

Economics needs you!

Speech delivered by Tim Ng, Deputy Secretary to the Treasury,
at the University of Auckland's Business School

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CHECK AGAINST DELIVERY

Kia ora Asha.

E te whare e tu nei, tēnā koe.

E te papa ki waho, tēnā koe.

E ngā mate, haere, haere, haere.

E ngā mana, e ngā reo, e ngā iwi o te motu, e ngā iwi ngā hau e wha,
tēnā koutou, tēnā koutou, tēnā tātou katoa.

Good evening everyone. It's great to be here at the University of Auckland's Business School and to be able to offer my congratulations to everyone who did so well in this year's New Zealand Economics Competition.

I'd like to acknowledge our hosts from the Business School for this evening, Jayne, Asha and James, the place in which we are gathered, and everyone who has come from far and wide – especially those from outside Auckland – to join in this ceremony. I studied economics, and biochemistry, here in Auckland myself, so it's a pleasure to be able to support an institution where I spent several formative years.

Every participant in the competition deserves congratulations for having a go and challenging themselves. As you'll have seen in the programme notes, this year the competition had 2,426 students from 89 schools around New Zealand participate. This is really terrific to see. I very much hope that our economists of the future will be drawn from your ranks.

Finally, I acknowledge all the teachers, principals, parents, Asha and others in the Economics faculty, and everyone else involved in organising this year's event. Because of you all, the competition keeps getting stronger, which I really welcome, as a member of the New Zealand economics profession and community.

In the next few minutes what I would like to do is tell you a bit about what I think economics is for, and what you can do with it. Both are really important, and both are interesting. I'm pretty sure everyone here knows that already, otherwise you wouldn't be here.

But many of the participants here in particular might also be thinking about what you might do in the next few years, and in particular what to focus on at university and beyond. That's why I also want to convince you to study economics in some depth at university, and to pursue either a career in economics, or at least a career that uses economics, of which there are many.

What is economics for?

Economics is a social science.

It is social because at a very basic level, economics tells you something about the choices people will make when faced with certain circumstances – the classic unlimited wants in the face of limited means – in a social context called the economy. It also tells you something about how the economy, a human system that brings together groups of people, can change and develop – sometimes for the better, and sometimes for the worse.

If you think about the questions you answered for the competition, lots of them were variants on this basic idea.

The science part is in the expression of many of the questions in very simple and clear terms, which enables them to be formed into models that can be tested against evidence. In your studies you probably moved lines up and down and side to side on charts, representing demand and supply shifts for example, and made predictions about people's choices based on simple calculations.

The ideas that those simple terms and manipulations represent, and their implications, are incredibly profound and powerful.

That is the beauty of economics – it can completely change the way you think about the world.

One of my favourite examples of this is the economic principle of comparative advantage. Both this year's competition and last year's featured a question about comparative advantage, and no doubt earlier competitions also, since it is a foundational concept.

Let me restate this year's Question 21, with a slight adjustment that doesn't change which answer is correct, but makes the point of comparative advantage clearly.

Suppose that Ruth can cook two meals or complete three worksheets in one hour while Anthony can cook one meal or complete one worksheet in the same time. Which of the following is true?

- a. Ruth has a comparative advantage in cooking meals.
- b. Ruth has a comparative advantage in completing worksheets.
- c. Anthony has a comparative advantage in completing worksheets.
- d. None of the above is correct.

The question and answer are simple enough. Ruth has a comparative advantage in completing worksheets. Anthony has a comparative advantage in cooking meals.

What is profound is the implications for their behaviour. I want to tease them out, even though I'm pretty sure you know this already, because I'm going to use the example later in the story.

It's clear from the setup that Ruth is better than Anthony at both cooking meals and completing worksheets, in terms of the time it takes them to do each of these tasks. Ruth has an absolute advantage at both tasks. But even so, Ruth and Anthony will be more productive collectively, and both better off, if Ruth focuses on worksheets and Anthony focuses on cooking, because Ruth is better than Anthony at worksheets in terms of meals foregone, and Anthony is better than Ruth at meals in terms of worksheets foregone. If they specialise in their respective comparative advantages, they will end up collectively with the most worksheets and meals.

They can then trade worksheets for meals. Ruth and Anthony will negotiate meals for worksheets at an exchange rate somewhere between 1 meal for 1 worksheet, and 1 meal for 1.5 worksheets. Both will accept any exchange rate within this range, because what they will each give away in trading will be less than the opportunity cost they would each face if they instead themselves produced the good which they will receive in trading. The difference between specialising and trading, and producing without trading, is of course what we call the gains from trade.

Think about where this leads in the real world.

The phenomenal economic growth we have seen in the past few decades in Asia testifies to the logic of comparative advantage and the liberalisation of markets, both domestically and across borders. That logic works whether you're talking about trade across borders or just economic activity within a country. That logic has lifted hundreds of millions of people out of dire poverty in Asia.

If you look at the case of China – where many, but not all, of these hundreds of millions of people live – the gains from trade that lifted them out of poverty via four decades of market-oriented reform arose from both domestic and cross-border trade.

Domestically, market reforms enabled rural poor to migrate to cities, where their labour could be used much more productively. Instead of working largely in subsistence farming on small plots of land – meaning they consumed pretty much all they produced, and that wasn't much at all – they used their labour for higher incomes working in cities. Their extra earnings meant better education for their children and higher savings, some of which could be remitted back to family remaining in the rural areas, boosting their standards of living there.

In the global markets, the development of export-oriented manufacturing industries further drove massive national productivity and income gains in China, while the West benefited from much cheaper imported manufactured consumer goods and the income from supplying China with more advanced manufactured goods and services.

If you want to put a human face on the idea of lifting hundreds of millions of people out of poverty, consider the following two very stark indicators. Between 1990 and about now, the child mortality rate in China fell by a factor of more than five times, while the rate of maternal

death in childbirth fell by a factor of four. To make things a little more concrete – in 1990, one child in every twenty live births in China would be expected to die before the age of five. That number is now one in a hundred. The child mortality number in New Zealand is one in two hundred, so China's rate is still double New Zealand's (which also improved over the period), but that is still way better than five times New Zealand's rate in 1990, and the catchup has been achieved in less than two decades.

Keep thinking.

If opening up markets and borders is so brilliant, why is the world now facing trade wars and other major challenges to the idea of globalisation, and the power of markets to massively lift incomes and prosperity?

This is where a simple idea like comparative advantage, compelling and powerful and important as it is, needs to be supplemented. The story needs enrichment so that it better reflects the context and complexity of real life.

For one thing, in our example, the outcome of Ruth and Anthony's negotiation over the exchange rate of meals against worksheets, and hence the division between them of the gains from trade, depend on their relative bargaining strengths. If there are lots of worksheet workers and not very many cooks, for example, the outcome is likely to be that Anthony gets most of the gains from trade, because he can shop around for worksheets. While Ruth stands to gain at least a bit from trading, otherwise she wouldn't do it at all, Anthony getting the bulk of the gains from trade might cause Ruth to feel a bit aggrieved that the gains were not shared more evenly.

Second, if you imagine that Ruth and Anthony are countries, it is likely that, before the opening of trade, each country will have had both cooks and worksheet workers. So shifting to specialisation and trade between the two means that the cooks in Country Ruth and the worksheet workers in Country Anthony will be out of work, at least temporarily. In order to restore full employment, Country Ruth's cooks will need to retrain as worksheet workers and Country Anthony's worksheet workers as cooks. How easily this happens depends on such factors as the extent and nature of jobseeker support, the education and training system and the willingness and capability of the workers themselves to change occupations.

Managing the social and human strains caused by the decline of some industries and activities, and the growth of others, even within a single country, is one of the big challenges faced by all societies today. Growth, development and economic change can be accompanied by increases in inequality, and social frictions if the gains from internal and external trade are not perceived to be distributed fairly.

Even though globalisation may be blamed for a range of contemporary economic and social concerns in Western countries, it is only one of several large forces driving change in the structure of those economies over the past few decades. The share of manufacturing in total output, and employment in manufacturing itself, had been falling well before the market-oriented reforms in China (for example), driven by ongoing automation, labour-saving technology and the growth of service industries over that period.

Anti-globalisation and protectionist sentiment sometimes focuses on the idea of the "left behind" – that is, the regions and workers perceived to have benefited little from trade and technological change. In order to reduce the number of those left behind and their

vulnerability, and to mitigate any increases in inequality due to economic change, most countries use so-called pre-distribution and re-distribution mechanisms such as minimum wage and employment protection laws, progressive tax rates and public provision of education and health services.

If those mechanisms do not work sufficiently well to spread the gains from trade, market development and technological innovation, possibly quite large numbers of people might well ask “what’s in it for me?”. They might then either resist these sources of economic change and growth altogether, or demand strengthened pre-distribution and re-distribution mechanisms, which would at least allow for some of the gains from trade to flow. Clearly this challenge is not about the underlying logic of comparative advantage. Instead, it’s about how to ensure the gains from trade are distributed in a way that is perceived as fair.

What this suggests is that some combination of market development and pre- and re-distribution to address the transition for adversely affected groups is preferable to resisting economic change outright, which would reject gains from trade for anyone.

The rub is that, as other economics tools tell us, most pre- and re-distribution measures imply foregoing the full benefits of new internal and external trading opportunities. The taxes that fund social safety nets, redistributions of income and provision of social services, for example, can reduce incentives to work, invest and provide for oneself or one’s own family.

Public policy is all about striking the balance between these diverse objectives – income growth, innovation and economic dynamism, inclusion, protecting the vulnerable, environmental quality and sustainability, to name just a few.

Hopefully this little story has helped show that the idea of comparative advantage, as fundamental and powerful as it is as a way of explaining and driving growth and prosperity, is only part of the story of economic development. More is needed to sustainably bring wide benefits to all.

The questions in the Competition touch on other fundamentally important economics principles and tools that can help us understand developments in our own country and abroad. I could have picked the tragedy of the commons, for example, or the concept of negative and positive externalities, or monopolistic behaviour. All of these ideas can be represented quite simply in mathematical terms, but their explanatory power for the behaviour of humans and of human systems is profound indeed.

What can you do with economics in real life?

So the tools of economics can help us answer some grand questions like how did China develop so quickly, or why did the global financial crisis happen – as well as less grand questions like why houses generally cost more in Auckland than in New Plymouth, or should I buy Australian dollars now before my Gold Coast holiday next month, or should I wait until I get there. So at the very least, knowing some economics can make you a better informed citizen, and help you manage your life.

You can also use economics to understand what might be done to make the most of the opportunities around us. We live in a time of amazing technological advances, from AI to biotech. The world *is* globalised. Both globalisation and technology bring challenges and

opportunities. And of course, we face a fundamental and enormous challenge to our way of life from climate change.

Whether you end up working in the private or the public sector, and whether you specialise in economics or include economics with other training in humanities, the sciences or business, economics can help you understand and respond to these trends. Our little comparative advantage story illustrated how complex economic development can be. Economics provides powerful tools for thinking through a wide range of associated issues in any number of business or policy contexts. The fascinating job of the economist is to know which tools to apply in the circumstances.

Lastly, of course, you can get a job with the Treasury. In my job, I'm responsible for ensuring that the Treasury's advice to the Government on raising New Zealand living standards is supported and strengthened by sound economic theory and evidence. The Treasury is the government's lead economic and financial adviser. As economic adviser we are charged with providing advice on promoting sustainable growth. As financial adviser, we are the guardian of the public purse, and as such are required to advise on the value for money of government expenditure, and to assist the Government to produce a Budget.

Governments have to make choices, prioritise with the limited resources at their disposal, set supportive conditions for people and businesses to learn, innovate, invest and grow, and be cognisant of the costs of taxation and regulation on the economy. Again, the story above should illustrate how the questions of how best to promote prosperity are not straightforward. All the tools of economics are relevant, and we use them routinely in our work.

What do you need in your toolkit?

Your success in the competition suggests that you also have a handy range of tools in your toolkit already covering both microeconomics and macroeconomics.

If you continue to pursue economics – and as I said I very much hope you do – you will encounter a couple of things. First, you'll use maths and analytical techniques more deeply, which will enable your tools to be more precisely targeted and your economic thinking to be better focused. Second, you'll face some choices about what related disciplines to economics you might want to study also, to ensure that your economics does not become divorced from the social and political realities and contexts within which you'll need to use it.

Confronting those realities requires multidisciplinary thinking, the ability to think in terms of systems, and a strong appreciation of the nature of economic evidence. A good economist needs to read extremely widely to understand all the different perspectives that can explain and influence human behaviour. Some of you might lean towards public policy and study economics with politics, law, philosophy and history. The scientifically inclined might take to the quantitative aspects of the discipline and pursue econometrics, statistics or the rapidly emerging intersection between economics and data science. Still others might be interested in the applied fields of labour economics or health economics, or pursue a commerce degree with accounting and finance.

Economics also requires a different sort of diversity of perspective. Economics is relevant to all people, and especially in public policy, it's incumbent on economists to be aware of the different impacts of policy interventions on different groups in society. Our comparative advantage story illustrated the impact of trade liberalisation and its creation of winners and

losers in the form of growing and declining industries. It's not hard to imagine that these impacts can also have differential gender impacts, given that most occupations have a gender imbalance. There are many areas of economics where the analysis is enriched by considerations of gender, an obvious example being labour economics and the phenomena of gender wage gaps and gender disparities in care work.

A lot has been written about how the economics profession itself is insufficiently gender diverse from this perspective. That's why, in addition to being very happy to support the Economics Competition in general as a way of encouraging our economists of the future, the Treasury is very pleased to match the prize money given by the Business School this evening to the girls who performed well in the competition. I'm here tonight because I want to showcase how interesting, relevant and important economics is, and to congratulate everyone who did well in the competition. But at this moment when women are substantially underrepresented in the profession, we want very much to encourage girls especially to study economics and enter the profession. We need both more economists, and more economists from a range of walks of life, to understand and meet the diverse challenges and opportunities facing our country.

Economists generally consider that their tools are blind to gender, that is, that the fundamental principles of economic behaviour are the same whatever your gender. That may well be the case, or not. Regardless, it is quite possible that gender, and perhaps age, ethnicity and other differences, affect which particular social and economic issues get attention, and how the tools are used. That would be consequential, because the tools and principles are there to help us understand and benefit humanity in general, not just people who look and sound like us. Having a diverse economics profession is thus important both to help us make the most of all the human potential out there, and to help us pay due attention to all the relevant issues.

Conclusion

Let me conclude.

Congratulations for studying economics, for being so interested and so capable in this incredibly important discipline, full of powerful ideas.

With power comes responsibility. We face big challenges in our time, as well as amazing opportunities. Economics gives you a unique way to look at the world, to understand why certain things in our human systems happen the way they do, and to know how you can act to change things for the better. It gives us tools and habits of mind that can help all people live their lives to the full, and do and be what they want to be.

So – sharpen your tools. Be curious. Join a community of economists.

Study economics, but also study related disciplines and embrace diverse perspectives, so you can understand the full, rich, human context in which economic decisions are made.

Then, go out and do something that will leave things better than you found them.

Tēnā tātou katoa.