Te Waka
Anga Whakamua Waikato

Quarterly Economic Update Q1 : 2019

Economic development - a flutter on the horses?

How do you pick a winner? Is there a system, or is it just plain luck? Who amongst us would risk other peoples' money to back the last placed horse in this picture?

In many ways, 'picking winners' has been officially out of fashion since the 1980s, but we all still make choices that effectively pick winners – even if we don't like to call it that. Whether it was think-big, 'catching the knowledge wave', biotechnology, cycle trails, tourism or minerals – successive governments in New Zealand have all succumbed to picking winners to some extent. And if you're in the business of an economic development agency, how do you know where to direct your attention? How do you know where the best return is going to be made? Are some industries worthy of more attention than others? And what is the best indicator of likely success?

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IS BIGGER BETTER?

Large industries have often gotten to be that way because of some inherent advantage that they may have. For example, they may be built on some local comparative advantage; the largest industry in the Waikato region, as measured by value-added – is dairy cattle farming. This reflects, among other things, the plentiful supply of suitable land and a moderate climate.

Blair Keenan

PRINCIPAL ECONOMIST, WAIKATO REGIONAL COUNCIL & ECONOMIC ADVISOR TO TE WAKA

Blair Keenan has an undergraduate degree from the University of Otago. Keenan worked at ANZ as a macro-economist and industry analyst for five years before heading overseas as a researcher for Japan's External Trade Organisation in the UK. While in the UK, he also received his Master's degree in applied environmental economics from the University of London and was an economist at the National Farmers Union of England and Wales.

Back in New Zealand, he held several policy roles at Landcare Research, Department of Internal Affairs and Housing New Zealand before his current role as principal economist at Waikato Regional Council. He also continues to collaborate on projects with the University of Waikato, CRIs, central and local government, and a variety of industry groups.

So if, up to this point, the size of an industry reflects such advantages, might we expect that to be a good predictor of future success? Table 1 provides a list of the 20 largest industries in the Waikato region, ranked by their respective total value added.

Collectively, these 20 industries make up about two-thirds of Waikato's gross domestic product. This is certainly not the only way to measure the 'size' of an industry. Another approach is to look at those that create the most jobs. A list based on this measure would have largely the same industries – 16 out of the 20 (highlighted green ■ in Table 1) would appear in both lists. It is worth noting too, that employment is even more concentrated in these industries – with the top 20 making up four out of every five jobs in the region.

GETTING MORE FOR LESS

If you combine the two measures of size, you get value added per worker – a measure of productivity. Given productivity is an important driver of economic wellbeing and potential economic growth (and, indeed, the more efficient use of resources), perhaps we should consider which industries tend to be categorised by higher productivity. The top 20 most productive industries in the Waikato are shown in Table 2.

> It is striking that only four of the largest industries appear in the list of the top 20 most productive

Industries that are reliant on capital rather than labour – such as mining and utilities – will rank highly by this measure. Even so, it is striking that only four (highlighted green ■ in Table 2) of the largest industries in the Waikato appear in the list of the top 20 most productive.

Table 1

Waikato top 20 industries by 'value added'

1.	Dairy cattle farming
2.	Health care & social assistance
3.	Property operators and real estate services
4.	Professional, scientific & tech services
5.	Electricity & gas supply
6.	Education & training
7.	Wholesale trade
8.	Construction services
9.	Mining
10.	Other store & non-store retailing
11.	Central gov admin, defence & safety
12.	Accommodation & food services
13.	Dairy product manufacturing
14.	Heavy & civil engineering construction
15.	Sheep, beef cattle & grain farming
16.	Road transport
17.	Other services
18.	Finance
19.	Machinery & other equipment manufacture
20.	Supermarket & specialised food retailing

Source: Infometrics

Table 2

Waikato top 20 industries by productivity

1.	Electricity & gas supply
2.	Mining
3.	Property operators and real estate services
4.	Beverage & tobacco product manufacture
5.	Telecoms, internet & library services
6.	Forestry & logging
7.	Finance
8.	Insurance & superannuation funds
9.	Basic chemical & chemical product manufacture
10.	Rental & hiring services
11.	Water, sewerage & waste services
12.	Pulp & paper product manufacture
13.	Dairy cattle farming
14.	Primary metal & metal product manufacture
15.	Non-metallic mineral product manufacture
16.	Polymer product & rubber product manufacture
17.	Heavy & civil engineering construction
18.	Sheep, beef cattle & grain farming
19.	Postal, courier & warehousing services
20.	Dairy product manufacture

Source: Infometrics

Given that size and productivity seem to be so different, it is worth looking directly at which industries are growing the fastest. These are shown, for the period 2013-18, in Table 3.

This list has a lot more in common with the size rankings than with productivity – 15 of the largest industries also feature in the fastest growing list, but only four of the most productive industries are among the fastest growing. Only two industries appear on all three lists – property operators & real estate services and dairy product manufacturing (highlighted green in Table 3).

This suggests that the fastest growing industries in the Waikato are not necessarily being driven by improving productivity. Looking at the industries in Table 3, many of them – such as property-related or service industries are strongly linked to population.

Table 3

Waikato top 20 industries by growth

1.	Construction services
2.	Health care & social assistance
3.	Professional, scientific & tech services
4.	Property operators & real estate services
5.	Other store & non-store retailing
6.	Dairy product manufacturing
7.	Accommodation & food services
8.	Building construction
9.	Telecoms, internet & library services
10.	Wholesale trade
11.	Road transport
12.	Central government admin, defence & safety
13.	Supermarket & specialised food retailing
14.	Machinery & other equipment manufacture
15.	Administrative & support services
16.	Transport equipment manufacture
17.	Motor vehicle, parts & fuel retailing
18.	Other services
19.	Polymer product & rubber product manufacture
20.	Wood product manufacture

Source: Infometrics

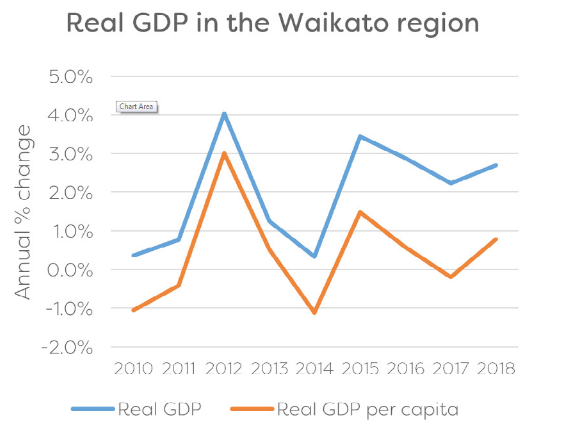
Only four of the most productive industries are among the fastest growing

Given the strong growth in population in the Waikato region over the past five years (averaging around 2 percent per annum), it should be no surprise that industries driven by local consumption have also been growing. But, if the economic growth is simply a product of a growing population, are we really any better off?

Measuring gross domestic product per capita provides a better indication of this and highlights rather modest performance. Figure 1 shows growth in real GDP, averaging 2.3 percent per year over 2013-2018, and growth in real GDP per capita, which has averaged just 0.3 percent per year over the same period. That is, over the last five years, nearly 90 percent of GDP growth in the Waikato has been the result of more people, rather than improving productivity or rising real incomes.

This is issue is not limited to the Waikato – it can be seen across New Zealand as a whole, and indeed, across much of the developed world.

Figure 1



Source: Infometrics

OUT WITH THE OLD...

In the 1950s, the economist Joseph Schumpeter popularised the concept of 'creative destruction', whereby new firms, technologies, processes or industries emerge and replace existing ones. This process, which Schumpeter described as "...the essential fact about capitalism..." is happening all the time, with a steady procession of businesses starting up and closing down. In the Waikato region, for example, there is a 'churn' of about 10 percent of firms with a moderate increase over time. On average, new business units make up about 10% of the population, while closures are about 9%.

If we look at the industries in the Waikato region from our tables above, we might then expect that those with higher productivity to have more start-ups, while those with lower productivity might have more closures. However, we don't really see that in the data for the Waikato region, where there is only a weak relationship between productivity and start-up/failure rates.

There are many confounding factors which might influence his analysis – maybe there is indeed a creative destruction process going on, we just can't see it in this data. Alternatively, it might well be that the market and/or institutional arrangements in the Waikato are resulting in a misallocation of resources, with the result that productivity and real economic growth is stagnant. Reading these tea-leaves and deciding (a) whether it matters and (b) what action to take, if any, is not easy.

HORSES FOR COURSES

The moral of the story is that we should be careful about picking winners based on simple high-level indicators of size, past growth performance, or even relative productivity, and we need to carefully judge each prospect on its merits. We need to make sure that whatever scarce public resources and support we have available, is targeted towards improving producitivity and value-add per worker. And even then we should only do this where and when the market is unable to provide the required rsources itself. Every time we support/subsidise something which does not achieve this, or we block resouces from being used for a more productive use – we prevent creative (destruction) processes from properly working – and we all become a little bit poorer.

At the very least, it would be useful to consider whether there are barriers to entry for high productivity industries; barriers to exit in low productivity industries; and whether there are institutional arrangements that mask the incentives created by technology and productivity.

> The late Sir Paul Callaghan noted:
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> "Our brilliance has been in the 'weird stuff' that the big players don't think to exploit. What we are good at is a result of brilliant entrepreneurship and business expertise. Such genius does not follow politicians' prescriptions."

So, do we really know what the Waikato's high productivity 'weird stuff' actually is? Who are the high productivity, knowledge-based entrepreneurs, firms, sectors and clusters, big or small, which might be worth our attention and indeed our support – if that's needed?

SO, WHAT'S THIS GOT TO DO WITH HORSE RACING?

In case you're still trying to work out which horse you'd back from the picture at the beginning, here's a clue: It's a snap of the 1983 Melbourne Cup, and the caller at that moment was saying "...and last of all, Kiwi". But Kiwi was, of course, an unconventionally trained stayer – and was just the horse for the long Flemington course that day. •

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