

University of Papua New Guinea Graduate Follow-Up Survey

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Introduction

This survey is the first “follow-up” survey conducted with economics graduates from the University of Papua New Guinea. In 2015 a survey was conducted on final year economics students, the results were written up as a Development Policy Centre discussion paper by Michael Cornish. The survey follows up with these same students to find out information about their work situation, and seeks feedback about their education at the University of Papua New Guinea given their experience two years on from graduation.

It is intended that this information can be given to students to help them plan their degree & course choices, and plan their career. It could also be used by lecturers at UPNG to incorporate in to their courses, and/or by management at UPNG to assist in economics curriculum review.

Methodology

Contact details (email, phone and/or Facebook accounts) were obtained for 31 out of 35 students who completed final year studies in economics in 2015. The author had 3 student assistants at UPNG who assisted in finding and confirming these details. Of the 35 students who were in the class of 2015, 24 responded to the survey. This is comparable to the 25 responses received to the original survey.

This survey was undertaken using the online platform SurveyMonkey in October and November 2017. Participants were contacted through email and Facebook to take the survey. Although phone numbers had been collected in the previous survey it was found that students were no more easily contacted by phone than by the combination of email and Facebook, and taking the survey anonymously was also preferred. As a result no surveys were conducted via phone.

Limitations

The survey will naturally be biased in favour of participants who are easier to contact. This means that the survey will potentially be skewed towards responses from Port Moresby, and, to a lesser extent other urban centres.

The survey may also be biased in favour of participants who have been more successful with regards to job seeking. Those who feel they have been less successful may be less likely to want to share their story if they feel they have somehow failed so far to achieve their career ambitions.

Respondents do not have to answer all questions in the survey and may choose to leave questions blank.

Analysis

Descriptive statistics

It is more difficult to get responses in this follow-up survey as participants in the original survey have left university and are now scattered around Port Moresby and across Papua New Guinea. The original study received 24 responses out of a class of 35. This study received 22 responses.

The original study had a gender ratio of 37.5% female, while this study had a gender ratio of 54.5% female.

	This study	Original study
Response rate	62.80%	68.60%
% female respondents	54.50%	37.50%

% male respondents 45.50% 62.50%

All bar 2 of the respondents were living in Port Moresby, with the other two respondents living in Madang and Lae respectively.

Employment characteristics

As stated, this survey will likely overestimate the rate of employment. However, despite this, the results still show some interesting and useful characteristics. Firstly, most graduates who answered the survey were employed in the formal sector. Of those, most graduates were employed in the private sector. This is despite 58% of graduates indicating in the prior 2015 survey that they sought careers in the public sector, and only 20% indicating preference for the private sector. This could be partially reflective of government salary and hiring freezes that hit just before these students graduated.

Figure 1: Employment characteristics, % of total participants

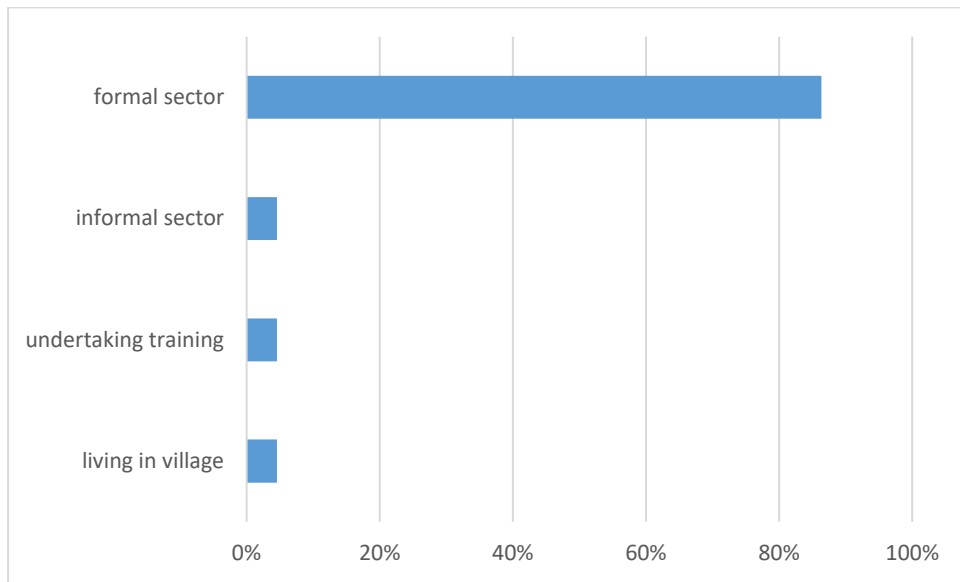
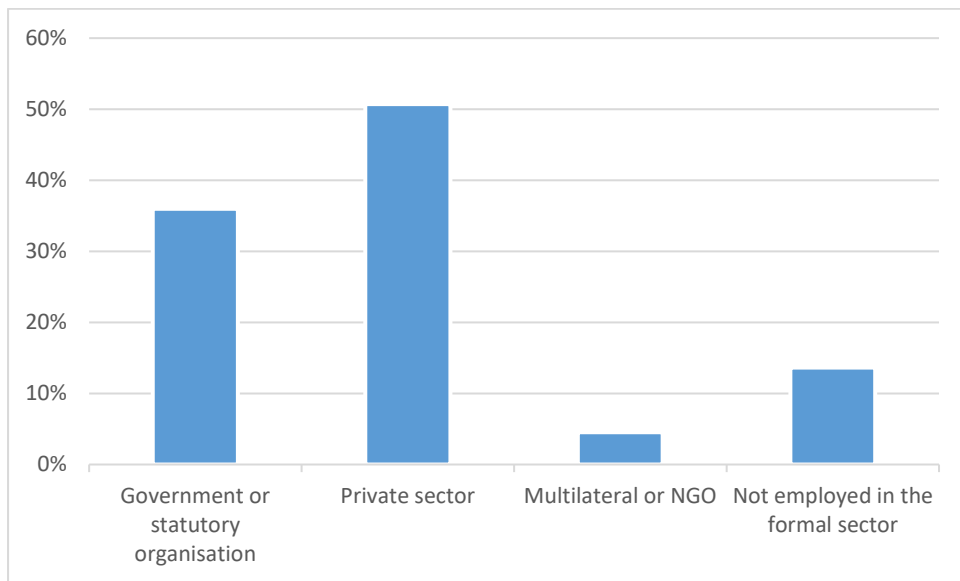


Figure 2 Employer sector, % of total participants



Not all respondents divulged the name of their employer. Of those that did their employers were:

- National Research Institute
- Bank of PNG
- University of PNG
- Telikom PNG (2)
- National Fisheries Association
- Price Waterhouse Coopers (2)
- KPMG
- Department of Foreign Affairs (2)
- Madang Provincial Government
- Oil Search
- Asian Development Bank
- Bank South Pacific
- Trugas Ltd

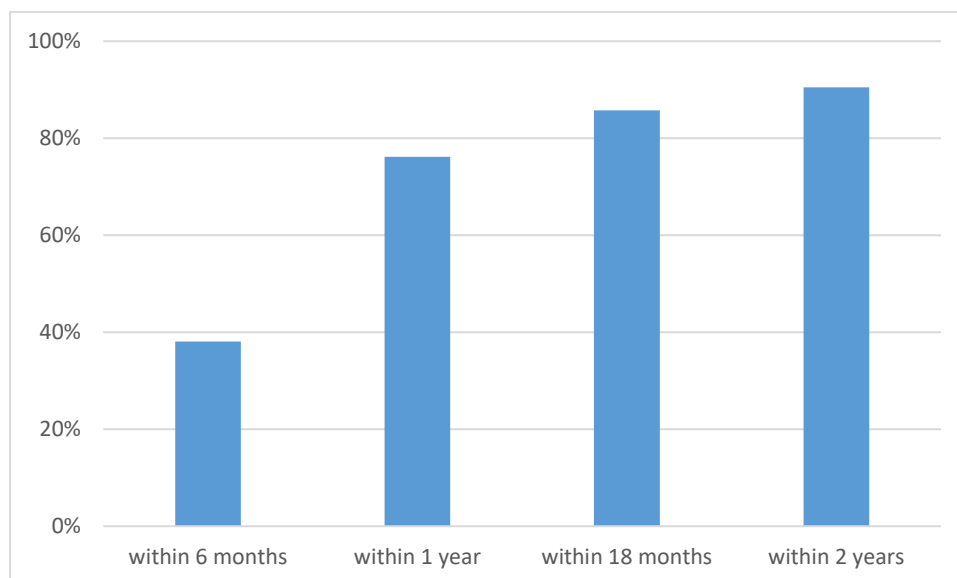
(2) Indicates that 2 participants listed this organisation as their employer.

Again, this sample is biased toward Port Moresby and likely toward participants who feel they have more successful careers. This is not a representative sample of the entire graduating cohort. Nonetheless, all of the employers listed are high-profile, large organisations with strong reputations. This could reflect a number of different possibilities – for example that UPNG economics graduates are in high demand – and as such successfully apply to high profile organisations, or alternatively that in tough economic times only the largest organisations are hiring new graduates.

The job application process

38% found employment within 6 months of graduation, a further 38% were employed within 1 year of graduation, a further 10% within 18 months, and a further 5% within 2 years.

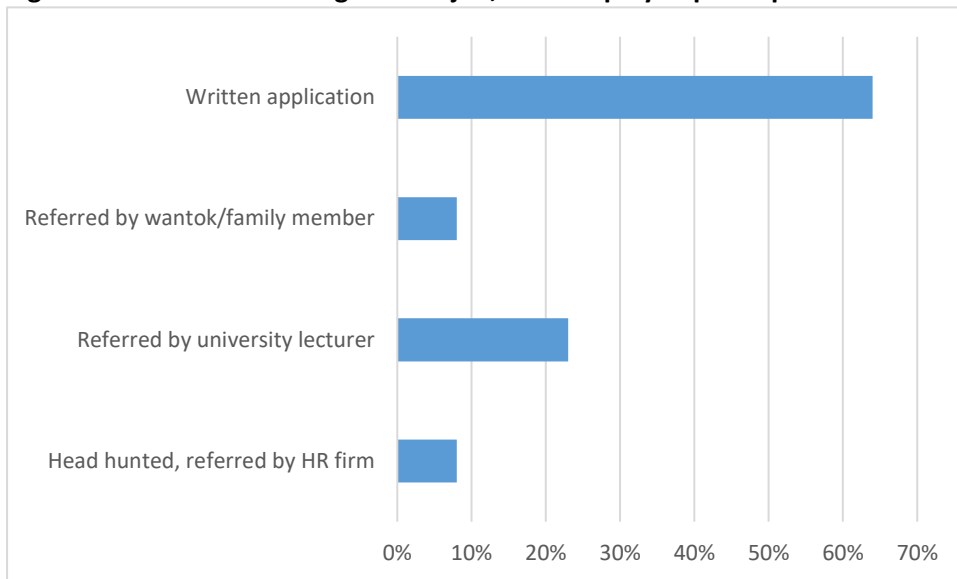
Figure 3 Cumulative distribution of formal employment over time, % of total participants



The majority (64%) were able to secure a job through a written application. While the rest were referred by various contacts, wantoks, lecturers, or HR firms.

All following graphs report percentages of total number of participants successful in gaining employment.

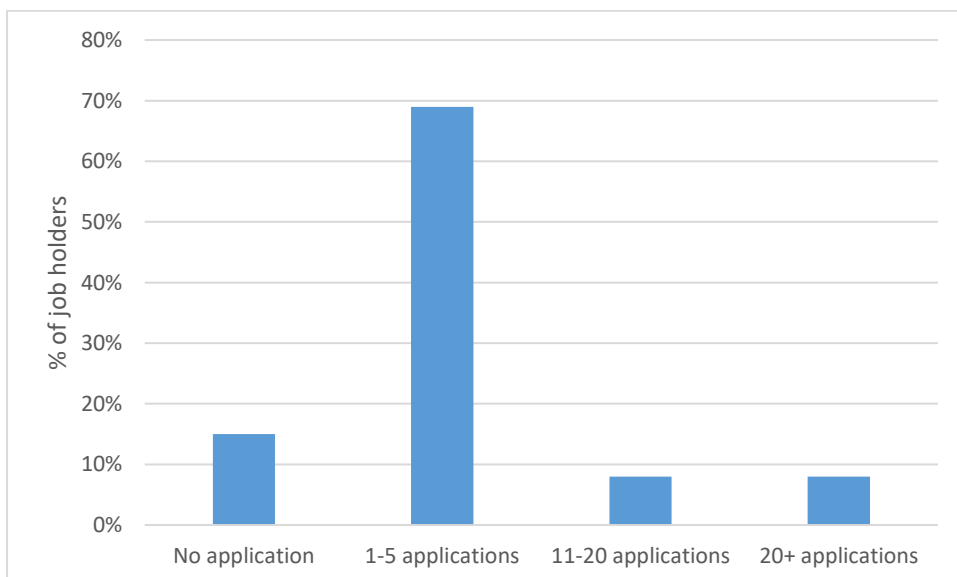
Figure 4 Method of securing current job, % of employed participants



Of those who secured a position, the vast majority submitted 5 or less applications for jobs before they were offered their current job. This is an interesting statistic even once you take in to account that this survey may be skewed towards more successful candidates, as we may have expected that with the majority of participants still waiting to hear back from jobs at six months, most may have submitted a higher number of applications.

The reasons for this could be uncovered using further qualitative research, but possible answers include that due to the economic downturn far fewer graduate jobs were advertised, that graduates were only aware of a small number of advertised positions and only aware of a few of the major employers to submit applications, or that many only wanted to apply to larger, recognisable organisations.

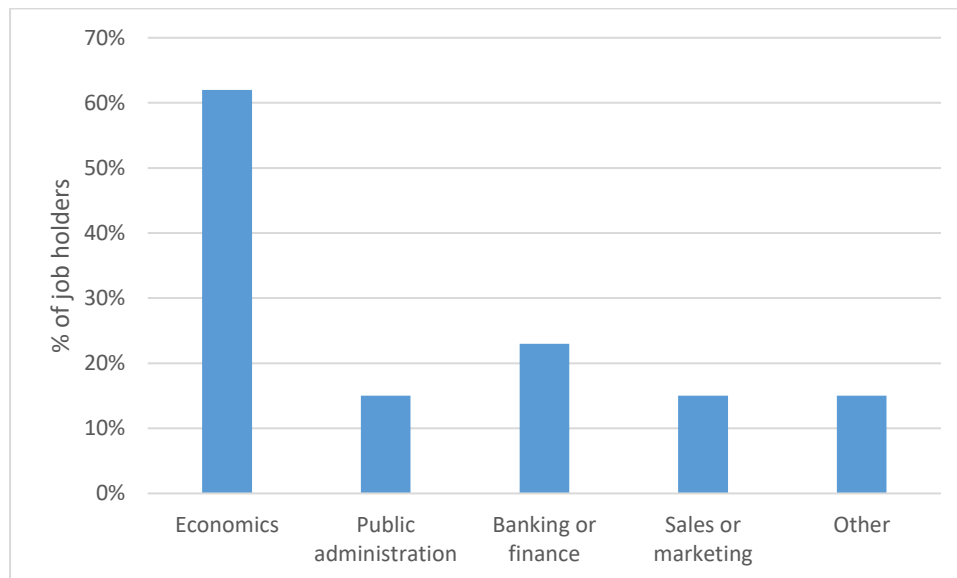
Figure 5 Number of applications submitted before securing current job, % of employed participants



Job characteristics

Not all jobs related to economics. Participants were asked whether the job that they do involved aspects of economics, public administration, banking/finance, sales/marketing or other.

Figure 6 Job characteristics, % of employed participants



Participants were allowed to check more than one job type in answer to this question. This means that we can infer that 38% of participants, assuming they understood the question correctly, felt that their job did not involve economics at all. This is quite a large percentage, especially if this sample over-represents candidates with successful careers.

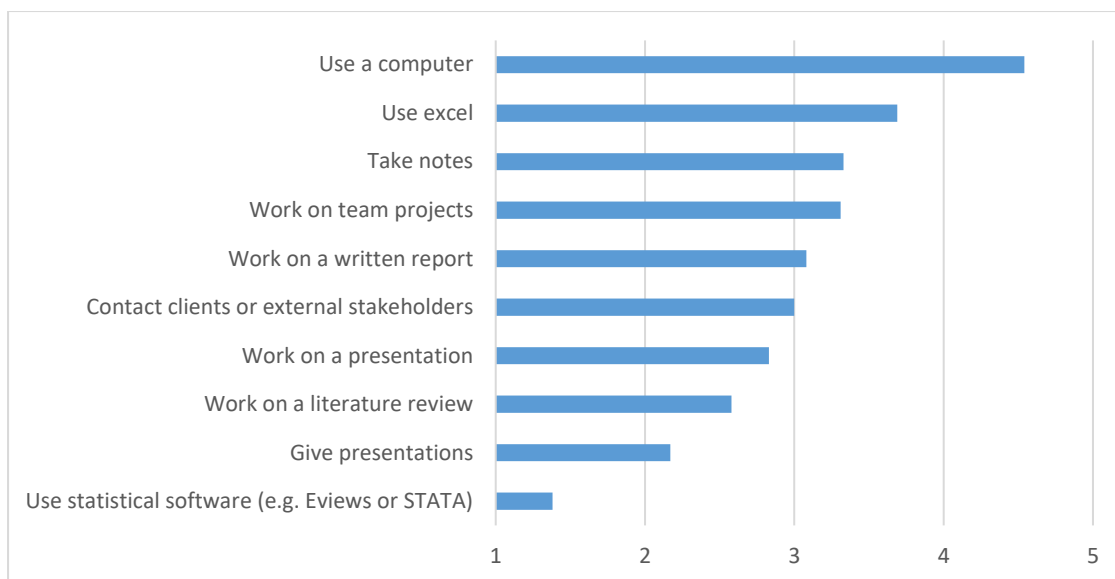
Participants were also asked to write a short, free-response to describe the type of work they do in their job. Of those who don't work in economics, specific jobs included administration/logistics, accounts, marketing, audit and retail. The full responses can be found in appendix 1.

Skills used at work

To find out how graduates spent their time at work, and what kind of work they do day-to-day, participants were asked to rate several actions on a scale of 1-5, where 1 is never, 3 is once a week and 5 is every day. The actions cover major skills including writing, note-taking, oral communication, research, teamwork as well as technical knowledge of programs like excel and statistical software. One notable result which may be useful for UPNG economics course curriculum is the relatively high rate of Excel use, with participants across the board on average saying they use Excel between 2-3 times per week. From the authors own experience teaching at UPNG, currently Excel is not widely used in UPNG coursework, and degree of understanding is highly variable, with a significant minority of students in economics having no understanding of Excel.

The below graph is an average of their scores.

Figure 7 Skills graduates use most often at work, average score (1=never, 3=once per week, 5=every day)



Notably, the question does not ask how important participants feel knowledge of Excel, writing or statistical programs are, but only the rate of use. It is also an average across all participants. So this graph should be interpreted as such, high scores correspond to skills that are used across more workplaces, while low scores correspond to skills that are more specialised (used only in particular workplaces as a graduate) or are used less frequently (they may still be very important when they *are* used).

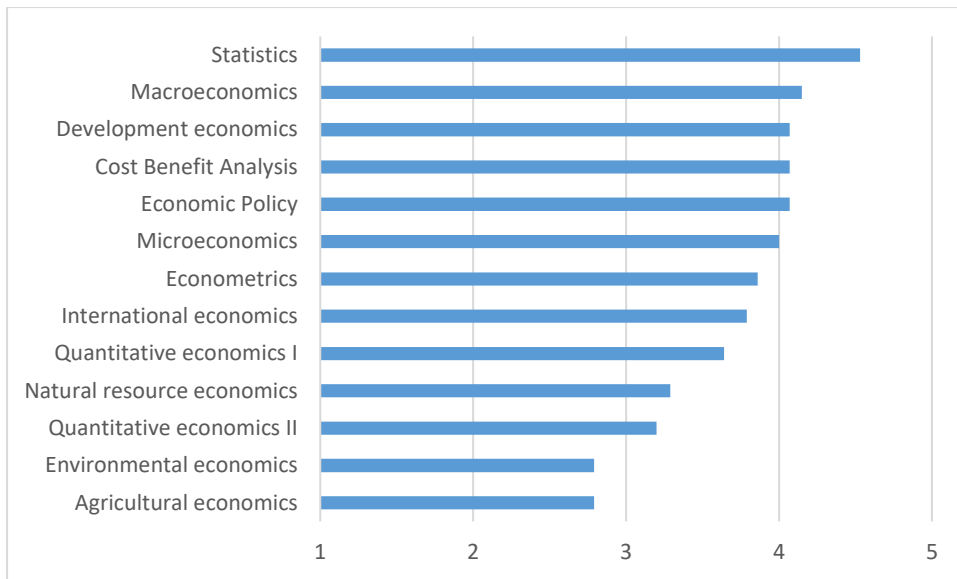
Assessment of economics courses at UPNG

The graduates were asked to assess the value economics courses at UPNG were most important in their current jobs on a 5-point likert scale from not very important, occasionally important, of average importance, very important or vital.

This data is interesting because it provides an insight in to the kinds of knowledge and skills relevant in most workplaces. A high score is likely to indicate broad applicability across several workplaces, though a higher quality of lecturing/course materials in a particular year that the course was taken could also affect the score. While a low score could indicate a course which is more specialised and such useful to a few specific workplaces, or a lower quality of lecturing/course materials in a particular year.

This kind of information could nonetheless be useful to help guide students in some of their elective choices, or inform their priorities.

Figure 8 Importance of course to current job, average (1=not very important, 3=of average importance, 5=vital)



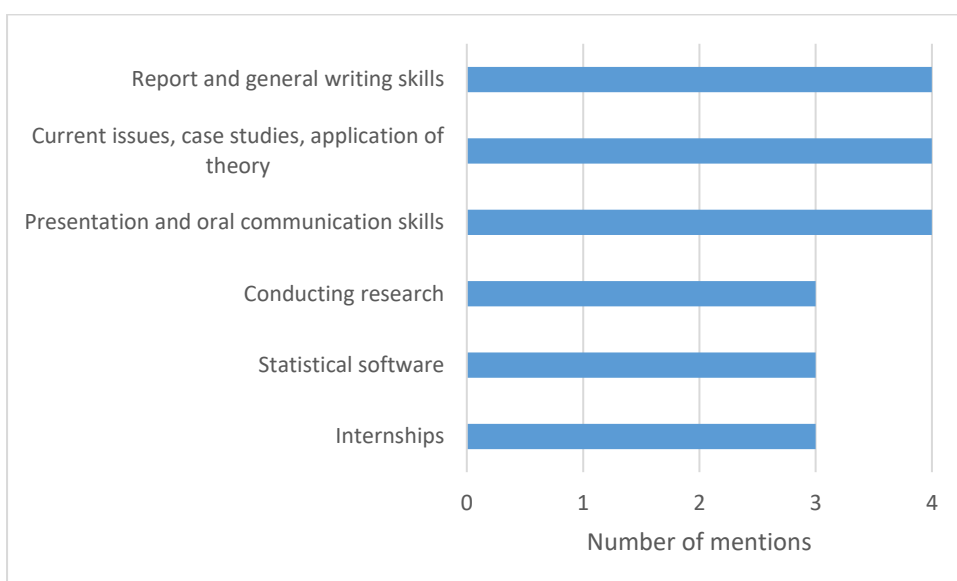
The order of courses roughly follows the predicted pattern. For example, the broad applicability of statistics and general importance to a wide variety of jobs may have resulted in its high score. This finding may be of interest to economics students at UPNG who may not currently be aware of the wide importance of the contents in this course.

Free-text response questions

Students were asked free-response questions about their current role, and what changes, in hindsight, would they like to see in the economics curriculum at UPNG. They were also asked whether they had any general comments to make, about the survey or anything else. In-full responses to these questions are provided in Appendix 1-4.

In the free text about what skills could take greater focus in the economics degree, a number of themes arose. Figure 9 collates the number of times specific themes were mentioned in the free response. Full responses to this question can be found in Appendix 2.

Figure 9 Skills to which participants would like to see UPNG put greater emphasis



In the final free-response question, students related their experience of the difficulty of finding economics-related jobs in PNG, and thanked the ANU & UPNG lecturers and the survey writer for seeking their opinions on their work and UPNG experiences.

Conclusions

This survey followed the career progress and insights of 24 UPNG economics graduates from 2015. Information gleaned from the report may be valuable to staff and students at UPNG as well as outsiders like former students, employers, government, education professionals or those implementing aid or employment programs. The participants are all economics graduates, so insights largely relate to this program at UPNG and the employment characteristics of economics graduates, however there are broader applications as well.

Most graduates who responded to the survey found work, mostly in the private sector, and in large high-profile organisations. 76% of those who answered the survey found work within the first year of graduation, however, there is a high likelihood that the survey is biased in favour of those who succeeded in gaining employment faster. The success of these students, most of whom said that they applied for their job through a written application, may show that the economics degree at UPNG is valued by employers.

Many jobs however do not involve economics. The economics program thus could in future provide the option for some students to choose more courses outside economics as electives. Participants also suggested that economic coursework could be broadened somewhat to provide students with more practise in skills like report writing and oral presentation. As well as more specialised economics and research knowledge like use of statistical software, conducting research and

Some of the changes suggested may be feasible and others may not. These choices are at the discretion of the stakeholders currently involved in the UPNG economics program. However, even those suggestions that may not be feasible assist us in understanding the attitudes of prior students toward the program of economics at UPNG, and can help to inform the continual improvement of the economics program, and other courses at UPNG.

Appendix

Free-text responses 1

Please provide a short "job description" for your current position that describes the kind of work you do (items have been blacked out if they divulge information that identifies the author of the comment)

My Job Description are: - Doing social economic research. - Collecting social economic, marketing and biophysical information. - undertaking Cost Benefit Analysis on Fisheries and Marine product. - monitor general economic trends - develop forecast on parameters including Fisheries development and business cycle - develop methods of collecting reliable data for analysis . - assist in analysis raw data and writing reports. - assist in preparing policy submission business papers. - Assist in doing budget analysis. Etc.

I reconciles supplier's accounts and make online payment.

Currently working closely with the Universal Basic Education Program to finalize our major project- PNG Provincial and District Education Profiles. I also assist other research program [REDACTED] to conduct research were needed.

Working with APEC Secretariat to coordinate APEC 2018

We document initiation documents, mostly for IT projects, software's or applications that the bank would like to roll out to automate the manual processes within the branch. Our office deals with other projects like retail products that the bank will use to generate money (example, the EFTPoS Terminals and their infrastructures or platforms they run on, etc...) My role here also includes conducting change management work for the projects, mostly around post implementation reviews, i.e. reporting on how workers or customers are handling the change in systems, processes, etc...

My work varies from job to job as I am in the Consulting Line of Service [REDACTED]. I have worked on Internal Audits (Process reviews around Governance & Risk), External audit, Remuneration bench marking, Market Survey and other confidential engagements.

I have been on 6 months secondment training at the National Retail Division, [REDACTED]. It is part of [REDACTED] 2016 Graduate Development Program, however, in that 6 months I have been undertaking tasks a bit similar to a business analyst. I have been collecting information, analyzing data and information communicated from all branches [REDACTED] nationwide through email correspondences/reports, compiling information and forming one document for reporting purposes, reviewing documents and reporting to the National Retail Manager, correspondences, and the like.

The major part of what I do is carrying out market research and providing insights based on the research.

1. Prepare lesson plan 2. Do further research in certain topic 3. Setting tutorial questions 4. Marking assignment and tests 5. Entering marks 6. Use computer

Collection of regulatory data for government regulators assisting the Regulatory Economist with data analysis and addressing industry regulation issues concerning [REDACTED] (my organisation).

I deal mainly with market research and Thought Leadership.

I work as a Research Analyst [REDACTED]. We collect data and produce reports like inflation, GDP, etc.

Free-text responses 2

Based on your personal experience at work, are there any skills that UPNG should focus on improving in its students, and if so, how could this be implemented

“UPNG Economic Department should offer additional courses that can include: - SOCIAL ECONOMIC RESEARCH SKILL - RESEARCH DATA COLLECTION AND ANALYSIS AND REPORT WRITING - BUDGET ANALYSIS AND ECONOMIC FORECASTING AND ANALYSIS ECONOMIC TRENDS. - PREPARING ECONOMIC POLICIES SUBMISSION AND BUSINESS PAPERS - GOVERNMENT AND FINANCIAL STRUCTURES AND RESPONSIBILITIES. - INTRODUCE ECONOMIC SOFTWARE FOR DATA ANALYSIS AND TRENDS AND FORECAST ETC.”

“Every departments in the University should create On Job Trainings for every 3rd and final year students.”

“Public Speaking skills (presentation) which includes slides preparation to how to respond to questions asked by the audience, report writing skills and how to use statistical software to do practical lessons during tutorial. The general presentation and writing skills can be integrated into students assessable tasks. More practice makes perfect. For the statistical software, those open licensed software like Stata should be made available to students and they should be thought how to use it to do practical analysis.”

“Attach students to organizations so they understand working environment but also as part of their assessment”

“UPNG should focus on coming up with activities in classes that allow students to converse on current issues, (Communication with different stakeholders in different work settings and on different levels is a challenge for graduates just entering the workforce). Interpersonal communication is what I see lacking among old and new employees and it's a much needed skill, so doing activities that help students to master that skill or teaching them tools to use to become effective in this area would help them greatly. Whether it be email etiquette, telephone etiquette. Even in interpersonal skills that cover negotiation, team building, coaching, communication, etc... Cultural barriers around communication among peers and different levels of management is also another barrier, so always highlighting that and understand that aspect and coming up with issues that teach students at a much earlier stage on how to not confuse these things and how to act professionally is always a plus and you will definitely tend to grow better in an office setting Also, do a lot more writing too. Assign tasks around writing a lot, about everything current, history, on our own issues and even foreign events. It's always better if you absorb as much as you can. This will help you not only become better at writing, but also become better at analysing, identifying issues and where the issues are and suggesting solutions as well. This doesn't just help us personally and in our work areas, but we can eventually become better representatives of our own people and solve relevant current issues on a much wider scale or at least become an instrument in that process”

“Technical skills. Students need to be trained theory and more so on how to apply theory to real life scenarios.”

“UPNG needs to improve critical thinking, report writing, communication & teamwork”

“Using of statistical software or excel. Can be achieved by teaching and practice at a computer lab if possible.”

“A skill any student shouldn't miss working on is Communication skills especially in written and oral and attention to detail (e.g. typo). Similar to what Michael Cornish did, probably engage the students in frequent or if not weekly writing and presentation of reports to help them improve this skill.”

“Presentation skills prepare them with many debates and group presentation work in academic”

“Skills needed-Public/Economic Policy Analysis, writing and specific industry issue cases like Margin squeeze. Also strong analytical/mathematical and statistical background. 'Give the final year students such cases to analyse as their major project for their final year and I suggest job internships too.”

“Presentation skills. Students need to know how to present their research and work to the lecturer and fellow college after their research or writing report. Course like Econometric and Applied Business Economics is very import for data collection and using software as STATA. This will help them more to prepare for the work field.”

“Communication. This can be improved through high interactions between lecturer and tutors during every classes.”

Free-text responses 3

Based on your experience at work, are there any concepts or topics you would have benefited from learning more about at UPNG? If so, please list these topics/concepts. (These can be about economics, or not about economics)

“How to analyse categorical data (Econometrics) and how policies are formulated and implemented (Economic Policy)”

“Economic Organizations (Especially, International Organizations)”

“Research skills, Analytical skills, interpersonal skills”

“Finance. It would have been very beneficial if we learned more on topics around corporate finance (NAV, NPV, etc.) and their relevance to decision making processes in business.”

“Resource curse”

“Project Management Business Management Sales and Marketing Pricing techniques”

“One course that I thought was important but I feel I didn't get much out of was the content taught in Economic Policy.”

“Accounting 1 & Accounting 2, Inflatons. Opportunity Cost & minimum wage rate.”

“Economics Development in rural community”

“Cost benefit Analysis (Economics) Contracts Law (Law) Business Law (Accounting/Law)”

“Economics Development. It really help me to know how government and private sector can work together to promote the growth of gross domestic product and reduce socio-economic problems in community.”

“Research and communication”

Free-text responses 4

Do you have any final comments?

“It's very hard to find Economics related jobs here in PNG.”

“For the quantitative, statistical and econometrics courses, it will be more helpful if students not only learn the concepts but also do hands-on exercises/assessments using software. This will them to really understand what they are learning and which will also be useful when in the workforce.”

“Thank you for allowing me to participate in the survey”

“ANU is a vital part of UPNG Economics and the School of Business. I hope this partnership with UPNG continues and more positive stories will come out of this”

“I am very glad to have been a beneficiary of the ANU-UPNG Partnership and more so to provide some feedback on my experience post University. I look forward to further discussion in future and thank you.”

“No”

“I think Economics students have a better chance of finding a good job that is more related to Economics. They just need to study smart and have some kind of plan on where they really want to work or do and where they want to go after Uni. That will drive them to focus and get good grades to get them into organisations. For myself, I am where I am for a while. I might switch jobs or venture into the kind of job I really want to do. Only time will tell. Anyway, thanks for the survey.”

“Hope I answered all questions well. Cheers.”

“I'll always be grateful to my former lecturer for being keen on giving career advice when I was still a student and even after I started work with my current employer.”

“The survey was very nicely structured. I would like to comment if we include some more questions”