

Hello there and welcome to the Moxie Podcast. This is episode 12. This is a companion we've showed to the Moxie Sessions. The Moxie Sessions is an internet economy discussion group which is held once a month in Auckland, New Zealand. Its purpose is to bring together a group of interesting technophiles from across the economy to talk about how New Zealand can take advantage of the internet to improve its economic performance. My name is Glen Williams, I'm here in London pushing all the buttons and keeping everything together. Now, today, we are talking about the future of New Zealand, the economy in particular, it's quite a broad stroke topic this time. Are we going to get away from making milk powder to making software and high-tech products? We've been talking about this fairly well, so if we are going to do it, how are we going to do it? What should we be making the economic priorities and what are we going to be doing in the coming years? It's a pretty big topic. Now, talking at the last session about this, three very talented people. Dr. Shaun Hendy, welcome to the show.

It's good to be here.

Also, Vikram Kumar who these days is chief executive of the internet party, going into politics these days, but he also used to hit up internet in New Zealand. Vikram, welcome to you.

Hi there.

And joining us on the phone today, it is Dr. Rick Boven, who is joining us from Stakeholder Strategies, he's the director there. Welcome to you.

Good morning, Glen.

Now, first off, we'll go back to you, Shaun. Let's look at what New Zealand does very, very well at the moment and that is grow cows and produce milk that feeds the world, keeps the coffees filled up around the country and for the government, they are quite happy to have that. What are the risks of cow-only and what did you talk about at the Moxie Session?

Certainly, our dairy industry has been very important for our economy over the last couple of decades, that's been one of our success stories. We used to be... have an economy that's based on meat and wool, and over the last couple of decades, we've transitioned and we're now making milk powder. But one of the things that concerns me about that – actually, there's several things that concern me about that – but one thing is that actually leaves us very exposed, because it's become such a big friction of our export earnings. In other words, we've been very successful in dairy, and that now accounts for about 20% of our exports by value, but we haven't developed other parts of our economy. So last year, when we had the Frontiers contamination scandal for example, our dollar over the couple of days while that story played out dropped three cents against the U.S. dollar. And that's the rest of the world saying, 'Hey. Actually, we also think you're quite exposed to this one particular export,' and if something goes wrong with that, then that puts us in a difficult position. So I think it is risky. It's great that we've been so successful at dairy, but actually, why haven't we been able to develop other things? Other strengths that would buffer us against fluctuations and milk powder prices or some sort of problem in our industry. And so, I guess I'm coming up from trying to understand how knowledge drives economies and what sort of conditions are good for creating new knowledge, and then how that goes on to influence the economy. And certainly, there's a lot of science, there's a lot of knowledge that goes into our dairy industry, but it's very, very specialized. And one of my concerns, again, is that by focusing all our science and technology efforts on dairy, we don't give ourselves opportunities to develop other new areas of our economy. And so, we're talking about the impact of the internet today, I'm interested in not only using the internet to sell services and products, as a company like [Zero?] might do. But also, how does the internet change the way that we might develop knowledge-based industries in [?]. And of course, once you start thinking about the conditions that generate knowledge, the things that come up are that we're a very small country, we're a long way from our markets. It's hard to share knowledge with people offshore, although we do have technologies like internet, there's still nothing like face-to-face, that's still a great way of exchanging knowledge and coming up with new ideas. Of course, we can talk about the watercooler effect as being when you have those chance conversations that just take place accidentally but can lead to those moments of inspiration, and that's still quite hard to do on the internet. Our meeting today, we had to plan it, arrange it and we've all come together and it's not the spontaneous thing that I think leads to innovation.

Let's move onto Rick. Now, you're coming from a point of view of a strategist and you were talking about the missing links at the last Moxie Session. Tell us about that.

I think the issue and opportunities in New Zealand is that we have our exports concentrated in tourism and agriculture and those areas don't collectively offer us enough and in terms of the volume available, the land available, the number of people involved, nor the value added profitability, and therefore, the margin that we bring back to make New Zealand a prosperous country so we have to go beyond that. And when you look at what productivity, and therefore, the incomes of the people involved for different industries, what you find is that when you have a manufacturing industry, it fails in the primary industries and tourism and that's true across a range of countries. And then if you look at the incomes that are available from technology-based businesses, those are [?]. So the question is how can New Zealand migrate itself into a stronger mix of industries, and then how can this grow into these areas? And the challenge for New Zealand, as Shaun has pointed out, is that we're so far away. It doesn't only mean that we run into issues in terms of communication connectivity, but we also get ourselves into a position where we have very small businesses. We credit lots of small technology-based businesses, but at the time that they come to export, they are very small. What that means is that they haven't learned the capabilities or developed the resources that are required to successfully penetrate the international markets. And so, the questions are what can we do to best take advantage given that situation? And I think there's two directions that I would suggest going in. The first one – and it does relate to commodities but also to value-added exports – is to take our technology, whether that be internet-based technology or other technologies, and apply that to our commodity and value-added exports in order to improve the margins that we can achieve from those businesses. And the second area is that the businesses themselves lack the capability to be successful in international markets, and to some extent, lack resources that are required to do that. And we need to make sure, as a country, that those businesses are as well-equipped to be successful in entering those markets as they can be. The one thing that I would pick out as an opportunity there is marketing capability, market [?] capability. We teach people here to sell commodities or to be marketers for banks or insurance companies or Telcos and it's really fundamentally different from the challenge of taking a small business with a new product into a new market that's a long way away. And we need to find ways to make sure our businesses are much more successful in doing that.

Vikram, tell us about your talk.

Yes, so I suppose building on what Shaun and Rick has said, this is a very narrow conversation happening between a small number of people. So the logic of why we need to move on from primary and tourism is quite well established now. The problem that I see is that it's not happening. There isn't that general conversation, there isn't an excitement, there isn't a common 20/20 vision of, 'Here's where we need to get to and this is a really great, exciting, new vision for New Zealand and let's get there.' So it's a sense of complacency, we've got a rock star economy, we're doing okay, we're leading the first world economies on raising interest rates, and I just sense that there isn't a real sense of engagement and drive and even a vision on excitement. So I suppose that's where a little of where I see government can actually play a role in signaling the vision and the priorities and trying to get this excitement. There's no doubt that the primary industries in tourism account for a vast majority of our earnings, and therefore, nobody wants to rock the boat and take this big leap forward of faith. In a sense, what we have is a neutral platform where I suppose the government is encouraging anyone and everyone to get ahead. The problem with that is that when the government makes trade-offs, they tend to make trade-offs in favor of the primary industries. For example, when we are negotiating trade treaties, we would try and maximize the benefits to our farmers even though some of our intangible exports might suffer as a result.

I see the same thing in the sights in the innovation area, when we look at where do the government puts its dollars in [RND?] funding. I think for every one dollar the primary sector puts in [RND?] funding, the government puts in two dollars, whereas say for manufacturing, for every dollar the private sector puts in, the government puts in about 30 cents. So there's a quite a big difference in the way that the government treats its science and innovation funding. And certainly, the primary sector receives the large [?] of that funding. That's partly historical and that's not to say that we don't get good returns from that money, but it's certainly the case that it's, perhaps, holding back developing some of these other areas and these other businesses.

Obvious successes at the moment that we hold up and say, 'Well, this is the model that is already happening in New Zealand that other businesses should follow.' Or do we still need to come up

with something completely new?

Yeah. There are lots of good examples. Last week, we talked about a number of different companies. One of the problems is they tend to sit in niches. They tend to be niche companies that— it's hard to say, the pattern across our manufacturing and technology industries, because of all these businesses of doing something slightly different, they're doing really well in their niche, but it's hard to see a coherent industry sector out there, and I think that's one of the difficulties in trying to talk up. What's going on in New Zealand is a lot of these companies are very, very different and we don't see this particular cluster of businesses, but of course, the classic one these days is [Zero?], which is just developed so rapidly and I think has changed many people's impression of what you can actually achieve from New Zealand.

Well, it's not just the [Zero?]. I think if you look at the data on the companies that are coming through, what you find is there's a very large volume of export and revenues coming from companies that are in the value-added primary produce area and there's a similar size in the niche manufacturing area. And then, when you look at the ICT communications areas and the science and medical, you got chunks of activities there too, but they're smaller. And Shaun's right that you just can't see how the clusters are taking shape, it's spread out across the country. A lot of these companies are under the radar and many of them are progressing particularly well but just completely invisible.

I just wanted to give an example of, perhaps, one sector which typifies what we're discussing which is the software for games. We could probably go back a few years and say, 'Ah, games. That must be a small, unknown and frivolous niche that we occupy.' But actually, games are doing really well and it brings together our creative sectors, it brings together our technical sectors and there's a huge amount of, relatively speaking, exports going on around the world. And yet, it's not that well-known sector. It isn't an identified, tangible, physical area where you can say there's a few number of companies, they spread out all over varying in size and doing a whole lot of things. So I think the games industry has been a real good success for New Zealand, but those are the types of areas that we need to allow to grow and encourage them to grow.

So, how can we get the games industry to be taken seriously? Is it just because, 'Well, they're games,' and it sounds like it is something a bit frivolous and silly?

I think part of what they did was to, first of all, give some numbers and that's really important, because when you put the numbers together, then you start being taken seriously as a sector that— it's a substantial number that's already there. Secondly, there needs to be someone or somebody or something that actually starts talking about it and starts promoting the benefits and the numbers and what is required. And the association there seems to be doing a really good job. And finally, I think it does help if you get a bit of recognition from the government, from your peers, from the industry, so that we really enforce a success.

I think there's a general pattern and it comes from a small size and the focus that people have when they start a business. We're very inventive as a country, we come up with great ideas, we come up with great inventions, we come up with great business propositions, but the challenge is that we're really small. And so, the people who are sitting around the table or in the garage or in the small office developing a product may be very good at product development, but they don't necessarily have the connections and understanding which is required to build the links in other parts of the world. Now, in some industries, that may be relatively simple because there are simple exchanges and places that you need to go. But in many others, New Zealand companies are not looking forward into what their market opportunities are, find themselves more or less at the border going, 'Okay, so which country should we go into? Should we see the CEO? Should we create an office? Should we have a distributor? What's the mechanism that we should use to do that?' And that's where I think that there's a gap that's really remains worth filling. If you ask New Zealanders who are the leading [all blacks?] or the leading cricketers, most of them would be able to answer that question. But in many ways, it's a far more important question to ask, 'Who are New Zealand's gurus on international marketing and market entry and where do I go to learn to be as effective as I can possibly be at that?' And most people I ask that question to can't come up of much of an answer. Market entry like any other discipline, the invention process, we have all sorts of understanding through the invention process and it's pretty widely understood, and even for the development process, it's pretty widely understood. But the question is where is the source of knowledge that people will drawn on in order to allow them to enter these new markets, to make the right choices as they go about doing that, or will they continue to do it by common error and

discovery as a small company trying to figure out what to do next. That's the issue I see. That must be you win of the availability of a tool kit.
Is it just time that will bring that tool kit on and those people with that expertise and knowledge? Because the people that are doing it now are pioneers.
It's true that we will build knowledge and we are building knowledge, and so, the people who are governing these businesses and leading them are at many times doing it for the first time, or second time, first time, second time, maybe even third time. But the challenge that we have, I think, is with the hundreds, if not thousands, of companies that are coming through now, each of which doesn't have the opportunity to draw on that accumulated knowledge.
What, Shaun, do you need to see happen in order to get young people interested away from primary industries, away from doctors, being accountants or lawyers and that sort of thing and into all these other interesting fields?
It is partly around telling these stories and making it clear that there are jobs and there are industries in New Zealand that are growing very rapidly. I get asked a lot by not so much by students, but perhaps, more by their parents. My son or daughter is doing a science degree. What on Earth, what sort of job? There are no jobs for scientists, right?
Yeah.
I don't know anyone with a science degree who's unemployed.
Sure.
That's part of what we've got to tell people, that actually getting these technical skills, becoming more technology literate, more science literate, and more business literate as well, gives you a lot of career opportunities in New Zealand. Even if you want to take those skills overseas, those things are very marketable. But in a way, in New Zealand, I think people do think about being doctors and lawyers as being the way up in life, when really, there's an awful lot of skills missing in the technology sector that could be common. So it is about telling those stories.
Have we missed the boat or is there still an opportunity for us to really start investing in the whole green technology side of things and to grow that sector and be a leader in that area in the world?
That's a difficult one. I do struggle with the idea of picking winners or picking out particular sectors. But green technologies, there's certainly some areas where we have some capabilities and skills and it might not be in things like solar cells. The green party announced last week their plan to put solar cells in people's roofs. That may not be New Zealand technology that we use here because there's such a big driver to develop solar cells overseas, but there are niche green technologies where we have developed expertise here. The classic would be geothermal power stations. New Zealand really is world-leading in geothermal engineering, and so, building on that, looking at ways in which we can turn that into an export industry, I think is a very attractive way to go.
Yes. I think it's easy when you look at a country to work out what kinds of things at a very large scale it might be good at. When you look at New Zealand, we've got grass and water, so maybe we'll be good at agricultural. I do agree with Shaun, though, that it's difficult to pick winners at the level below that. So what countries generally do is they identify emerging sectors and then they get the obstacles out of the way and they try to concentrate resources to support the emergence of those sectors, because they have indicated that the country can be successful in that and because there are all sorts of synergies in terms of learning and cooperation, self-transfer, and so on that result from that. If you look at the green economy, there are lots of opportunities there, and if you believe that the world is going to be a green-conscious place as the economy grows beyond the capacity of the environment to support it, then that will create opportunities. And so, the question that arises is what might that mean for New Zealand? I think we can't quite know that yet, but I think there are some areas where I would have thought that New Zealand can benefit, not only in terms of getting benefits for itself, but also in terms of creating capabilities that could be sold overseas, in the same way that we can with agricultural technology. And I think the one that I'm kind of most interested in because of that double whammy is technologies that help us to reduce resource-use intensity. As resource costs are rising, the benefits from that are increasing and it has to be a growth idea, I think, in terms of the green economy. It pays back to New Zealand and it gives us opportunity to export. What form that will or should take? I don't really know yet.
Brilliant. And Dr. Rick Boven has been with us on the phone today. Where can people catch up

with what you're up to?

I'm at Stakeholder Strategies. We have stakeholderstrategies.co.nz or email me at rick@stakeholderstrategies.co.nz.

Good. It's nice to have Vikram relaxed and back in to finish off the show with us today. Thanks so much to you, Vikram Kumar, and where can people find out what you're up to on the internet and follow your musings?

I think the best is on Twitter, [vikram_nz](https://twitter.com/vikram_nz).

Brilliant. And Shaun is with us at the [MacDiarmid?] Institute, how can we catch up with you?

Follow me on Twitter, my handle is [Hendysh](https://twitter.com/Hendysh), and I also have a blog called The Measure of Science.

Good stuff. If you want to keep up with what's happening with the Moxie Sessions, which I'm sure you'd want to and want to find out when the next session is and whereabouts you can go along, go along to the moxiesessions.co.nz, where you'll find this in audio, and there's also the link to the Twitter as well, which is [@moxiesessions](https://twitter.com/moxiesessions), and all the other back issues of the Moxie Podcast, as well as the transcripts of the show as well. Dr. Shaun Hendy, Dr. Rick Boven, and Vikram Kumar, thank you very much to all you guys. Have a fantastic rest of your day and we'll catch you next time.