## defining MZ

### Finance 2011

- Challenges for growth
- Focus on innovation
- Partnerships with business





## Creating Leaders, Transforming Business

Steve Maharey

In recent years New Zealand's place on the international stage has changed. A new New Zealand is emerging. New Zealanders are carving a future for themselves, confident that they have something unique to offer the world. They aspire to achieve big things, break new ground through innovation and to mark out their own distinctive Kiwi world view. To succeed in a global economy, New Zealand must produce creative, innovative and connected leaders. That is just what Massey University is doing through its colleges.

Massey's College of Business is one of the largest business schools in New Zealand and plays a leading role in tertiary education, research and training in business and management. It prides itself on an innovative, flexible "cando" approach that produces graduates ready to make a difference from the day they are employed. The college attracts students from throughout New Zealand and from 100 countries around the world to Massey campuses located in Manawatu, Wellington and Albany. A large number of students also take advantage of the opportunity the University offers to study at a distance.

One of the features of the Massey model of teaching and research is our commitment to engaging with partners. We believe what we do will be enhanced by a close mutually beneficial relationship with a range of partners – particularly our business partners. It is for this reason that we are delighted

to be able to work with the Auckland Chamber of Commerce to bring you Finance 2011 featuring Minister of Finance Bill English. The chamber and the University believe that at the beginning of each year an opportunity should be provided for the Minister of Finance to give a "state of the economy" address before an audience with a direct involvement in business. Especially in these challenging economic times, the interests of New Zealand will be served if there is the opportunity for the Government to map out its economic direction and to engage in discussion with informed members of the business community.

The discussion should, of course, not be confined to one event. Universities and the business community need to ensure ongoing discussion about the challenges facing New Zealand and the pathways forward. This special finance edition of *definingNZ* is aimed at highlighting some of the activities Massey is involved in. I hope you find what you read interesting and inspiring. We want to create leaders and transform businesses to build a more prosperous economy. If you would like to talk more please get in touch.

Steve Maharey Vice-Chancellor



#### Champions for change

Michael Barnett

As a nation we keep on having conversations about the need to build a stronger economy, resilient communities and maximising opportunities.

Successive governments have set targets for growth. The last Labour Government suggested getting NZ into the top half of OECD nations and more recently closing (eliminating) the gap between ourselves and Australia has been proposed. Aspirational, yes, but how many NZers believe we can or understand what they could do to contribute to achieving such goals?

We refer to ourselves as a nation of exporters and yet only 200 New Zealand firms are responsible for 80 per cent of our exports.

We have government agencies responsible for the growth of regional economies and for exports, all with questionable results over a period of decades. And we keep on having conversations about the need to change and yet we keep on doing the same things we have always done and expect a different result.

This year the Government has signalled its intention and economic direction. Without some champions from business and a programme of action set within time frames that express the urgency of change, we will enter 2012 no better off.

As business leaders we should become the champions for change and your advocates should be the business organisations and universities who have the best interest of business and the economy as part of their mandate.

The Auckland Chamber of Commerce's partnership with Massey University and its College of Business are champions for the change that will provide the platform on which New Zealand businesses can succeed.

That change will start with smart people and smart ideas — it will continue with businesses who are prepared to invest in their people and invest in the research that will determine change in the way we do business and design new technology to grow and do business better.

The conversations can continue but not with out the action of some champions.

MA. Com

Michael Barnett

Chief Executive, Auckland Chamber of Commerce



### Finance 2011 – Contents

#### China in her hand

Professor Usha Haley, of the School of Management, is an international expert in Asian and emerging markets. She urges caution about doing business with China.



#### 10 Inspired by excellence

PhD Finance student Annie Zhang hopes her research into what makes KiwiSaver investors tick will help improve the nation's financial literacy.

#### 5 Rugby World Cup: The \$507 million question

Economics lecturer Sam Richardson has just submitted his PhD on public spending for major sporting events. He talks about the Rugby World Cup and what it's worth to the New Zealand economy.

#### New research centre focuses on social innovation

How the Social Innovation Research Centre is tapping into the country's entrepreneurial spirit.

#### Privatisation 'critical' for economic growth

Head of the University's College of Business Professor Lawrence Rose says the Government's plans to sell off state assets would lead to better productivity.

#### Taking an innovative approach

Distinguished Professor Gaven Martin talks about matching research with business brains to propel New Zealand towards greater economic prosperity.

#### 12 Due credit

You've probably seen his name in the business pages. A conversation with David Tripe, director of Massey's Centre for Banking Studies.

#### Finance 2010

A look back at how Massey University graduate Anna Hamilton-Manns hit the headlines at the Finance 2010 event when she challenged Bill English, saying his tax policy was not strong enough to stop talented young people from leaving the country.

#### **Countering the threat of global epidemics**

Why the World Bank selected Massey as its partner for a \$5.2 million programme to train Asian public health specialists and veterinarians.

#### 17 Truth behind the crisis theory

Professor Ben Jacobsen is carrying out research that will change the way financial markets are studied forever.

#### 18 Eye of the tiger

Wildlife economist Dr Brendan Moyle is on a mission to save tigers from extinction. He talks to Kathryn Farrow about the complex black market trade.

#### Student nets Zonta award and dream job

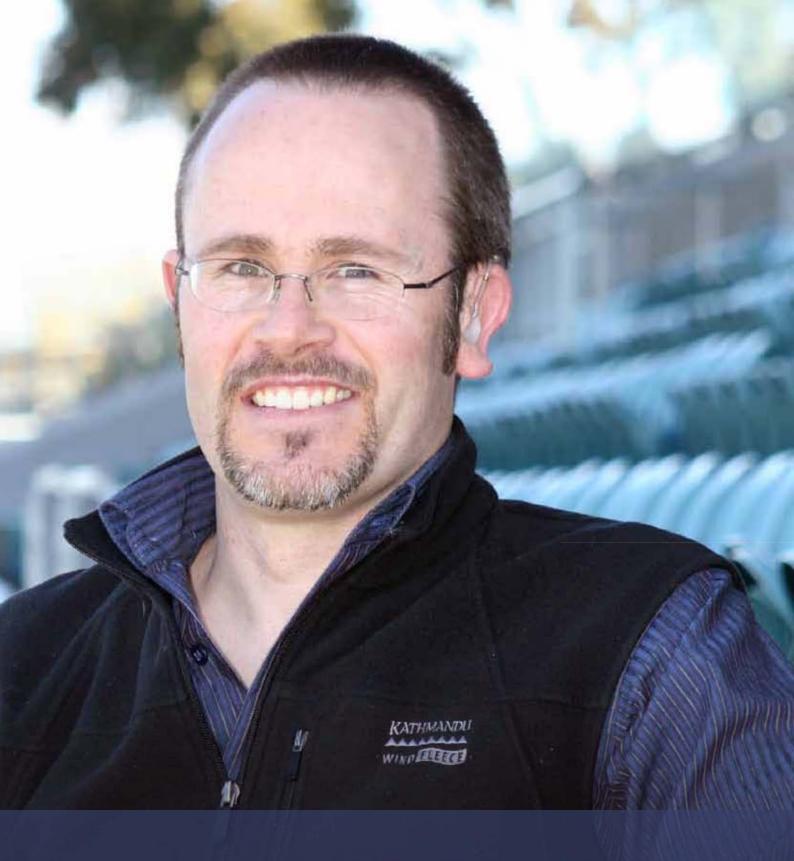
Hannah Broederlow is the third Massey student in three years to win a scholarship that ranks her among the top female business students in the world. She says there are many similarities between her netball career and the business world.

#### Teams triumph in economic challenge

These are tough economic times but the University has teamed up with ANZ to host a competition to challenge secondary school students to tackle the prickly issues with fresh solutions.

#### 23 Batting on to a BBS

Auckland cricket captain and wicketkeeper Gareth Hopkins talks about his motivation to study.



### Rugby World Cup: The \$507 million question

Fconomics lecturer Sam Richardson has just submitted his PhD on public spending for major sporting events. He talks about the Rugby World Cup and the magic \$507 million figure.

#### Will the RWC generate \$507m for the economy?

There is financial motivation for most big events, with organisers saying it will bring in "X" million but the figures rarely materialise. I think \$507m is a lofty and unrealistic figure. Even if they sold all the tickets to the matches, it is projected to run at a loss.

#### How did you assign a cash-value to sporting events?

In my PhD, I considered the effect on employment and GDP on local host economies of 11 major sporting events in New Zealand. Only the 1997 Netball World Championship was found to have a significant positive impact on the host economy during the event itself.

#### Why is that?

A big event with visitors coming in does have a crowding out effect, which dampens regular tourism.

#### Does the importance go beyond money?

In New Zealand, sport is ingrained into culture and that matters and cannot be put into a dollar figure. The actual benefit from hosting it will come down to whether New Zealanders and the rest of the world perceive it has been successful. We need to look beyond the figure and see the impact of visitor spending and long-term reputation to see if it's justifiable.

#### So it is about an experience?

If the criteria for the RWC was economic then the IRB wouldn't choose New Zealand, they would choose somewhere like Japan. But this is not a dollars and cents decision; there are more intangible factors that play a part. Yes it's about the experience and New Zealand has hosted successfully before.

#### Could this be the last time New Zealand hosts the RWC?

It might be, because the costs just keep getting larger. Joint hosting with Australia would be a possibility. Increasingly scarce taxpayer funds should be allocated to those events that demonstrate clear benefits that exceed their cost. But, hand on heart, I do hope that it is successful.

"If you look at the research from the United States, economists suggest the real figure is gained by moving the decimal point one place, so that would reach \$50.7 million – there is an element of truth to that view."



#### Playing the market

Experiencing the rollercoaster highs and lows of real-life stock market trading is all in a day's study for five Massey postgraduate students. They are members of the College of Business Student Investment Fund, with \$23,000 invested on the NZX50 and ASX200 stock exchanges, across all sectors of the market.

Fund managers are Katie Brown, Rick Du, Jeremy Jukes, Iris Li and Annie Zhang, who each carry out analysis of the industry and company specifics and produce a stock report on which they base their final decision. The fund is the only one of its kind in New Zealand and one of just two in the southern hemisphere.

"It is fun and something that gives you valuable experience of how to make money and awareness of the risk associated with it," Ms Zhang says.

"We are quite proud that lately we have outperformed the NZX50 benchmark."

Associate Professor Russell Gregory-Allen, a former New York pension fund manager who now teaches finance at Massey's Albany campus, oversees the fund and has the final say before any deal goes live.

College of Business Pro Vice-Chancellor Professor Lawrence Rose established the fund 15 years ago with \$5000 seeding money. The college has injected a further \$8000 and investment returns have grown the fund by another \$10,000 to date.

"It is one thing to teach in the classroom, but until people have to make decisions with real money you don't really learn," Rose

Fund managers present to a board of advisers and attend industry conferences where they network with professionals. They work to a strict statement of investment policies. Previous fund managers have gone on to take jobs as investment, pricing and research analysts and work on trading desks.

The fund is part of a series of initiatives from the School of Economics and Finance that have seen students excel, including an Investment Club overseen by Gregory-Allen.

Under his guidance, Massey's team recently won the Chartered Financial Analyst Institute Global Investment Research Challenge and will represent New Zealand in the Asia-Pacific title in Bali this month.

### Research centre focuses on social innovation

A research centre that aims to showcase New Zealand's social entrepreneurial spirit has been set up at the University.

The New Zealand Social Innovation and Entrepreneurship Research Centre will be the first interdisciplinary centre of its kind in the country.

It has been founded by socio-economist Professor Anne de Bruin, of the School of Economics and Finance, with an aim to contribute to social innovation through collaborative research.

De Bruin, who is based on the Albany campus, says the concept of social innovation is not widely understood but will play an increasingly important role in the future.

"Figures such as New Zealander of the Year Ray Avery have brought social innovation to the forefront of people's minds," she says. "We need to understand that innovation is not only about science, technology and business but also about social issues."

De Bruin says social innovation is also about community and how we might build community assets. "Growing our community assets helps create a dynamic community and that increases regional employment, economic and social development. We also want to raise awareness among our students that it's not all about money and profit; they need to think beyond that and focus attention on the importance of social goals."

Centre researchers have been working on a case study of Wellington Zoo, focused on the various factors that contribute to the success of not-for-profit organisations. Their paper *Not for Loss: Insights on Building a Community Asset*, has been accepted for presentation at the 7th Annual Satter Conference on Social Entrepreneurship at New York University next month.

"The zoo is an integral aspect of the Wellington region and innovation and entrepreneurial activity is helping it play a more vibrant role in the community," de Bruin says. The paper is co-authored by Drs Simona Fabrizi, Louise Lee, Kate Lewis and Steffen Lippert.

De Bruin says a series of case studies will be carried out to grasp the broader context of success of social entrepreneurship and understand social innovation. Further research will consider ecopreneurship and green entrepreneurship, sustainability and ethical issues, not-forprofit, community, charity and philanthropic businesses that have an entrepreneurial approach.



Professor Anne de Bruin

De Bruin has long-running research interests in entrepreneurship and how it contributes to employment creation. In 2008, she received a fourmonth Fulbright scholarship and worked with top scholars at Babson College, in Boston – the leading entrepreneurship research and teaching institution in the United States.

The new centre was showcased at an innovative launch event described as a "show and tell" on the Albany campus in October, addressed by Vice-Chancellor Steve Maharey. In keeping with the social ethos of the centre, donations to the Christchurch earthquake appeal were made.

Members of the centre's board of governance, Distinguished Professor Gaven Martin of the College of Science, Professor David Ding of the College of Business, and Associate Professor Peter Lineham of the College of Humanities and Social Sciences, and other well-wishers will be present.

The website for the New Zealand Social Innovation and Entrepreneurship Research Centre can be viewed at http://sierc.massey.ac.nz

#### Assessing the small business model for Apec



Professor David Deakins

The Asia-Pacific Economic Cooperation organisation has selected the University's Centre for Small and Medium Enterprise Research to complete an independent assessment of its small-business working group.

Apec is a major international forum that promotes free trade and economic cooperation through 21 member countries, including China, Japan, the United States, Australia and New Zealand.

The working group's role recognises the importance of small and medium enterprises to all those countries' economies, says centre director Professor David Deakins, who will review the group's effectiveness including how small business is promoted.

Deakins says the contract is testament to the expertise at the centre, based in the School of

Management at the Wellington campus.

"The SME Research Centre has a successful track record of research projects completed for a number of public sector agencies and government departments," he says.

"Small businesses are important to the development of any economy. The work Apec does to support the sector helps to foster growth and development, building management capabilities and strengthening skills needed to access international markets in all 21 member countries, including New Zealand."

Deakins aims to complete his assessment by December and make recommendations on ways to strengthen practices and protocols to enable the working group to align more closely with Apec's strategic priorities.

#### Expertise ready and waiting for financial services hub

New Zealand has the expertise to support an international financial services hub for the Asia-Pacific – it just needs a strong regulatory environment, says the University's new Professor of Finance, David Ding.

Prime Minister John Key has said he wants New Zealand to become an international financial services hub for the Asia-Pacific. This could create up to 5000 jobs and careers for graduates as financial analysts, investment managers, wealth advisers and hedge fund managers.

Ding says New Zealand has the expertise to serve as a financial services hub, especially for the South Pacific, but that has to go hand-in-hand with a strong regulatory environment in order for it to become successful.

Ding, who is associate head of the School of Economics and Finance at Albany, joined Massey last year from Lee Kong Chian School of Business at the Singapore Management University. Prior to this he was foundation Professor of Finance at the University of New South Wales' Asian campus. He has also been director of the Center for Research in Financial Services and head of the Division of Banking and Finance at Nanyang Technological University in Singapore. He is currently president of the Asian Finance Association. He says if a hub is created, finance graduates will be keen to stay and the level of services offered will improve. "If students in New Zealand see there are opportunities, then it will create jobs for talented people who want to work in financial services and will take services here to a higher level.

"Students are graduating with the relevant expertise and many take jobs in Hong Kong, London and New York."

He thinks New Zealand can play a key financial intermediary role that links the South Pacific to the major financial centres in the Asia-Pacific such as Singapore, Hong Kong, Shanghai, Tokyo and Sydney. In addition, he says, New Zealand universities are in a position to provide financial training across all service areas for Pasifika students.

"So, not only can we be a financial services hub, we should also strive to be a financial training hub. These could be the service areas that will fuel the country's growth in the future."



#### Privatisation 'critical' for economic growth



Professor Lawrence Rose

Selling state assets would improve market liquidity leading to better productivity, says the head of the University's College of Business.

**Professor Lawrence** Rose says the announcement by the Government of a plan for partial sales of the electricity companies and some other stateowned enterprises was encouraging because it would have

benefits for the financial markets, individual investors and the Government. He also believes partial private ownership would make the assets more efficient.

Rose, who has studied the performance of privatised companies in New Zealand and Australia and the effects on the share markets, says his research shows that previous sell-offs have significantly increased market share capitalisation and impacted on market liquidity.

"This would have major ramifications for the deepening and transparency of our capital markets and especially the NZX, if they are listed on it," he says. "Liquid and complete capital markets are critical for economic growth and prosperity and are one aspect holding New Zealanders' productivity down."

Professor Rose says his research of New Zealand companies from 1990 to 2001 showed that anyone investing in privatised firm portfolios would have received significantly higher returns than those investing in aggregate market portfolios. "The fact that mum and dad investors are going to have first priority in buying these state-owned assets bodes well for their ability to provide for their future prosperity, independent of the state.

"Some critics may believe that disposing of earning assets to the private sector can only hurt the government fiscal position. However, this position assumes that the state should have priority over asset ownership and not private individuals, and that tax revenues will fall. Neither position is

"A well-functioning and democratic economy should have the majority of assets held by private individuals and not the Government. Furthermore, I would expect assets held in private hands to generally become more efficient as there would be less government interference and shareholders would be demanding higher returns."

## dragon

The resilience of China's economy may of International Business Usha Haley partners. She talks to Malcolm Wood



For China, Marxism may have been just one of those phases you go through. Certainly it isn't the word Professor Usha Haley uses to describe it today.

"There is a continuity in the way the Chinese embrace technology, in the way they organise, and in the way they deal with people from outside China, from outside the middle kingdom. Their communist ideology is more akin to imperial Chinese than Marxist ideologies."

Haley, Massey's newest School of Business professor, is a long-time China watcher and analyst: her interest in emerging market economies, of which China is one, stretches back to 1992. China has made for good watching. From 1978, when Deng Xaioping took power and the 'bird cage' economy was created – the bird being the free market, the cage being the central plan – it has been an economic phenomenon.

For three decades China's GDP has grown at the rate of around 10 per cent year on year. In 2009 the value of China's exports overtook that of Germany, making it the world's largest exporter; in the second quarter of 2010 it overhauled Japan, becoming the world's second largest economy.

China has had advantages: cheap and compliant labour, state-supplied credit at low rates, inexpensive land.

Even so, within this pattern there are oddities. Consider the abrupt rise of China's steel industry, as Haley did when commissioned by the Alliance for American Manufacturing. In 2005 China was the fifth largest exporter of steel in the world; in 2006 it became the largest.

What had happened? It wasn't cheap labour or centralised and highly efficient industry. Haley looked closely at the Chinese steel industry and found it to be highly fragmented — and, if anything, becoming more so.

Instead, what stood out was the scale of Chinese subsidies. In 2007 these amounted to \$15.7 billion – money that went to support coal, coke, gas and electricity to keep the furnaces running. Indeed, according to her research, China's steel exports almost perfectly correlate with the level of the subsidies.

Similarly, in studies conducted for the Economic Policy Institute of the Chinese glass and glass products industry and the Chinese paper industry, she again found huge levels of subsidy: for the glass and glass products industry the 2004 to 2008 subsidies came to more than \$30.3 billion; for the paper industry from 2002 to 2009 the subsidies came to \$33.1 billion.

These subsidies are in addition to another subsidy-in-effect: the Chinese have held the value of their currency, the renminbi, at an artificially low level. It should, critics say, be worth 25 to 40 per cent more.

Who gains from this? The Chinese exporters and, for now at least, the world's consumers. Who loses? The industries and labour forces that are put at an unfair disadvantage – many of them US-based.

No wonder then that in the US, where the current unemployment rate stands at 9.7 per cent, the US-China trade deficit stood at US\$46.3 billion for August 2010 alone, and the talk is of a double-dip recession, that trade sanctions are being actively contemplated.

However, despite the cause being taken up by President Barack Obama with China's Premier Wen Jiabao, Haley doubts the Chinese will allow the renminbi to appreciate markedly.

"It's not in the Chinese Government's interests as it views it — although it increases the Chinese people's purchasing power. So the Government will not devalue the yuan voluntarily. The Chinese make noises once in a while

#### ay have been the one bright spot in the global financial crisis. But Professor counsels caution: Not everything that is good for China is good for its trading

but do little, and I think the rest of the world has realised we have very little influence on China; we can only influence our own actions, and we don't have many options."

That the Chinese and US economies exist in a delicate balance restricts what either can do. The US is massively in debt to China. China cannot sell off its reserves of US currency without devaluing the currency and its reserves in the process. But Europe has imposed protectionist measures, says Haley, and the US is likely to follow suit.

"This is not a free market we are operating in, so we shouldn't operate on free market assumptions."

Haley has testified several times before the US Congress about her research findings. In July 2010, 104 US senators and representatives wrote a bipartisan letter to President Obama recommending action on China trade. It drew on Haley's research into the paper industry.

So what of New Zealand? In 2008 New Zealand entered a free trade agreement with China and in 2010, as exports to the US declined, China became New Zealand's second largest trading partner after Australia, whose own economy was being fuelled by China's appetite for minerals.

Thus far, New Zealand's exports to China have been dominated by natural resources – products like milk powder, wool and logs. Haley worries that New Zealand could prove naive in its dealings with its vastly larger and more powerful partner.

"How do I put this delicately? New Zealand should take a more strategic view."

China is in the business of picking winners and trying to own areas of endeavour that will move it up the value chain. Sometimes the tactics it has employed have included an element of bait-and-switch: a foreign business with valuable intellectual property is lured to China on the promise of cheap manufacturing only to find that the 'property' part of the formula is less fastidiously observed than in the West.

"The Chinese Government is not interested in foreign investments in general manufacturing the way it was in the 1980s and 1990s. That is no longer a draw for China. The government would like foreign investments in clean tech, green tech, biotechnology, aviation – industries that it has anointed as strategically important."

"Most of these are not areas of natural strength for New Zealand, but dairying, where New Zealand does have substantial intellectual property, is one area of national strategic interest where care needs to be taken.

"New Zealand should also be careful when it comes to the issue of land ownership. There should be national debate over the Chinese-backed bid for the Crafar farms."

The Chinese are acting rationally by taking an opportunity that, I suspect, is being bankrolled by the China Construction Bank."

We need to remember, says Haley, that New Zealand's area of arable land is trifling compared with the acreages available in China - or the US for that matter – and that the New Zealand land and landscape embody other

spiritual, emotional and national values too precious to alienate.

New Zealanders should also be aware that some of its areas of natural strength can be contested. "Take wood, for example. China subsidises its plantations so there will come a time, probably within the next five to seven years, when it doesn't need imported wood from New Zealand or the US.

"New Zealand should not be relegated to becoming an exporter of natural resources and agriculture when there is a chance to move up the value chain and export more sophisticated manufactured products.'

In the longer term, Haley does not see China's growth continuing unchecked for many more years. China, she says, faces some fundamental problems, two of them rooted in the age profile of its population, which is becoming older - "China is going to be in the unenviable position of becoming an old country before it becomes a rich country" - and which, because of prejudice against female children, will have large numbers of unpartnered men.

Her faith in the resilience of the US is undimmed – "I think it will come back. The US is going through a period of readjustment and recovering from bad policies and intense global competition" - and she sings the virtues of a free society - a free press, free internet, free universities and free speech - as an engine of innovation.

"Currently, the Chinese are not the leaders in first-order cutting-edge technology, but rather in second-order applications. Money can buy innovation only to a point."

Interesting times lie ahead. "This is an extremely complex world. I tell my students, you have to be able to chew gum, whistle and walk at the same

#### **FACT FILE**

Indian-born United States citizen Professor Usha Haley's academic qualifications include a master's degree in political science from the University of Illinois at Urbana-Champaign and master's and PhD degrees in international business and management from NYU's Stern School of Business.

Her research interests have included boycotts, divestitures and regulations, and the economics of developing markets.

The Chinese Tao of Business: The Logic of Successful Business Strategy, the 2004 book she co-authored with husband George T Haley (an industrial and international marketing professor) and Chin Tiong Tan, was a well reviewed best seller and remains an essential guide for anyone aspiring to do business there.

She has written for The Christian Science Monitor and Newsweek and been cited in The New York Times, The Economist, CNN and The Wall Street Journal.

Her expertise is sought after. For example, she is speaking on business and government in China at the prestigious Economist Conference on High-Growth Markets to be held later this year in

Currently Haley is working on research into the Chinese auto parts and green tech industries and is completing her seventh book, Subsidies to Chinese Industry: State Capitalism, Business Strategy and Trade Policy. The book, again to be co-authored with George T Haley, will appear under the imprint of Oxford University Press this year.

Besides the US and India, she has lived and worked in Mexico, Singapore, Finland, Thailand, Vietnam, Italy and Australia.



## KiwiSaver researcher inspired by 'climate of excellence'

Finance doctoral student Annie Zhang is investigating the feelings and fears that motivate KiwiSaver investors as they decide how much risk to take with their funds.

"With around \$6 billion invested in KiwiSaver, it's vital that people make wise decisions about what kind of funds to invest in for the short and long term that really reflect their personal circumstances," she says. "What I want to find out is what influences those decisions."

She hopes, by the end of her thesis, to have produced research that could improve the nation's overall financial literacy at a time when a great deal of emphasis is being put on savings and investment as a way of recovering from the international economic recession. Zhang acknowledges the goal is ambitious, reflecting both the high expectations she has for herself and those she knows Massey University has for all of its students, whether in Auckland, Manawatu or Wellington – or scattered globally as distance learners.

"We are encouraged to publish articles from day one and to get the best results. It's a very positive atmosphere."

"The pursuit of excellence is part of the climate at Massey," she says.

Westpac assisted Zhang by providing her with information to help form her insights into KiwiSaver habits. The 22-year-old has been based at the Albany campus for two years. She began her Bachelor of Business Studies with double majors in finance and accounting at Manawatu, then transferred north to complete her honours year when her family moved.

"The transition was seamless. I was able to finish my undergrad degree thanks to the helpful advice I received across the campuses." She describes Massey as "like family" thanks to cross-campus, cross-generational links. She came to New Zealand, aged five, from China when her mother won a scholarship to do her PhD in management at the Manawatu campus.

Zhang has always been a high achiever. She was awarded a doctoral scholarship last year, was Albany Students' Association education vice-president for two years, and is manager of the Student Investment Fund and part of a team that won last year's CFA Global Investment Research Challenge at KPMG in the Viaduct Harbour — a "real life stock analysis" competition against teams from five other universities. The team is about to represent New Zealand in the Asia-Pacific contest in Bali.

The College of Business is one of five academic faculties at Massey. It spans all three campuses as well distance learning, professional short courses and the internationally recognised Master of Business Administration programme, New Zealand's oldest. The other faculties are the College of Creative Arts, the College of Education, the College of Humanities and Social Sciences and the College of Sciences.

From nursing and nutrition to nanotechnology, engineering to evolutionary genetics and ecology, sociology to speech language therapy, fashion design, jazz, creative writing and food technology, each campus has a distinct set of offerings from broad subjects to specialty programmes.

With numerous centres across its campuses – including in public health, disaster management, food and human nutrition, Maori health and development, and a newly launched social innovation and entrepreneurship centre – the University offers ample research opportunities for students aspiring to higher education in the fullest sense.

Annie Zhang. Photograph: Doug Cole



## Maths man leading research revolution

Distinguished Professor Gaven Martin. Photograph: Geoff Dale

Encouraging research into "ideas not yet seen" then matching it with business brains in order to help propel New Zealand towards greater economic prosperity is the new mission for Massey University's Distinguished Professor Gaven Martin.

As leader of the University's innovation strategy, Martin wants more commercialisation of new ideas and intellectual property from academic staff. "We want to create something novel at Massey – a mix of world class multidisciplinary research across the board, coupled to an innovation and entrepreneurial framework to get the stuff out there into New Zealand business where it can work."

Martin, a pure mathematician and director of the New Zealand Institute of Advanced Study, is adamant that teaching students how to think and problem solve are the kinds of skills and knowledge New Zealand needs to invest in.

"We will go nowhere with an unskilled workforce. We must upskill. I wonder how our economy would perform if we had the most well educated population in the world? Let's have the experiment invest in education across the board and see what happens. Some in government say we can't afford to do this. I'd argue that we can't afford not to – without this, the future seems too grim."

Martin grew up tinkering and inventing things out of old speedometers, carburettors and other spare parts in his panel beater father's garage in west Auckland. He has had a meteoric rise in academia, becoming a professor at the University of Auckland at the age of 32 and a

distinguished professor when he joined Massey six years ago. He has a long list of prizes and international fellowships on his CV and an exceptional citation rate for his publications.

As founding director of the institute, launched in 2007, he is dedicated to fulfilling its aspiration to be a world-class centre for theoretical research and intellectual inquiry in the sciences through his numerous collaborative research projects with mathematicians and others around the world and fostering the research of the "absolutely fantastic people" within it.

In the wider community, at schools and in the media he is an outspoken champion of the importance of mathematical skills for effectively developing tools to find answers to puzzling questions that underpin our understanding of how the physical world works.

"Virtually every piece of modern technology is underpinned by quite sophisticated mathematics – to the blissful unawareness of the public. From the abstract group theory in compression algorithms that make your phone, television, camera and ATM card work – to the geometry and analysis of partial differential equations modelling weather, aerodynamics and medical imaging technology like CAT scans."

He says that contrary to what many think, mathematicians are highly sought after across a range of careers and disciplines - medicine, technology, business, finance and elsewhere – because of their exceptional problem-solving ability.

"The best people in virtually any discipline will have strong mathematical and analytical skills."



You've probably seen his name in the business pages. Malcolm Wood talks to Dr David Tripe, director of Massey's Centre for Banking Studies. (This article was first published in the Massey University Alumni magazine in April 2009).

### There is a term David Tripe is fond of using these days when people ask about the origins of the global financial crisis.

It is 'disaster myopia', the very human tendency to severely underestimate risk. It comes, he tells me, from a paper co-authored by Richard Herring, a former visiting scholar at the Reserve Bank. Herring, Tripe recalls, was fond of ending his talks to local audiences with the snide comment, "but of course the bankers tell us that this time it is different, there won't be a problem, nothing can go wrong".

During his career Tripe has seen many shifts and ructions within the banking world. He joined the industry in the 1970s with an honour's degree in economics just as international exchange rates were being floated and the banks were making their first forays into foreign exchange trading, "some making quite spectacular losses by the standards of the day". Later he would watch with growing disbelief the behaviour of the markets in the lead-in to the 1987 crash. "There were people lending money on the smell of the smell of an oily rag. When you saw it being done, you thought, 'well this is a recipe for disaster' and, of course, it was."

He witnessed too the aftermath of the crash: the reluctance of banks to lend for commercial property development – an inherently risky activity, he says – and the fateful rise, in response, of private finance companies set up by commercial property developers.

But he also saw good things happen, particularly as the banking system was deregulated. "In the mid '80s you had to queue to get to a lender to get a mortgage for a house and you needed four or five mortgages and all the rest of it. By the mid '90s it was so much easier for the consumer."

By the time he departed the commercial banking world to join Massey's

Institute of Banking Studies in 1994, he had developed an utter fascination with the industry he had entered for no better reason than "it paid better than a government job".

It shows. In conversation over a cappuccino in Wellington Library's Clark's café he leans slightly forward, talking with enthusiasm, explaining and expanding.

If a banking expert can be locally famous, then Tripe is that expert. Reporters seek him out; their coverage of the current crisis is punctuated with Tripe's typically matter-of-fact commentary. So I have been curious to meet him, if only to see what happens when banker turns academic.

Impressions? I can imagine he must be a compelling lecturer in Palmerston North, but he also has the sort of besuited well-groomed presence that might equally be at home in Wellington's policy-making circles or the boardrooms of Auckland, which is where most of the banks are locally headquartered.

But there are individual touches as well: his jazz-instrument-themed tie – though he tells me his inclinations are more classical – and the pocket watch he pulls out white-rabbitishly to consult once or twice.

Just as the 1987 sharemarket crash was, in retrospect, clearly predictable, he tells me, this time round the signs that a financial bubble was building were evident long before it burst. The flood of cheap credit, the comfortable belief that property could only rise in value, the herd behaviour — all of these were signs the market was riding for a fall, says Tripe, who has made no secret of his views over the past few years.

Indeed, he wasn't the only one to express doubt But the industries whose self-interest was tied up with the rise in property and pushing out cheap credit were not interested in naysayers.

"There were a lot of people who had a commitment to it as a one-way bet, because if it was a one-way bet it was going to make them rich, or it gave them a job, because they sold services to the people who bought houses."

In New Zealand a smaller-scale reckoning came with the collapse of a number of finance companies, beginning in May 2006, while internationally the first significant signs that all was not well - the beginnings of the catastrophe - came with the August 2007 announcement by BNP Paribas, a commercial bank in France, that it could not fairly value the underlying assets in three funds as a result of exposure to US subprime mortgage markets. Like many other major banks, Paribas had unwittingly taken on so-called toxic debt in the form of the bundled and securitised packages of mortgages called Collateral Debt Obligations (CDOs).

These in themselves are a useful financial instrument, according to Tripe.

"CDOs were established to address the problem that when you bought a pool of mortgages you didn't know when you were going to get your cashflow. With a CDO you would know when you would get your cashflow - say within two-to-four years or four-to-eight years - and in principle that is a good thing for investors."

Similarly, a financial instrument some journalists have taken to describing as a weapon of mass financial destruction, the Credit Default Swap, is far more useful than not. "Suppose you are a bank wanting to make a large loan to the New Zealand Government but you don't necessarily want that much [risk] exposure to the New Zealand Government on your books. What you do is make the loan then sell off parts of the exposure. Not having too much of a credit concentration with any particular borrower is just prudent."

Where the fault lies, he says, is not with the instruments, but with how they have been used: the push to sell mortgages to people who could not afford them; the misleadingly secure ratings given to CDOs that were anything but; the rush to onsell those CDOs to institutions around the world; the overlay of financial complexity; and the miscalculation of risk. He comes back to disaster myopia. Those outside-chance events - the ones so unlikely no allowance is made for them – do happen, and much more often than the models allow for.

So what happens now in our patch? New Zealand's small open economy faces some very serious problems. Although the exchange rate may offer some buffer, the overall demand for our products is still likely to decline as global demand diminishes; credit has already become more difficult to come by; and the downturn will cast an unforgiving light on the New Zealand economy's fundamental problem: the nation has been consistently spending beyond its means, making up the difference with debt.

For a number of years New Zealand has been running a current account deficit of between 8 and 10 per cent of GDP (Gross Domestic Product), accumulating a net international debt that stood at \$165.9 billion at the end of September 2008.

Paradoxically that brings with it some reassurance, he says – overseas investors are to some extent hostage to New Zealand's economic success - and some risks.

"Of that \$160- or \$170-billion odd of foreign indebtedness, banks have net foreign indebtedness in New Zealand dollars, or hedged in New Zealand dollars, of around \$110 billion," explains Tripe. "So they have a very big chunk of it, which means someone somewhere else in the world is holding net New Zealand dollar positions that have been falling in value as the value of the New Zealand dollar has declined. There is a real concern that they will get uncomfortable with that and want to exit their New Zealand dollar positions, and that could cause a dramatic decline in the value of the currency."

However, Tripe is reasonably comfortable that the local – read Australian - banks, although leveraged ("they all meet the standard capital rules of 8 per cent equity, but in practical dollar terms when the risks are unweighted we are effectively looking at between 5 and 8 per cent"), will accommodate the changing environment.

"When it comes to the crunch, I am not of the view that the banks are going to lose huge amounts of money. Most of their lending is secured with loans for housing and loans on small businesses, and most people will have been sensible in their borrowing, and the banks have some margin. Even if someone loses their job and housing falls by 20 per cent, in many cases the house can be sold without a loss, and even where there are losses, some of these will be insured."

He is less sanguine about what will happen to the New Zealand economy generally. "To spend at the level of our income we are going to have to reduce the proportion of the nation's income being spent on retail and housing by 8 to 10 per cent. That means some excess capacity that is going to have to be drafted into some other use, which means that current levels of employment are nowhere near what they are going to reach. The official government figures seem to be unduly optimistic."

Nor is the world soon going to be back to what it was anytime soon. Although Tripe is resistant to the idea of being classified ideologically, in general he favours free market solutions over the alternatives and he is no fan of nationally owned banks, which tend, he says, towards inflexibility.

Yet for the foreseeable future a number of landmark international banks will now have major government stakeholdings.

"The French took the best part of 20 years to unnationalise the banks that they nationalised in the early '80s – and they took up most of the market's appetite and capacity for buying banks. When you have the US and the UK and the Europeans all trying to denationalise banks [in the same period], that is going to take lot more."

The blanket retail bank deposit guarantee schemes now in place in many countries also disquiet him.

However necessary, these schemes introduce 'moral hazard': with the Government carrying the risk there is less reason for financial institutions to act with proper prudence.

Will the crisis mean that banking qualifications now become more sought after within an industry whose upper echelons - it emerges - are largely full of people who have come in from other disciplines?

Tripe isn't sure. There has, in the past, been a tendency for the banks to see themselves as all-knowing and no one has held them to account bank customers seldom ask their bankers about their qualifications.

Perhaps, he says, they should.

## Since 1972, Massey University has produced more MBA graduates than any other university in New Zealand.

Victoria Troake believes that the key to success is perseverance, dedication and hardwork, but you've got to enjoy the journey.

"This MBA has proven to me that I'm capable of achieving when I have goals to reach"

Victoria is the Managing Director of Troake, a contracting company that specialises in interior solutions. She is primarily responsible for the strategic development and leadership of the company and is actively involved in daily operations.

Thanks to the MBA, Victoria has broadened her skill set. This has been a valuable asset with her involvement as President of the Walls & Ceilings Association, the Specialist Trade Contractors Federation, and a member of the Building Research Advisory Council.

"This MBA will reward me for years to come"

Victoria Troake, BBS MBA (distinction)
MANAGING DIRECTOR. TROAKE

For more information call 0800 MASSEY or visit



Te Kunenga ki Pūrehuroa MASSEY UNIVERSITY
COLLEGE OF BUSINESS
KAUPAPA WHAI PAKIHI



### REASON TO STAY

"I wanted to speak out for the thousands of young, bright New Zealanders out there who want to stay in this country but feel they have to move overseas to find the career opportunities and earn the incomes they deserve." Anna Hamilton-Manns (above)

#### Graduate Anna Hamilton-Manns hit the headlines at the Finance 2010 event when she challenged Bill English, saying his tax policy was not strong enough to stop talented young people from leaving the country.

Hamilton-Manns was interviewed on TV1, TV3 and by newspaper journalists after she asked the finance minister for a "good reason" to stay in New Zealand.

The next day English invited her for a one-to-one discussion to see what ideas she had to prevent "brain drain". No stranger to offering advice, she is on the University's College of Business Advisory Board. She returned to New Zealand four years ago after working overseas and runs her own event management company.

"Coming back, I don't see the opportunities in New Zealand apart from having babies, and maybe that's not what we all want," she told

"I have my own company but, your proposition, I'm doubting whether it's strong enough and whether I'm thinking about getting back on that plane."

Mr English replied that the Government wanted to cut personal taxes to give people "incentives to work hard, to improve their skills, to save, to invest and to get ahead here in New Zealand". But he said there was no silver bullet solution. Hamilton-Manns, who had voted for National at the last general election, said it did not go far enough and emailed him the next day. He replied and arranged a meeting.

"I told him I wanted to be part of the solution, not to create a headache.

"I wanted to speak out for the thousands of young, bright New Zealanders out there who want to stay in this country but feel they have to move overseas to find the career opportunities and earn the incomes they deserve."

Since graduating from Massey in 1998 with a Bachelor of Science (chemistry) and a Diploma in Secondary Teaching, Hamilton-Manns has travelled the world, working in Qatar, Kuwait, Britain, Italy and South Africa for five years as a teacher and then as an event manager. She is concerned that others would not return.

"We are going to have more and more people leaving for economic reasons rather than just to check out the Taj Mahal and tick off 40 countries in 40 days. This problem around the world is not unique, but we do have it."

She says she was encouraged that Mr English was prepared to listen.

#### WHAT HAPPENED LAST YEAR

In his address to Finance 2010, Bill English outlined the need to look at tax changes that rewarded work and savings and discouraged borrowing and housing speculation.

His comments were widely interpreted as an early signal of the subsequent increase in GST and the reduction in income tax announced in the Budget in May, along with changes to the tax rules for property investment.



Head of the University's College of Business Professor Lawrence Rose speaks to Bill English at last year's business lunch.



## World Bank selects Massey as training partner

Deputy Vice-Chancellor Professor Sir Mason Durie (above) and Tertiary Education Minister Steven Joyce (below) speaking at the launch of the partnership with the World Bank. Photos: Mark Coote

Tertiary Education Minister Steven Joyce has officially launched an international education programme under which the University will train Asian public health specialists and veterinarians in methods of countering the threats of global epidemics such as avian influenza, SARS and AIDS.

The World Bank chose Massey as its partner for the \$5.2 million programme. The programme is the first of its kind in the Asia-Oceania region and represents one of the few times the bank has contracted directly with an organisation to deliver a programme. Normally the bank deals only with governments.

The bank manages funding for the training on behalf of the Avian and Human Influenza Facility, a multi-donor trust fund, financed mostly by the European Union, which supports influenza-related programmes in various countries.

Sixty-seven health professionals from India, Pakistan, Sri Lanka, Bangladesh, Afghanistan and Nepal are currently working towards one of two Massey qualifications specifically developed for the programme – a Master of Veterinary Medicine (Biosecurity) and a Master of Public Health (Biosecurity).

Programme participants were in New Zealand for two weeks in December for a series of study workshops at Te Papa in Wellington. The teaching programme is made up of online interactive teaching modules supplemented by face-to-face short courses.

Deputy Vice-Chancellor Professor Sir Mason Durie says the partnership is proof of the University's commitment to being New Zealand's defining university. "With its leading programmes in veterinary medicine, public health and distance learning, Massey is uniquely placed to offer this qualification," Sir Mason says. "We are providing a novel solution to a global problem, and our innovative staff from across the University are working together to make a difference."

He emphasised the integrated approach that was at the heart of the programme. "Staff from across the University are involved in teaching, with the College of Sciences and the College of Humanities and Social Sciences contributing to the two qualifications."

Sir Mason also paid tribute to Professor Roger Morris, an internationally recognised epidemiologist, whose previous work with world health authorities and the World Bank put Massey in a leading position to be offered the contract.

Professor Morris expressed his appreciation to those who had been involved in establishing the project. "A number of World Bank staff were very constructive in ensuring that it could happen," he said, identifying Norman Piccioni and Mohinder Mudahar, who "provided the leadership to get the South Asia project established, and made it possible for us all to be here today, with the cooperation and support of Omar Hayat in obtaining the agreement of the European Union, which provided the

funding".

"Brian Bedard provided the initial impetus for the project and has been a driving force in getting it established. He is very close to getting a matching project approved for Central Asia, and is in discussions about extending it to other regions of the world."

Dr Eric Neumann, of the University's EpiCentre, is directing the programme, overseeing the academic schedule that is taught by veterinary and public health

staff at Massey with help from international collaborators. "We were excited to be approached by the World Bank to build this innovative training programme," Dr Neumann says. "Dr Daan Vink has led a large team of developers, across the veterinary and public health disciplines, to build the training modules.

"Through partnerships with Massey's Centre for Public Health Research and other international collaborators, the students will be exposed to a wide range of epidemiological tools for combating everyday health issues. Through their involvement in this programme, students will build lasting relationships with peers in the region. These outcomes will lead to a sustainable improvement in disease response capacity across the region."

Health professionals who are part of the current cohort of students also spoke at the launch. Dr Rattan Ichhpujani, from the National Centre for Disease Control in India, spoke of how the programme would lead to lasting relationships that would greatly improve co-operation in the battle against zoonotic diseases.



Judges at last year's New Zealand Food Awards, led by celebrated chef and food writer Ray McVinnie

### Tasty meal makes a mark

Just a few months after taking his product to market, Andrew Vivian has already had to make a change. The Tasty Pot Company has added the New Zealand Food Awards mark to its range of ready meals after taking out the Supreme Award.

The Auckland company triumphed over 80 other entrants at the gala awards dinner in October.

The New Zealand Food Awards, in association with Massey University, are a celebration of innovation in food, offering consumers a clear indication of food excellence and the industry new benchmarks and leadership.

The Tasty Pot Company won the Convenience and Meal Solutions Award, and owner Andrew Vivian says that was where their hopes finished. However, they went on to win the award for Innovation in Food Products and the Supreme Award.

"The calibre of previous years was high, so we went along thinking we might have a chance in our category, but we didn't expect this," he says. "We're very chuffed."

He says the accolade will help the brand. "It lends our product credibility, and the Massey endorsement," he says. "It helps having the stickers on the pots, because consumer education is important. This product is not your typical soup or pasta; it's a unique offering compared to what has traditionally been in the category."

The Food Awards win caps a big year for the company, which only began trading in June. "My wife and I had been living in Britain for eight years," Mr Vivian says. "I'd worked for a company there that did a range of fruit smoothies, and was part of a team working out the future of the company. We were looking at a range of fresh ready meals."

That range was launched and is performing well, so on their return the Vivians thought about doing something similar in New Zealand. "We saw there was a gap in the market; there was soup and pasta but not a lot of innovation.

They spent six months doing market research and tailoring their product to the New Zealand palate. "We looked at what ingredients appealed and gave it a twist to cater to the discerning foodie," he says.

The company endeavours to source ingredients locally, and is looking to do contract growing with local farmers in the future. They employ a seasonal recipe rotation so they can use the freshest ingredients.

"It's a costly product to put together; the packing is done by hand daily, so there are no production shortcuts. The ingredients are layered, because consumers need to be able to see what's in them. It's all about honesty."

The University will soon confirm a date for this year's awards.

## Massey's finance research published in top journals



Professor Ben Jacobsen

Research that supports a theory that investors need to account for rare disasters when making decisions on the stockmarket has been accepted for publication in the international top journal in finance.

Professor Ben Jacobsen, of the University's School of Economics and Finance, worked with two former colleagues on the paper Time-varying Rare Disaster Risk and Stock Returns. It will feature in the Journal of Financial Economics. They showed there is truth behind the theory that crises - such as wars, financial meltdowns, earthquakes or epidemics – do need to be

factored in because of their effect on world markets. Jacobsen, who is a member of the University's Institute for Advanced Study, says the research will have a major impact on the study of financial markets and expects the measure they have developed to be used in the development of further

"The validity of this theory is an important fundamental breakthrough and while this is still laboratory and drawing board work, it will play a major part in our thinking on financial markets in years to come," he says. He carried out the research with Professor Henk Berkman and Dr John Lee of the University of Auckland backed by a Marsden Fund grant. Using data from 447 international political crises from 1918 to 2006, they discovered fluctuations in probability can explain large movements in stock return and stock volatility.

Jacobsen says the theory sheds light on two key issues in finance. The first is the equity premium puzzle, that returns on stocks are too high relative to other investments, and the second is that the volatility of stockmarkets is too high to be explained by economic variables.

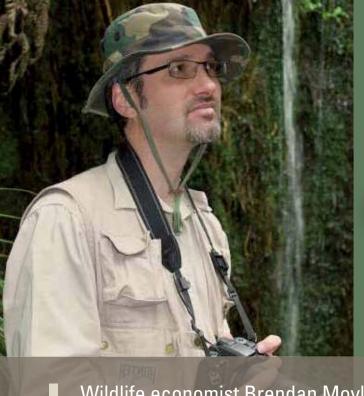
"For decades people have tried to explain these puzzles but, so far, not convincingly. However, this new theory would explain both. According to this theory, if investors account for a small probability of a rare disaster and if this probability fluctuates over time these two puzzles can be explained.

"For the moment, a practical implication is that time-varying disaster risk is an important risk factor to take into account when valuing stocks and bonds. "Over the years we will probably develop better models on how to do that.

Meanwhile, research by two College of Business staff which challenged a popular method used by Wall Street stockbrokers to predict stock market performance, has been published in the Journal of Banking and Finance. Associate Professor Ben Marshall and Dr Nuttawat Visaltanachoti, from the School of Economics and Finance, studied the theory, known as the Other January Effect or January Barometer, which suggests that stock market performance in January can predict positive or negative performance in the following 11 months. Their paper *The Other January* Effect: Evidence against market efficiency concludes that the effect has not been a useful tool for investors.

We suggest practitioners should think twice before using the Other January Effect as a market timing tool. There is no evidence that it provides useful information," says Dr Marshall.

He says he is not criticising previous research, because, 11-month returns following positive Januaries are generally larger than 11-month returns following negative Januaries, but the analysis shows the barometer cannot be implemented to earn statistically and economically significant risk-adjusted returns. Visaltanachoti says the effect is therefore not evidence against market efficiency. "If the Other January Effect does not generate economic profits, then those currently using the Other January Effect should reconsider their faith in this timing tool," he says.



# crusading into tiger country

Wildlife economist Brendan Moyle talks to Kathryn Farrow

He's the Indiana Jones of the School of Economics and Finance, or so some say. The similarities between the fictional feature film character and Massey University senior lecturer Dr Brendan Moyle are clear to see.

Both university academics by profession – Jones in archaeology and Moyle in economics – their "crusades" take them on exciting adventures in far-flung destinations in pursuit of the bad guys.

But while Jones' role is confined to the silver screen, Moyle's mission to save the tiger species from extinction is very real. It has come with its own perils as he works covertly in China to try to understand the complex black market in trade of tiger products. He has tracked smugglers' routes and is a rare breed of conservationist, studying the issue from an economic perspective in pursuit of a solution. He speaks to Kathryn Farrow.

#### Tell us about your strategy for saving the tiger species?

I'm a conservationist but economics is my tool to understand how and why the illegal trade in tigers takes place. You cannot fight the black market unless you know how it operates. The international CITES meeting chastised range states [states which tigers naturally range into] for their inadequate statistics on the black market – that's after 30 years of knowing poaching is a threat. There's been little analysis of what drives demand, until now

#### How serious is the threat to tigers?

The wild tiger population is in deep trouble. There are only an estimated 3500 left. In 1900, there were 100,000 wild tigers. When I started my research in early 2007, we thought there were 4000 in India alone, but 12 months later that had gone down to 1400 tigers. The Sariska and Panna reserves in India had all their tigers poached out recently. We think about 300 tigers are poached annually and the biggest single market is China, but there are others. In Tibet, the skins are made into costumes (chupas) and the bone is in high demand across China as a traditional medicine to treat severe bone diseases.

#### Surely poachers face the death penalty – why does this not deter them?

A poached tiger commands a very high price – up to \$US50,000 to an Asian smuggler. A lonely hunter who is offered \$US1500 to shoot a tiger – a hundred times his annual salary – is not going to say no. And the death penalty is only a risk in China. The death penalty has been handed out but it is not enough; it has just made trade in illegal tiger products more secretive.

#### How did your work with tigers come about?

I'd been working with crocodiles and wildlife black markets for a while. I was one of those people who stuck to the conservation of the underdogs. They're the animals no one gives you lavish amounts of money to help these species as they do with whales and tigers. But it was my International Union for Conservation of Nature that led to the Chinese authorities asking me to help.

#### Why do you think the hunting ban has not been effective?

Simply, because tiger poaching hasn't been stigmatised, the regulations are badly enforced and the demand has not changed. To make things worse, supply has been constrained – pushing prices higher, which encourages poachers. The international and domestic trade bans have just had a supply effect. The problem is that interdiction and education isn't working. There have been campaigns launched about the traditional Chinese medicine shops, but this is futile because they only sell fakes. There's a core of people in China who are prepared to pay a lot of money for tiger bones. That's all down to their "medicinal" qualities. And this core knows they are threatening the species, and they're not put-off by the death penalty or risk of 20 years in a Chinese prison. They're prepared to pay smugglers what it takes to get the parts. The other problem is that poaching is often done by locals, resentful at conservation policies. Indigenous hunters resent their forests being turned into tiger reserves. Local communities resent having their livestock and family members killed by tigers. They're not reluctant to poach tigers for high black market prices.

#### Have you always had an interest in wild animals?

As a child I was a member of Hamilton Junior Naturalist Club and I was always fascinated with false scorpions. My grandfather gave me a book on New Zealand spiders by Ray Forster when I was 11. It was a hard-cover book with colour photographs, which would have cost a bit in 1977. I think

I am the only grandchild who still has their present from that year and now my children are using it. I had lizards, bugs and spiders in my room as a child. Nobody was really afraid of spiders then – well not boys anyway. They were just used to scare girls in the classroom. When it came to doing a degree, I studied a BSc in biology followed by an MSc at Waikato University with my master's thesis focusing on New Zealand's false scorpions and then I did a PhD in economics at Waikato. As time has gone on, I seem to have progressed to bigger, more scary animals.

#### Your research in China was recently published in criminology journal Global Crime. What did it expose?

I found many myths about the illegal trade in tiger products. Lots of stuff is made up by conservationists. To give us a chance of saving the species, we have to try to make sense of the black market and find out how it operates. We need to understand these markets better and that means economic research, not more biology.

#### What are the myths?

I guess the first main myth is that there is one big connected black market, when my research indicates it is actually geographically separate, with different product mixes and subspecies. Second, there is a misconception

that tiger bone is marketed through the TCM shop network. This doesn't happen. It would be very stupid for smugglers to use these as they leave a trail back to them. My studies found that there were small conspiracies operating secretively outside formal markets. Third, neither the international (CITES) ban nor the Chinese domestic ban has reduced demand. High prices indicate that demand has been sustained, while supply has been constrained. And most smugglers' costs come from the distribution side, like avoiding detection, rather than the direct poaching costs. Lastly, I found that tiger products are not widely available. During my three trips, the

closest I have come to a tiger part is in a photograph. Fakes are very widely available and sadly the market for fakes has been confused with the real by too many conservationists.

#### How did you carry out your research?

Detecting poachers in reserves is difficult because of terrain, corruption and lack of resources, but I interviewed rangers and local people to learn how the market operates. They were happy to give me information. They think it is interesting that people want to know that stuff because they actually haven't been asked before and these are the people with the knowledge. I was also one of the first people to gain access to Chinese arrest and interception data that has shown that gangs are very small. Although to get the Chinese to give me their data took about three trips and a lot of drinking games to get them to trust me with it.

#### What dangers did you face tracking tiger poachers?

Well, the goal is pretty much about avoiding danger as much as you can. Sometimes you might get a firearm, but the nagging feeling is that well, poachers get a lot more practice shooting stuff than you do. There are those moments where you suddenly feel very vulnerable in some remote spots no authorities know exactly where you are - and there are a lot more wary locals about, looking inhospitable. And sometimes local army units will detain you for a bit. I think it makes their day interesting if they can wave their guns around a bit and haul you away. They usually look pleased. Mostly you're not staying in air-conditioned hotels, but border areas lacking refinements like, oh, toilet paper.

But my previous work researching crocodiles was probably more dangerous. You have to treat those animals with a lot of respect. When you go into any wilderness area it is physically challenging, and you're going to face threats from disease or small venomous creatures or large predatory ones. But let's say I've not stared death in the face through my conservation work – that only happens when I'm out cycling on Auckland's roads.

#### So, what is the solution to saving the tiger species?

I'm not sure. I think if anybody does know what the solution is, they probably don't understand the problem. Even conservationists can't agree. Some want to boost reserve size and scope, some want to focus on just those reserves that can be managed effectively. The standard response seems to try to do the same things as before, but with more money. Others, like myself, want to try out some new ideas. This includes more translocations and captive breeding. And we want to talk about whether we can beat smugglers by outcompeting them with legal tiger-products from captive tiger populations. Playing 'nice' with smugglers has just made them rich. If we want to squeeze their profits then the 'feel-good' approach of the bans need to be looked out again. That may help especially to reduce poaching of Indo-Chinese tigers.

#### Isn't tiger farming an extreme solution?

It's a controversial solution, but that doesn't mean we shouldn't debate it (accepting it may not be feasible). I think a lot of people have an emotional reaction against it, but we do use similar tactics to help other species. I am not thrilled by the idea of tiger farms but letting Asian criminals earn big bucks from poaching has ended in catastrophe for tigers. We need to go after their profits. It's pertinent to point out I've got a crocodile

> background. And with crocodiles, can be an anti-poaching tool, so we used here too

we've used ranches and farms to assist conservation. And one of the effects has been to squeeze poachers out of this market. Trade need to think about whether it can be

#### So you're from a Crocodile **Dundee background?**

Yes, there are similarities between crocodiles and tigers. Both

crocodiles and tigers are huge carnivores, can be turned into high-value products and have been involved in human/animal conflict, hence they are hunted. Crocodiles can be farmed and tigers can be farmed; it is just not a popular solution. We know farms cannot compete on price but can compete on quality and volume. People do not want crap quality crocodile shoes or belts. Farms offer high quality skins with no scratches. If people want a secure supply of skins, farms can deliver that and these consumers are assisting crocodiles to survive. The theory is we might be able to get consumers in the tiger black market to leave if there was a legal alternative instead. If we don't properly analyse this option then we're just sacrificing wild tigers for emotional reasons. The urgent and pressing problem is we have been unable to arrest the collapse in tiger numbers for the past 30 years. Doing more of the same and hoping Asian criminals will suddenly decide poaching is wrong, is a futile approach.

#### Where to from here?

When you go into any

large predatory ones

wilderness area it is physically

to face threats from disease or

challenging, and you're going

small venomous creatures or

Patiently sifting through the fragments of black market data to piece together more details. I'd like to get into some parts of Asia I haven't investigated yet - Nepal, Tibet, Vietnam and Indonesia. A lot of information from those parts of the world is still pretty fragmentary. My last two attempts to get to Nepal have failed, sadly. I'm still going to tiger conservation meetings, discussing and exchanging ideas. Conservationists often disagree on tactics for endangered species, but we all share the same aims. And the only way we can reconcile disagreements is by talking and sharing research.

So, are you Massey University's answer to Indiana Jones? If I am Indiana Jones, then I'm Indy with more mud and meetings and less gunfire - I'm also not afraid of snakes.



"...You do not get anywhere without working hard; you can always achieve more as a team than you can on your own. You can learn from other people, share ideas and grow yourself that way." Finance student Hannah Broederlow. Photo: Graeme Brown

# Zonta award and dream job

Hannah Broederlow says there are many similarities between her netball career and the business world.

"The first thing is hard work: you do not get anywhere without working hard," she says. "The second is teamwork. You can always achieve more as a team than you can on your own. You can learn from other people, share ideas and grow yourself that way."

Ms Broederlow, 22, from Palmerston North, is the third Massey student in three years to win a prestigious scholarship that ranks her among the top female business students in the world.

She has been awarded a Zonta International Jane M Klausman Women in Business Scholarship. She has just completed a Bachelor of Business Studies majoring in finance by distance learning.

In 2009, she combined study with playing goal defence for the Central Pulse and helping New Zealand Under 21s to second place in the World Youth Championships in Rarotonga. Last year she took a break from netball to concentrate on her studies but plans to play again at club level.

The scholarship, worth \$US5000, was set up with a bequest from a New York businesswoman to help women overcome barriers to achievement in the business world.

It was won last year by Valeria Kern of the Albany campus and the previous year by Genevieve Cooper from the Manawatu campus. As an international finalist, Ms Broederlow receives an additional \$US1000 as well as \$1000 as the winner of the District 16 (New Zealand) national award after being nominated by the Zonta Club of Manawatu.

The former Palmerston North Girls' High School student has a science degree but had always wanted a career in corporate finance so enrolled at Massey, aided in her first year by a Prime Minister's Athlete Scholarship.

Studying business has helped her land what she describes as her "dream job". She starts work this month in the corporate finance team at PricewaterhouseCoopers in Auckland and is currently preparing for her Chartered Financial Analyst Institute exams.

The prize money will go towards studying for charter and paying off living costs accumulated while completing her degree. "I studied extramurally so I could fit it in around netball," Broederlow says.

"Having both was really good, I don't think I could have done one without the other. They balanced each other out. When I was a bit sick of study it was nice to have a break and play netball."

Broederlow was on the college's Dean's List of students who achieved an overall minimum grade of A minus last year.

Her award was presented by District 16 Governor Anne McMurtrie at the Wharerata function room in a ceremony attended by Zonta members and University staff.

"It's really cool and a real honour to be recognised by such a strong group of women who are leaders in their profession," she says. "I hope I can represent them well."





Teams from Orewa and New Plymouth won the annual ANZ-Massey University Economics Challenge with their innovative solutions to economic problems.

Above: Hayley Morrison, Luke Becker and Jack Davies receive their prize from Ministry of Economic Development economic strategy chief adviser Philip Stevens.

KingsWay School and Spotswood College took top honours in the competition, which was hosted simultaneously on the Albany and Manawatu campuses last year. Pupils from 15 secondary schools took part in the contest, answering a 20-question online quiz based on the year-13 curriculum before making a five-minute "rocket pitch" on the subject What can we do to improve New Zealand's low productivity?

The KingsWay team members were Hayley Morrison, Luke Becker and Jack Davies, and the Spotswood team members were Jacob Burton, Harry Graham and Hamish Crimp. Dr Peren Arin, from the judging panel in Albany, says it was a landslide victory for KingsWay School, which had demonstrated knowledge of different aspects of productivity and clear understanding of economic concepts.

"They had two very original, interesting, relevant and applicable ideas about tackling low productivity through more funding for research and development and infrastructure," Arin says. "The judges felt they responded to questions articulately and professionally with a clear understanding of economic concepts."

Associate Professor Rukmani Gounder, who judged the Manawatu event, says the Spotswood team had a well-structured presentation based on good data. "Their presentation was based on clear themes of capital productivity, labour productivity and innovation, and had identified the role of incentives in allocating capital," Gounder says.

Each student in the winning team received a trophy and a Massey University scholarship of \$2000 toward full-time study in the College of Business next year. Runners-up Westlake Boys' High School and Palmerston North Girls' High School receive \$1000 scholarships for each team member.

Westlake Boys' High School team members were Chris Nielsen, Daniel Mason and Rowin Munchetty and Palmerston North Girls' High team members were Anna Hamer-Adams, Phway Aye and Cui-Ying Yao.

Each team of three was assigned a Massey postgraduate student to mentor them in the challenge and was supported by lecturers from the School of Economics and Finance.

Judges at Albany were ANZ managing director of private banking and

wealth John Body, *National Business Review* editor-in-chief Nevil Gibson, Ministry of Economic Development economic strategy chief adviser Philip Stevens, Department of Labour group manager Dafydd Davies, College of Business Pro Vice-Chancellor Professor Lawrence Rose and senior economics lecturer Dr Peren Arin.

At Manawatu, the judges were ANZ general manager Craig Bruce, Inland Revenue Department senior research economist Iris Claus, Vision Manawatu chief executive Elaine Reilly, Treasury principal adviser Grant Scobie and lecturers Dr Rukmani Gounder, Sam Richardson and Dr James Obben.

Schools taking part at Albany were KingsWay School, Kristin School (Albany), Long Bay College, Northcote College, Orewa College, Rutherford College, Westlake Girls' High School, Rangitoto College, Takapuna Grammar School and Westlake Boys' High School.

Schools taking part at Manawatu were Feilding High School, Onslow College (Wellington), Palmerston North Girls' High and Spotswood College.



ANZ regional manager Bernie Dekker, Palmerston North Mayor Jono Naylor, Associate Professor Rukmani Gounder with the winning team from Spotswood College - Jacob Burton, Harry Graham and Hamish Crimp.



#### Batting on to a BBS

When he does not have a bat or a ball in his hand, cricketer Gareth Hopkins has a book.

The Auckland cricket captain is studying for a Bachelor of Business Studies with a double major in finance and economics.

Hopkins hit a career best 45 from 51 balls in the one-day internationals against Australia last year and was part of the Black Caps squad for the Twenty20 World Cup in the West Indies.

He is one of the five players each year, including Jacob Oram and Michael Papps, who are studying at Massey through scholarships offered by the College of Business in partnership with the New Zealand Cricket Players' Association.

The 34-year-old wicket keeper-batsman decided to return to study seven years ago and says the distance learning set-up suits him. "Extramural is perfect," says Hopkins. "I can play cricket full-time and chip away at the degree." He does four papers a year but never studies from the stands. "I don't take books to matches," he says. "When we are touring, the guys are relaxing and I'm in my room catching up with study. But I do keep the two things separate."

"Massey manages the project well and offers the flexible learning environment that is so important to people who do have full-time jobs but are keen to study and improve their skills."

There could have been a clash when he was scheduled to sit an exam on the day of his test debut against England at Trent Bridge. But the Black Caps' sports psychologist, Gary Hermanson, was invigilating and arranged for him to sit it the next day.

"I've sat exams in a few countries now," he says. "The online learning environment, through Stream, has also been pretty good and other students are helpful in the online forums."

Aidan Hobson, career and personal development manager for the New Zealand Cricket Players' Association, says the partnership with Massey helps players to take positive steps to a future outside cricket.

During Hopkins' school days at Taupo-nui-a-Tia College, he was into science, maths and, of course, sport. He left school and began a career as a professional cricketer, but always hoped that he would study for a degree.

Since he began his first paper in 2004, he has married, bought a house, played for the Black Caps and his wife recently had a baby. He started his latest paper – in advanced microeconomics – when his son, George, was just a few weeks old.

"I always wanted to do something at university but at 18 I didn't know what I wanted to do. My wife, Bernadette, has done a degree and is incredibly supportive. Coming to study a bit later in life, I probably have more motivation and drive and I want a career after cricket."

With a few papers left to complete, the finishing line and a capping ceremony in sight, what will he do with his qualification?

"I'd like to own a successful business," Hopkins says. "But what area, well that's the \$64 million question." - Kathryn Farrow

