

VICTORIA
UNIVERSITY OF
WELLINGTON

*Te Whare Wananga
o te Upoko o te Ika a Maui*



*Greetings from the
Career Development &
Employment Service of
Victoria University*

*Career View is published by
Career Development and
Employment to provide information
on careers and employment to
students, graduates and friends in
the community.*

*Topics cover a wide range of areas
from information on how degrees
and courses relate to employment
opportunities, to life/work planning,
graduate destination information and
current issues or material relevant to
the employment scene.*

*In this issue of **Career View** we
look at the broad area of Economics
and its use as a decision making tool.
We explore the wide range of employ-
ment opportunities available to
students who study Economics and
we profile four recent graduates who
share with us their experiences in
work and study.*

Career View

ISSUE NO 16 • JULY 2000

Economics

Economics is the study of choices. It is a subject which is dynamic and constantly evolving and whose consequences affect our lives every single day.

Economics provides a rigorous analysis of a wide range of real world problems such as poverty, inflation, unemployment, pollution, crime, taxes, finance, inequality, international competition, consumer behaviour, world trade, economic growth and many others.

Economics provides for a wide range of interests. It combines power of abstract reasoning with accurate observation – which of course is shared by other fields of knowledge, but economics is the way in to understanding how we allocate resources and why we allocate them as we do. Good economists have good judgment about some aspect of that broad field.

So What is Economics, Exactly?

Through the application of abstract reasoning, logic and mathematical techniques, economics provides conceptual models for analysing complex problems. Economists 'ask' their models what the outcome might be if certain conditions were in place. By changing these conditions in the model, different outcomes can be predicted. Much, sometimes heated, discussion goes on between economists over what questions should be asked in the first place and how the outcomes should be interpreted.

Economic analysis can be applied at different levels. It can be used to study how the market systems work, including the economic behaviour of consumers, households and companies, which comes down to such factors as individual prices, wage rates, profit margins, interest rates and rental charges. This type of analysis is typically referred to as *microeconomics*.

Economics can also be applied in the study of the economy as a whole from a

national and international viewpoint. Topics of analysis include the study of employment, inflation, industrial production, government policy, international trade, international finance, and the economic impact of international events such as changes in oil prices, world sharemarkets, wars, business confidence, etc. This is typically referred to as *macroeconomics*.

Then there's *econometrics*, a branch of economics that uses mathematical methods and models. It is based on a combination of collected data, techniques of statistical estimation and a mathematical treatment of economic theories. Its emphasis is on establishing principles, which are general and enduring, rather than on immediate, one-off solutions. Calculus, probability, statistics, linear programming and game theory, as well as other areas of mathematics, are used to analyse, interpret and predict various economic factors and systems.

Why Study Economics?

The best reason to study economics is to gain greater understanding of the world around you. Unfortunately, it seems too many people believe economists are concerned only with the business world. While it is certainly true that economists analyse the business world, the topics studied by economists go far beyond business.

Economics is essentially an intellectual toolkit that allows people to explore and manipulate particular features of the world that would otherwise be too abstract or too complex to understand, and to engage in controlled speculation about what might happen with them next. Since a considerable amount of the information about the world is presented in statistical and economic terms, people who have studied economics have access to certain levels of information which are unavailable to those who don't understand this 'language'.

Economics is also a creative discipline. Many of the problems it is called upon to solve have never existed before. Part of the intellectual training which economics instills in its students, is the capacity to imagine how different applications of certain techniques can contribute solutions to entirely new situations. So wherever organisations and enterprises need people who can understand and apply structured thinking, rigorous analysis and a focused imagination to the resolution of difficult decisions, economics will come into its own.

Not all people who study economics will become economists. Students of economics know about a range of procedures that allow them to approach problems in a constructive and disciplined way. Not only can they initiate this logical problem solving process for themselves, or on behalf of an employer, they can also evaluate the work of others who have followed a similar procedure. Because they know what they know and can focus their thinking in particular patterns, people who have studied economics are equipped for informed discussion and decision making in almost any area of enquiry. They can argue different points of view in the international 'language' of economics and can translate this language into guidelines for choice about what to do next. All employers, at some stage, at some level, are confronted with choices about what to do next.

What do Economists do?

Economics provides a foundation for careers in:

- accounting
- business
- government and politics
- finance and insurance
- information technology
- law
- management
- marketing and tourism
- public policy
- teaching and education

Economists undertake research and analysis in order to provide advice and forecasts to governments, business, financial and international policy organisations. They evaluate investment proposals for business, policy ideas for governments and international bodies, monetary policy, interest rates, exchange rates, and share prices for financial institutions.

Economics provides techniques for market analysis. Economists study data in order to spot trends in economic activity, such as economic confidence levels and consumer attitudes, and to address issues arising from the production and distribution of goods and services. They can investigate national or international economic conditions or particular features like specific industries, markets or regions.

Economists also act in an advisory role. They often have to take a broad view of complex problems and may frequently have to deal with senior and influential people in government or industry. They therefore need confidence to argue their case well, defend their results in a convincing manner and express themselves in terms that can be understood by a non-economist. The ability to handle and interpret numerical information is important. Economists may work in project-based teams with other economists or other specialists and it is necessary to be able to adjust to the demands of other team members and acknowledge their expertise and priorities.

What Skills and Personal Qualities do Economists or Policy Advisers Need?

Economists are highly skilled professionals in the business of giving expert advice. They need:

- a good degree, preferably honours or a postgraduate qualification

- analytical and research capability
- an excellent command of written and spoken English
- excellent report-writing skills
- the ability to communicate complex ideas in simple terms
- self-confidence and good presentation skills
- a high level of organisational ability and motivation
- communication and negotiating skills
- initiative and a focus on achievement
- computer skills

Economies never sleep. The term 'global economy' is now common place and as long as the sun is up in some part of the world, economies everywhere are ticking away and occasionally making a loud crash. For their part, economists need to have:

- the stamina to work under pressure and a willingness to keep going until the job is done
- the ability to understand and manipulate complex numerical data at speed and without sacrificing accuracy
- rigorous attention to detail
- confident decision-making abilities

Economists are often working with sensitive information and must demonstrate:

- scrupulous integrity and trustworthiness
- interpersonal skills
- commercial awareness
- adaptability and sensitivity to different cultures
- good teamwork skills

Since economists tend to have a curiosity about how the world works and an interest in mentally taking it apart and trying out different ways of putting it back together, they probably have:

- the ability to think laterally and work creatively
- an awareness of the significance of patterns of data
- an instinct for what the numbers are saying

And what about maths?

Mathematical and statistical understanding greatly enhances one's ability to apply and understand economics. These subjects are strongly recommended, particularly if your intention is to take economics as a major subject in your degree. Some study of maths and stats at the undergraduate level is usually a requirement for postgraduate study in economics.

Where do Economics Graduates Work?

The Government is a first employer for many new graduates who are serious about economics, and whose academic achievement demonstrates this. Their job title, however, would probably be 'policy analyst' or 'policy adviser', not economist, even though they may hold an advanced degree in the subject and are applying the techniques of economic analysis to their work.

The Treasury recruits a small number of graduates each year. The emphasis is on academic excellence, and Trainee Analysts will need to be equipped to undertake original economic and financial analysis and design and evaluate policy options to a high standard. Presentation and report-writing skills are critical. The Treasury has a well-defined hierarchy of analyst positions; trainee analyst, assistant analyst, analyst, senior analyst, and so on to the position of Advisor.

The Reserve Bank is the country's central bank and is involved with monetary policy, financial systems and currency transactions at the highest level. It recruits a small number of graduates each year and competition for these positions is high. Applicants need to demonstrate academic excellence and expect to maintain high standards of achievement and productivity. The work largely involves economic forecasting and research on monetary policy issues and requires the ability to use econometric techniques.

The Ministry of Economic Development is the Government's main adviser on the operation of the markets. Its primary need is for good all round analysts, with some specialised positions well suited to economics graduates, particularly those who have an understanding of how the organisation of electricity, broadcasting and telecommunications networks impact on the price to consumers. The Competition and Enterprise Branch of the Ministry is reasonably representative. About a quarter of its staff have economics degrees and some twenty percent of the remainder have undertaken tertiary level study in economics. As well, considerable emphasis is placed on the capacity to research, write good English, argue a case and propose a practical solution to a well-described problem.

The Labour Market Policy Group within the Department of Labour recruits

economic graduates with a minimum of an Honours degree. The Group provides policy advice to the Government on labour market issues aimed at improving its social and economic outcomes. It focuses on issues of employment relations, employment accident insurance, education and training together with research and evaluation work. New recruits are learning to be policy analysts, and will be researching issues, writing draft papers and interacting with other agencies. They also need to be politically aware and understand the current Government's aims.

Statistics New Zealand employs economics graduates, generally at the Bachelor's or Honours level, and calls them economic statisticians. They are employed mostly in the Balance of Payments Division, Inflation Measures Division and the Labour Market Division. The work may involve the use of certain computer packages such as SAS, Excel, Lotus Notes and INFOS. After gaining experience in certain statistical methodologies, economic statisticians may be required to write articles, answer customer enquiries, prepare news and media releases and present statistical information at media conferences.

Local Authorities: While a large local authority might employ a lone economist/business and policy analyst, an economics graduate has statistical and computing skills which can be used to advantage in more general research and policy planning positions, working on such issues as housing, transportation, water services and waste management. A large local authority might have an economic development unit which concentrates on local or regional issues such as the labour market and industry enterprise initiatives. Openings in these organisations are not frequent, and employees at all levels need to be adaptable, a team player and comfortable working within organisational and community values which typically require an awareness of political and cultural issues.

Economic consultancies undertake economic research, analysis and forecasting to help solve strategic business and policy problems for their clients. The range of assignments is varied, with an emphasis on macro-economic issues, but economists in a consulting environment need to draw on a broad base of knowledge and experience. Honours and Masters degree graduates are valued for their

research skills. Consultancies such as the **New Zealand Institute of Economic Research** also produce various publications which provide a regular commentary on economic conditions. Since such publications function as economic reference points for the business and wider community, the writing skills of the economists who produce them is critical in order to maintain the integrity, accuracy and comprehensibility of their information.

Large business/corporate organisations are often interested in employing economics graduates as management trainees, marketing analysts and project analysts. These positions are usually offered through each university's programme of graduate recruitment. Economics graduates can function well in business management, since much strategic planning is based on the interplay between economic variables. They also bring higher level analytical and critical thinking skills which can translate into effective problem-solving and decision-making. Graduates take on increasing management responsibilities as their experience and effectiveness grows.

Banks employ economists, and people with a background in economics. Different business units have different requirements and different job titles. Business units may include; investment banking, foreign exchange, structured finance, and corporate and institutional banking. Job titles may be analyst or customer service representative. Skill requirements generally go beyond academic understanding and include; business writing, interpersonal skills, presentation skills and consulting skills. A good working knowledge of information systems and e-Business, with practical knowledge of Power Point and Excel is highly desirable.

Bank treasuries and financial markets are more specialised economic environments. Foreign exchange and money market dealers provide services to a bank's corporate and off-shore customers in areas of interest rate management, investment funding and foreign exchange currency transactions. Dealing Rooms require people with a wide range of skills, including people skills and a passion to succeed. More specifically, economics graduates are valued because they understand the principles of monetary policy and how the markets are likely to react to fluctuations. From this understanding they are better able to communicate with clients and sell

interest rate solutions that will be good business for both the bank and the client. The money market is a global business and provides opportunities to work overseas.

The four major New Zealand banks contain economic analysis units. These are small operations, typically employing a few experienced economists, who would hold an Honours or Master's degree. The work tends to involve the collection, appraisal and reporting of general economic news and information about individual sectors of the economy. Occasionally specific research projects undertaken by these units may offer a short-term employment opportunity.

Merchant banks provide expert financial advice to corporate clients, dealing particularly with foreign exchange and interest rate fluctuations. A background in economics allows analysts and traders to relate to clients in terms of the markets and how they work. Social skills and the ability to relate to people are also very important. Although, currently, merchant banks tend to employ those with two or three years experience, an incoming employee would carry out fairly routine tasks of analysis and writing commentaries.

Stockbroking firms could consider an economics graduate with a straight Bachelor's degree and good people skills, but higher academic qualifications would demonstrate real interest and enthusiasm. Firms usually operate under different divisions, such as investment banking, sharebroking or research. The tasks of a new graduate would vary according to which division within the firm they were placed, but generally involve financial analysis, report writing and project based research. Firms undertake continuous analysis of trends in economies all over the world and interpret the implications for their clients, who might be corporate investment analysts or fund managers.

Insurance companies occasionally have openings for economics graduates. In the insurance industry their statistical knowledge is particularly relevant. Pricing Analysts, for example, analyse claims histories and project likely future costs in order to decide what premiums to charge customers. Marketing Analysts carry out research on customer and industry trends. Other analysts will give advice on the investment and management of the company's funds and assets. Competence in report writing and making presentations is expected.

Journalists with a special focus on economic issues are employed in all forms of the media. However, a journalism qualification and several years experience is required in addition to any economics qualifications.

An economist reflects...

Clive Thorp has a Masters degree in Economics from Victoria University. He is currently a Senior Adviser in the Economics Department of the Reserve Bank. He describes the first few years of life as an economist as very similar to a trade apprenticeship, during which theoretical tools are put to work in practical situations and gradually confidence and competence grow to the point where "you are not embarrassed to call yourself an economist". He feels fortunate that his university course incorporated a lot of input from the 'real world'.

The value of an economics degree, he believes, is considerable, as its graduates are equipped with a form of expert knowledge and a way of thinking that can inform all levels of decision-making and be applied in both specialised economic environments and broader business activity.

Clive describes a dedicated economist's career path as being something like this. It might begin with a policy position in a Government Department, or in another agency, perhaps in the financial sector, which requires the concrete application of economic principles and theory. After ten years or so, many are ready to leave intensive economics. A career may then shift in the direction of management, in government service or possibly in business, where economics underpins the management function, and financial rewards may well be greater. For committed economists, the government is the largest employer, where careers are made in senior roles in policy analysis and advice.

It is at this point of change and opportunity, that the flexibility of an economics background becomes so valuable, as the experienced economist's intellectual training and statistical/mathematical expertise is highly prized in the business community. Financial institutions in particular value these skills in their dealing and trading operations. It is quite possible for an economist to become a senior executive in a private company. He points out that several of the chief executives of our largest companies come from a background in economics. And it

doesn't end there. New Zealand economists are highly regarded in the international market. Their exposure early in their career to a wide range of issues in a free-market economy serves them in good stead, and they may aspire to positions in international organisations such as The World Bank or the International Monetary Fund.

Profiles

Ceri Jones

Economic Analyst, AMP Asset Management



I left high school knowing that I wanted to do something at university that would get me a job at the end of it all and that I could be reasonably good at. I had been studying economics for four years at high school and doing OK, and I figured it was a definite shoe-in for a job – so economics was it.

I completed my BCA in 1997, branching out into a bit of psychology and statistics along the way but basically doing a pretty mainstream economics degree. I most enjoyed the applied courses that I did, which gave me the theory I learned throughout my degree and to see how economics can be used in the 'real world.' Recognising that I still probably hadn't done enough study at the end of my undergraduate degree to hit the workforce with any confidence, I then spent 1998 doing an Honours course consisting of economics, finance and econometrics.

At the end of a very challenging Honours year I found myself a job at the (then) Ministry of Commerce as an advisor in the Competition and Enterprise Branch. My role there was varied, mainly looking at firm level issues – collecting and analysing statistics, APEC related work, firm visits and surveys and writing a fair few reports for Ministers on a wide range of issues. The wonder about a Government department (at least the Ministry of Commerce anyway) is the scope to branch into the work of other areas as it interests you – a great feature for a recent graduate.

The Ministry of Commerce recently changed to the Ministry of Economic Development. The implications of this are

still unfolding, but the focus is now on a more hands on approach. It's an exciting time, but in search of a bit of private sector experience, I have recently taken a position as an economic analyst at AMP Asset Management. I learnt a lot in the public sector and think it is a great training ground, especially for economics graduates. However, looking ahead to my OE in a couple of years has led me to seek some more transferable skills that I think the private sector can best offer.

My Honours year was invaluable to me – not so much in the material covered but in learning to stand on your own two feet and, primarily, as a selling point to employers. A lot of the economics based jobs that I was looking at when I came out of university didn't necessarily require postgraduate study, but employers still looked favourably on it. That being said, a BCA in Economics can also lead to jobs in a pretty wide range of fields where an Honours degree isn't necessarily a prerequisite.

Another key to making it through my degree was the importance of mixing other subjects in with economics – preferably something from outside the faculty, just to keep a bit of balance and to offer some alternative courses of study.

Duncan Jared *Trading Analyst, Marketing Department, TransAlta*

My study at Victoria University started in 1995 and consisted of three years doing a BCA in Economics and Finance, an additional year doing six papers of an Honours degree in Finance, and last year (1999) completing the Honours degree part time while working at TransAlta.



I originally started a BSc/BCA conjoint degree because I thought it was the surest way of getting a reasonable job. I thought of doing maths and computers for my BSc – maths because I did calculus and statistics at seventh form, and computers because my father is a programmer. After my first year's study, during which I was in hospital for a couple of months, I decided to concentrate my studies on the BCA.

I had enjoyed economics in the seventh form, so I decided that I would

focus on this area with a view to working in the Reserve Bank or the Treasury. I enjoyed studying economics because it logically fused the different sectors of the economy, and made me think about such questions as why an expansionary shock in the goods market would increase the real interest rate.

I applied for about twenty-five positions before being accepted into the Marketing department of TransAlta. Being a graduate with computing skills in Excel and Access, and a strong willingness to learn, helped me get the position. I learned valuable modeling skills in the Marketing department and I really enjoyed the job, but I quickly learned that the department for me was Energy Procurement, where I'm part of a young team that gets on well together both at work and socially. In this department I've learned about options and futures and stock trading as a whole. I've also been quite surprised by the amount of finance I've used in my job. I use specialised equations such as Net Present Value and Weighted Average Cost of Capital with reasonable frequency in valuing hydro stations and Balck-Scholes option pricing formulas for valuing stock options. I'm also extending my knowledge of finance, investment and business systems to help me achieve my personal financial goals.

Chris Pipe *Management Consultant, Cap Gemini Ernst and Young New Zealand Limited*

I came to Victoria University in 1994 planning to complete a BCA in three years, but with no specific plans regarding major subjects. This idea was then revised to a BCA/BA in four years, and in 1998 I emerged with a BCA (Hons)/BA with majors in Economics (Hons), Money and Finance, Accounting and Commercial Law.



My extended course of study was the result of a two-part realisation. In my second year I realised that I was going to need more than a BCA to differentiate myself from other prospective employees, hence I decided to add a BA to my name. Then, because I realised that careers in the economics field require a postgraduate degree, I completed an honours year in economics. As

it turned out, I used this qualification, not to enter the 'pure' field of economics, but as another qualification to differentiate myself from other prospective employees.

Economics is a true multi-disciplinary subject that teaches practical advanced skills in analysis, argument structure and logic, using concepts and issues from subject areas including accounting, maths, law and politics. In the 'real world' employers are increasingly looking for multi-dimensional employees who are not specialists in a certain field, but, rather, have the skills to tackle different issues from varying points of view. An economics degree enables you to say with confidence that you have the correct skill set.

A subject that crosses over such an array of disciplines is obviously challenging, but equally this is the most enjoyable part of the subject. For example, in my honours year I found myself heading from rooms with whiteboards full of pure algebra, to debating whether an article authored by an economics scholar was argumentatively sound, to analysing and discussing the merits of paid parental leave. This sense of variety and unpredictability (some might call it chaos) appeals to me and was the deciding factor in choosing my current position.

A degree in economics opens up many employment opportunities (especially if combined with a degree in Law, Finance, Accounting or Information Systems). Friends from my honours year have positions ranging from policy analysts with The Treasury and the Reserve Bank, to merchant banking.

Management consulting is a profession where the objective is to increase the 'value add' components of a business through the implementation of new business processes and/or systems. I specialise in Business Process Re-engineering and Focused Improvement projects, and have worked in many different industries including airlines, telecommunications and forestry. There is no set academic pre-requisite to be a management consultant, it is the correct skill set that they look for.

Management consulting has not utilised my economics qualifications in terms of pure economic modeling, but it very definitely has in terms of utilising the skill set my qualifications provided me with. This is a key point. Studying economics does not limit you to the traditional economic/policy analyst

type positions, but rather opens up a broad array of job opportunities because of the unique skill set it arms you with. These skills are highly transferable and in high demand in the market place.

Evan Roberts

Research Assistant, Health Services Research Centre

I took economics in my first year at university but did not intend to major in it. However, I found economics more interesting than maths and changed my BA to a double major in economics and history



at the start of my second year. Ironically, after completing my BA I then returned to do a BSc in Maths and Statistics, because I realised that if I wanted to do postgraduate or research work in economics, a good knowledge of mathematics and statistics was necessary. I then did my Honours degree in History, but included two half-papers in economics – labour and public economics.

For the last three years I have been working part-time as a research assistant in health economics at the Health Services Research Centre (HSRC). The HSRC is a research institute, which is affiliated to the Institute of Policy Studies at Victoria University and the Wellington Medical School. My job there mainly involved finding and evaluating economic research relevant to research projects the HSRC was involved in, and managing and analysing data for these projects. The main projects I was involved with were research into the personal costs of asthma, and an evaluation of a pilot programme where general practitioners took an increased role in caring for people with mental illness. In working on these projects I had to learn about topics that might be thought of as quite removed from economics, such as the epidemiology of asthma, or how people's mental health can be assessed and measured. But the economics of research relied on key economic concepts that would be important in monetary economics as well. Thus, the mode of analysis learnt in economics can be applied to a seemingly very diverse array of topics.

The core undergraduate courses in micro and macroeconomics at Victoria

University gave me a grounding in the basics of economics from which I could then undertake more specialised work in health economics. Completing a degree in mathematics and statistics at the same time as I was working in health economics enabled me to see the practical side of all three subjects. Sometimes that practical side is the realisation that 'real life' research and data is a lot messier than is apparent at the undergraduate level.

Economics combined very well with mathematics and statistics, because a lot of economic argument and writing is expressed in formal mathematical

language and most empirical research in economics uses statistical evidence. Economics also combined very well with my history major because both subjects are about investigating and understanding human behaviour, though they sometimes take quite different approaches.

My main academic interests are in labour history and because of that I am also interested in labour economics. In September I am starting my PhD in History at the University of Minnesota and intend to do my thesis in labour history, but before I write that I will be doing courses in labour economics as well.

Economics at Victoria

Economics can be taken as the major subject in either a Bachelor of Commerce and Administration (BCA) or a Bachelor of Arts (BA) degree. It is an excellent complement to professional subjects such as Law, Accounting, Marketing and Management, as well as other social and natural sciences, Philosophy and Applied Mathematics.

Papers fall into three categories: *Economics, Money and Finance, and Econometrics*. *Money and Finance* papers explore four broad areas of finance: financial contracts, financial institutions, financial decision making by firms and portfolio choice. Equities, bonds, futures, contracts and options are some of the basic financial contracts which are analysed. *Econometrics* is concerned with empirical estimation and uses economic theory, data and statistical theory. Papers start by covering basic material in mathematics and statistics with applications in the commerce area and then proceed to more advanced techniques and issues in the fields of econometrics, forecasting and financial mathematics.

Students can choose from a large range of 200 and 300 level papers including microeconomics, macroeconomics, business cycles, industry and strategic behaviour, public economics, international economics, law and economics, economics of work and pay, and the history of business, Asian economies, and economic thought.

Both the BCA and BA degree can be taken jointly with other degrees including Law, Science and Tourism.

Many students have also found it beneficial to continue their studies at postgraduate level. Options include the Graduate Diploma in Commerce or in Arts, the Transitional Certificate in Economics, BCA or BA Honours and Masters degrees. Beyond that qualified students may undertake a PhD thesis.

For further information it is recommended that you seek advice from the University Liaison Office, Faculty Student Advisers or University Career Advisers. See also our web site: www.vuw.ac.nz/economics

Special thanks to:

Associate Professor Bob Buckle and academic staff of the School of Economics and Finance (Faculty of Commerce and Administration, Victoria University), Clive Thorp, Ceri Jones, Duncan Jared, Chris Pipe, Evan Roberts and all the other people who contributed to this publication.

Career View is published by
Career Development and Employment
Victoria University of Wellington
Te Whare Wananga o te Upoko o te Ika a Maui
PO Box 600, Wellington
Tel: 64-4-463 5390 or 64-4-463 5393
Fax: 64-4-463 5234
www.vuw.ac.nz/st_services/careers/
ISSN 1172-4315