## Research into the Financing of Technical and Vocational Education and Training (TVET) in the Pacific

# Sustainable Financing of TVET in the Pacific

**Overview Paper** 

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This overview paper is based on research undertaken by the Australian Council for Educational Research (ACER) 2012-2014 for the Australian Department of Foreign Affairs and Trade under the research project Research into the Financing of TVET in the Pacific and on the various reports produced by ACER over the course of that research. However the use made of the ACER research and the views expressed in this paper are those of the author alone and do not necessarily reflect the views or policies of either ACER or the Government of Australia.

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#### Acronyms

ACER	Australian Council for Educational Research
ADB	Asian Development Bank
APTC	Australia-Pacific Technical College
AusAID	Australian Agency for International Development <sup>1</sup>
DFAT	Australian Government Department of Foreign Affairs and Trade
FJD	Fijian Dollar
FTC	Fisheries Training Centre (Kiribati)
FNU	Fiji National University
GDP	Gross Domestic Product
KIT	Kiribati Institute of Technology (Kiribati)
MoE	Ministry of Education
MoYS	Ministry of Youth and Sports (Fiji)
MOOE	Maintenance and Other Operating Expenditure
MTC	Marine Training Centre (Kiribati)
NGO	Non-governmental organisation
NUS	National University of Samoa
ODA	Official Development Assistance
PGK	Papua New Guinea Kina
PNG	Papua New Guinea
PSC	Public Service Commission (Fiji)
QTE	Qualifying training expense (PNG levy)
SINU	Solomon Islands National University
TBC	Technical and Business Colleges (PNG)
TIST	Tonga Institute of Science and Technology
TOP	Tongan Pa'anga
TVET	Technical and Vocational Education and Training
VIT	Vanuatu Institute of Technology
VRTC	Vocational Rural Training Centres (Solomon Islands)
VTC	Vocational Training Centre (PNG)
VTVETSSP	Vanuatu TVET Sector Strengthening Program

<sup>&</sup>lt;sup>1</sup> AusAID was integrated into DFAT in October 2013. Citations of AusAID in this paper refer to the original authorship and material produced before that time. The documents concerned are available through DFAT.

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This overview paper was written by Robert Palmer, International Education and Skills Development Consultant. Email: rpalmer00@gmail.com

In addition to drawing on the country reports prepared for and published by ACER under the research project, this Overview Paper draws on the following unpublished papers produced by ACER in the course of the research:

ACER (2014b). Draft Synthesis Report, 10 November 2014. Melbourne: ACER.

McKenzie, P. (2014). *Regional Framework TVET Finance Data Collections*. Draft Thematic Paper, 25 September 2014. Melbourne: ACER.

McKenzie, P. (2014). *Unit Costs of TVET Provision*. Draft Thematic Paper, 4 October 2014. Melbourne: ACER.

Horne, R. (2014a). *The Role of Fees, and Financial Support, in Facilitating Student Access and Course Completion*. Draft Thematic Paper, 19 December 2014. Melbourne: ACER.

Horne, R. (2014b). *Marshalling Private Resources for TVET*. Draft Thematic Paper, 18 December 2014. Melbourne: ACER.

## 1. Introduction

Developing skills, including vocational and technical skills, and enhancing employability are strategic objectives in the *Pacific Plan for Strengthening Regional Cooperation and Integration* (PIFS, 2007), the Forum Education Ministers' *Pacific Education Development Framework* (PIFS, 2009), Australia's *Port Moresby Declaration* (GoA, 2008), Australia's Pacific Education and Skills Development Agenda (2011), and Australia's aid program (DFAT, 2014). In this context, it is essential to seek sustainable financing for technical and vocational education and training (TVET) in the Pacific. This is not only about ensuring that sufficient and predictable revenue streams exist to fund training programmes that are accessible and of good quality, but also about how financing is strongly linked to policy objectives of making TVET systems more equitable, demand-driven, responsive and relevant.

This cross-country overview paper of TVET financing in the region brings together the results of the seven country studies (Fiji, Kiribati, Papua New Guinea (PNG), Samoa, the Solomon Islands, Tonga and Vanuatu) and related work undertaken through the project *Research into the Financing of Technical and Vocational Education and Training (TVET) in the Pacific.* This overview paper will address the following areas: (i) Sources of TVET funding; (ii) How funds are spent, and with what outcomes; (iii) Financing mechanisms currently used, and their strengths and limitations; and (iv) Other financing mechanisms that could be considered to achieve policy objectives.

## 2. Current Sources of Post-Secondary TVET Finance

This section examines what the seven country studies say about the current sources of postsecondary TVET finance. Table 1 provides an overview of the relative importance of different types of funding (recurrent and capital) for institutional public and private TVET that could be identified in the seven Pacific Island countries in this study. The Australia-Pacific Technical College (APTC) is treated separately because it is a regional provider with funding arrangements separate from national systems. Excluding the APTC, the most significant source of funding for institutional public and private TVET in the seven Pacific Island countries was government funding, followed by student fees, official development assistance (ODA), and private resources.

Annexes 1 and 2 show the proportion of funding going to selected TVET providers, public and private, in the seven countries, and shows great intra- and inter-country variation.

For the majority of public TVET providers in the seven countries, government funding is the most significant source of funds. For example, in Samoa, excluding the APTC, the most significant source of funding for TVET is the government, which accounts for 63% of all funding to TVET providers, followed by student fees (21% of all funding), and private resources (16%) (Maglen et al., 2013). The heavy Official Development Assistance (ODA) funding for the APTC distorts the relative importance of ODA for the majority of TVET providers. When APTC is included in national averages, ODA is the most significant overall source of funding, making up 33% of all funds, followed by government funding (30%), tuition fees (28%) and private resources (8%). Excluding APTC, however, shows that

government funding makes up 38% of funding followed by tuition fees (35%), ODA (17%) and private resources (10%).

	% all sources	% all sources excl. APTC
Government grant	30.2	37.6
Official overseas aid excl. APTC	13.4	16.6
APTC	19.6	n/a
Student fees	28.4	35.3
Private resources	8.4	10.4
of which		
Church and NGO donations	0.5	0.6
Industry contribution	5.6	6.9
Sale of services etc	1.0	1.2
Other sources	1.4	1.7

 Table 1. Shares in TVET funding for institutional public and private TVET - All seven participating countries

Source: Summarized from Annex 1

**ODA<sup>2</sup>** is estimated to provide about 17% of funding in various forms, excluding Australia's support of APTC. When funding for APTC is included, ODA is estimated to constitute about one-third of funding for TVET. With the exception of the Solomon Islands, Australia and New Zealand are the principal providers of ODA for TVET in the participating countries (Table 2). It is apparent, at least for ODA for 'vocational training' reported to the OECD DAC,<sup>3</sup> that especially in countries like Kiribati, Samoa, Fiji and Vanuatu, Australian ODA dominates – thus leaving these countries particularly open to the risk of the changing priorities of Australian funding.

Most ODA is grants in-aid, with soft-loans for TVET being less significant (Table 3). However, in PNG, for example, China made a loan of about US\$5.9m to fund capital expenditure on community colleges (Horne et al., 2014).

Bilateral ODA								Multilate	aral ODA
	Australia	New Zealand	Japan	Germany	Austria	Finland	Spain	EU	IDA
Fiji	76	0	2	<1	0	0	0	22	0
Kiribati	91	8	<1	0	0	0	0	0	0
PNG	69	14	<1	0	4	0	0	0	12
Samoa	84	15	<1	0	0	0	0	1	0
Solomon Islands	<1	0	2	0	0	4	0	86	8
Tonga	55	44	<1	0	0	0	0	0	0
Vanuatu	96	3	0	0	0	0	<1	<1	0

Table 2. ODA dis	sbursements to vocatio	nal training, 2010	)-2013, by country	y and source
of funds (%)		-	-	-

Source: Author using data from http://stats.oecd.org accessed on 22.04.15

<sup>&</sup>lt;sup>2</sup> The term 'ODA' is used in this paper to refer to both ODA and other official flows, including loans.

<sup>&</sup>lt;sup>3</sup> The Organisation for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC).

Country	ODA main area of support						
Fiji	APTC; Fiji National University; Scholarships; support to private TVET						
Kiribati	Sectoral improvement program (e.g. TVET Sector Strengthening Program);						
	capital works projects and equipment (e.g. MTC); Scholarships						
PNG	APTC; Scholarships; capital project with community colleges						
Samoa	APTC; Scholarships						
Solomon Islands	Grants to Vocational Rural Training Centres; Scholarships						
Tonga	Sectoral improvement program (TVET Support Program Phase 1); Scholarships						
Vanuatu	APTC; Vanuatu TVET Sector Strengthening Program (TVET centres);						
	Scholarships						

#### Table 3. Main areas of ODA support to TVET in the seven countries

Source: Country studies

Donor dependency is an issue for APTC operations and overseas scholarships, but not for the majority of TVET providers in the seven countries, with the exception of Kiribati. In Kiribati, the Kiribati Institute of Technology, the Fisheries Training Centre and the Marine Training Centre are all heavily reliant on ODA (ODA makes up 84%, 62% and 41% of funding respectively) (Annex 2). However, the Tonga, Kiribati and Vanuatu country studies all noted a strong reliance on donor funds, especially for sectoral improvement and capital works programmes, and the absence of a risk mitigation strategy if donor funds are reduced for TVET (ACER, 2014a; Bateman et al., 2014b; Majumdar and Teaero, 2014).

Reliance upon ODA for TVET, however, varies between participating counties, viewed either as a proportion of GDP or in per capita terms. There is a marked difference between the comparatively low level of dependence of PNG and Fiji, and the much higher levels in the other five countries (ACER, 2014b).

Non-government TVET institutions are in receipt of public funding in Fiji, PNG, Samoa, Solomon Islands and Tonga. The proportion of government subsidies to non-government institutions varied across the countries studied from 0% in for-profit private providers in the Solomon Islands, to 1% in PNG, 14% in Samoa, 32% in Fiji, 30-37% in Tonga and 50-65% in church-run providers in the Solomon Islands (Annex 2):

- In Tonga, both the Free Wesleyan and Catholic Churches run TVET institutes receive government and donor funds to supplement the amounts paid from their own Diocese (Bateman et al., 2014b).
- In Fiji, government funding is limited to selected not-for-profit (charitable) institutions that are registered with Ministry of Education (Maglen et al., 2014).
- In Samoa, private providers do not receive any dedicated/targeted government grants, but they can compete for small grants from the annual Ministry of Finance private/mission school grant fund (Maglen et al., 2013).
- In the Solomon Islands, the church-run Vocational Rural Training Centres (VRTCs) are supported financially through government paid instructor salaries and grants (Bateman et al., 2014a).

Student tuition fees are the second-largest source of funding for TVET public and private providers (excluding APTC), providing an estimated 35% of recurrent funding for the participating countries as a whole. Most public and private TVET providers levy fees, but

their contribution to overall provider revenue varies considerably. Tuition fees represent a significant source of funds for TVET providers especially among private TVET providers in Fiji, PNG, Samoa, Solomon Islands, and the Free Wesleyan Church TVET providers in Tonga, but also among some public providers (e.g. Fiji National University, the Technical and Business Colleges of PNG, the Solomon Islands National University, and the Vanuatu Institute of Technology). However, in Kiribati, student fees contribute only 1% of all TVET funding, while in Vanuatu and Samoa fees account for 7% and 9% of funds respectively. APTC is one of the institutions least reliant on student fee income.

**Direct funding from churches and NGOs was relatively insignificant for the majority of providers**, except for private TVET providers in Samoa, and the church TVET providers in Tonga. However, this understates the essential role that churches have played in establishing TVET providers in many of the countries studied, that now operate as non-profit nongovernmental providers, drawing funding from government grants, tuition fees, the sale of goods/services, as well as direct grants from churches. It also understates their actual resource inputs since an important part of their contribution is through staff salary subsidies and volunteers, for example in Samoa (Maglen et al., 2013).

The sale of goods and services was relatively insignificant for the majority of providers, except for private TVET providers in PNG, Samoa, and Tonga, and to a lesser extent for the Vanuatu Institute of Technology, the provincial VRTCs in the Solomon Islands, and the National University of Samoa (NUS).

#### In some countries, funding for TVET is heavily skewed towards one or two providers:

- In Fiji, 64% of all funding for TVET (2012-13) goes to the Fiji National University (FNU) (Maglen et al., 2014).
- In Samoa, almost 94% of all funding for TVET (2011-12) goes to just two institutions; NUS (34% or US\$ 2.95m) and the APTC (59% or US\$5.23m) (Maglen et al., 2013).
- In the Solomon Islands, 72% of all funding for TVET (2012) goes to the Solomon Islands National University (SINU).<sup>4</sup>

**Kiribati has the least diversified source of funding for TVET among all seven countries, followed by Vanuatu, and Samoa.** The government and development partners are the predominant funders of TVET in Kiribati, and together they account for 99% of the funds flowing into the TVET sector. Student fees accounted for 1% of overall sector funding – the lowest percentage among the countries in the study. In Vanuatu and Samoa, 85-89% of all TVET funding is from government and donors.

## The TVET providers with the most diversified funding portfolio are the Free Wesleyan and Catholic Church providers in Tonga.

**Other income sources were most significant in Fiji and PNG, where training levies are present.** In Fiji, about US\$ 6.4m is raised per annum by the levy, while in PNG it is about US\$ 1.3m per annum (Maglen et al., 2014; Horne et al., 2014; Palmer, 2015).

<sup>&</sup>lt;sup>4</sup> Since 2011, figures for TVET funding from the Government have been high due to the US\$13m commitment to the development of the SINU.

Formal training by firms in Pacific Island countries is very common, especially in Samoa, Fiji and Vanuatu (Palmer, 2015), but is not recorded in Table 1 and Annex 1, with the exception of the industry levy contributions from PNG and Fiji.

## 3. How Funds are Spent and with What Outcomes

This section examines expenditure on TVET in the seven countries, and also comments on whether this expenditure is resulting in an equitable quality TVET system of good quality. Table 4 gives an idea of overall public spending on TVET as a per cent of GDP in selected Pacific Island countries, showing that among the countries in the current study, Samoa appears to allocate relatively more resources to TVET. Overall, about 1% of combined GDP was spent on TVET in the seven participating countries in the reference year.

Pacific Island Countries	2007	2012
Cook Islands	0.2	-
Fiji Islands	0.4 - 0.68	1.5 - 1.6
Kiribati	0.6 - 2.0	1.6
Marshall Islands	0.5 - 1.8	-
Micronesia	1.4	-
Palau	3.3	-
PNG	0.5	0.6 - 1.4
Samoa	-	2.0 - 2.5
Solomon Islands	3.5	1.3
Tonga	0.3	1.3
Vanuatu	0.6	0.6

Table 4. Relative size of TVET budgets, Selected Pacific Island Countries (% of GDP)

Source: 2007 data from ADB (2008); 2012 data from country studies and ACER (2014b)

#### 3.1. Overview of expenditure on TVET in the seven countries

Table 5 identifies the composition of average TVET expenditure by category.

Expenditure category	% of recurrent exp.	% of total TVET exp.
Recurrent Expenditure		
Personnel (1)	51	30
Maintenance & other operating expenditure	35	21
Overheads	14	8
Other Expenditure		
Capital expenditure		12
Scholarships (2)		26
Other expenditure		3
	100	100

 Table 5. Share of total estimated expenditure on TVET by expenditure category - All seven participating countries, all provider types

Notes:

(1) This may well be an under-estimate as other recurrent expenditure categories are likely to include some expenditure on personnel.

(2) The estimates of expenditure on scholarships need particular caution because of the difficulty of determining the sector to which scholarships are most appropriately classified

(3) Expenditure on APTC is excluded from this calculation because its funding arrangements are separate from national systems

Source: Schofield (2015) summarised from Table 6.2 in the draft synthesis report (ACER 2014b:54) which was derived from the seven country studies.

In four of the seven Pacific Island countries in the study, recurrent expenditure (salaries, operating costs and overheads) made up 80-90% or more of total annual expenditure on TVET. For example, in Vanuatu the figure was 81%, in Samoa and Solomon Islands the figure was 90%, while in Fiji 96% of total expenditure was recurrent. Of the recurrent costs in these three countries, salaries made up 50-60% (Maglen et al., 2013; 2014; Bateman et al., 2014a). In three of the seven Pacific Island countries in the study, the proportion of total expenditure allocated to recurrent expenditure dropped to between 20-56% (20% Kiribati, 21% Solomon Islands, 56% PNG), due to high expenditure on scholarships in these countries (see below).

There are important differences in the proportion of spending devoted to personnel costs between public and non-public institutions. In several of the countries (Fiji, Tonga, Solomon Islands) personnel costs took up a much larger share of total expenses in government institutions owing to higher levels of remuneration.

- In Fiji, personnel costs accounted for 60% of recurrent expenditure for Ministry of Education (MoE) TVET providers, compared to 49% for Ministry of Youth and Sports (MoYS) TVET providers and 44% for private providers (Maglen et al., 2014).
- In Tonga, personnel costs accounted for 77% of recurrent expenditure in the Tonga Institute of Science and Technology, and 88% in the Tonga Institute of Higher Education, compared to 46% in the Free Wesleyan Church and Catholic TVET systems (Bateman et al., 2014b).
- In the Solomon Islands, personnel costs accounted for an average of about 60% of recurrent expenditure among those TVET providers surveyed; this varied from 59% for the Solomon Islands National University, to 65% for non-Catholic Church VRTCs, to 81% for Provincial VRTCs, and 88% for Catholic VRTCs (Bateman et al., 2014a).

In most countries, TVET teachers are remunerated from the national pay-roll, not from TVET providers directly. This is the case with public TVET provision in at least six of the

seven countries, except for the Fiji National University and the National University of Samoa which both pay staff directly. Among private TVET providers, many are responsible for paying their own staff directly, except for example, for the church-run VRTCs in the Solomon Islands which are paid direct by government (Annex 4).

Maintenance and Other Operating Expenditure (MOOE),<sup>5</sup> which covers expenditure on teaching and training materials, utilities, routine maintenance and repairs, ranged from 17-36% of total expenditure in Fiji, Samoa and the Solomon Islands. There was some variation within countries as illustrated below, for example:

- In Fiji, MOOE in Ministry of Education vocational schools amounted to 40% of total recurrent expenditure, in Ministry of Youth and Sports TVET providers it was 51% and in private TVET providers it was 56% (Maglen et al., 2014).
- In the Solomon Islands, the MOOE for the Solomon Islands National University was 41% of recurrent expenditure, while in the church-run VRTCs the MOOE was only 12-36%, and in the provincial VRTCs MOOE was 19% (Bateman et al., 2014a).

Scholarships are the traditional form of student support across all the countries studied and take many forms. The average expenditure on scholarships was estimated to be about 26% of total TVET expenditure, excluding APTC (USD45 million); however 93% of this expenditure on scholarships was in just three of the seven countries in the study - Kiribati, PNG, Solomon Islands (ACER, 2014b).

## With the majority of expenditure on salaries and running costs, little is left for staff development, training materials, buildings and equipment.

- In Fiji, there was no capital expenditure recorded among private providers in 2012, the Ministry of Education and Ministry of Youth and Sports providers recorded 2% and 10% capital expenditure respectively (Maglen et al., 2014).
- In the Solomon Islands, capital expenditure was significantly higher for the Solomon Islands National University (9% total expenditure), compared to the VRTCs (1%). VRTCs use the government grant money largely 'for 'food and fuel' and not for professional development of trainers, training materials and resources or equipment' (Bateman et al., 2014a: 202).
- In Kiribati, there is very little or no funding available for professional development of staff, material costs or new equipment. Capital costs are borne by donors; for example, in the year of the study (2012), Kiribati had a US\$1 million grant from New Zealand to support capital works for MTC (Majumdar and Teaero, 2014).
- In PNG (2012), about US\$ 3.1m was allocated from the government budget for capital expenditure for TBCs and VTCs, with a similar amount coming from donors. In addition, in 2012 the government took a loan from China for about US\$ 5.9m to fund capital works on community colleges.
- In Samoa, capital works programs are funded almost entirely from donor grants and soft loans (Maglen et al., 2013).

Adequate capital expenditure is a key issue for the development of TVET although it was not one which the seven country studies were able to investigate in depth.

<sup>&</sup>lt;sup>5</sup> Unfortunately, it is not possible to disaggregate MOOE into its constituent parts.

#### 3.2. Expenditure on Australia-Pacific Technical College

APTC is a regional TVET provider with campuses in five Pacific countries, including Fiji, PNG, Samoa, Solomon Islands and Vanuatu.<sup>6</sup> It is funded as part of Australia's regional aid program. Unit costs for APTC students are high. For example, in Fiji, the unit costs for APTC students come to FJD10,245 (US\$ 5,430), which are significantly higher than other TVET providers in Fiji (e.g. the cost per student in the Ministry of Education registered vocational schools is FJD 1,621 / US\$ 859) (Maglen et al., 2014). Similarly, in PNG in 2011, 153 students were trained at a cost of over US\$ 30,000 per person, funded by Australian aid (Horne et al., 2014). Unit costs of delivery in APTC also are inherently greater than national providers because, to date, it has conducted most of its operations – classroom and workshop instruction and campus management - using Australian staff on temporary attachment. However, such expenditure is linked to the creation of qualified graduates; for example, a 2013 survey of employers of APTC graduates indicated a 91% overall satisfaction rating with APTC training (www.aptc.edu.au).

#### 3.3. TVET expenditure and equity

All seven country studies report dimensions of inequitable access to TVET, mainly related to gender, geography and disability. A fundamental aspect of a successful TVET system is the access it provides to trainees from a wide range of social backgrounds, ages and geographic areas. With regard to gender, enrolments in most TVET providers are majority male, and where females are in TVET they are taking courses considered traditionally female. For example:

- In Fiji, female enrolment in MoE vocational schools is 29%, and 24% in Ministry of Youth and Sport, Youth Training Centres. Of the females in MoE vocational schools, 94% are enrolled in catering, tailoring or office skills (Maglen et al., 2014).
- In Kiribati, females outnumber males and are found almost exclusively in the secretarial, business services and hospitality sectors (Majumdar and Teaero, 2014).
- In PNG, female enrolment in the technical and business colleges is 35%, in the Solomon Islands female enrolment in the VRTCs is 36%, and in Vanuatu's Rural Training Centres it is 30%.

With regard to geography, the disbursed populations and remote areas in these seven countries has an effect on equitable access. For example:

- In Kiribati, TVET is limited in the extent to which it offers programs accessible and relevant to people from the outer islands (Majumdar and Teaero, 2014).
- In Samoa and Tonga, the majority of TVET provision occurs in around the capitals (Bateman et al., 2014b; Maglen et al., 2013).
- In PNG, there are big variations in Vocational Training Centre (VTC) enrolments per 1,000 population; these average about 7 for the 5 provinces which have most trainees, and about 1.5 for the 5 provinces who have least. There are no financial incentives for provinces to even up provision (Horne et al., 2014).

People with disabilities are disadvantaged in at least several of the countries studied, for example in Kiribati and Fiji (Maglen et al., 2014; Majumdar and Teaero, 2014). In Fiji, as far

<sup>&</sup>lt;sup>6</sup> At the time of this study of TVET financing, the APTC had not started operations in the Solomon Islands.

as TVET for people with disabilities goes, the approach has been more akin to occupational therapy than genuine preparation for the world of work (Maglen et al., 2014).

There are many factors exacerbating the inequitable access to TVET in the Pacific Island countries studied; gender, geography and disability are three, but issues like poverty that result in early disadvantage and reduced chances of completing school (as mentioned in the PNG study), will subsequently disadvantage access into formal TVET programmes that have minimum educational entry requirements. Other issues include the predominant focus on long-duration, full-time pre-employment courses, which are often not appropriate for many young people and older adults who can't afford the opportunity cost of training (and not earning). Another issue is the cost of fees which are already high for many low-come families (e.g. in Samoa – Maglen et al., 2013). Further, inequitable access to TVET is exacerbated in some countries due to funding decisions. For example, the Solomon Islands study noted that the bulk of funding has been earmarked for establishment of the Solomon Islands National University and scholarships for students attending the university; 'this current pattern indicates a level of inequity in terms of financing TVET program - the vast network of about 40 Vocational Rural Training Centres are left out' (Bateman et al., 2014a: 200). Similarly, the Fiji study noted the funding bias towards the Fiji National University and the associated relatively limited funding for other providers (Maglen et al., 2014).

## All seven countries have various forms of financial assistance schemes aimed at mitigating disadvantage. For example,

- Fiji offers many small scale scholarships for the disadvantaged, including for people with disabilities and for indigenous Fijians (Maglen et al., 2014). Indeed, all seven countries have scholarship offerings, including to study abroad, but there is variation in the extent to which they are targeted at the disadvantaged.
- Kiribati has intake quotas from each island in both the Fisheries Training Centre and Marine Training Centre (Majumdar and Teaero, 2014).
- The Solomon Islands introduced a blanket fee subsidy at the Solomon Islands National University in 2013, essentially supporting all students (Bateman et al., 2014a) (see also 4.4, this paper).

#### 3.4. TVET expenditure and skills training in the informal economy

While informal learning was excluded from the research project, structured training for the informal labour market was within the scope of work (AusAid, 2011), though was only covered in a limited way in the country studies. There are no data on TVET expenditure on structured skills training for the informal economy, but the country studies make it clear that this kind of training is usually undertaken by NGOs, rather than by governments. For example, in Fiji, there are a number of non-governmental providers mainly offering short-course and non-formal TVET (Maglen et al., 2014), and in Kirbati, local NGOs and church bodies are active in providing non-formal education and training programs (Majumdar and Teaero, 2014). In PNG, the Ginigoada Business Development Foundation, an NGO, provides unemployed young people through short-term skills development via mobile training units (Horne et al., 2014). Since most work opportunities are to be found in the informal economy, and skills upgrading is a key part of improving productivity and livelihoods in this context, **it would be advisable to undertake additional research on the financing** 

of TVET for the informal economy, looking at both enterprise-based training in informal enterprises, as well as structured training for those working in wage or self-employment in the informal economy.

#### 3.5. Analysis of efficiency through unit costs

**Unit costs illustrate inefficiencies in the TVET systems.** Four types of unit costs were calculated in the Pacific Island countries' study (Table 4), and it was expected that unit costs might vary in several ways (Maglen et al., 2013):

- across fields of study and by level of training with some fields by their nature requiring higher cost operations than others, and with higher levels of training requiring more expensive more resource-intensive activities;
- be subject to economies of scale, with unit costs tending to be lower the greater the class size and the higher the student staff ratio; and
- to reflect differences in the price of inputs, especially labour, in course delivery with higher labour costs (teacher emoluments) driving unit costs higher.

Type of Unit Cost	Uses
Costs per student	A summary measure of cost per student enrolled.
Costs per graduate	A summary measure of the inputs needed to
	produce a unit of output. The narrower the
	difference between costs per student and per
	graduate, the more likely it is that providers are
	achieving high course completion rates.
Costs per training hour	Useful as standard measures of comparison
Costs per student training hour	across the diversity of fields and levels that
	typically are found in TVET sectors, and in the
	mix of short and long courses and alternative
	delivery modes.

#### Table 6. Summary table showing the uses of each type of unit cost

As it turns out, in at least in a couple of countries studied (PNG, Samoa), unit costs are driven mainly by staffing levels and average staffing costs, and not by occupational area within institutions or by economies of scale. Therefore, relatively low unit costs often reflect the fact that teachers have low salaries and little support, and should not necessarily be interpreted as indicating internal efficiencies.

High unit costs for a course might signal inefficient use of resources and policy makers should understand the reasons affecting cost. For example, the Tonga report singles out the Tonga Institute of Higher Education for its high unit costs (Bateman et al., 2014b). The report for Solomon Islands refers to the high cost and low efficiency of many institutions, especially the Solomon Islands National University (Bateman et al., 2014a).

**Differences between cost per student and cost per graduate for some courses indicate inefficiencies related to course completion.** For example, in Fiji (2012) MoE vocational schools there is a large difference between the cost per student (FJD 1,621 / US\$ 859) and cost per graduate (FJD 4,533 / US\$ 2,403) indicating that many students are not completing. In the Tonga Institute of Higher Education (2011/12), there was a seven-fold difference between cost per student (TOP 1,806 / US\$ 957) and cost per graduate (TOP

12,124 / US\$ 6,426), indicating low levels of course completion (Bateman et al., 2014b). Meanwhile in Fiji's Ministry of Youth and Sports youth training centres (2012), the cost per student and cost per graduate are very similar (FJD 1,812 / US\$ 960 versus FJD 1,900 / US\$ 1,007) implying that most trainees complete the course (Maglen et al., 2014).

The range of cost per student in the same organisation (with multiple providers) can indicate the higher cost of training some students in different geographical areas. For example, in PNG the cost per student in the VRTCs (2012) ranged from PGK 1,327 – 3,112 (US 518 – 1,214), with the higher costs being in rural VRTCs and in VRTCs that specialise in meeting particular needs (e.g. for people with disabilities) (Horne et al., 2014).

#### 3.6. Quality and relevance concerns from industry

Current expenditure on TVET has not resulted in TVET systems that employers consider to be of good standard. Employers in the Pacific Island countries express concern about the quality and relevance of TVET available, but also seem to lack involvement in creating a better system. In Fiji, PNG and Vanuatu employers are dissatisfied with the quality and relevance of existing TVET provision, and the associated competencies of their recently trained new employees (Maglen et al., 2014; Horne et al., 2014; ACER, 2014a); in Tonga and Kiribati, there is no strong link to industry in terms of developing TVET curriculum or informing training provision to meet industry needs (Bateman et al., 2014b; Majumdar and Teaero, 2014); and, in Samoa, there is a low level of industry/employer participation in the planning of structured TVET provision (Maglen et al., 2013).

### 4. Financing Mechanisms Currently Used

TVET financing mechanisms have the potential to influence the achievement of national development objectives (effectiveness), outputs per unit cost (efficiency) and the degree to which people from different backgrounds and locations have access to good quality training (equity). This section examines the financing mechanisms that are currently used in the seven Pacific Island countries studied to finance or co-finance TVET, as well as the strengths and limitations of these mechanisms. The following section (5) then explores how financing mechanisms *could* be used in the Pacific to achieve policy objectives.

#### 4.1. The diversity and complexity of the TVET funding and financing mechanisms

The complexity of TVET financial flows seen in many Pacific Island countries studied is illustrated by the case of Tonga in Annex 5. Across the countries studied, funding comes from multiple sources (e.g. multiple government ministries, donors, fees, churches/NGOs, sale of goods, enterprises) and is allocated to multiple TVET providers (higher education courses in national universities, in schools, in rural training centres, through regional providers, through non-government and other private providers, and in workplaces) via multiple financing mechanisms (e.g. input-oriented financing from government, grants from donors, scholarships, enterprise levy grants etc).

The diversity, and sometimes fragmentation, of TVET systems results in a fragmented approach to TVET financing. Several of the country studies (e.g. PNG, Samoa) noted the lack of a unified funding model for TVET where one party 'had the opportunity or power to look at the picture as a whole' (Horne et al., 2014: 145). However, in Tonga the Ministry of Education and Training has provided oversight of all TVET since 2012, including via a single budgeting and reporting framework (Bateman et al., 2014b).

#### 4.2. Direct public payments to TVET Institutions

The financing mechanisms used by government to transfer funds to TVET providers can affect institutional behaviour and the way funding is used (Johanson and Adams, 2004). For example, funding can be based on: historical expenditure (e.g. a grant to cover training materials, equipment, logistics etc), where no account is taken of performance and grants are simply allocated based on the previous year's expenditures; inputs (e.g. the number of students), where incentives exist to increase student enrolment; outputs (e.g. the percentage of students graduating or achieving a specified minimum standard), where incentives exist to improve such metrics; or, outcomes (e.g. the percentage of graduates finding employment or becoming self-employed within six months of graduating), again where incentives exist.

As noted above, government funding represents the most significant source of funds for the majority of public (and some private) TVET institutions in the seven countries studied. Funding is usually provided in two forms; funding for teacher salaries, and funding in the form of operating grants.

In most public (and some private) TVET providers in the seven Pacific Island countries, TVET teacher salaries are paid centrally through a national payroll system (rather than at provider level) (Annex 4). As a result, heads of TVET providers may have less influence over teacher behaviour, and teachers know that they will get paid regardless of how many students pass their exams or gain adequate practical competencies.

Historical allocation and input-based funding approaches are the dominant modes of direct public operating grant payment to providers, and the ways these function in the Pacific Islands countries serve to reinforce a supply-driven training model. As noted above, historical financing mechanisms provide funding unrelated to performance, and are based on actual annual expenditure of the previous year. The same levels of finance are allocated to poorly performing TVET institutes with high dropout rates as to those that maintain a high quality of teaching and performance, with good learning outcomes and successful graduates. In other words, historical allocation approaches do not provide incentives to providers to function more efficiently, or to adapt themselves to market needs; as a result training provision remains supply-driven and static (Johanson and Adams, 2004). Meanwhile, input-based financing mechanisms provide funding based on inputs, and are unrelated to training or market outcomes, but can reward institutes for enrolment increases if the institute is allowed to retain the additional funds (e.g. from additional student tuition fees). As noted below (4.3), several countries are not allowed to retain fees, thus negating the incentive to enrol more students according to an input-based financing approach.

As the Solomon Islands country study noted, 'there appears to be no incentive to improve internal efficiencies or to improve outcomes of training, as funding does not depend on it'

(Bateman et al., 2014a: 204). In at least three countries in the study (Kiribati, Vanuatu and Tonga), the country reports noted that most TVET providers are provided with baseline funding based on historical trends, rather than on an input-based approach. In addition, operating grants to TVET providers based on input-based financing approaches are used in Fiji, Kiribati, Tonga and the Solomon Islands (ACER, 2014a; Bateman et al., 2014a, 2014b; Maglen et al., 2014; Majumdar and Teaero, 2014).

There is little evidence of output-based financing mechanisms being used in the seven countries studied, with perhaps the exception of Fji. For example, in the Kiribati study it was noted that in financial planning or budgeting discussions, there is no attention paid to course completion rates, unit costs, graduate outcomes or employer satisfaction (Majumdar and Teaero, 2014). In PNG, in both VTCs and TBCs there is no account taken to reward course completion and good outcomes in employment or the informal economy (Horne et al., 2014). Only Fiji is moving towards a performance based funding model, but 'performance' that is based on outputs not graduate outcomes (Maglen et al., 2014).

Training providers have no financial incentive to meet labour market needs or to stimulate internal efficiency. Planners' lack of consideration of performance, outputs, and outcomes in deciding how much to allocate to a particular TVET institute, combined with the lack of incentives for TVET institutes' effective use of available resources (see 4.3 below), results in training providers having insufficient interest in their finances.

#### 4.3. Financing policies and incentives at provider level

**Financial system barriers inhibit flexibility, expansion and sustainability at provider level.** None of the countries appear to have devolved much financial authority to managers of public training institutions; decisions on spending are centralized, and most providers are unable to retain revenue from tuition or fee for service at the institution.

In at least several countries (e.g. Kiribati, Tonga, Vanuatu), there are limited incentives at provider level to increase student numbers, as fees contributed by students are not retained by public TVET providers. Rather fees are transferred to the general revenue of the respective ministry or Diocese (in the case of the church-related TVET providers in Tonga) rather than being available to expand or improve operations at the provider level (ACER, 2014a; Bateman et al., 2014b; Majumdar and Teaero, 2014).

By contrast, private TVET providers that retain fee income have a direct incentive not only to increase student numbers, but also to ensure that the training delivered is seen as relevant. For example, in Samoa, the for-profit Tesese Institute of Administrative Studies, 'has the direct incentive to ensure that its graduates are meeting employer requirements, because its continued livelihood depends upon it' (Maglen et al., 2013: 135). However, in the absence of competition, for example where private TVET providers are widely dispersed as is the case in some Pacific Island countries, private providers may still have an incentive to increase student enrolment, but less of an incentive to deliver very relevant and better quality training.

With regard to internally generated funds from the sale of goods and services, in three (Kiribati, Tonga, Vanuatu) of the four Pacific Island countries studied which stated it, public TVET providers reported that they were not allowed to retain profits

from such ventures to supplement their funding (Palmer, 2015). However, in Fiji such funds raised by the training providers are generally managed and retained by them.

#### 4.4. Financing mechanisms related to individuals: loans and scholarships

The existence of student loans to help individuals to finance TVET study were only mentioned in Fiji and PNG, and were very limited in both cases. In Fiji, a student loan mechanism targeted at economically disadvantaged students supports only about 40 TVET students (Maglen et al., 2014). Meanwhile, in PNG, the Enga province has a TVET loan scheme for students of Engan descent or children of non-Engans who have lived in the province for more than three years. A previous student loan scheme for tertiary level TVET in PNG ceased in 2007 'because no effective means was found to recover the repayments' (Horne et al., 2014: 77).

Scholarships to study TVET exist in all seven countries. While they have some equity benefits, they lack alignment with labour market needs, and can come with high actual and opportunity costs. Scholarships, funded by governments as well as donors, play a key role in improving access for individuals from disadvantaged backgrounds to study at home, in the Pacific region, in Australia or New Zealand or another country (see also 3.3 above).

The criteria for scholarship allocation varies from targeting high-academic achievers (e.g. Samoa, Kiribati), to outer Island residence (Kiribati), to people with disabilities (Fiji), indigenous people (Fiji), to gender (at least 50% scholarships in Tonga for females). However, in the Solomon Islands, constituency scholarships, issued by members of parliament to SINU TVET students in their constituencies are untargeted; they appear to have 'no academic controls in the selection of students or alignment to industry or social needs of the Solomon Islands' (Bateman et al., 2014a: 203). Further, as noted earlier, the Solomon Islands introduced a blanket fee subsidy at the Solomon Islands National University in 2013, essentially supporting all students (Bateman et al., 2014a). This allocation is based on student numbers and not demand driven and 'raises an equity issue for other students NOT enrolled' in SINU (Bateman et al., 2014a: 204). In fact this policy probably works against equity, because the scholarships subsidise education at a level (higher education) that most disadvantaged people never reach.

The outreach of scholarships is often limited resulting in often high direct costs, and opportunity costs should not be ignored. All spending decisions, including on scholarships, carry with them opportunity costs (the cost of not spending that money in another way). The opportunity cost of offering blanket fee subsidies to higher education students was highlighted in the Solomon Islands study; it was noted that such scholarships 'takes resources from other TVET providers, notably Vocational Rural Training Centres' (Bateman et la., 2014a: 204).

In the Kiribati study, it was noted that 'scholarships, particularly those for international study, use substantial funding for only small numbers of awardees' (Majumdar and Teaero, 2014: 48). Many, but not all, overseas scholarships are funded by donors. And it is not just international scholarships that have high unit costs; scholarship unit costs for study in APTC regional campuses are also high (see 3.2 above).

Indeed, the high unit costs per student for some overseas scholarships might lead to questions about most effective allocation of resources to TVET. For example, in PNG the government-funded TVET Skills Scholarships Program suffers from 'excessive cost' (Horne et al., 2014: 74); in 2012, in response to labour market needs, it took about 240 students to study in Australia for pre-apprenticeship courses of 21 weeks' duration at a cost of PGK26.4m (US\$10.3m); an estimated unit cost per graduate of over US\$40,000.

#### 4.5. Financing mechanisms related to industry: training levies

In two countries in this study, PNG and Fiji, there are training levy programs wherein employers above threshold sizes pay a levy that is pooled for approved training applications (Palmer, 2015). In both countries, the training levy does not appear to be working well as a financing mechanism for training.

In PNG there are problems with the levy:

- As a source of revenue for government to fund TVET, the levy provides a very modest source of funds to the Training Assistance Fund. Further, even the modest revenues to the Training Assistance Fund don't appear to be used most effectively: there is no competitive mechanism to allocate these funds to the best applicants; instead grant applications are considered as they come in (Horne et al., 2014: 90).
- As a training incentive for employers. It imposes on the Internal Revenue Commission a heavy, perhaps unrealistic, burden for the assessment of qualifying training expenses (QTEs) (Horne et al., 2014: 147). Moreover, the definition of QTEs 'is so wide that it is easy for employers to represent that their expenses exceed their liability to pay, and hard for the Inland Revenue Commission to check such claims' (Horne et al., 2014: 90).

In Fiji, the two mechanisms developed to reimburse enterprises for training have limitations:

- The first mechanism is for organizations that operate their own training programs; however, most training in enterprises does not appear to meet the criteria for getting reimbursed and it is therefore not an effective incentive;
- The second mechanism, open to those organizations that do not have established systematic training programs for their employees, requires employers to undertake lengthy application procedures to obtain recompense for each specific training activity; an endeavour that discourages many (Maglen et al., 2014).

In both cases, the training levy financing mechanisms are not well suited to small and microenterprises, especially those in the informal economy (Palmer, 2015).

#### 4.6. Innovative financing mechanisms

Several examples of innovative practice were noted in the country studies, including:

**Private-public partnerships in Papua New Guinea and Kiribati** - In PNG a non-profit private provider and provincial governments have entered into arrangements whereby the province supplies facilities, and the provider undertakes to offer TVET courses at those premises. Teaching costs were to be covered by fees, preferably with some input of scholarships by the province (Horne et al., 2014). Such partnerships offer another way to promote cost-sharing and diversity, and may be a useful option for remoter locations in other

Pacific countries, where buildings suitable at least for classroom-based TVET happen to be available. In Kiribati, the success of the Marine Training Centre shows how sharing costs and program development among government, industry (a consortium of German shipping agencies) and donors can be beneficial for all. Key features in its success appear to have been the shipping industry playing a major role over a long period in establishing standards, having experienced staff support the training provided by the centre, providing structured workplace learning opportunities during training, and rigorous quality assurance processes. Developing such partnerships across TVET more broadly and maintaining close interactions are necessary to overcome skill mismatches and make TVET more demand-driven (Majumdar and Teaero, 2014).

**Financing demand-driven training in Vanuatu** – In Vanuatu, TVET centres established in three of the six provinces, as part of the Australian-funded Vanuatu TVET Sector Strengthening Program (VTVETSSP), offer training closely linked to identification of local training needs. These TVET centres seek funding from an Education and Training Fund that was established as part of the VTVETSSP. The VTVETSSP illustrates two interesting approaches; first, it illustrates how training finance can be more closely linked to identification of local training needs, and shows how the government might reconceptualise its role from a supplier of publicly-funded TVET, to a purchaser of TVET (ACER, 2014a); second, the success and expansion of the Education and Training Fund, illustrate steps that are being taken towards the potential establishment of a National Training Fund in Vanuatu (Box 1), though sustainability challenges remain a key concern.

#### Box 1. Steps towards the establishment of a National Training Fund in Vanuatu?

In Vanuatu, Phase 2 of the Australian-funded Vanuatu TVET Sector Strengthening Program (VTVETSSP) (2008-2012) has demonstrated that a demand-driven Education and Training Fund can be operated effectively (i.e., an agreed proportion of participants who receive training get jobs and the program has a net impact). Up to mid-2012, the Education and Training Fund was operating across two provinces. During VTVETSSP Phase 3 (2013-2016) the operation of the Education and Training Fund has been extended to three provinces. This is seen as a step towards the establishment of a National Training Fund, which could become, over time, a common pool for government and donor funds. By mid-2012, the government had not yet contributed to the Education and Training Fund, and no other development partners had indicated interest in contributing funding. Thus financial sustainability for such a Fund is not yet assured. However, looking into the feasibility of establishing a National Training Fund and seeking contributions from other development partners is in the approved TVET Policy. It is likely, however, that significant Australian funding (or other development partner support) for skills development in Vanuatu will be needed for the foreseeable future.

Source: Grinsted et al., 2012: 13; www.vanuatutvet.org.vu (accessed 07.04.15)

#### 4.7. Donor financing mechanisms and modalities<sup>7</sup>

International donor contributions to financing TVET in the Pacific are significant (Table 1), and when funding for APTC is included, ODA is estimated to constitute about one-third of funding for TVET across the seven countries. So the mechanisms that donors use to channel their funds to TVET are particularly relevant to Pacific TVET financing systems.

<sup>&</sup>lt;sup>7</sup> First three paragraphs in this section are from Schofield (2015).

Virtually all ODA across the seven countries is in the form of grants (transfers in cash or in kind for which the recipient incurs no legal debt). Only in PNG was a loan identified; from the People's Republic of China (PRC) tied to the purchase of pre-fabricated units for new Community Colleges.

Table 7 below provides a high-level summary of the types of aid modalities identified by the country studies. The two most commonly used are project-type interventions and Scholarships for overseas study. In only one country (PNG) was budget support for the education sector applied explicitly to the TVET sub-sector, and this was both modest and short-term (Horne et al, 2014:103).

Financing Mechanism	
Budget support	Budget support to the education sector was used only in Solomon Islands at the time of the study but few (if any) of these funds were applied specifically to the TVET subsector. In PNG, sector budget support was provided by Australia for 2013 on a small-scale to the TVET sector through the National Department of Education.
Core contributions and pooled programmes and funds	The only use of core contributions was the Skills Development Trust Fund in PNG. Examples of pooled funds applied to TVET were rare. The studies did not identify any public-private partnerships where donors used pooled funds, although early discussions on one in PNG (Lae) were underway at the time of the study, potentially to be supported by Australia.
Project-type interventions	This is the most widely used mechanism to support TVET. Projects and programs of highly variable scale and duration were evident in all countries studied. APTC was the largest. Australia is the largest donor. New Zealand, Japan and EU were also providing project financing. Some examples were identified of aid for TVET projects and programs being channelled through NGOs; e.g. in Vanuatu by NZ. Occasional small grants direct to individual vocational training centres and schools were made by a range of donors across most countries studied. The PNG Incentive Fund provided substantial grants to two TVET providers for infrastructure.
Experts and other technical assistance	Some provision of a range of relatively small-scale technical assistance to TVET by donor experts was evident in most countries. This included the provision of specialist volunteers (e.g. by Japan), local scholarships (e.g. NZ), in-country training, support for conferences, seminars and workshops and non-project-related analytical studies.
Scholarships and student costs in donor countries	This type of aid was identified in all countries studied, although explicit targeting of scholarships to TVET was rare. Donors include Australia, India, Japan, NZ, Republic of China (Taiwan) and People's Republic of China (PRC).

Table 7. Types of aid modalities used by donors to support TVET in the Pacific

Note: The typology above is based on the OECD Development Assistance Committee (DAC) categorization of types of aid. See OECD DAC Codelist, Type of aid subcodes, 2014, http://www.oecd.org/dac/stats/dacandcrscodelists.htm

Source: Schofield (2015) derived from the seven country reports

A similar picture is presented if we look at ODA disbursements<sup>8</sup> from DAC donors to vocational training<sup>9</sup> in the seven Pacific Island countries in the study. This ODA data confirms that project-type interventions are by far the most common aid modality used, accounting for 80-99% of ODA disbursements to vocational training over the period 2010-2013 (Table 8).

<sup>&</sup>lt;sup>8</sup> Aid levels can be measured through two account lines in donor reporting systems. Commitments represent an obligation to deliver a stipulated amount of aid in the future, while disbursements record the actual release of funds, often spread over several years. Commitment levels tend to be more volatile since they often reflect a few large projects announced in a given year. Disbursements provide a more accurate reflection of the resources actually transferred from donors to recipients in a given year (UNESCO, 2011: 109). <sup>9</sup> 'Vocational training' as defined by the DAC's Creditor Reporting Service (CRS) code 11330 which covers both

formal and informal pre-tertiary TVET (OECD, 2014: 2). There are great methodological challenges to looking at ODA to TVET via the DAC CRS (King and Palmer, 2011).

			lional	uann	ig, 200		iti y	
		2004-2009 avr p.a.	2010	2011	2012	2013	2010- 2013 total	2010-2013 avr p.a.
Fiji	Total	0.074	5.566	6.133	0.245	1.074	13.019	3.255
	of which project		5.560	6.073	0.117	1.073	12.822	3.206 (98.5%)
Kiribati	Total	1.035	0.118	0.113	3.814	3.044	7.090	1.772
	of which project		0.047	0.013	3.459	2.778	6.297	(89%)
	of which experts/TA		0.071	0.101	0.355	0.089	0.615	0.154 (9%)
PNG	Total	1.800	6.072	4.728	1.044	1.117	12.961	<b>3.240</b> 2.636
	of which project		4.877	4.176	0.638	0.853	10.544	(81%) 0.558
	of which experts/TA		1.195	0.552	0.369	0.114	2.231	(17%)
	<b>T</b>	0.040	4 000	0.400	0.557	0.075	0.000	0.007
Samoa	Iotal	2.043	4.092	3.463	0.557	0.275	8.388	<b>2.097</b> 1.793
	of which project		3.833	3.095	0.233	0.010	7.170	(86%) 0.289
	of which experts/TA		0.224	0.344	0.324	0.263	1.156	(14%)
Solomon Islands	Total	0.045	0.734	2.508	0.898	1.867	6.006	1.502
	of which project		0.734	2.233	0.308	1.718	4.993	1.248 (83%)
	of which experts/TA		0	0.275	0.490	0.149	0.914	0.229 (15%)
					4 502			
Tonga	Total	0.326	1.145	2.079	1.593 (i)	0.033	3.256	<b>1.212</b>
	of which project		0.929	1.766	0	0	2.695	(56%)
	of which experts/TA		0.215	0.094	0	0	0.309	0.077 (6%)
Vanuatu	Total	0 962	3 642	4 246	2 371	2 557	12 816	3 204
Fandalu	of which project	0.502	2642	4.246	2.074	2.001	12.010	3.165
			3.042	4.240	2.371	2.402	12.007	(99%)
	1							

(i) 012 for Tonga was 100% on core contributions/ pooled programs (the TVET Support Program funded by New Zealand)

Source: Author using data from http://stats.oecd.org accessed on 22.04.15

Experts and other technical assistance (TA) showed up as a not insignificant aid modality. Budget support disbursements were not picked up in Table 8, despite the knowledge that it is a modality being used in PNG (Table 7); this could either be because no disbursements were made up to 2013, or that they were made but reported under a different CRS code related to TVET. Meanwhile, ODA disbursement for scholarships and student costs in donor countries showed up as insignificant, though we know that such modalities exist (Table 7); their almost absence in ODA disbursement data could be because they were reported under a separate CRS code, or that they were considered to be part of 'project-type interventions' and therefore appear below but are 'invisible'. This illustrates the challenges faced in tracking the various types of aid modality. As noted above, while ODA funding for the majority of TVET providers in the seven countries is not significant (with the exception of Kiribati), several of the country studies noted a concern about donor reliance with regard to capital expenditure and sectoral improvement programmes.

- The Kiribati, Tonga and Vanuatu studies all noted that donor funding is a dominant feature of TVET financing and this reliance relates to both sectoral improvement programs (e.g. TVET Sector Strengthening Program in Kiribati) and to capital works projects and equipment (e.g. NZAID – MTC in Kiribati) (ACER, 2014a; Bateman et al., 2014b; Majumdar and Teaero, 2014).
- The Samoa study noted that the capital works program is funded almost entirely from donor grants and soft loans (Maglen et al., 2013).

Both the Tonga and Vanuatu studies noted an absence of a risk mitigation strategy if donor funds were reduced for TVET at any point in the future (ACER, 2014a; Bateman et al., 2014b).

### 5. Other Financing Strategies and Mechanisms to Achieve Policy Objectives<sup>10</sup>

#### 5.1. Policy objective 1: to use resources more efficiently

**Try to avoid displacing private funding with public funding** - A key concern in any statesupported or co-financed training scheme is to try to avoid paying for something that private individuals or companies would have paid for anyway in the absence of state support.

**Rationalise funding** – Both the Samoa and PNG reports noted that efficiencies could be created where funding was rationalised, including via incentives to providers to merge and reduce overheads, or by creating an overarching body to oversee TVET financing.

**Encourage an integrated training market –** similar to the example of the Vanuatu TVET Sector Strengthening Program (mentioned above), an approach worth considering is for a government to shift from using public finance only to fund public TVET to being a purchaser on behalf of trainees and communities – and to view the training providers in the market, public and private, in an integrated way; such that public funds could support both public and private providers. Various financing mechanisms can be used to encourage an integrated training market, including, for example, the use of grants, vouchers, or scholarships that are available on an equal basis to both public and private providers.

At the national level the establishment of a national training fund, or a national skills development fund, can also encourage the development of an integrated market (Johanson, 2009). National training funds are typically financed by enterprise levies, but may also be based on public subsidies or donor financing. If used strategically, national training funds can help to orientate entire TVET systems in the direction of agreed national priorities. Johanson (2009) identifies three types of training fund:

<sup>&</sup>lt;sup>10</sup> Drawing partly on a framework in ADB (2014).

- Pre-employment training funds to create a supply of well-trained individuals in the labour market;
- Enterprise training funds to increase the incidence of training within firms;
- Equity training funds to train specified target beneficiaries (e.g. unemployed, women, youth, those in the informal sector).

The disbursement mechanisms for national training funds depend on the type of fund. For example, pre-employment and equity training funds might typically have disbursement windows that are able to fund various quality-assured providers, including public and private training institutions, and specified target beneficiaries. The most effective training funds are those that are largely autonomous bodies with strong employer and worker representation, and are soundly managed with clear and transparent allocation mechanisms (Johanson, 2009; Ziderman, 2002). Sectoral, or industry-specific, training funds are an alternative to national (centralized) funding models (Johanson, 2009), and may be more suited to contexts where a particular sector is dominant (e.g. tourism, extractive industries) and employers want a more sector-specific arrangement.

Performance-based financing to stimulate an effective use of public resources -Performance-based financing rewards providers for their actual performance (Salmi, 2013), and may be input-based (e.g. per student financial rewards give incentives to increase the number of students), output-based (e.g. completion rates), or outcome-based (e.g. proportion of trainees in employment after six months); non-performance-based financing include financial transfers to providers based on historical expenditure, where there is no incentive or disincentive to perform or under-perform. Several Pacific Island countries already used input-based financing approaches (see 4.2), but where the providers are unable to retain the funds from tuition fees, the incentive to providers to enrol more students is taken away. Several of the country studies (Kiribati, Samoa, Tonga) called for there to be more financing emphasis on results (e.g. training outputs, students' employability). However, in many Pacific Island countries, the policy focus seems to be more about distributing funds more equitably between providers, rather than allocating based on results. Moreover, performance-based financing (especially output- and outcome-based approaches), require reliable information systems (ADB, 2014), as well as greater provider capacity and autonomy. Such conditions may not be present in Pacific Island countries.

#### 5.2. Policy objective 2: to raise relevance

**Restructure public provision** – So that public providers have more autonomy, more incentive to respond to local demand, more incentive to perform. For example, input-based financing approaches with the provider allowed to retain tuition fees, or incentives to generate and retain income through the sale of goods and services at the provider level.

**Expansion of private provision of TVET -** Governments could encourage such an expansion, for example by:

- Making TVET scholarships available across the spectrum of quality-assured public and private providers on equal terms;
- Offering tax incentives to promote the growth of private TVET;
- Setting up a competitive fund with grant windows open to both public and private providers;

- Providing indirect public financing for private TVET;
- Encouraging public-private partnerships (Palmer, 2015).

Align TVET scholarships to labour market needs – As noted in the Solomon Islands study, increase the number of TVET scholarships that are linked to labour market needs (Bateman et al., 2014a).

#### 5.3. Policy objective 3: to raise quality

**Create more reliable funding streams for expenditures related to the quality of TVET –** as noted in the PNG report, more predictable flows for expenditures such as the development of occupational standards, training packages, curriculum and teacher training are needed (Horne et al., 2014).

**Use competitive funds to stimulate innovation and quality improvement** (ADB, 2014: 44), both public and private TVET institutions should be able to compete for funds.

#### 5.4. Policy objective 4: to increase access

**Increased public funding of TVET is an obvious way to increase access** (ADB, 2014: 45), either through the supply of more places, or targeted fee subsidies. While this may not be possible in some Pacific Island countries, the potential for greater government funding was suggested in the Fiji report (Maglen et al., 2014).

**Private provision is a powerful way to increase access among those able to afford it.** 'Private provision reduces pressure on public funding to pay for expansion of enrolments.' (ADB, 2014: 45).

**Input-based financing mechanisms** with the provider allowed to retain tuition fees - As noted above, these can provide powerful incentives to increase enrolment.

#### 5.5. Policy objective 5: to promote equity

Improving access to and completion of a quality primary and secondary school education will help make access to post-secondary TVET programs more equitable. International experience shows that the most disadvantaged young people do not make it into formal TVET programs as they drop out of formal schooling before entry. The PNG study noted that, in part, access for women to TVET 'is an issue which needs to be addressed earlier in the educational cycle – fewer women obtain the school grades needed to enter the TVET system' (Horne et al., 2014: 145). For many, affirmative actions in TVET (e.g. scholarships) may come too late to assist disadvantaged students (ADB, 2014: 46). Policy makers interested in promoting equity in TVET, should therefore also examine financial support policies for disadvantaged students at lower levels in the education system.

Allocate funds directly to students rather than institutions. Financial transfer mechanisms that allocate resources to institutions are less effective in closing equity gaps because the institutions rather than the individuals receive the funds. In contrast, programs that support students and their families directly are more likely to be effective in increasing

participation (ADB, 2014: 46). Giving vouchers to disadvantaged individuals to use in a training institution of choice is one way to do this. In contexts where vouchers are not feasible, incentivising TVET providers to enrol/graduate disadvantaged students would be the next best option.

Enhance targeting of disadvantaged students to help them to "catch up." This might be through:

- Better targeted scholarships / fee waivers targeted financial support has a key role to play in mitigating disadvantage, but the current outreach of scholarships in Pacific Island countries is often limited resulting in sometimes high direct and opportunity costs (see 4.4). Policy makers might consider reviewing their approaches to scholarships, including introducing more targeted approaches based on verifiable criteria, where these do not exist. Several country reports called for greater use of scholarships, for example to encourage more females into apprenticeships (PNG), as well as for better alignment with labour market needs (Tonga) (Bateman et al., 2014b; Horne et al., 2014).
- Student loans for TVET Several country studies recommended student loans, for example with payment from post-graduation earnings (Kiribati, Samoa) or mortgage-type loans on a pilot basis (Vanuatu) (ACER, 2014a; Maglen et al., 2013; Majumdar and Teaero, 2014). While the PNG report comments that loans are an option in principle, as noted above (4.4), the same report also cited the experience of a defunct student loan scheme for tertiary level TVET that was terminated because repayments could not be recovered. Indeed, the administrative and, for income-contingent loans, the tax collection capability in Pacific Island countries may limit the use of this mechanism.
- Work and study options As recommended in the Vanuatu report (ACER, 2014a), increasing opportunities for concurrent work and study would help some disadvantaged individuals to access TVET, as they would be able to pay their way through the course.

#### 5.6. Policy objective 6: to mobilize resources

#### Stimulate private enterprise investment in TVET (see Palmer, 2015 for details), e.g.

- Enterprise training levies Introducing training levies is probably not currently feasible in the five countries in the study where they are not done now (Fiji and PNG).
- Tax incentives and education.
- Education and training leave in companies.
- Stimulating in-kind private sector resources.
- Training vouchers for companies.
- Private sector corporate social responsibility towards TVET.
- Private investment in TVET capital projects.
- Payback clauses to encourage enterprise-financed employee training.
- Public providers can set out to increase contributions from industry by putting on full-cost courses

**Retention of internally generated funds at the level of the TVET institution –** the sale goods and services, where revenue is retained is another viable option (see Palmer, 2015).

**Supply-side financing through tuition fees –** Several of the country studies (Fiji, Tonga, Vanuatu) noted that there is only limited scope to increase TVET funding through enrolment

fees, and that doing so (in the absence of increased targeted financial support) would have negative equity implications for disadvantaged groups. Even in Kiribati, where student tuition fees contribute only 1% of the resources for the TVET system (Annex 1), the country report noted that raising additional resources for TVET through cost sharing with trainees was not feasible. In PNG, however, the Technical and Business College (TBC) appear to be doing well on fee income (it accounts for 61% of revenue – Annex 2), and the report suggests that the levelling of enrolments in TBCs has more to do with capacity constraints than lack of demand for places at present fee levels. It also implies more could be raised by deregulating TBC fees, tempered by additional needs-based scholarships (Horne et al., 2014).

## 6. Creating the Right Environment for Sustainable Financing

At the start of this paper, it was noted that sustainable financing for TVET is not only about ensuring that sufficient and predictable revenue streams exist to fund TVET, but also about how financing is strongly linked to policy objectives of making TVET systems more equitable, demand-driven, responsive and relevant. Moving towards a situation of sustainable financing for TVET requires that governments work towards creating the kind of environment that will help this happen. This includes (but is not limited to), for example:

- Establishing national TVET coordination mechanisms, where they don't exist, that can coordinate demand and supply, and financing mechanisms to achieve specified policy objectives.
- Ensuring the private sector has control of allocating funds raised from private sector contributions. To get the private sector to contribute, they need to have control.
- **Decentralising governance of providers** where full decentralisation is not possible, partial devolution, including for example the ability to retain self-generated revenue might be considered.
- Strengthening TVET quality assurance and accreditation needed to facilitate the functioning of some financing mechanisms (e.g. vouchers or allowing private provider to compete for public funds).
- Improving TVET information systems essential for most financing mechanisms. For example careful targeting of financing mechanisms at specific beneficiary groups can help to reduce the percentage of individuals or companies who would have taken the training anyway and paid for it themselves. For careful targeting to take place, it is essential to know which groups (categories of people or enterprises) are currently under-investing in training. Targeting does not only have to relate to which groups or categories of people or enterprises should be the priority, but it can also refer to which types of skills should be the priority. To know this, it is necessary to have adequate labour market information systems.
- **Improved tax collection systems** Tax collection capability is particularly important for payroll levies, income contingent loans, and tax incentives to companies and individuals.

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	Fiji (i)		Kiribati (ii) PNG (iii)		Samoa		Solomon Islands (iv)		Tonga (v)		Vanuatu (vi)		Total								
		2012-13		20	012		2012			2011-12		20	)12	201	1-12		2012				
	US\$ m	% all sources	% all sources excl APTC	US\$ m	% all sources	US\$ m	% all sources	% all sources excl APTC	US\$ m	% all sources	% all sources excl APTC	US\$ m	% all sources	US\$ m	% all sources	US\$ m	% all sources	% all sources excl APTC	Total US\$m	% all sources	% all sources excl APTC
Government grant	15.61	26.6	33.0	2.25	30.5	4.88	22.7	30.8	2.19	25.1	62.6	8.99	53.6	1.62	34.2	3.54	30.8	42.4	39.1	30.2	37.6
of which NUS of which SINU									2.11	24.2	60.3	6.79	40.5								
Official Development Assistance	16.11	27.5	10.1	5.04	68.3	5.64	26.3	0.0	5.23	59.9		1.78	10.6	2.14	45.1	6.68	58.1	42.3	42.6	33.0	16.6
of which APTC	11.31	19.3				5.64			5.23	59.9						3.15	27.4		25.3	19.6	
of which FNU	3.47	5.9	7.3																3.5	2.7	3.3
of which VTVETSSP																2.1	18.3	25.1	2.1	1.6	2.0
of which other	1.33	2.3	2.8	5.04								1.78		2.14		1.43	12.4	17.1	11.7	9.1	11.3
Student fees	20.63	35.2	43.6	0.09	1.2	9.08	42.3	57.4	0.75	8.6	21.4	4.81	28.7	0.52	11.0	0.79	6.9	9.5	36.7	28.4	35.3
of which FNU	18.74																		1		
of which NUS									0.6	6.9	17.1								1		
of which SINU												3.79	22.6						1		
of which VIT																0.71	6.2	8.5	'		
Private resources	6.27	10.7	13.3	0	0.0	1.87	8.7	11.8	0.56	6.4	16.0	1.18	7.0	0.46	9.7	0.49	4.3	5.9	10.8	8.4	10.4
of which																			1		
Church and NGO donations						0.13	0.6	0.8	0.18	2.1	5.1	0.12	0.7	0.18	3.8		-	-	0.6	0.5	0.6
Industry contribution	5.85	10.0	12.4			1.3	6.1	8.2	0.03	0.3	0.9						-	-	7.2	5.6	6.9
Sale of services etc	0.06	0.1	0.1			0.44	2.0	2.8	0.14	1.6	4.0	0.32	1.9	0.15	3.2	0.18	1.6	2.2	1.3	1.0	1.2
Other sources	0.36								0.21	2.4	6.0	0.74	4.4	0.13	2.7	0.31	2.7	3.7	1.8	1.4	1.7
Total all sources	58.62	100.0		7.38	100.0	21.47	100.0		8.73	100.0		16.76	100.0	4.74	100.0	11.5	100.0		129.2	100.0	
Total all sources, excl. APTC	47.31		100.0	7.38		15.83		100.0	3.5		100.0	16.76		4.74		8.35		100.0	103.9		100.0

#### Annex 1. Funding of TVET provision in Fiji, Kiribati, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu

(i) The Fiji Data only include funding for FNU TVET (and exclude funding for degree programs); figures were calculated assuming TVET courses are allocated pro-rata funding, that is, 72.4 percent of the FNU total (see Fiji Report tables 8.11 and 12.1). The 'industry contribution' for the Fiji data is from the proceeds of the Fiji Training Levy.

(ii) The Kiribati data includes only the Kiribati Institute of Technology, Marine Training Services and Fisheries Training Services, and excludes providers offering training in nursing or teaching that are listed as TVET providers in the country study.

(iii) The PNG figures are based on data collected from 7 private providers, 5 technical and business colleges, and 7 vocational training centres; out of more than 200 providers in PNG. An estimation of total funding for all providers has not been attempted here due to lack of data on what weight to give the data collected. E.g. the 7 private providers surveyed (out of about 200) are reported to be some of the larger ones. The PNG data in the table above will therefore be an underestimate, and more attention should be paid to the proportions than numerical totals. For PNG, the 'industry contribution' is the levy revenue, calculated based on a 4 year average (2011-14) due to the 2012 figure (US\$1.8m) being so much higher than other years.

(vi) The Solomon Islands study only managed to survey 14 of the 41 Vocational Rural Training Centres (VRTC), with the data recorded in Table 12.1 of the Solomon Islands country report. The above table has incorporated an estimate of the 41 VRTCs based on a proportional scale up the 14 surveyed VRTCs.

(v) The Tonga study was not able to obtain all the required data from Tonga Institute of Higher Education and from private providers, so the Tonga data here underestimates funding from donors, student fees, sale of goods and other income.

(vi) The Vanuatu study did not collect data for the non-government sector (e.g. Rural Training Centres and church/mission providers). Therefore, these data represent an incomplete picture and, as such, are an under-estimate of the total funding for TVET provision in Vanuatu.

-Private resources 'Other sources' are assumed to be private resources, but this was not fully clear from the data collected.

-APTC is treated separately because it is a regional provider with funding arrangements separate from national systems. At the time of the study APTC did not have campuses in Kiribati, the Solomon Islands or Tonga.

-Key: APTC - Australia-Pacific Technical College; FNU - Fiji National University; NUS - National University of Samoa; SINU - Solomon Islands National University;

TIST - Tonga Institute of Science and Technology; VIT - Vanuatu Institute of Technology; VTVETSSP - Vanuatu TVET Sector Strengthening Program

-Conversion factor from local currency to USD: Fiji Dollar FJD 1 = US\$ 0.53; Kiribati AUD 1 = US\$ 0.97; PNG Kina PGK 1 = US\$ 0.39; Samoan Tala WST 1 = US\$ 0.43; Solomon Islands Dollar SBD 1 = US\$ 0.13; Tonga Pa'anga TOP 1 = US\$ 0.53; Vanuatu Vatu VUV 1 = US\$ 0.0105

Source: derived from country reports and ACER (2014b)

	Government grant	ODA	Tuition fees	Church / NGO	Sale of goods / services	Other (including training levy)
Fiji	27	28	35	0	0.1	12
Fiji National University	25	9	50	0	0.2	16
MoE vocational schools	87	0	13	0	0	0
Ministry of Youth and Sports TVET providers	92	0	0	0	0	8
Other government TVET providers	100	0	0	0	0	0
APTC	0	100	0	0	0	0
Private TVET providers	32	20	33	0	0	15
PSC scholarships	51	49	0	0	0	0
Kiribati	31	68	1	0	0	0
Kiribati Institute of Technology	14	84	1	0	0	0
Fisheries Training Centre	38	62	0	0	0	0
Marine Training Centre	57	41	2	0	0	0
Papua New Guinea	23	26	42	1	2	6
Technical and Business Colleges	34		61	0	2	4
Vocational Training Centres	71	0	26	0.3	2	0
Private TVET providers	1	4	85	0	8	3
Samoa	25	60	9	2	2	3
National University of Samoa TVET	71	0	20	0	4	5
APTC	0	99.9	0	0	0.1	0
Private TVET providers	14	1	27	32	5	20
Solomon Islands	54	11	29	1	2	4
Solomon Islands National University	62	0	35	0	1	2
Catholic Church-Related VRTCs	65	1	29	4	1	1
Other Church-Regulated VRTCs	50	24	18	3	1	4
Provincial VRTCs	64	3	22	0	3	9
Private TVET providers	0	0	100	0	0	0
Tonga	34	45	11	4	3	3
Tonga Institute of Science and Technology	70	12	15	0	0	3
Tonga Institute of Higher Education	100	0	0	0	0	0
Free Wesleyan Church private TVET providers	37	1	34	14	9	5
Catholic Church private TVET providers	30	12	14	12	15	15
Vanuatu	31	58	7	0	2	4
Vanuatu Institute of Technology	47	0	33	0	8	12
Vanuatu Maritime College	87	0	8	0	0	5
Rural Training Centers	-	-	-	-	-	-
APTC	0	100	0	0	0	0
Scholarships	0	100	0	0	0	0

#### Annex 2. Funding of TVET provision (%), by type of funding, by county (selected)

(i) Those VRTCs run by the church are considered nongovernmental.

Source: ACER, 2014a; Bateman et al., 2014a; Bateman et al., 2014b; Horne et al., 2014; Maglen et al., 2014; Maglen et al., 2013; Majumdar and Teaero, 2014.

	Fiji (2012)	Kiribati (2013)	PNG (2012)	Samoa (2012)	Solomon Islands (2012-13)	Tonga (2011)	Vanuatu (2011-12)
Number	107	2	200*	4	35	10	39*
% CSO/church non-profit	-	50%	-	75% (3/4)	97% (34/35)	80%*	25%*
Total private enrolment	3,415*	-	7,139* (iii) 6,482* (ii)	393 in non-profit 292 in for-profit	4,306	1,057 in non-profit 294 in for-profit	1,181
Average enrolment per provider	131	-	35* (iii) 75% have <5 trainees	171	265* (vi)	155	38* (Rural Training Centers only)
% female enrolment	35%*	-	38%* (ii)	-	25%*	-	30%
% private of total TVET enrolment	51% (cert. 1&2 level) 12% (of all TVET)	-	-	46% (at cert. 1&2 level)	-	58%	-
Range of courses (% enrolment in these areas)	26% trade and technician skills; 38% agricultural programs; 11% IT skills; 8% service skills; 17% other *	-	85% business, ICT* (ii)	28% mechanics and metal work; 28% IT; 21% pre- trade life skills; 8% food processing (2010)	29% carpentry; 25% agriculture; 21% mechanics; 16% life skills	-	-
Level of courses	Basic (approximately Cert. 1 and 2)	Certificate, diploma and a degree qualification	Basic, Certificate, Diploma	Cert. 1 and 2	Basic (approximately Cert. 1 and 2)	Certificate, Diploma	-
Total number annual TVET graduates	2,964 (2012)	-	5,131 (2012) (ii)	226 (2010)	-	-	-
Funding sources	33% tuition fees; 32% government grant; 20% development assistance; 15% unspecified	-	100% tuition fees; 13% of fees paid by scholarship providers or employers	32% church support; 27% tuition fees (iv); 14% government grant; 5% sale of goods/services; 1% donors; 21% unspecified	Church-based providers: 50-65% government support (staff salary and grant); 18-29% tuition fees; 1-24% donor support. Private for-profit: 100% tuition fees* (v)	Church-based providers: 35% government; 29% tuition fees;13% church grant; 11% sale of goods/services	-
Expenditure areas	32% personnel 69% MOOE (i)	-	-	64% personnel 10% MOOE	Church-based providers: 62-85%	Church-based providers: 46%	-

## Annex 3. Summary of private TVET providers by country (2011-13)

Fiji (2012)	Kiribati (2013)	PNG (2012)	Samoa (2012)	Solomon Islands	Tonga (2011)	Vanuatu (2011-12)
				(2012-13)		
0% capital			18% capital	personnel; 11-34%	personnel; 54%	
			8% staff	MOOE; 1% staff	MOOE*	
			development	development; 1%		
				capital.		
				Private for-profit:		
				31% personnel;		
				66% MOOE; 4%		
				capital * (v)		

- missing data

\* estimate

MOOE = maintenance and other operating expenses

(i) due to rounding

(ii) data refers only to those registered training organisations sampled (22 out of >200).

(iii) Estimated from Horne et al., 2014: Table 5.14 and Annex 4.

(iv)% revenue from tuition fees varies greatly from 10-12% among non-profit church providers to 80% in the for-profit provider.

(v) based on 1 private for-profit provider only.

(vi) based on data from 7 church-based providers and 1 private for-profit provider.

Source: ACER, 2014a; Bateman et al., 2014a; Bateman et al., 2014b; Horne et al., 2014; Maglen et al., 2014; Maglen et al., 2013; Majumdar and Teaero, 2014.

	Fiji (2012)	Kiribati (2013)	PNG (2012)	Samoa (2012)	Solomon Islands (2012-13)	Tonga (2012)	Vanuatu (2012)
Government central payment of TVET teacher salaries in public TVET providers	Yes – MoE and Ministry of Youth and Sports providers No - Fiji National University	NS	Yes - Technical and Business Colleges, Vocational Training Centers and TVET at tertiary level: staff paid from national pay-roll, not the center or college	No – National University of Samoa pays staff directly	Yes - church-based non-profit private providers; Solomon Islands National University No – some church- based providers still pay own staff	Yes - For public providers (Tonga Institute of Science and Technology, Tonga Institute of Higher Education)	Yes - For public providers
Operating grant from government for non-teaching	Yes – MoE and Ministry of Youth and Sports providers; Fiji	Yes - Kiribati Institute of Technology, Marine Training Center,	Yes - Technical and Business Colleges and Vocational Training	Yes – private TVET providers, but low and not as dedicated funds	Yes – church- based non-profit private providers; Solomon Islands	Yes - public providers (Tonga Institute of Science and Technology,	Yes - public providers
costs	National University; some registered non-profit private providers	Fisheries Training Center	Centers	Yes - National University of Samoa	National University No – for-profit private providers	Tonga Institute of Higher Education), church providers	No – private (rural training centers)
Tuition fees	Yes – public providers (Fiji National University, MoE providers) Yes- private providers	Yes – public providers (Kiribati Institute of Technology, Marine Training Center), but not retained Yes – private	Yes – public providers (Technical and Business Colleges, TVET at tertiary level) Yes - private providers	Yes – public providers (National University of Samoa) Yes – private providers	Yes – Vocational Rural Training Centers (including church-based, provincial); for- profit private provider	For public providers (Tonga Institute of Science and Technology, Tonga Institute of Higher Education): paid direct to Ministry, returned to general revenue	Yes – public providers, but not retained Yes - private (rural training centers)
	Youth and Sports providers, APTC	No - Fisheries Training Center	No - Vocational Training Centers are now fee free		Islands National University; government sponsors all students.	For church- providers: paid to provider, forwarded to Diocese	

## Annex 4. Summary of TVET funding mechanisms by country

	Fiji (2012)	Kiribati (2013)	PNG (2012)	Samoa (2012)	Solomon Islands (2012-13)	Tonga (2012)	Vanuatu (2012)
Materials / project fees	NS	NS	Yes - Vocational Training Centers	NS	NS	Yes, retained.	NS
						providers, returned if not used.	
Funds from commercial activity	Yes – retained by MoE and private providers	None recorded, but if done, income is not retained.	Yes - Technical and Business Colleges and Vocational Training Centers	Yes	Yes – Vocational Rural Training Centers	For public providers: Possible but not done, returned to general revenue	For public providers: Possible but returned to general revenue
					No - Solomon Islands National University	For church- providers: Yes, retained	
Levy-based training fund	Yes - levy-grant mechanism	NS	Yes - exemption- based levy, but some features of levy-grant	NS	NS	NS	NS
Scholarships	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Student loans	Yes – but limited to 40 economically disadvantaged students.	NS	Yes – but limited mainly to students of Engan descent	NS	NS	NS	NS
Tax reductions/ Tax Rebates	NS	NS	NS	NS	NS	Yes	NS
Vouchers	NS	NS	NS	NS	NS	NS	NS
Training leave	NS	NS	NS	NS	NS	NS	NS

NS - means that this mechanism was not stated in the country reports. Source: ACER, 2014a; Bateman et al., 2014a; Bateman et al., 2014b; Horne et al., 2014; Maglen et al., 2014; Maglen et al., 2013; Majumdar and Teaero, 2014.



Annex 5. Summary diagram of TVET financing flows in Tonga

Source: Bateman et al. (2014b), adapted by that author from Ziderman (2003). Key: TSP1 - TVET Support Program Phase 1; TIHE - Tonga Institute of Higher Education; TIST - Tonga Institute of Science and Technology