

**KWPF**  
KOREA-WORLD BANK  
PARTNERSHIP FACILITY

**FINANCING TVET IN THE EAST ASIA  
AND PACIFIC REGION**

**Current Status, Challenges and Opportunities**

By

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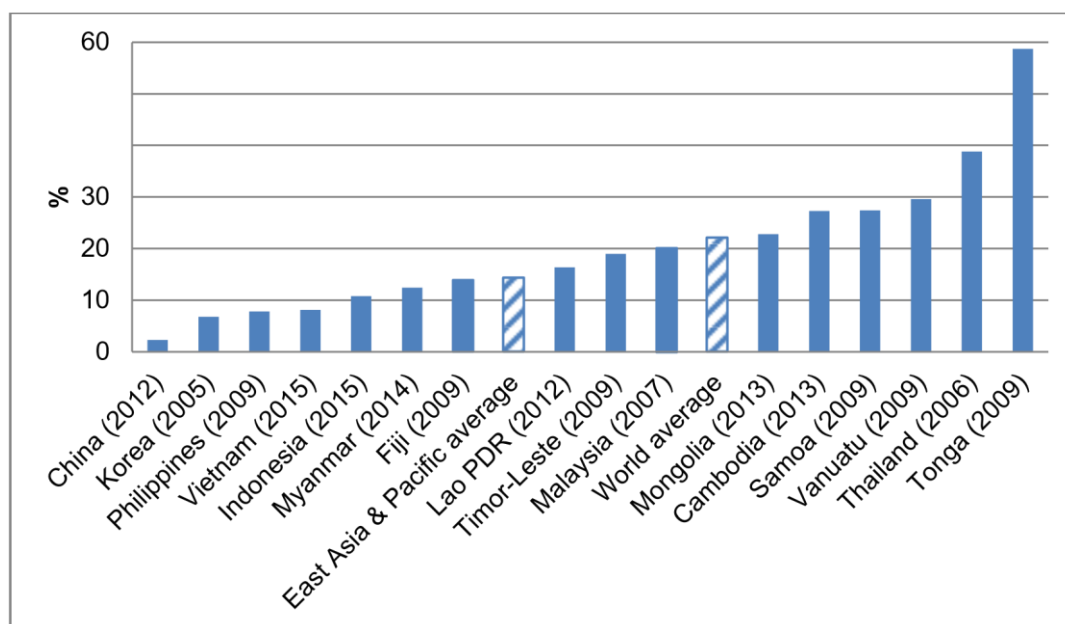
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## Introduction

The East Asia and Pacific (EAP)<sup>1</sup> region is very diverse and there is a wide range in the extent to which firms across these countries identify the education level of their workforce as a major constraint (Fig 1). However, developing skills, including vocational and technical skills, and enhancing employability are clear strategic objectives in the EAP region. Countries in the region face strong pressures to expand their technical and vocational education and training (TVET) systems and enhance their quality, at the same time as facing spending pressures on basic and higher education. As this demand increases, the need for sustainable financing for TVET becomes more urgent; this is not only about ensuring that sufficient and predictable revenue streams exist to fund training programs, but perhaps just as importantly about how financing mechanisms themselves can be strongly linked to achieving policy objectives of making TVET systems more accessible, equitable, efficient, demand-driven, responsive and relevant.

**Fig 1. Percentage of firms in East Asia and Pacific identifying an inadequately educated workforce as a major constraint**



Source: enterprisesurveys.org (accessed 15.05.16 & 22.05.16)

This brief aims to address the following key questions with regard to TVET financing in the EAP region:<sup>2</sup>

- Where does TVET funding come from?
- How are TVET funds spent?
- How are TVET funds currently allocated?
- What role can TVET financing play in achieving TVET and national policy objectives?
- How can countries create the right environment for TVET financing?

<sup>1</sup> The EAP Region here refers to: Cambodia, China, Indonesia, Korea, Lao PDR, Malaysia, Mongolia, Myanmar, Pacific Islands, Papua New Guinea, Philippines, Singapore, Thailand, Timor-Leste and Vietnam

<sup>2</sup> The framework of this brief draws on two previous reports by the author that covered TVET financing in the Pacific Island Countries only (cf. Palmer, 2015a; 2015b). The analysis has been significantly expanded to cover the whole EAP region.

## Where does funding come from?

TVET funding typically comes from three main sources: government budgets, student fees, and the private sector. In addition, other sources might include employee contributions, private donations, income generating activities and external assistance (e.g. Official Development Assistance (ODA) and official loans). Funding portfolios of TVET providers across countries and across types of provision varies, but in general **for the majority of public TVET providers in the East Asia Pacific Region, government funding is the most significant source of funds; while student fees are the most significant source of funds for private providers.** Meanwhile, training for employees in private firms is almost entirely paid for by that firm. A few illustrative examples follow below.

In the Pacific Island Countries (PICs), excluding the Australia-Pacific Technical College (APTC),<sup>3</sup> government funding makes up 38% of funding followed by tuition fees (35%), ODA (17%) and private resources (10%) (Table 1).

**Table 1. Shares in TVET funding for institutional public and private TVET – Average of Fiji, Kiribati, Papua New Guinea, Samoa, the Solomon Islands, Tonga and Vanuatu**

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

Source: Palmer (2015a)

Across the countries in the EAP region, TVET resources are mobilized differently between private and public TVET providers. In Fiji, Papua New Guinea and the Solomon Islands, the majority of funding for private TVET providers comes from student fees; while in Samoa private TVET providers receive the bulk of their funding from NGOs and the church, and in Tonga, Catholic church private TVET providers receive the bulk of their funds from public grants (Palmer, 2015a). In Mongolia public vocational schools, almost all (95%) funding comes from government budgetary allocations (Table 2).

<sup>3</sup> The APTC distorts the relative importance of ODA for the majority of TVET providers.

**Table 2. Shares in TVET funding for institutional public vocational schools in Mongolia (2014 data)**

	% all sources
<b>Student fees</b>	1-2
<b>Government grant</b>	95
<b>Private resources</b>	1-3
<i>of which</i>	
<i>Sale of services etc</i>	1-3

Source: World Bank (2016)

In the Philippines, public TVET providers such as TESDA (Technical Education and Skills Development Authority) training centers, TESDA-administered schools mobilize almost 95% of their resources from TESDA. Public universities and colleges offering non-degree TVET programs are financed by the Department of Education and local government units' (LGUs) resources as well as students' fees. On the other hand, private TVET providers receive limited resources from TESDA (4-6%), but they raise most of their funds from student fees. The government subsidies for private TVET operators are limited (about 5% on average), but more significant for NGOs (Table 3; Péano et al., 2008; World Bank, 2016a).

**Table 3. Source of funds for TVET providers in the Philippines (percentage), 2002**

TVET providers	TESDA	LGUs	Other govt	ODA	Subtotal (govt)	Trainees	NGOs	Companies	Income generation	Subtotal (private)	
Community based - LGU	1.3	88.8	4.3		94.4	0.5	3.2	0.1	1.9	5.7	100
TESDA regional centers	61.6	1.5		27.7	90.8	4.6			4.6	9.2	100
TESDA provincial centers	94.7			0.9	95.6	3.5	0.9			4.4	100
TESDA schools	94.1		0.1	2.1	96.3	2.2	0.7		0.8	3.7	100
Public HEIs		36.4	42.8		79.2	20.4			0.4	20.8	100
<i>Subtotal (public providers)</i>	<i>26.4</i>	<i>44</i>	<i>21.6</i>	<i>1</i>	<i>93</i>	<i>4</i>	<i>1.7</i>	<i>0</i>	<i>1.3</i>	<i>7</i>	<i>100</i>
NGOs	13.7	3.1			16.8	1.1	62.1	3.2	16.8	83.2	100
Private TVET	3.8	0.1	0.1		4	68.3	13.3	6.7	7.7	96	100
Private HEIs	5.6	0.3			5.9	74.8	17.3	0.3	1.7	94.1	100
<i>Subtotal (private providers)</i>	<i>4.8</i>	<i>0.3</i>	<i>0</i>		<i>5.1</i>	<i>69.7</i>	<i>16.1</i>	<i>3.8</i>	<i>5.3</i>	<i>94.9</i>	<i>100</i>

Source: Péano et al. (2008)<sup>4</sup>

Legend: LGU - local government unit; TESDA - Technical Education and Skills Development Authority; HEI – Higher education institutions.

## Government funding via grants and direct payments

In most EAP countries, government funding is the most significant source of funds for public TVET providers. Indeed, in China (Xinjiang Province) ‘the government treats private providers equally with public institutions in terms of... government training contracts, financial subsidies, and student grants’ (World Bank, 2014: 24). In addition to China, private TVET providers in several other EAP countries are in receipt of public funding, including Fiji, PNG, Samoa, Solomon Islands, Tonga (Palmer, 2015a), as well as the Philippines (ILO, 2016).

## TVET funding from Official Development Assistance

### Official Development Assistance

Between 2002-2014, Official Development Assistance (ODA) to vocational training<sup>5</sup> in East Asia and the Pacific increased overall by 133%, from US\$53 million in 2002 to US\$124 million in 2014.<sup>7</sup> East Asia has significantly more ODA flows than the Pacific, as can be seen in Fig 2, where the graph for ODA to East Asia mirrors that for East Asia and Pacific. Fig 2 also shows a peak in ODA to vocational training in the Pacific between 2007-11; much of which was allocated to the Australia-Pacific Technical College (APTC). For country detail, please refer to Annex (Table A1).

Over the period 2002/3-2013/14,<sup>6</sup> there have been increases in ODA disbursements to vocational training in the following East Asian countries:

- Cambodia: US\$ 1.3m to US\$ 9.5m (+631%)
- China: US\$ 19m to US\$ 27.1m (+43%)
- Lao PDR: US\$ 1.2m to US\$ 14.7m (+1,125%)
- Mongolia: US\$ 0.3m to US\$ 9.7m (+3,133%)
- Myanmar: US\$ 0.1m to US\$ 9.1m (+9,000%)
- Timor Leste: US\$ 0.3m to US\$ 3.4m (+1,033%)
- Vietnam: US\$ 8.5m to US\$ 18.6m (+119%)

In particular, Cambodia, Lao PDR, Mongolia, Myanmar and Timor Leste have seen significantly higher ODA disbursements for vocational training in recent years compared to the early 2000s. In Lao PDR, ODA is estimated to make up about one quarter of the budget

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<sup>4</sup> This table excludes TVET provision provided by companies directly, since these are 99.9% funded by companies directly, and would have skewed the significance of company funding to other TVET providers in the table. The subtotal for private providers has therefore been recalculated by the author.

<sup>5</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, 2014a: 2). There are great methodological challenges to looking at ODA to TVET via the DAC CRS (cf. King and Palmer, 2011; Palmer, 2015c). <sup>7</sup> The financial data in this review refers to disbursements, rather than commitments, as the former ‘provide a more accurate reflection of the resources actually transferred from donors to recipients in a given year’ (UNESCO, 2011: 109).

<sup>6</sup> Two year average disbursements 2002-03 and 2013-14.

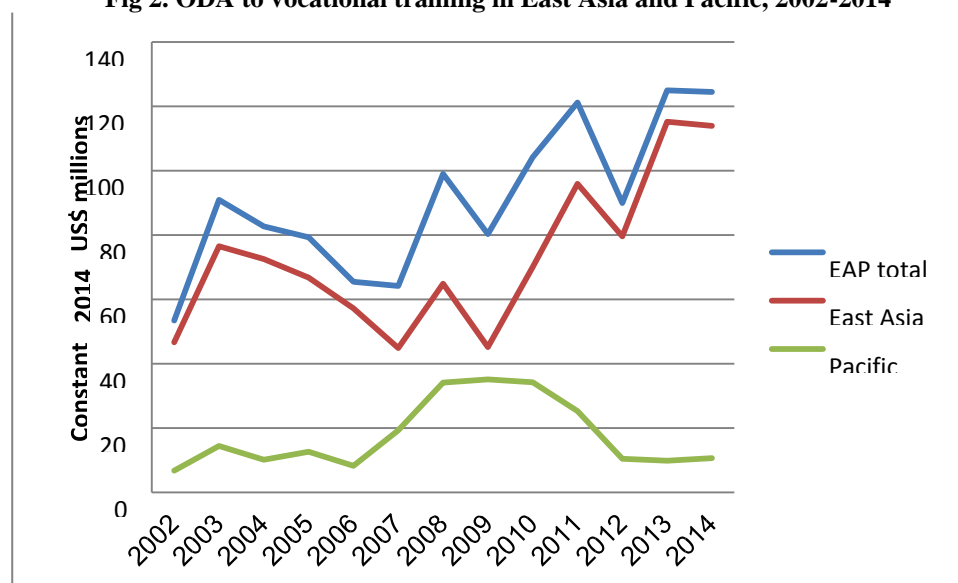
2016-2020 (Leuang, 2016), indicating significant reliance on external funds to achieve national objectives.

Over the same period (2002/3-2013/14), there have been significant decreases in ODA disbursements to vocational training in three East Asian countries, signaling the decreased importance of this type of funding for national TVET programs:

- Indonesia: US\$ 21m to US\$ 14m (-33%)
- Malaysia: US\$ 3.3m to US\$ 0.3m (-91%)
- Thailand: US\$ 2m to US\$ 0.7m (-65%)

The only East Asian country that appears to have remained relatively constant over the period 2002-2014 (albeit with a peak 2003-2006 – see Annex) is the Philippines, which had ODA disbursements of US\$ 4.4m in 2002/3 and US\$ 3.7m in 2013/14.

**Fig 2. ODA to vocational training in East Asia and Pacific, 2002-2014**



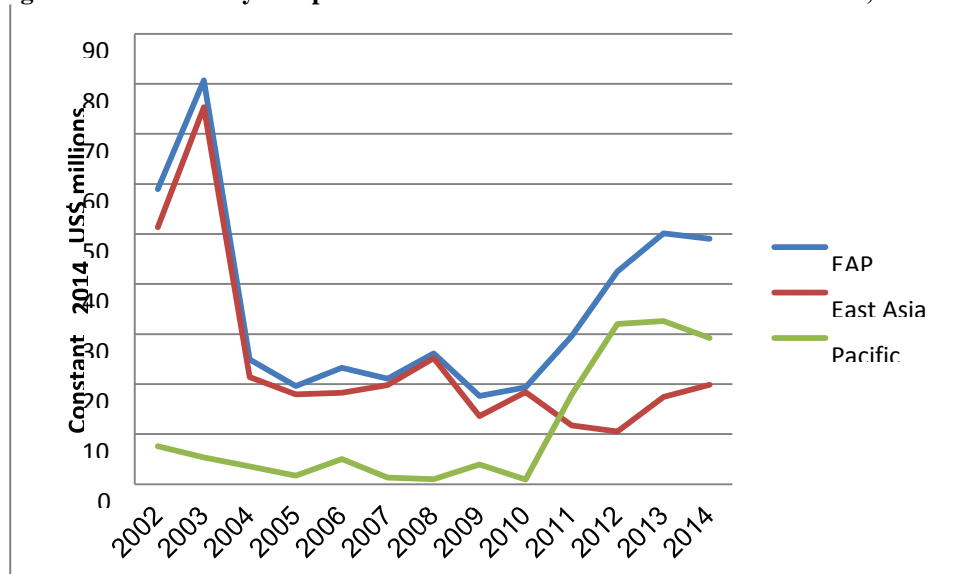
Source: calculated by author, based on data from <http://stats.oecd.org>

The ODA story for the Pacific Island Countries (PICs) over the period 2002-2014 can be largely summed up as:

- Significant non-country specific regional disbursements over the period 2007-11 averaging US\$ 19m per annum for the APTC, with significantly lower ODA support 2002-2006 and 2012-2014.
- Low levels of overall ODA funding to PICs over the 2002-14 period, with the exception of Fiji (2010-11), Kiribati (2012-14), PNG (2003-4, 2010-11), Samoa (2005-6, 2010-11, and 2014), the Solomon Islands (2011, 2013), Tonga (2011-12), and Vanuatu (2002-04, 2009-14).
- In 2013-14, the PICs receiving the most amount of ODA for vocational training included Fiji, Kiribati, PNG and Vanuatu.

Regarding ODA support to tertiary and professional-level TVET<sup>7</sup> in the EAP region over the 2002-2014 period, these flows started out at a comparable level to ODA support to pre-tertiary vocational training: the average annual disbursement for the EAP region in 2002-3 was about US\$ 70m for both tertiary/professional-level TVET and pre-tertiary vocational training (calculated from table A2 in Annex). However, while ODA to pre-tertiary vocational training increased over the period, as noted above, ODA to tertiary/professional-level TVET declined significantly over the years 2004-2011, only to start increasing again 2012-2014 (Fig. 3). The average annual ODA disbursement 2013-14 for tertiary/professional-level TVET in the EAP region stood at US\$ 49.6m (Annex).

**Fig. 3. ODA to tertiary and professional-level TVET in East Asia and Pacific, 2002-2014**



Source: calculated by author, based on data from <http://stats.oecd.org>

**Reliance upon ODA for TVET, most of which is grants in-aid, varies considerably among EAP countries;** there is a marked difference between the comparatively low level of dependence across most East Asian countries (with the exception, perhaps, of Cambodia, Lao PDR, Myanmar and Timor Leste), and the much higher levels in some of the Pacific Island Countries.

**In the Pacific Island Countries, for example, ODA is estimated to provide about 17% of funding in various forms, excluding Australia’s support of APTC.** When funding for APTC is included in national averages – which has been heavily reliant on ODA – ODA is the most significant overall source of TVET funding, making up 33% of all funds, followed by government funding (30%), tuition fees (28%) and private resources (8%). Donor dependency is an issue for APTC operations and overseas scholarships, but not for the majority of TVET providers in the PICs, with the exception of Kiribati (Palmer, 2015a).

### Other official flows

<sup>7</sup> OECD CRS code 11430 ‘Advanced technical and managerial training’.



Certain types of official sector transactions are not regarded by the OECD-DAC as ODA as they do not meet the ODA criteria, and are therefore excluded from ODA tables. These are classified by the OECD as ‘Other Official Flows’ (OOF).<sup>8</sup>

OOF does not represent a major source of finance for TVET in any EAP country. In fact the only two countries currently with OOF flows for vocational training are China and Indonesia (Table 4). In both cases, these represent loan agreements with the Asian Development Bank.

**Table 4. OOF to vocational training, in East Asia Pacific Region, 2004-2014**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
China (People's Republic of)	0.0	1.4	0.2	..	0.1	1.8	3.6	3.4	14.4	22.8	31.0
Indonesia	..	..	..	..	..	..	..	..	..	5.4	1.8

Source: <http://stats.oecd.org>

Regarding OOF to tertiary and professional-level TVET in the EAP region, there have been no flows since 2006.<sup>9</sup>

## TVET funding from private resources

Funding for TVET from private resources can come in the form of: students’ fees, enterprise financing, private training provision by institutions, faith-based and NGO donations, and the sale of goods and services. These are examined for the EAP region in brief below.

### Student fees

In the EAP region, most public and private TVET providers appear to levy fees, but their contribution to overall provider revenue varies considerably between and within countries, and according to type of provider:

- In the Pacific Island Countries, student tuition fees are the second-largest source of funding for TVET public and private providers (excluding the Australia-Pacific Technical College), providing an estimated 35% of recurrent funding for the participating countries as a whole (Palmer, 2015a).
- In China, student fees (2014) accounted for a low share of revenue (8%) for secondary vocational schools, and about 32% for tertiary TVET providers (Yang, 2016). This is a change from several years ago when tuition fees made up a much more significant proportion of revenue for secondary vocational schools (see Yang, 2014).
- In Mongolia public vocational schools, only 1-2% of funding comes from student fees (Table 2).
- In the Philippines, student fees in public pre-tertiary TVET providers make up between approximately 0.5-5% of funding, but almost 70% among for profit private TVET providers (Table 3).

<sup>8</sup> OOF are ‘Transactions by the official sector with countries on the DAC List of ODA Recipients which do not meet the conditions for eligibility as Official Development Assistance, either because they are not primarily aimed at development, or because they have a grant element of less than 25 per cent.’ (OECD, 2016 - DAC Glossary of Key Terms and Concepts - <http://www.oecd.org/dac/dacglossary.htm#OOF> Accessed on 07.05.16).

<sup>9</sup> When there was a small flow of US\$0.2m to China.

## **Enterprise / Industry**

Funding for TVET from formal sector private enterprise and industry can take several forms, including: private firm contribution to formal institution-based TVET provision (either in cash or in-kind); private sector funded training funds; and, the firm-financed training for own employees (either in-house or outsourced). In addition to formal sector firms' contributions, private enterprises operating in the informal economy across the EAP region are also themselves providers, and self-funders, of training for their employees, though most of such training is informal and on-the-job.

### ***Enterprise contributions to formal institution-based TVET provision***

Overall, financial cooperation between private enterprise and formal TVET institutes are not significant in most EAP countries, as noted in several studies. For example:

- In China 'the contribution of enterprises remains insignificant' (ADB, 2009: 12), and involvement of firms in public TVET provision is low (Yang, 2016). In Xinjiang Province, 'businesses... are not partners in funding the [TVET] system' (World Bank, 2014). However, some collaboration does exist – see below.
- In Lao PDR there is limited involvement of the private sector in formal TVET provision (KfW, 2015).
- In Malaysia, 'the public sector's engagement with industry remains superficial' (World Bank, 2013a: 15) (but see below).
- In Vietnam, 'the involvement of enterprises in vocational training is still weak' (Nhan and Yen, 2016: 12).

However, there is acknowledgement of some collaboration between private enterprise and formal TVET institutes, but often little indication of the extent or scope of this cooperation. For example:

- In China, students in upper secondary vocational schools are required to spend a third of their course interning in enterprises (Mehrotra et al., 2013). In addition, a school-enterprise cooperation system is being set up whereby schools and enterprises collaborated to design and deliver skills training (Han, 2016).
- In Indonesia, a dual training system exists that involves partnership between vocational training centers and industry.<sup>10</sup>
- In Malaysia, 'employers participate in curriculum development as well as the offer of internships and industrial training' (World Bank, 2013a: 21). Furthermore, an apprenticeship scheme exists that involves a combination of theory training in vocational training centers and practical training within the firms of sponsoring employers; however, the outreach is relatively small – only 3,815 apprentices were trained under the 10<sup>th</sup> Malaysia Plan (Gobilee, 2016), involving about 1 in 10 TVET institutes (Chau Leong, 2016; personal communication 24.05.16). Another point of industry-TVET institute collaboration in Malaysia is the dual training system, which involves 70-80% of training in partner enterprises and 20-30% in TVET institutes; again, outreach is limited with only about 1 in a 1000 companies participating in this

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<sup>10</sup> As discussed at the Second ASEAN+3 Forum on Dual Learning System and TVET Financing, May 23-24, Seoul, Korea.

(c.4,800 out of c.500,000 companies in Malaysia) (Chau Leong, 2016; and personal communication 24.05.16).

- In the Philippines, ‘companies... fund apprenticeships and short courses, as well as give allowances to dual training system students’ (ILO, 2016: 163). The dual training system involves 60% of training time in industry and 40% in vocational schools (Urdaneta, 2016). The Philippines also offers tax incentives to encourage enterprise participation in TESDA-accredited apprenticeship or dual training, including deduction from taxable income 50% of the amount spent by enterprises on trainees, and an agreed waiver for enterprises to pay trainees 75% of the minimum wage (Urdaneta, 2016). ‘In addition, companies can deduct 100% of a donation, contribution, bequest, subsidy, or financial aid made for dual training system operation from companies’ taxable incomes’ (World Bank, 2016a: 6). Meanwhile vocational training centres are incentivized through the allowance to import training equipment and materials tax and duty-free.
- In Thailand, dual vocational education is becoming more of a government focus; this involves 60% of training time in partner enterprises and 40% in vocational colleges. Companies are offered tax incentives to participate (Tongliemnak, 2016).

### ***Private sector funded training funds***

In the EAP region, there are eight countries with private enterprise financed training funds (China, Fiji, Korea, Malaysia, Mongolia, Papua New Guinea, Singapore and Thailand), and there are an additional four EAP countries that are planning to, of have proposals to, set up such training funds (including Indonesia, Lao PDR, Myanmar and Vietnam) (Fig. 4). Most of the existing training funds are resourced by an enterprise levy (except China).

**Fig. 4. Private Enterprise financed Training Funds by Country and Type (EAP Region)**

<b>Country</b>	<b>Organization</b>	<b>Details of Fund</b>	<b>Source</b>
<b>China</b>	Training Funds (provincial level)	Exemption-based scheme	Yang and Tian (2016)
<b>Fiji</b>	Training Fund run by the National Training and Productivity Centre	Levy-grant mechanism.	Maglen et al. (2014)
<b>Indonesia</b>	<i>Proposed Skills Development Fund</i>		Allen (2016); Skjaerlund and Van der Loop (2015)
<b>Korea</b>	Training Fund	Exemption-based scheme: Employers above a certain size required to conduct training or pay a levy	Lee (2016)
<b>Lao PDR</b>	<i>Proposed National TVET and Skills Development Fund</i>		ILO (2016); KfW (2015)
<b>Malaysia</b>	Human Resource Development Fund	Levy-reimbursement scheme.	ADB (2014a); Gobilee (2016)
<b>Mongolia</b>	Employment Promotion Fund	Almost half of its funding comes from payments from employers for hiring foreign citizens	World Bank (2016b)
<b>Myanmar</b>	<i>Proposed Skills Development Fund</i>	<i>Expected to be levy-based.</i>	Kyaw Naing Oo (2015)

<b>Papua New Guinea</b>	Training Fund	Training levy (hybrid: exemption-based, levy-grant), and also used as a general source of funds for TVET	Horne et al. (2014)
<b>Singapore</b>	Skills Development Fund	Levy is imposed only on the lower-wage workers. Levy rate is 1% of the monthly remuneration.	Johanson (2009)
<b>Thailand</b>	Skills Development Fund	Levy-reimbursement scheme.	ILO (2016)
<b>Vietnam</b>	<i>Proposed Training Fund</i>	<i>Proposed to be levy funded.</i>	ADB (2014b)

Source: compiled by author from listed sources.

Those EAP countries with existing enterprise-financed training funds are noted below:

- China operates an exemption-based scheme. The 1996 Vocational Education Law obligates an enterprise to ‘bear the expenses for vocational education given to their staff and workers and persons to be employed by them’ (PRC, 1996: article 28); enterprises that do not provide such training are required to pay the amount that should have been used for staff training to the provincial government ‘and such funds shall be used for vocational education in the locality’ (ibid: article 29). In other words, enterprises are obligated to train or pay. Enterprises are required to spend 1.5-2.5% of their payroll towards in-service training, or else to pay an equivalent amount to the government (Yang and Tian, 2016).
- Fiji operates a levy-grant mechanism whereby the National Training and Productivity Centre (NTPC), which is part of the Fiji National University, collects levy money from industry and then pays out training grants to employers. Approximately FJ\$ 12m (about US\$ 6.4m) per annum is raised from this levy, representing about 12% of all TVET funding in Fiji. The training levy is a statutory requirement that obligates all employers in Fiji, except those that are specifically exempted by law, but including Public Service Commission on behalf of the government, to pay a levy of 1% of gross payroll (Maglen et al., 2014).
- Korea has a universal training levy-grant system to which employees and employers contribute. Introduced in 1995, the training levy-grant system is part of the Employment Insurance System. All employees pay a levy for all employees as part of employment insurance fees (Lee, 2016).
- Malaysia’s Human Resource Development Fund (HRDF) is a dedicated training fund paid into by companies, and serves to promote enterprise training in Malaysia. The HRDF is administered by Pembangunan Sumber Manusia Berhad, an agency under the Ministry of Human Resources. It is resourced via a mandatory levy at a rate of 1% of the monthly wage of workers for employers with 50 or more employees and 0.5% for small enterprises that wish to participate (ADB, 2014a: 102; Ghazali Abdul Aziz, 2015; Gobilee, 2016). SMEs constitute 89% of all employers registered with the HRDF (Ghazali Abdul Aziz, 2015).
- Mongolia operates an Employment Promotion Fund (EPF), which draws almost 50% of its funding from payments from employers for hiring foreign citizens on a contractual basis (World Bank, 2016b), with the bulk of remaining funds coming from the state budget (ILO, 2016). The EPF is used solely for financing employment promotion activities, ‘including short-term skills training to unemployed people, and to those wanting to acquire new skills or upgrade their skills in order to improve their employability’ (ILO, 2016: 82). In 2016, a quarter (23%) of the EPF was used to

resource the TVET Promotion Fund (TVETPF) (World Bank, 2016b). Overall, the TVETPF is meant to be 75% resourced from the EPF<sup>11</sup> with the remaining 25% from the state budget. In fact, the financing received from the EPF does not reach 75% (World Bank, 2016b).

- In Papua New Guinea, employers with an annual payroll of US\$78,000 or more pay a training levy at 2% of payroll, which raises about US\$ 1.3m per annum (Horne et al., 2014).
- In Singapore, a Skills Development Fund is resourced by a 1% levy on the monthly remuneration of lower-wage workers.
- In Thailand, a national Skills Development Fund is resourced by training levies from enterprises.

EAP countries that have plans or proposals to set up an enterprise-financed training fund include:

- Indonesia - a Skills Development Fund has been proposed to both encourage enterprises to train their workers and as a way to raise additional funding for training institutions (Skjaerlund and Van der Loop, 2015). It is expected to be resourced through a 'training levy on foreign workers, which requires their employers to pay US\$ 100 per month per foreign worker' (Allen, 2016: 30).
- Lao PDR - the proposed national training fund is to be set up, and resourced through a 1% levy on annual salary or wages. Firms will be liable to this levy if they don't conduct a sufficient amount of training for their own employees (ILO, 2016).
- Myanmar and Vietnam – both are proposing to set up training funds, to be resourced through enterprise payroll levies (ADB, 2014b; Kyaw Naing Oo, 2015).

Two additional EAP countries operate training funds not resourced by private financing:

- In Cambodia, a National Training Fund was set up with ADB support (1997/2003) and exists to finance the expansion and delivery of initial training before employment. However, it appears to be focused on disadvantaged groups and is funded from public resources, not private financing via an enterprise levy (Hunleng, 2013).
- Similarly, in Vanuatu an Education and Training Fund exists which was set up with Australian government funded support; it is funded by Australian ODA funding. 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 (cf. Palmer, 2015b).

### ***Firm-financed training for own employees***

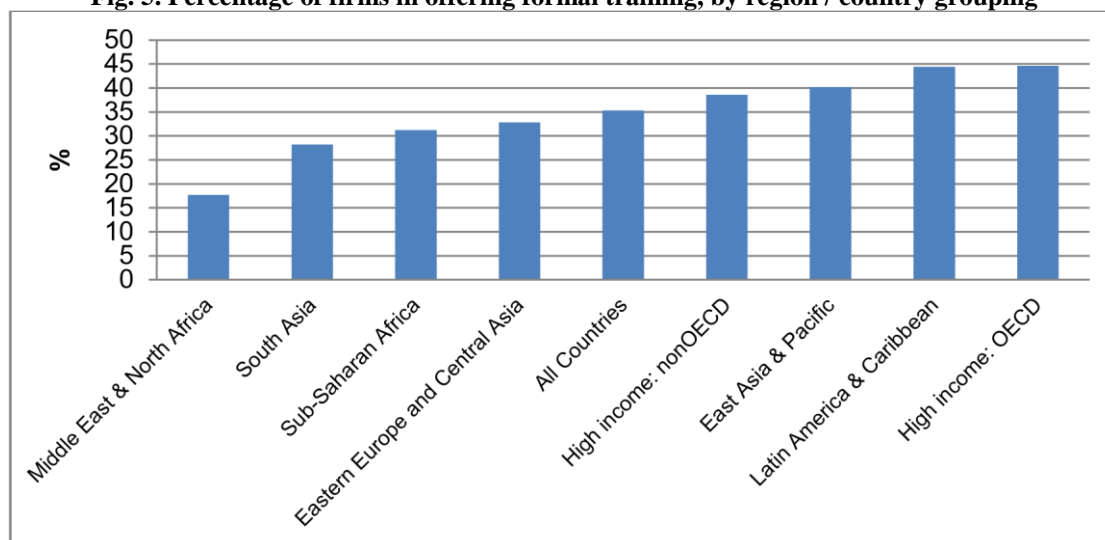
Formal enterprises in the EAP countries also represent an important component of supply in training markets (ADB, 2004), and directly finance training activities, including through enterprise-based training (in-house professional development, apprenticeships), or paying the fees of external providers.

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<sup>11</sup> However, the sum received for the TVETPF (from the EPF) is smaller than that stated in the Law (World Bank, 2016b).

Formal training by firms in the EAP region overall is very common, averaging 40.2% - which is close to the high income OECD country average of 44.6% and well above the world average (35.3%) (Fig. 5).

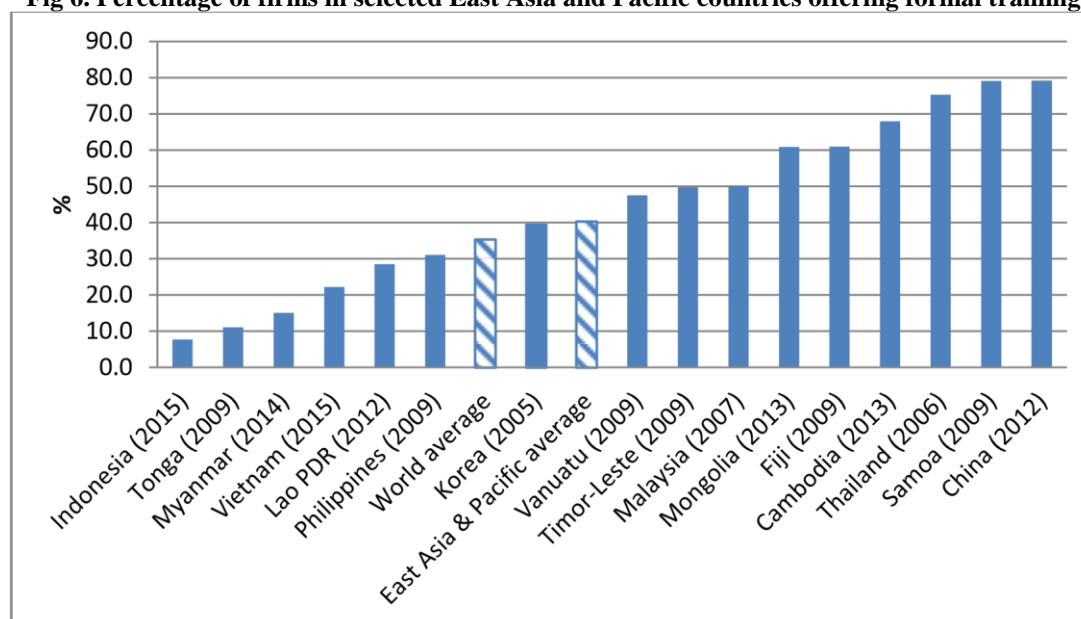
**Fig. 5. Percentage of firms in offering formal training, by region / country grouping**



Source: enterprisesurveys.org (accessed 15.05.16)

While the EAP regional average is high, there are huge intra-regional differences with regard to the percentage of firms offering training (Fig 6).<sup>12</sup>

**Fig 6. Percentage of firms in selected East Asia and Pacific countries offering formal training**



Source: enterprisesurveys.org (accessed 15.05.16 & 22.05.16)

<sup>12</sup> Participants from two different countries listed in Fig 6 said that they thought that the proportion of firms in their countries listed as offering training was too high; one suggested it may be due to methodological issues regarding the enterprise surveys conducted by the World Bank Group, which simply asks a firm ('yes' or 'no') if they conduct training (discussions at the Second ASEAN+3 Forum on Dual Learning System and TVET Financing, May 23-24, Seoul, Korea).

At one end of the spectrum are countries like China, Samoa, Thailand, Cambodia, Fiji and Mongolia where over 60-80% of formal firms offer training – much higher than the regional average of about 40%, and the world average of about 35%. In fact, China, Samoa and Thailand have the three highest rates of firms offering formal training in the world. It appears that 1996 Vocational Education Law may be the reason for such apparently very high levels of training within formal firms (of all sizes) in China. Some comment that this law empowers provincial governments and that enterprises train for fear of incurring financial penalties or negative publicity (Mehrotra et al., 2013); the extent to which employers also train as they believe it is beneficial to their firm is not known. More research is needed to understand this. Further, the percentage for Korea – 40% incidence of firms offering training – masks or underemphasizes the huge significance of private enterprise as a funder and provider of TVET in Korea. In contrast to perhaps all other EAP countries, the majority of all TVET in Korea is enterprise funded and takes place after employees are hired as opposed to most other EAP countries where most training tends to be pre-employment; in 2014 over 85% of the 3.7 million TVET trainees that year were employees. Such training of employees in Korea takes place both within enterprises (in 40% of firms) or in TVET providers selected by enterprises (Lee, 2016).

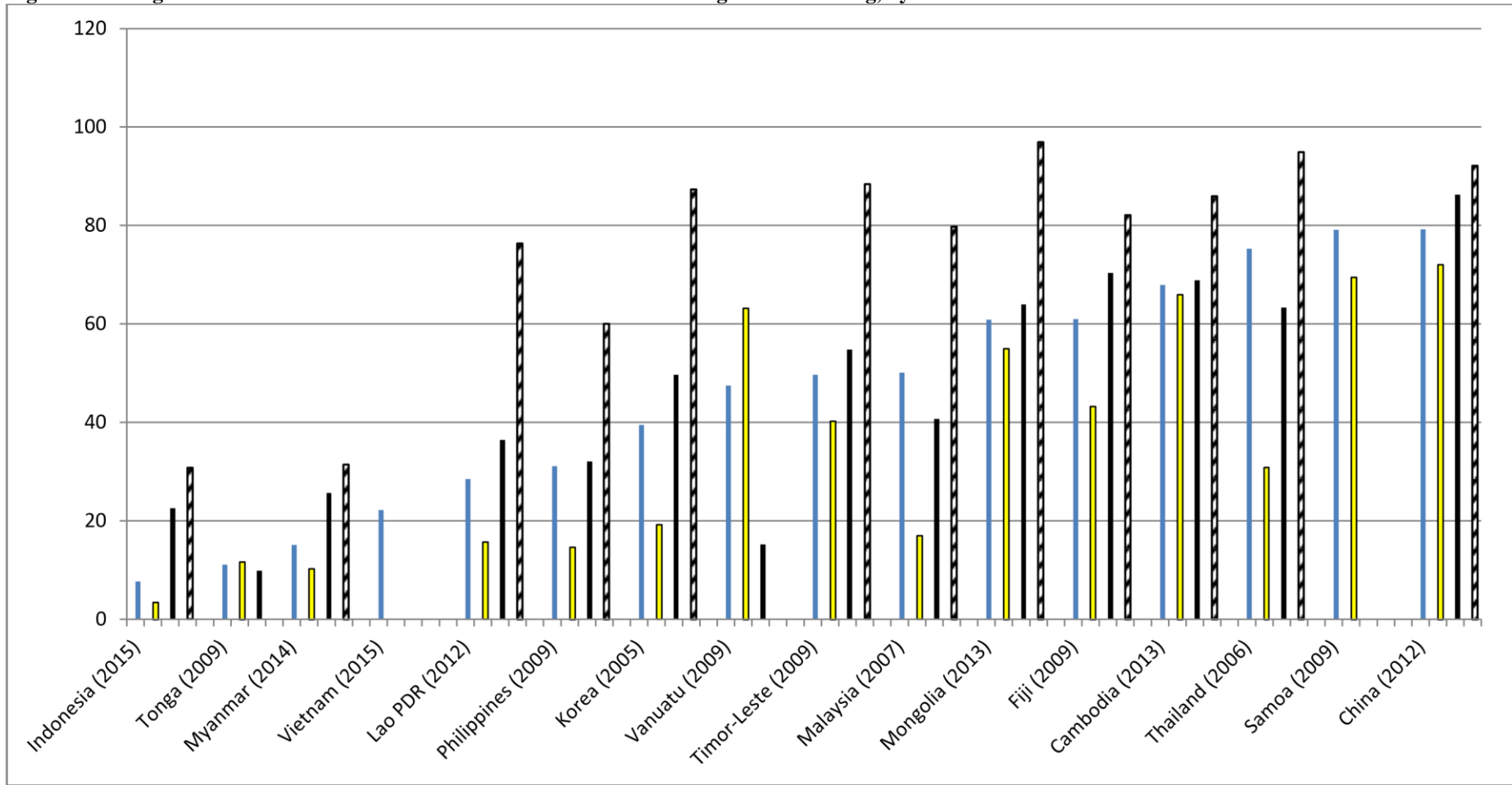
At the other end of the scale are countries like Indonesia, Tonga, Myanmar, Vietnam, Lao PDR and the Philippines that have levels of firm training below the world average; Indonesia, in particular, stands out as having a very low percentage of firms (8%) offering formal training overall.

In addition to inter-country variation in incidence of formal training by firms, there is usually a significant intra-country variation according to firm size (Fig. 7).

In all EAP countries for which there are data, the percentage of firms offering formal training is highest among large firms (100+ employees). In general small firms have the lowest incidence of formal training offerings across all countries. This is a similar pattern globally.

Countries like China, Samoa and Cambodia have relatively high proportions of firms offering training regardless of size, whereas countries like Indonesia, Myanmar, Lao PDR, the Philippines, Korea, Malaysia and Thailand tend to have very significantly higher incidences of training among large and medium firms compared to small firms (Fig. 7).

**Fig. 7. Percentage of firms in selected East Asia and Pacific countries offering formal training, by firm size**



Source: World Bank enterprisesurveys.org (accessed 15.05.16 & 22.05.16)

Firm size: Average — Small (5-19) — Medium (20-99) — Large (100+) - - - -



### ***Training for informal sector enterprises***

International experience shows that the smallest enterprises, especially those operating in the informal economy, are the least likely or least able to be able to provide their own training or to invest in it.

Meanwhile, it is known that informal economies in many – but not all – EAP countries are larger than formal economies. As a percentage of non-agricultural employment, informal employment in East and South East Asia (excluding China) is 65% - almost identical to that of Sub-Saharan Africa (66%). In China, 33% of non-agricultural employment is informal employment (Vanek et al., 2014).

The sheer scale of the informal economy in many EAP countries, combined with what is known about informal training in other regions, suggests that in many EAP countries informal on-the-job training and learning is taking place. More research on this would be very useful.

### **Faith-based and NGO donations**

Direct funding from churches, mosques, other faith-based organizations and NGOs appears to be a relatively insignificant current source of funding for the majority of TVET providers. However, in some countries (e.g. some Pacific Island Countries) this understates the essential role that churches have played in establishing TVET providers in many instances (Palmer, 2015a).

### **Sale of goods and services**

The sale of goods and services is also a relatively insignificant current source of funding for the majority of TVET providers. There are exceptions to this generalization of course. For example, private TVET providers in Papua New Guinea, Samoa and Tonga get 3-4% of their funding from churches; still small, but not insignificant (Palmer, 2015a).

Some TVET providers in EAP countries have not been allowed to generate their own funds through income generating activities; this has been the case in Mongolia (ILO, 2016), but amendments to the TVET Law in February 2016 will allow TVET schools to own or run business operations (Rinchin, 2016; World Bank, 2016b).

## **How are TVET funds spent?**

### **Public spending as a percent of GDP**

Table 5 gives an idea of overall public spending on TVET as a per cent of GDP in selected EAP countries, showing that overall about 1-2% of combined GDP was spent on TVET.

**Table 5. Relative size of TVET budgets, selected East Asia and Pacific Countries (% of GDP)**

Fiji Islands (2012)	1.5 - 1.6
Kiribati (2012)	1.6
Mongolia (2015)	0.3

Myanmar (2013)	0.1
Philippines (2002)	0.3
PNG (2012)	0.6 - 1.4
Samoa (2012)	2.0 - 2.5
Solomon Islands (2012)	1.3
Tonga (2012)	1.3
Vanuatu (2012)	0.6

Source: 2012 data from Pacific Island Country studies cited in Palmer (2015a); other data from CESR (2013); ILO (2016); World Bank (2016)

## TVET expenditure: recurrent and capital

**The bulk of recurrent expenditure among most TVET providers in the EAP region goes on staff salaries and other overhead costs.**

- In one study of seven Pacific Island countries (PICs), four out of seven had recurrent expenditure (salaries, operating costs and overheads) of between 80-90% of total annual expenditure on TVET: in Vanuatu the figure was 81%, in Samoa and Tonga the figure was 90%, while in Fiji 96% of total expenditure was recurrent (summarized in Palmer, 2015a).
- In Mongolia, almost 70% of the total expenditure of the public vocational schools are on staff salaries, bonuses, social insurance contributions and other allowances (World Bank, 2016b).
- In Myanmar, teacher salaries represent the main current expenditure item of TVET institutions under the Department of Technical and Vocational Education (CESR, 2013).
- In the Philippines, the bulk (71%) of all expenditure regarding public TVET providers relates to personnel expenses (salaries and wages, various allowances, bonus, and social security contributions), followed by other recurrent costs.<sup>13</sup> On average, significantly less is proportionally expended on personnel costs among private providers, while significantly more is expended on both other recurrent and capital costs (Table 6) (Péano et al., 2008).

**Table 6. Expenditure of public and private providers in the Philippines, average percentage (2002)**

	Personnel	Other recurrent	Student services	Capital	Total %
Public providers	71	18.2	4.9	5.8	99.9
Private providers	42.8	31.1	3.8	22.2	99.9

Source: Péano et al. (2008)<sup>14</sup>

<sup>13</sup> E.g. utility costs, training materials, staff development and other recurrent costs.

<sup>14</sup> This table excludes TVET provision provided by companies directly, since these are reported to have zero additional capital costs, and so skew the incidence of private TVET provider expenditure on capital costs. The subtotal for private providers has therefore been recalculated by the author.

**In most East Asian and Pacific Island countries, TVET teachers are remunerated from the national pay roll, not from TVET providers directly.**

**Expenditure on scholarships as the traditional form of student support in the EAP region is common and takes many forms.**

- Among the Pacific Island Countries, the average expenditure on scholarships was estimated to be about 26% of total TVET expenditure, excluding APTC (USD45 million) (Palmer, 2015a); **however 93% of this expenditure on scholarships was in just three of the seven countries in that particular study - Kiribati, PNG, Solomon Islands, scholarship (ACER, 2014b).**
- In Lao PDR, about 40% of TVET students are supported with scholarships (Leuang, 2016).

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

- In the Philippines, among public TVET providers, capital expenditure was only about 6% in 2002 (Table 6). Indeed, overall expenditure by TESDA in the Philippines illustrates the low level of expenditures related to quality improvements including textbooks, instructional materials, office supplies and staff training (World Bank, 2016a).
- In Myanmar, it is noted that ‘capital budgets for facilities, equipment and teaching materials are unfortunately constrained’ (CESR, 2013: 18).
- 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 Kiribati, there is very little or no funding available for professional development of staff, material costs or new equipment (Majumdar and Teairo, 2014).

### **TVET expenditure and equity**

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. **All EAP countries are likely to exhibit some degree of inequitable access to TVET, mainly related to gender, geography and disability** – though the severity of this will vary and needs more research.<sup>15</sup>

Most Pacific Island 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, many PICs have scholarship offerings, including to study abroad, but there is variation in the extent to which they are targeted at the disadvantaged.

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<sup>15</sup> See Palmer (2015a) for a summary of the situation in the Pacific Island Countries.

- Kiribati has intake quotas from each island in both the Fisheries Training Centre and Marine Training Centre (Majumdar and Teairo, 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).

In the Philippines, TESDA has major financial support schemes (all voucher operated) that have been set up to address equity and access, including (Urdueta, 2016; World Bank, 2016a):

- Private Education Student Financial Assistance (PESFA) - For high school graduates from poor families enrolled at private TVET institutions with TESDA-registered programs. Assistance covers full training cost, student allowance and book allowance. Over the period 2011-2015, there were on average 26,800 PESFA scholars a year. The budget for this form of student assistance in 2016 is PHP 200m (US\$ 4.3m), meaning that the cost per student in 2016 is approximately PHP 7,460 (US\$ 160).
- Training for work scholarship - At least 15 years old out of school youth and adults enrolled at both public and private TVET institutions and enterprises with TESDA-registered programs. Assistance covers full training cost and either income support for displaced workers (at half the daily minimum wage per training day), or training support for others. Over the period 2011-2015, there were on average 204,000 TWSP scholars a year. The budget for these scholarships in 2016 is PHP 2 billion (US\$ 43m), meaning that the cost per student in 2016 is approximately PHP 9,800 (US\$ 210).
- Special Training for Employment Program - A community-based training program that addresses the specific skills needs of the communities and promote employment, particularly through entrepreneurial, self-employment and service-oriented activities. Assistance covers full training cost, starter toolkits and training allowance.

In China, institutions that serve vulnerable groups (such as rural and ethnic minority students) received targeted support from special government funds (World Bank, 2014). Furthermore, the government provides tuition subsidies to all vocational school students, with tuition free training at the upper secondary level (Kuczera and Field, 2010).

### **Expenditure (in)efficiencies: what unit costs tell us**

Unit costs can illustrate inefficiencies in TVET systems. High unit costs might signal inefficient use of resources, or the higher costs to reach certain groups. For example, in the Philippines, unit cost analysis by Péano et al. (2008) suggests that the financing efficiency of TESDA-training centres and administered schools seems limited as compared to other providers (cf. World Bank, 2016a).

Differences between cost per student and cost per graduate for some courses indicate inefficiencies related to course completion: the narrower the difference, the more likely that providers achieving high course completion rates. For example, in Tonga the Institute of Higher Education (2011/12) had a 7-fold difference between cost per student and cost per graduate, indicating low completion levels.

## How are TVET funds currently allocated?

TVET financing mechanisms (Box 1) 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 briefly examines the financing mechanisms that are currently used in the EAP region.

### Box 1. What do we mean by TVET financing mechanisms?

TVET financing mechanisms refer to:

1. the administrative ways funds are allocated, e.g. grants, scholarships, loans, training vouchers, grants from training funds etc;
2. the criteria applied to these ways – e.g. targeted/untargeted; linked to policy objectives.  
Financing mechanisms can be strongly linked to achieving policy objectives of making TVET systems more accessible, equitable, efficient, demand-driven, responsive and relevant.

**The diversity, and sometimes fragmentation, of TVET systems results in a fragmented approach to TVET financing.** In many EAP countries, the TVET system remains quite fragmented with multiple government ministries on the one hand, and a private training market, firm-based enterprise training and donor-funded ventures on the other. These, and other, multiple sources of TVET funding are allocated to multiple TVET providers via multiple financing mechanisms. Where countries have fragmented TVET systems, with weak TVET governance and coordination arrangements, they inevitably also have fragmented TVET financing arrangements.

### 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.

**In the EAP region, 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 EAP region serve to reinforce a supply driven training model.** In other words, 'most public funds are transferred and spent without regard for performance. Good performance reaps no reward, and poor performance suffers no penalty' (ADB, 2014a: 50). For example:

- In Mongolia, an input-based funding formula is used, based on a fixed cost per student (ILO, 2016).
- In Myanmar, budget for operations, wages and maintenance of the government funded Industrial Training Centre in Mandalay 'are submitted once a year based on

last year expenditure' (CESR, 2013: 37). Similarly, the budget for the Centre for Skill Training is 'decided upon by the Ministry... [with] basically no difference in the budget allocations from year to year' (ibid: 36).

- In at least three Pacific Island Countries (Kiribati, Vanuatu and Tonga), most TVET providers are provided with baseline funding based on historical trends, rather than on an input-based approach (cf. Palmer, 2015a).
- In other Pacific Island Countries (Fiji, Kiribati, Tonga and the Solomon Islands), input-based financing approaches are predominant (cf. Palmer, 2015a).

**There is little evidence of output-based financing mechanisms being used in the EAP region** – e.g. little attention is paid in financial planning or budgeting discussions to course completion rates, unit costs, graduate outcomes or employer satisfaction. For example:

- In Lao PDR, 'outcome- or demand-oriented [financing] mechanisms are rare' (KfW, 2015: 4).
- In Malaysia, there is no 'evidence that funding and other inputs [are] linked to targets to be achieved' (World Bank, 2013a: 15).
- In Mongolia, the 'lack of result-based financing negatively affect[s] quality of TVET' (World Bank, 2016b: 13).

However, there are some examples of how public funds are being used to award performance and encourage innovation. For example:

- In China (Xinjiang Province), 'exemplary training institutes and schools are praised and receive bonuses' (World Bank, 2014: 25).
- In Korea, where public funding of training programs is increasingly tied to performance (World Bank, 2013b). Also in Korea, training providers that develop new curricula related to strategic emerging technologies and industries are eligible for special government support (World Bank, 2013b).

## Financing policies and incentives at provider level

**Financial system barriers inhibit flexibility, expansion and sustainability at provider level.** Many EAP countries appear not 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 EAP countries where fees contributed by students are not retained by public TVET providers, there are limited incentives at provider level to increase student numbers. Similarly, where providers are not allowed to retain all (or the majority of) profits from the sale of goods and services, there is limited incentive to generate funding from such sources. For example, in China 'the majority of revenue generated by training institutions is required to be submitted to the Ministry of Education', and providers are only allowed to keep part of this revenue (World Bank, 2014: 21).

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.

Similarly, public and private providers that retain income from the sale of goods and services have a direct incentive to generate more such funds.

### **Financing mechanisms related to individuals: loans, scholarships, stipends**

The existence of student loans to help individuals to finance TVET study appears limited, but there is insufficient information on this to be able to say for certain.

**Scholarships and stipends to study TVET exist in many EAP countries. While they have some equity benefits, some lack alignment with labour market needs, and can come with high actual and opportunity costs.** In the PICs, 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. The criteria for such 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 (Tonga), to no targeting at all (Solomon Islands, constituency scholarships) (Palmer, 2015a).

Where stipends are targeted there may be unintended consequences for other needy groups that don't fit such criteria. For example, in Mongolia every student under 25 years old enrolled in public or private TVET providers receives a monthly stipend; this age-targeting excludes older individuals who return to TVET later in life (e.g. ex-military personnel) (ILO, 2016).

### **Allocation mechanisms of private enterprise financed training funds**

It was noted above that many EAP countries operate private enterprise financed training funds, with most of these funds resourced via a levy.

These training funds typically have three ways by which accrued funds are allocated (Johanson, 2009):

- cost reimbursement schemes – approved training costs are reimbursed up to limit of levy paid;
- levy-grant schemes – grants for enterprises to fund training, based on specific criteria (not only levy contributors);
- exemption-based schemes (also known as train-or-pay) – liable enterprises are exempt from paying the training levy up to the amount they spend of training directly.

Training funds, of course, can be hybrid; using more than one such allocation scheme.

The allocation mechanisms for EAP countries with training funds are noted below:

China (exemption based) – companies are obligated by the 1996 vocational education law to spend 1.5-2.5% of payroll on training. However, the law does not specify how the training funds should be spent by a firm, or on who; with some suggesting that upper management

tend to us it for activities like study trips rather than to train “rank and file” employees.<sup>16</sup> Meanwhile, there is insufficient information on how the funds that are received from non-training enterprises are allocated.

Fiji (cost reimbursement) – there are two mechanisms designed to reimburse enterprises for training:

- The first mechanism is for organizations that operate their own training programs; however, the vast majority of 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).

Korea (cost reimbursement) – employers are reimbursed their training costs after training takes place ‘in accordance with standard training costs defined by sector, occupation and training hours’ (Lee, 2016: 16). Since 2002, SMEs have been further encouraged to train through a subsidized grant (rebate) system that allows them to claim back three times the levy amount that they had to pay (Lee, personal communication 24.05.16). Employee training can be either in-firm, or the private enterprises can decide which external training provider to send their employees to; thus stimulating a demand-driven training market (Lee, 2016).

Malaysia (cost reimbursement) – enterprises can claim a part of allowable training expenses up to their total annual levy payments (ADB, 2014a: 102).

Mongolia – The TVET Promotion Fund (TVETPF) does not have any mechanism to re-allocate funding back to enterprises (despite almost half of its funding coming from payments from employers for hiring foreign citizens). Instead, the TVETPF is used to provide financial support and stipends to all TVET students (both public and private) (World Bank, 2016b).

Papua New Guinea (hybrid: exemption-based, levy-grant) (Horne et al., 2014) –

- The Internal Revenue Commission (IRC) collects revenue from employers only if their qualifying training expenses (QTEs) as reported to the IRC are less than their levy liability. In that sense the PNG levy is exemption-based. About three quarters of employers claim QTEs in excess of the levy amount (2% of payroll) and hence pay no levy;
- Over the years 2011-14 the annual yield of the levy varied from PGK2.8m to

PGK4.7m (US\$1.09m – US\$1.83m), of which the Training Assistance Fund operated by the National Training Council (NTC) received about PGK1.5m (US\$ 0.59m) to distribute to firms providing training. In this sense the PNG levy is a levy-grant scheme;

- The funds allocated to the NTC are distributed to firms as grants of up to PGK20,000 (US\$7,800) based on their submission of a three-year training plan, and details of the training to be provided.

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<sup>16</sup> Discussion at the Second ASEAN+3 Forum on Dual Learning System and TVET Financing, May 2324, Seoul, Korea.



The ‘training levy in PNG is not working well’ (Horne et al., 2014: 149), either:

- As a source of revenue for government to fund TVET - the levy provides a very modest source of funds to the Training Assistance Fund (average US\$ 0.6m p.a.)
- As a training incentive for employers - the definition of what constitutes a qualifying training expense is wide, making it easy for employers to represent that their expenses exceed their liability to pay, and hard for the IRC to check.

Singapore (cost reimbursement) – the Skills Development Fund uses a reimbursement mechanism, but does not limit the amount of incentives that a company can obtain to their levy contribution.

Thailand (cost reimbursement via tax) – the national Skills Development Fund uses a ‘tax deduction system to reimburse firms for part of the levy paid when training expenses are incurred to train their staff’ (ILO, 2016: 222).

### **Other publicly funded incentive mechanisms to encourage private firm training**

Several EAP countries (e.g. China, Thailand) offer tax incentives to private companies that conduct training for their employees.

China offers tax incentives to firms, especially SMEs, providing workplace training opportunities (Kuczera and Field, 2010; World Bank, 2014). Enterprises’ expenditure related to taking these trainees on is tax deductible (Han, 2016).

Thailand encourages large private-sector firms (100+ employees) ‘to organize training for their employees by offering tax incentives, i.e. their training expenses can be deducted through tax exemption, calculated at twice as much as the actual training expenses’ (ILO, 2016: 222; cf. Tongliemnak, 2016).

### **Development partner financing mechanisms and modalities**

Virtually all development partner financing for TVET across EAP countries is in the form of grants (transfers in cash or in kind for which the recipient incurs no legal debt). Project-type interventions are by far the most common financing modality used. Over the period 2012-2014, 89% of all ODA disbursed to the Asia region for vocational training was in the form of project support, while 71% of all ODA disbursed to the Pacific region for vocational training was in the form of project support (Fig. 8).

**Fig 8. 2012-14 annual average ODA disbursement to vocational training, with percentage as project-type interventions**

	<b>ODA US\$m</b>	<b>% project</b>
Cambodia	8.4	91.7
China (People's Republic of)	18.3	88.7
Indonesia	15.6	89.0
Lao People's Democratic Republic	13.5	93.1
Malaysia	0.4	52.4

Mongolia	10.9	96.5
Myanmar	7.1	79.0
Philippines	3.1	85.2
Thailand	0.7	40.7
Timor-Leste	3.9	75.6
Vietnam	17.6	92.6
<b>Asia -Total</b>	<b>99.6</b>	<b>89.3</b>
Fiji	1.1	96.3
Kiribati	2.9	92.5
Papua New Guinea	1.3	82.2
Samoa	0.5	17.1
Solomon Islands	1.1	61.1
Tonga	0.6	0.0
Vanuatu	2.6	59.6
<b>Pacific - Total</b>	<b>10.2</b>	<b>71.1</b>

Source: author, from stats.oecd.org (accessed 16.05.16)

Loan mechanisms for TVET are much less common, but exist in:

- Papua New Guinea – where a loan from the People’s Republic of China (PRC) was tied to the purchase of pre-fabricated units for new Community Colleges.
- China and Indonesia – non-concessional loan agreements with the Asian Development Bank.
- China – ODA loan<sup>17</sup> agreements, mainly with Germany.
- Vietnam – ODA loan agreements with the Asian Development Bank, France and Germany.

Even though development partner support represents a small proportion of overall TVET financing for most EAP countries, the significance of such support is magnified, as it tends to focus on capital expenditure and sectoral improvement programs.

### Public-private TVET financing mechanisms

Public-Private Partnerships (PPPs) in TVET (Box 2) serve two main functions, only one of which is directly related to financing. Typically, there serve to:

- Promote cost-sharing: Private sector resources – in the form of direct funding, in-kind support, or direct provision – complement public support for national TVET systems, and are a key component of sustainable financing for TVET.
- Increase collaboration with the private sector (e.g. in directing/governance, evaluating) can help achieve TVET policy objectives (e.g. making the TVET system more demand-driven, responsive, and relevant).

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<sup>17</sup> ODA loans contain a grant element of at least 25%.

## Box 2. What are PPPs in TVET?

PPPs in TVET refer to collaboration between the public and the private sectors with the objective of developing the technical and vocational skills of individuals. These skills can apply both within and outside of the formal labor force.

### Types of PPPs in TVET

#### Public support to private training provision

- Public funds, including scholarships, vouchers, grants, subsidies, are made available to private providers (on a competitive basis) to supply TVET.
- Governments provide public facilities to private providers to supply TVET.

#### Private support to public training provision

- Direct private financial contributions to public TVET system or institutions, including (but not only) as part of corporate social responsibility (CSR) - e.g. scholarships, grants.
- In-kind support from enterprises: Provision of trainee internships and public TVET staff training placements; Provision (or donation) of used equipment or training materials;
- Enterprise participation in governance, planning, curriculum and assessment (at provider/national level).

#### Joint public-private funding and delivery of training

- Co-funding from public and private sectors, and delivery of training by both public and private providers (or public-private providers), often brokered by an intermediary organization.

In the EAP Region, there are several examples of PPPs in TVET:

- **Indonesia:** An ADB-supported project facilitates partnerships between polytechnic institutions and target industry employers, e.g.: by involving industry in the improvement of curricula, training placements for lecturers, and apprenticeship for trainees; by aligning teaching and learning environments and equipment with industry needs; by establishing a national skills fund, through which the government can direct funding to public and private polytechnics, in collaboration with their industry partners (ADB, 2012).
- **Kiribati:** the Marine Training Centre is co-funded by government, industry (a consortium of German shipping agencies) and donors. 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 (Palmer, 2015b).
- **Lao PDR:** under the ADB-funded Strengthening Technical and Vocational Education and Training (STVET) Project (2010-2016), contracting arrangements with private firms and private TVET institutions were adopted 'to improve the relevance and responsiveness of the TVET system, and to allow the targeting of training to areas of skill shortage' (ADB, 2010: 4). Two types of government contracting were implemented:
  - Contracting with private firms for the delivery of training to TVET students and teachers in specialist skill areas that require expensive equipment that public TVET institutions could not afford (e.g., mining programs).
  - Contracting with private TVET institutions for the delivery of training in areas outside the priority skill areas of the STVET Project. (Ibid: 3)

- In both contracting arrangements, private firms and private TVET institutions were incentivized to train females through higher payments for female trainees.
- **Philippines:** public financing for private postsecondary TVET (ADB, 2014a).
- **Papua New Guinea:** 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 would be covered by fees, with some input of scholarships by the province (Palmer, 2015b).
- **Thailand:** the dual training system, noted above, is a partnership between private sector and government (Tongliemnak, 2016).

Meanwhile, other EAP countries (for example Cambodia) are seeking ways to promote PPPs in TVET (Koch, 2016; Seanglong et al., 2016).

## What role can TVET financing play in achieving TVET and national policy objectives?

As noted above, TVET financing plays an important role in leveraging TVET reform in desired directions. All countries in the EAP region have country-specific objectives and priorities and should consider a mix of financing mechanisms that can help achieve these objectives, while giving consideration to the country’s enabling environment for TVET financing – and the extent to which it will facilitate or hinder the functioning of specific financing mechanisms (see section 6 – this report). Countries in the EAP region should also recognize that as their TVET reform objectives change over time, so their financing mechanisms need to change. Korea provides a great illustration from the region of how a country’s TVET financing mechanisms have changed as national TVET objectives changed (see Lee, 2016).

### Policy Objective: Use Resources More Efficiently

**Try to avoid displacing private funding with public funding** - A key concern in any state-supported 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.<sup>18</sup>

**Rationalize funding** – efficiencies could be created where funding was rationalized, including via incentives to providers to merge and reduce overheads, or by creating an overarching body to oversee TVET financing. Making better use of existing resources by identifying and addressing current inefficiencies (ADB, 2009), including through unit cost and cost-benefit analysis is as important as trying to increase the overall resource envelope.

**Encourage an integrated training market** – 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

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<sup>18</sup> This section draws heavily on Palmer (2015a).

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:

- Pre-employment training funds – to create a supply of well-trained individuals in the labor 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). 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.

**Aligning financial incentives with desired effects through results-based financing.** Results-based financing rewards the delivery or achievement of specified targets through financial incentives upon verification that the pre-defined results have been delivered (World Bank, 2015). For example, they may be linked to:

- Inputs – e.g. per student financial rewards to give incentives to increase the number of students
- Outputs - e.g. incentives linked to the total number or percentage of trainees completing training, or to the percentage of trainees completing training from marginalized groups.
- Outcomes – e.g. incentives linked to the percentage of trainees in employment 3 or 6 months after completing a course, or the percentage of trainees who pass a recognized skills test after completing course.

By contrast, 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 reports on the EAP region have suggested that countries use financing approaches as a means to promote increased performance and results.

- An Asian Development Bank brief noted that: ‘Public funding to training institutions could be linked to accountability for performance, such as percentage of graduates

employed and employer and employee satisfaction rates from training' (Jagannathan, 2013: 3-4).

- For the Philippines, the World Bank (2016a) has noted that there is a need to link public training funds to greater performance, and for there to be effective sanction mechanisms to stop government subsidies going to poorly performing providers.
- In Myanmar, the Comprehensive Education Sector Review Team suggested results-based financing in the country's 2013 Education Sector Review: 'A future modality for financing TVET could be... based on the principle that the institution will receive 30% of the total cost for training at enrolment of the student, another 30% when the student has reached mid-term of the training... and finally 40%... when the training has been completed... This will also encourage the TVET institutions to actively boost the enrolment of students, the quality of training and possibly also ensure a higher graduation rate' (CESR, 2013: 21).

However, performance-based financing (especially output- and outcome-based approaches), require reliable information systems (ADB, 2014a), as well as greater provider capacity and autonomy. Such conditions may not be present in some EAP countries.

### **Policy Objective: 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.

In a 2009 report on TVET financing in China, the Asian Development Bank recommended that 'the government should provide substantive support, including financial/ fiscal incentives, to private providers who set up or expand TVET institutions' (ADB, 2009: 15).

**Align TVET scholarships to labour market needs** – increase the number of TVET scholarships that are linked to labour market needs (Bateman et al., 2014).

## Policy Objective: Raise Quality

**Create more reliable funding streams for expenditures related to the quality of TVET** – 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, 2014a: 44), both public and private TVET institutions should be able to compete for funds.

## Policy Objective: Increase Access

**Increased public funding of TVET is an obvious way to increase access** (ADB, 2014a: 45), either through the supply of more places, or targeted fee subsidies. This may not be possible in some EAP countries.

**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, 2014a: 45).

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

## Policy Objective: 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. For many, affirmative actions in TVET (e.g. scholarships) may come too late to assist disadvantaged students (ADB, 2014a: 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, 2014a: 46). Giving vouchers to disadvantaged individuals to use in a training institution of choice is one way to do this (cf Jagannathan, 2013). In contexts where vouchers are not feasible, incentivizing TVET providers to enroll/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, and policy makers might consider reviewing their approaches to scholarships, including introducing more targeted approaches based on verifiable criteria, where these do not exist. Ensuring that financial assistance measures have transparent selection mechanisms are also needed (World Bank, 2016a).

- **Student loans for TVET** - student loans with repayment from post-graduation earnings or mortgage-type loans could be explored on a pilot basis in some EAP countries. However, the administrative and, for income-contingent loans, the tax collection capability in EAP countries may limit the use of this mechanism.
- **Work and study options** – 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. However, this approach is regarded by some as a ‘rather discriminatory dual-track option’ (ADB, 2009:12).

## Policy Objective: Mobilize Non-State Resources

**Stimulate private investment in TVET**<sup>19</sup> – through incentivizing private enterprises to train own workers and contribute to overall reform efforts, encouraging PPPs and the expansion of private provision.

### Incentivizing private enterprises to train their own workers

- **Enterprise financed training funds** – Many EAP countries already have skills development funds that are resourced via private enterprise financing (mostly via training levies), but the experience in at least some of these countries (e.g. Fiji, Mongolia, Papua New Guinea) shows that fund functionality is often sub-optimal. Detailed research on the effectiveness and efficiency of existing training funds in EAP region would be advisable before concrete recommendations could be made. Such research would also help to inform the design and discussions related to proposals to set up training funds in Indonesia, Lao PDR, Myanmar and Vietnam. However, it is fair to say now that *introducing training levies is probably not currently feasible in most Pacific Island Countries where they are not done now*. International experience shows that levy systems require a sufficient formal industrial base to justify the costs, and good tax collection capabilities (to collect payroll levies). The fact that many Pacific Island Countries have large informal economies suggests not only that such a base probably does not exist, especially in the smaller Pacific Island Countries, but also that tax collection will be more problematic. Therefore, payroll-financed training levies targeting formal enterprises may not be the most suitable option for raising funds for TVET in these settings.
- **Tax incentives and education** - Tax regulations and liabilities can affect companies’ decision to train workers (OECD, 2014b); tax incentives (typically tax credits or tax allowances) can be used as a means to encourage company investment in staff training. However, international experience suggests that tax incentives are unlikely to work well in countries where formal industry is not well developed (and where small enterprises make up a bulk of all private enterprises) and where administrative or organizational capacity is weak (including tax collection capability) (Dunbar, 2013; OECD, 2014b). This may imply that such approaches are not well suited to some EAP countries. However, it is a known mechanism already used in several EAP countries (e.g. China, Philippines, Thailand), from which lessons could be drawn.
- **Education and training leave in companies.** Mechanisms that regulate periods of temporary leave (paid or unpaid) from the workplace for the purpose of education and training can encourage employee skill upgrading. Where a company gives paid leave to an employee to undertake training, they are making a direct financial contribution. Even

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<sup>19</sup> The framework for this sub-section draws on Palmer (2015b).



where unpaid leave is granted, the company incurs indirect costs (as a result of the employee not being present and the possibility of having to pay for a temporary replacement). As with tax incentives, above, such a mechanism is less suited to small (informal) enterprises that cannot afford staff to take off such time. Nonetheless, for formal medium and large enterprises in EAP countries, introducing such regulations – where they don't already exist – may be a useful step to take.

- **Training vouchers for companies.** Grants allocated to companies in the form of vouchers, which part finance training, can be another mechanism to stimulate private sector investment in training. Training vouchers can be purchased by enterprises at a discounted price to introduce an element of 'cost-sharing'; for example, a training voucher worth US\$250 might be sold to companies for US\$125. However, in the absence of targeting, such vouchers may simply be purchased by companies that would have paid full cost-recovery for training anyway.
- **Payback clauses to encourage enterprise-financed employee training.** Payback clauses are essentially agreements between an employee and an employer regarding training that has been financed at the employer's expense; the employee is obligated to stay with that company for a set period of time (e.g. 1-2 years) after completion of training, or else repay all or part of the cost of training. Again, a mechanism more suited to formal and larger companies.

#### **Incentivizing private enterprises to contribute to overall TVET reform efforts**

- **Stimulating in-kind private sector resources.** Marshalling in-kind private sector resources for TVET may be another option for governments to explore.  
For example, the involvement of the private sector:
  - on TVET institutional boards;
  - in (establishing) sector skills councils and TVET coordination bodies;
  - in helping to define curricula and determine skill needs;
  - with regard to offering internships, apprenticeships or other work placements for both students and staff of TVET institutes.
- **Private sector corporate social responsibility towards TVET.** Tapping into company corporate social responsibility agreements might be one way to access corporate grants for TVET from large formal companies. For those EAP countries with extensive natural resources (e.g. Indonesia, Papua New Guinea, Fiji), or where tourism revenue is relatively significant (e.g. Fiji, Indonesia, Malaysia), there may be scope for such agreements including the requirement of private firms to support TVET providers within their sphere of operations (in cash or in kind).
- **Private investment in TVET capital projects.** Private funding of capital projects for public TVET may be feasible in certain cases, if for example the new buildings have a specific income stream associated with them. Dormitory construction is a case in point, if students are to be charged economic rents (Horne, 2014).

#### **Encouraging PPPs and the expansion of private provision**

See above discussions.

## Other approaches to mobilize non-state resources for TVET

- **Retention of internally generated funds at the level of the TVET institution** – the sale of goods and services, where revenue is retained is another viable option (see Palmer, 2015b).
- **Supply-side financing through tuition fees** – In many EAP countries it is 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. However, in some countries this may be an option, provided that targeted needs based scholarships or stipends are provided for those that can't pay. Where cost sharing is expanded, it has been noted that trainee interest in the quality, relevance and cost-effectiveness of training increases (ADB, 2004).

## How can other countries create the right environment for TVET financing?

TVET financing approaches don't function in isolation of other TVET reform efforts and governments need to create a conducive policy, regulatory and administrative climate in which various financing mechanisms can function, and where private financing can flourish alongside public financing. This includes (but is not limited to), for example:<sup>20</sup>

- **Establishing and strengthening 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 crowd-in private sector financing, the private sector needs to be directly involved in creating a better system; e.g. in determining the allocation of funds raised (from private sector contributions), involvement in governance, in developing curriculum, in informing training provision.
- **Decentralizing governance of providers** – where full decentralization 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, and needed in order to align funding to identified need. 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

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<sup>20</sup> From Palmer (2015a).

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.

Lastly, countries wishing to adopt various TVET financing mechanisms need to give due consideration to their country's historical, social and political contexts and assess how these may act as enablers or barriers to the use of certain financing mechanisms.

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## Annex

**Table A1. ODA disbursements to vocational training – East Asia and Pacific (Constant 2014 US\$ million)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>EAP total</b>	<b>53.4</b>	<b>90.9</b>	<b>82.6</b>	<b>79.3</b>	<b>65.4</b>	<b>64.1</b>	<b>99.0</b>	<b>80.3</b>	<b>104.2</b>	<b>121.1</b>	<b>89.9</b>	<b>125.0</b>	<b>124.4</b>
<i>East Asia</i>	46.7	76.5	72.5	66.7	57.2	44.9	64.8	45.2	70.0	95.9	79.5	115.1	113.9
<i>Pacific</i>	6.7	14.4	10.1	12.6	8.2	19.2	34.1	35.1	34.2	25.2	10.4	9.8	10.6
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>East Asia</b>	<b>46.7</b>	<b>76.5</b>	<b>72.5</b>	<b>66.7</b>	<b>57.2</b>	<b>44.9</b>	<b>64.8</b>	<b>45.2</b>	<b>70.0</b>	<b>95.9</b>	<b>79.5</b>	<b>115.1</b>	<b>113.9</b>
Unallocated within the East Asia Region	..	0.1	..	..	0.0	..	..	0.1	0.2	0.1	1.5	2.8	0.8
Unallocated within the Asia Region (i)	0.1	0.1		0.1	0.0	0.0	0.0	0.1		0.2	0.7	1.9	2.0
Cambodia	0.9	1.6	1.7	1.5	1.6	0.7	1.5	1.1	1.9	3.6	6.2	9.8	9.2
China (People's Republic of)	14.7	23.4	23.0	12.8	12.9	11.3	9.9	5.4	3.6	11.2	0.8	19.9	34.3
Indonesia	21.0	21.0	10.1	14.0	22.0	13.7	16.5	7.3	24.9	35.3	18.7	22.1	6.0
Lao People's Democratic Republic	1.3	1.2	4.7	2.9	2.5	3.8	7.7	6.5	7.0	4.6	11.1	16.3	13.2
Malaysia	0.8	5.7	3.2	1.3	1.3	0.5	0.5	1.2	1.1	1.4	0.7	0.3	0.3
Mongolia	..	0.6	0.4	0.4	0.6	0.5	1.1	1.7	2.1	2.9	13.4	10.3	9.0
Myanmar	..	0.2	0.3	0.2	0.1	0.6	1.5	0.6	1.2	2.8	3.2	4.3	13.9
Philippines	2.9	5.9	12.8	23.3	7.4	3.6	3.7	1.7	1.8	1.4	1.9	4.2	3.3
Thailand	0.2	3.9	4.2	1.2	1.4	1.1	1.6	1.1	1.2	0.3	0.8	1.2	0.2
Timor-Leste	0.6	0.0	0.0	0.7	0.5	1.2	0.5	3.5	6.0	2.2	4.9	3.4	3.4
Vietnam	4.3	12.7	12.3	8.4	6.8	7.9	20.4	14.9	18.9	29.8	15.5	18.8	18.4

Table A1 (cont) ODA disbursements to vocational training – East Asia and Pacific (Constant 2014 US\$ millions)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Pacific</b>	<b>6.7</b>	<b>14.4</b>	<b>10.1</b>	<b>12.6</b>	<b>8.2</b>	<b>19.2</b>	<b>34.1</b>	<b>35.1</b>	<b>34.2</b>	<b>25.2</b>	<b>10.4</b>	<b>9.8</b>	<b>10.6</b>
Unallocated within the region	0.5	0.3	0.7	1.3	0.1	17.1	31.0	31.9	13.5	3.0	0.2	0.1	0.1
Fiji	0.4	0.1	0.2	0.1	0.1	0.0	0.1	0.0	5.2	5.9	0.2	1.1	2.0
Kiribati	0.0	0.5	0.7	3.1	1.8	0.2	0.1	0.3	0.1	0.1	3.6	2.9	2.3
Marshall Islands	0.4	..	0.1	..	..	..	0.0	0.0	..	0.0	0.0	..	..
Micronesia	..	0.5	0.5	0.0	..	..	0.0	..	..	..	..	..	..
Palau	..	..	..	..	..	..	..	0.2	..	0.0	..	0.0	..
Papua New Guinea	0.9	7.4	4.4	1.4	2.6	0.4	1.2	0.3	5.8	4.5	1.1	1.1	1.8
Samoa	0.9	0.8	0.7	5.8	3.0	1.0	1.1	0.0	3.9	3.3	0.6	0.3	0.5



Solomon Islands	1.1	0.8	0.0	0.0	0.1	0.0	..	0.1	0.7	2.5	0.9	1.9	0.7
Tonga	0.4	0.2	0.4	0.3	0.4	0.4	0.4	0.2	1.1	2.0	1.6	0.0	..
Tuvalu	..	..	..	..	..	..	0.0	..	0.4	0.0	0.0	..	..
Vanuatu	2.0	3.7	2.4	0.6	0.0	0.0	0.2	2.1	3.4	4.0	2.2	2.4	3.2

(i) The unallocated share for Asia, calculated proportionally for number of East Asian countries

Source: based on data from <http://stats.oecd.org> (accessed 30.04.16)

**Table A2. ODA disbursements to professional level vocational training – East Asia and Pacific (Constant 2014 US\$ millions)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>EAP</b>	<b>58.9</b>	<b>80.7</b>	<b>24.9</b>	<b>19.6</b>	<b>23.3</b>	<b>21.1</b>	<b>26.2</b>	<b>17.6</b>	<b>19.3</b>	<b>29.6</b>	<b>42.5</b>	<b>50.1</b>	<b>49.1</b>
East Asia	51.4	75.3	21.4	18.0	18.3	19.8	25.2	13.6	18.4	11.7	10.5	17.5	19.8
Pacific	7.6	5.4	3.5	1.7	5.0	1.3	1.0	4.0	0.9	17.9	32.0	32.6	29.2
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>East Asia</b>	<b>51.4</b>	<b>75.3</b>	<b>21.4</b>	<b>18.0</b>	<b>18.3</b>	<b>19.8</b>	<b>25.2</b>	<b>13.6</b>	<b>18.4</b>	<b>11.7</b>	<b>10.5</b>	<b>17.5</b>	<b>19.8</b>
Unallocated within the East Asia Region	..	1.8	0.8	0.7	1.7	0.3	1.4	0.2	0.8	0.0	..	0.3	0.3
Unallocated within the Asia region (i)	0.1	0.2	0.7	0.2	0.3	0.2	1.4	0.2	0.1	0.2	0.1	0.2	0.2
Cambodia	0.7	2.1	0.2	0.8	0.7	0.9	0.3	0.5	0.6	0.4	0.4	1.6	2.3
China (People's Republic of)	8.3	20.7	3.5	11.8	12.0	8.8	8.9	3.1	8.3	6.0	5.7	4.3	3.9
Indonesia	19.1	18.5	9.2	0.6	0.8	1.0	9.0	0.7	2.3	0.6	0.5	2.3	1.4
Lao People's Democratic Republic	1.5	1.0	0.2	0.5	0.4	0.8	0.2	0.4	0.3	0.2	0.0	0.5	0.0
Malaysia	0.3	0.5	0.1	0.1	0.1	1.4	0.1	0.2	0.3	0.2	0.5	0.9	0.6
Mongolia	2.6	5.3	1.1	1.3	0.1	0.2	0.0	0.7	2.1	1.5	0.0	0.1	0.0
Myanmar	0.5	1.5	0.2	0.1	0.1	0.5	0.1	0.1	0.1	0.2	0.3	1.6	1.2
Philippines	5.7	10.1	4.3	0.2	0.3	0.5	0.3	0.3	0.7	0.4	0.7	0.7	0.7
Thailand	2.2	5.0	0.4	0.9	0.7	2.4	0.4	0.2	0.5	0.5	0.5	1.2	0.2
Timor-Leste	0.2	0.0	0.0	0.0	..	0.2	0.2	0.2	0.1	0.1	..	1.0	0.2
Vietnam	10.2	8.5	0.7	0.6	1.1	2.5	3.0	6.9	2.2	1.5	1.9	2.8	8.8

**Table A2 (cont) ODA disbursements to professional level vocational training – East Asia and Pacific (Constant 2014 US\$ millions)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pacific	7.6	5.4	3.5	1.7	5.0	1.3	1.0	4.0	0.9	17.9	32.0	32.6	29.2
Unallocated within the region	1.6	1.2	2.0	0.6	4.4	1.1	0.8	0.3	0.0	13.0	8.2	7.1	7.8
Fiji	0.7	2.1	1.2	0.6	0.4	0.1	0.0	0.2	0.2	0.1	8.6	8.0	8.4
Kiribati	0.4	0.2	0.2	0.3	0.1	0.0	0.0	0.2	..	0.0	0.1	0.2	0.2
Marshall Islands	..	0.1	..	..	..	..	..	0.2	0.0	..	0.0	0.0	0.0
Micronesia	..	..	..	..	..	..	..	..	0.0	..	0.0	..	..



Palau	0.1	..	..	..	..	..	0.0	0.1	0.0	..	0.0	..	..
Papua New Guinea	4.1	1.7	0.1	0.1	0.1	0.1	0.1	1.1	0.4	4.7	5.4	6.8	5.8
Samoa	..	..	..	..	0.0	0.0	..	0.2	..	0.0	2.8	2.5	2.6
Solomon Islands	0.0	..	0.0	0.1	0.0	0.0	0.0	1.0	..	0.0	3.8	5.1	2.1
Tonga	0.1	..	0.0	..	0.0	..	0.0	0.2	0.0	..	0.2	0.2	0.2
Tuvalu	0.1	..	..	..	..	..	..	0.1	0.2	..	0.1	0.1	0.1
Vanuatu	0.3	0.1	0.1	0.1	..	..	..	0.2	..	..	2.7	2.6	1.9

(i) The unallocated share for Asia, calculated proportionally for number of East Asian countries

Source: based on data from <http://stats.oecd.org> (accessed 30.04.16)