> <li>▪ Individuals will be willing to be mobile</li> <li>▪ The region will have an inclusive labour market that fully utilises the talent of its people</li> <li>▪ Interventions will successfully address the barriers facing those at most disadvantage and tackle problems of two speed economies that may exist</li> <li>▪ Constraints to specific labour market groups will be broken and provide opportunities</li> <li>▪ Barriers to labour market mobility will be addressed including transport, land-use planning, health, childcare, housing, immigration, image and aspiration</li> <li>▪ A region will have, and will be perceived to have, "good" quality of life</li> </ul>
<p><b>A region can meet the increasing demand for higher level skills</b></p> <ul style="list-style-type: none"> <li>▪ Tertiary institutions and other providers of higher and further education will forge strong links with industry and provide a stream of "work-ready" graduates/those with higher level skills that want to stay and work in the region</li> <li>▪ A region will be able to attract graduates/migrants and those with higher level skills from outside the region to meet the increasing demand for the knowledge driven economy</li> <li>▪ A region's employment, learning and skills infrastructure will have the flexibility to deal with economic shocks and opportunities</li> <li>▪ Emergency response arrangements will be in place to respond effectively to large-scale redundancies, with roles and responsibilities clearly identified</li> <li>▪ Clarity of roles and responsibilities will exist regarding inward investment and business support, skills and training support.</li> <li>▪ Effective delivery mechanisms to join up learning, skills, information, business support through effective partnerships</li> </ul>

**Table 4: Regional Labour Market Indicator Framework.**

Demand side indicators	Supply side indicators
<ul style="list-style-type: none"> <li>▪ Employment rate (the proportion of the working age population in employment) by age, gender, ethnicity, qualification level</li> <li>▪ Employment growth (the change in the number of jobs in the region over time)</li> <li>▪ Self containment (the degree to which the region is a net exporter or importer of labour)</li> <li>▪ % of total employment across major SIC/SOC groups</li> <li>▪ Quality of jobs as measured by employment in knowledge sectors</li> <li>▪ Manufacturing GVA per capita</li> <li>▪ GDP per head</li> <li>▪ GDP per hour worked</li> <li>▪ Gross hourly earnings</li> <li>▪ Employment share (%) in high level occupations</li> <li>▪ Self employment share (%)</li> <li>▪ Employment share (%) in small firms</li> <li>▪ Business generation – business start-ups/survival rates</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participation rates (% of working age population in employment, seeking working or in training)</li> <li>▪ Share (%) of workforce lacking basic numeric skills</li> <li>▪ Share (%) of workforce lacking basic literacy skills</li> <li>▪ Share (%) of workforce with no qualifications</li> <li>▪ Share (%) of workforce with higher level qualifications</li> <li>▪ Working days lost to industrial disputes</li> <li>▪ % of workforce taking days off sick</li> <li>▪ Participation in post-16 full-time education and training</li> <li>▪ Participation in work related training</li> <li>▪ Participation in adult learning</li> <li>▪ Immigration – skilled migrants, work permits, businesses entrepreneur permits</li> </ul>
<b>Functioning of the labour market</b>	
<ul style="list-style-type: none"> <li>▪ Unemployment rate</li> <li>▪ Unemployment Benefit payments</li> <li>▪ Share of long term unemployment</li> <li>▪ Vacancies as % of total employment</li> <li>▪ Share (%) of employers reporting hard to fill vacancies</li> <li>▪ Hard to fill vacancies as a % of jobs</li> <li>▪ Skills shortage vacancies as % of all vacancies</li> <li>▪ Fill rates by broad SOC</li> <li>▪ Labour market turnover (churn)</li> <li>▪ Incidence of part time working and homeworking</li> <li>▪ Employment rate comparisons for women/men, beneficiaries</li> <li>▪ Intra regional disparity of unemployment</li> <li>▪ Intra regional disparity of income</li> <li>▪ Employer perceptions of the coherence of the skills development infrastructure</li> <li>▪ % employers offering learning opportunities to employees</li> <li>▪ % of employers engaging in training as a solution to skills shortages</li> <li>▪ high or low skill trajectory region</li> </ul>	