TAFE Directors AUSTRALIA

Position Paper

Employment and economic benefits of additional investment in technical and further education

Objective:

A new economic modelling report on technical and vocational education provides evidence on how the sector supports employment and productivity.

TDA advocates that the study illustrates opportunities for greater balance to tertiary education funding in Australia.

Economic modelling commissioned on employment and other economic benefits of the Australian technical and vocational education sector has detailed high rates of return from public investment in technical and vocational education. Economic modelling has been available for university public investment for some years, but detailed modelling analysis of employment and productivity contributions of technical and vocational education completed across all Australian jurisdictions has been lacking.

Independent Economics (IE) produced the Econometric Model (2013) under an Australian Government project contracted to TAFE Directors Australia. Canberra-based Independent Economics created the new Econometric Model accessing national data by reviewing courses completed and associated economic outcomes. It then used the model to track the impact of additional funding, allowing for students who complete individual modules, 'skills sets' or full qualifications.

Three Australian industry skills councils took part in the analysis; Agri-Foods ISC, Innovation and Business Skills Australia (IBSA), and Transport and Logistics ISC.

A Summary extract of the Independent Economics econometric model report (2013) is attached to this Policy Position Paper.

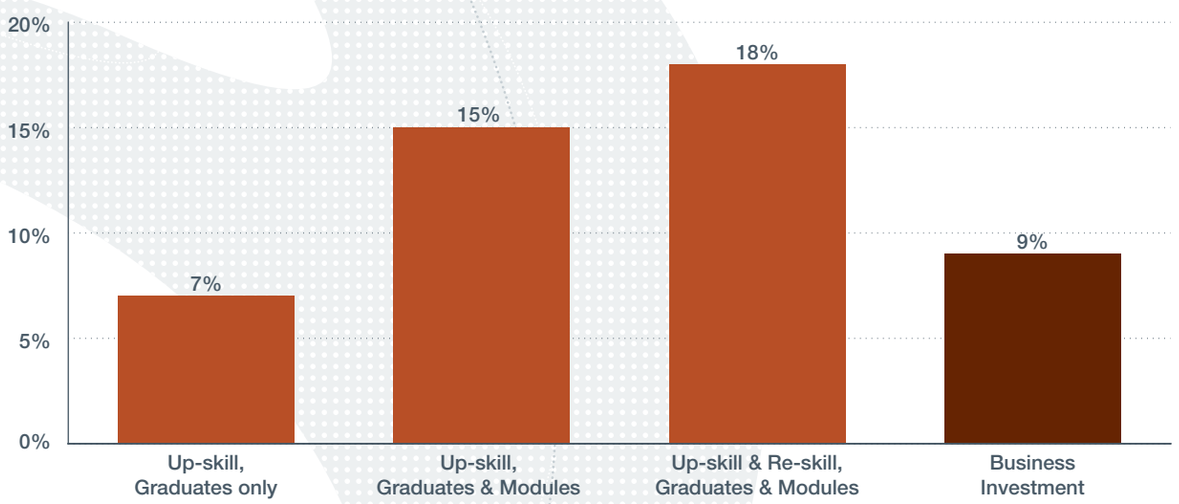
Taking 2011 as the base year for policy, the Independent Economics Report presents in the Model the costs, benefits and rate of return from the ***additional*** $2.7 billion which governments, students and industry are Budgeted to invest in VET over five years (2012-17), under the National Agreement for Skills and Workforce Development (NASWD), signed by COAG in April 2012. This includes the provision of national student entitlements and income contingent loans.

The modelling shows that, after allowing for the economic benefits for all cohorts of students, including qualification completers and module completers, up-skillers and re-skillers, there is a very high rate of return of 18%. This was recorded for students enrolled at Certificate III and above – double the 9% comparison rate for alternative investments – and predicted that it could generate an increase in the standard of living of $0.6 billion p.a.

The Independent Economics Report noted that its cost benefit model incorporated further information to previous studies:

- It includes the benefits from all VET students at Certificate III or higher, including those who complete *either* full qualifications *or* modules at a higher level as well as those who 'reskill' through qualifications or modules at the same or a lower level than their previous qualification.
- While returns are greatest for those who complete full qualifications at a higher level, there are also positive employment outcomes for module completers and for workers retraining for new occupations.
- The combined rate of return from these student cohorts is a very high 18% p.a.

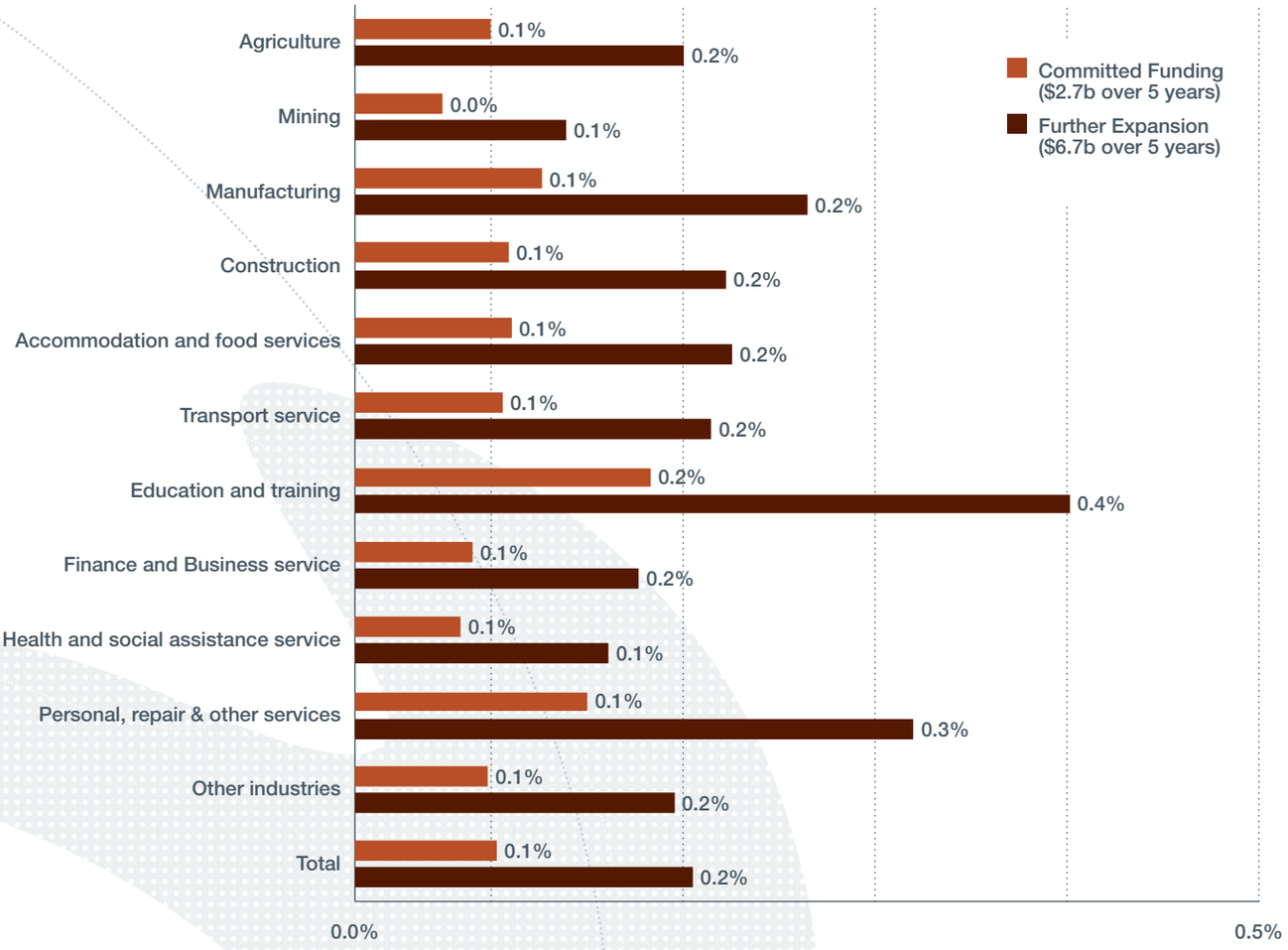
Chart 1: Three Cumulative steps in estimating the real rate of return (IRR) on investment in VET at Certificate III and above, per cent



SOURCE: Independent Economics estimates using Independent Education Model, Cost-benefit analysis and returns from additional investment in Vocational Education and Training (VET), p.X

- In a further innovation, the Independent Economics model assesses the benefits of current levels and additional investment in VET according to students' occupation and industry (rather than just the level of training) and over a lifetime of employment.

Chart 2: Impact on real GDP by industry, per cent change from baseline, annualised



Source: Independent Economics estimate using the Independent Education Model, Cost-benefit analysis and returns from additional investment in Vocational Education and Training (VET), p.40

In a 'further expansion' scenario, the report models the impact of an additional once-off contribution of $1 billion in federal funding over five years, with commensurate increases in funding from state governments, students and industry.

This, together with the committed additional funding under 2012 NASWD, could generate an economy wide increase in living standards of $1.4 billion p.a. in perpetuity – more than double that expected under the current funding commitments of 2012 NASWD.

Attachment A provides a more detailed summary of the key results of this report.

Recommendations

1

Federal tertiary education funding recognise the important contributions of technical and vocational education to employment and productivity. This may require a systemic review across all tertiary funding strategies, to bring balance to pathways funding, support for technical and vocational education, and continued support for university education and research.

2

The Federal Government increase its funding commitment to technical and vocational education. The report demonstrates that a further $1.0 billion over five years may redress current imbalances caused by falling Commonwealth contributions to the sector in the past.

3

The Federal Government develop a more strategic approach to technical and vocational education funding to maximise the economic benefits to individuals and to the economy, including:

a) funding TAFE for the delivery of industry and enterprise skill sets based on agreed completion targets and an enhanced national VET statistical collection to monitor skill set participation and outcomes.

b) support for foundation skills support and pathways to higher education.

EXTRACT FROM INDEPENDENT ECONOMICS

Cost-benefit analysis and returns from additional investment in Vocational Education and Training. (2013)

Key results

Since 2011, national and state governments have committed to increasing their funding of Vocational Education and Training (VET). This report estimates the economy-wide benefits and costs, firstly, of this committed funding increase under the National Agreement on Skills and Workforce Development (NASWD) and, secondly, of a larger expansion of VET funding.

The real annual internal rate of return on additional investment in VET, targeted at Certificate III and above, is estimated at a high 18 per cent[1]. This compares to returns on business investment that may be around 9 per cent. Such high returns from VET support the case for further VET funding.

The high returns from additional VET funding reflects a range of benefits and costs. Taking the committed increase in funding under NASWD, which is 5.6 per cent over the five years from 2013 to 2017 (compared to previously foreshadowed funding for the same years under 2011 policy settings), the costs and benefits expressed in 2013 (present value) terms are as follows.

- The total costs are $7.0 billion. This includes tuition costs of $2.3 billion, including the contributions from governments, students and businesses. It also includes foregone earnings of $4.7 billion by students who are studying and therefore less available for work.
- The total benefits are $20.4 billion. This consists mainly of employability benefits of $18.4 billion, as workers with VET training are more likely to participate in the workforce, less likely to be unemployed and more likely to work full time than those with no post-school qualification. It also includes productivity benefits of $2.0 billion because VET training leads to work in more highly-skilled occupations.

Hence, the benefits easily outweigh the costs, yielding a net benefit of $13.4 billion. On an ongoing basis, key benefits include:

- households are better off by $0.6 billion per year;
- the workforce is more skilled e.g. employment of Technicians and Trades workers is 0.3 per cent higher than under the baseline scenario;
- there is significant expansion of industries that are relatively dependent on VET skills, including manufacturing, automotive repair and personal services (e.g. hairdressing); and
- in aggregate, real GDP and employment are 0.1 per cent higher.

The further expansion scenario involves a larger 5-year boost to VET funding, of 13.7 per cent rather than 5.6 per cent, resulting in commensurately larger economic impacts. For example, the total net benefit is boosted from $13.4 billion to $32.5 billion, and the gain to household living standards per year is boosted from $0.6 billion to $1.4 billion.

Graduates who obtain higher level qualifications generate the largest employability and productivity benefits. However, this report builds on previous work by more fully recognising the following.

- There are significant benefits to completing part of a VET qualification, for both employability and productivity. Module completers make up a large proportion of VET students and include students who undertake Skill Sets.
- VET training at a level that is not higher than a student's previous education (re-skilling) can improve employability by helping students to adapt to changing industry needs.

1. This relates to investment in VET at the Certificate III level and above, because this has been to focus of recent policy.