

FINANCING OF VOCATIONAL EDUCATION AND TRAINING SCHOOLS IN NORTH MACEDONIA

Issue paper

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INTRODUCTION

Context. In 2019, the Ministry of Education set up a national “financing expert group” (FEG) to reflect on the financing of VET, with the support of the Education for Employment in North Macedonia project (E4E@mk) and European Training Foundation (ETF). The mandate of this group is to explore options for making VET financing more effective and come up with proposal for broader policy discussion. After the constitutive meeting (3 December 2019), a first discussion workshop was organised on 12-13 February 2020 as a launching step to « unpack » the financing issue, share and discuss an initial analysis of the situation of VET financing and expose Macedonian stakeholders to other countries’ approaches, namely Estonia and Slovenia. Since then, the FEG met several times to discuss policy priorities.

Issue paper: structure and objectives. Based on the abovementioned steps, this issue paper, authored by Marie Dorléans, senior specialist in ETF, presents **an analysis of the current state of play** of VET financing in the Republic of North Macedonia (*Chapter I*), shares the **experience of other countries in terms of formula funding for funds allocation to schools**, identified as priority issue by the Macedonian partners the (*Chapter II*), and formulates some **recommendations** for moving forward (*Chapter III*). It is worth clarifying that the note does hardly take into account the additional issues and policy development raised by the Covid-19 pandemia.

It aims to:

- support the strategic reflection of the North Macedonian decision makers on the needs and options for reform,
- inform the policy dialogue between the European Union (EU delegation and services in Brussels) and the country officials, and
- inspire the decisions for support projects or programmes of other international donors and partners for financial assistance.

Target audience. This note is primarily targeted at the members of the national financing expert group, who could find here a reference document to ensure common understanding of issues at stake and a method for organising and sequencing their discussion or work plan effectively. It can also be useful to donors supporting the VET sector, or to any other national stakeholders.

Preliminary remarks: general considerations on VET financing.

1. VET financing is not only a constraint; it is an opportunity for VET system and policy change.

VET financing can be approached at least from two perspectives:

- as a conditioning factor for reform: whatever is planned, it needs funds to be implemented
- as a full-fledged area of reform: designing appropriate financing instruments (schemes and mechanisms) does not only alleviate the monetary obstacle, but it also fosters and help steers the priorities.

Therefore, financing should not be considered only as a constraint but also as an opportunity for VET system change.

2. **Exploring options for reforming VET financing requires to put on the discussion table a fundamental question: What role is expected from the State?** Depending on the vision of the VET for the future, this question is also a pragmatic one: in contexts where State budgets are constrained, where business sector's further involvement in the training would help increase relevance and quality of the training, there may be room for discussing future priority role of the Public Actor, which should certainly keep focusing on ensuring quality and equity, but could probably reconsider its role in provision.
3. **Financing reforms need to be closely articulated with other components of the VET policy.** For instance, the quality assurance system, the governance setting, or the training provision arrangements are essential elements to consider when reflecting on increasing the efficiency of the system.
4. **Whether it is for resource mobilisation or for resource allocation, no single financing instrument can solve all problems, but the impetus is to find the right mix.**

1. STATE OF PLAY OF VET FINANCING IN THE REPUBLIC OF NORTH MACEDONIA

This chapter presents a detailed, evidence-based analysis of the state of play, which builds on desk review and on discussions held with stakeholders during field visits, bilateral meetings and a 1.5-day workshop organised in partnership with the Education for Employment at North Macedonia (E4E@MK) project supported by the Swiss Agency for Development and Cooperation (12-13 February 2020, Skopje).

It focuses on the various issues, financing or non-financing, that affect the financial situation of the vocational education and training (VET) system in the Republic of North Macedonia (RNM) - whether concerning the *mobilisation* of resources, their *allocation* to schools or the financial *management* at all levels. It endeavours to identify main issues and bottlenecks, and to spot some key levers for alleviating the financial constraint, with a priority attention to opportunities for a better use current resources (efficiency gains, more targeted use of existing financing instruments), instead of only seeking the solution in additional funds (budget increase and financing source diversification). These levers will then be further explored in Chapter III.

The state of play is organised around the main dimensions of financing as identified in the ETF tool called « the Financing Prism », designed to ensure systematic analysis and to organise effective dialogue about financing.

Therefore, the chapter reviews the three main facets of the financing:

- Resource Mobilisation
- Resource Allocation
- Management of the Financing Chain

and two transversal issues:

- Costing
- Data.

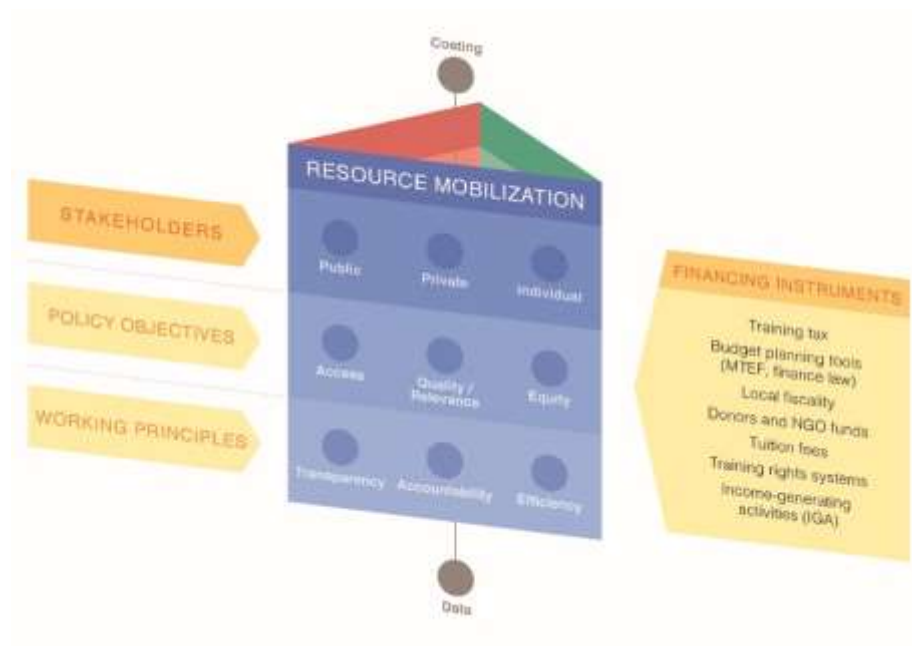
For each dimension, a description of the current situation is proposed, from a quantitative and/or qualitative point of view, followed by the key critical points for further attention.

1.1 Resource mobilisation

By resource mobilisation, one should consider here all that relates to the resources that enter into the VET system (for covering its running expenses or capital investment expenses, or for financing reforms), that is to say at least:

- the stakeholders as sources of finance: who pays
- the monetary aspects: amounts concerned
- the mobilisation channels.

Engaging a discussion on resource mobilisation can be rather smoothly done by **mapping the key stakeholders** currently engaged, or entitled to be engaged, in the resource mobilisation.



Current situation (Stakeholders and respective contributions)

Historically, in North Macedonia, the resource mobilisation is the main, if not sole, responsibility of the State, whose role covers various missions, including offering public provision, guaranteeing quality (setting standards, training trainers...) or ensuring equity. In this sense, public money covers most costs of the system.

PUBLIC STAKEHOLDERS

The State is the main source of finance. 96.7% of the funds received by the schools originate in the State budget. The budget line granted by the Ministry of finance for **Ministry of Education and Science** includes the envelop for the schools. Following the law on local self-government, for all schools but the 11 current State schools (the 3 upcoming regional VET centres to be created will also have this status), these funds transit through the Municipalities. Municipalities have been transferred the whole education competence (see box below), although it appears that their dependency on central government is still high, namely because of their still limited capability in most cases. This also means that the **Ministry of local self-government** is an important stakeholder to involve in discussions.

Municipalities can (should) add to the State budget part of their own resources (collected through their local taxation system, the share they receive of the value added taxⁱ or of the personal income tax), to increase the grant to schools, but cannot earmark their own resources to teachers' salaries. In practice, it seems they do little so, either because they do not fully 'own' this new competence or because they lack the capacities. The part that municipalities spend from their own budget for secondary education is only 1.18%.

THE FINANCING OF AND BY MUNICIPALITIES

Mandate in education: Art 22 of the law on local self-government, 2002 : « establishment, financing and administration of primary and secondary schools, in cooperation with the central government, in accordance with the law, as well as organising transportation and nutrition of students and their accommodation in dormitories »

Financing sources (Art 11): State subsidies, own resources (local taxes, fees and « fees determined by law »). Municipalities receive 3% of personal income tax (they lobby for 50%), 4.5% of VAT (they lobby for 10%), a 7% share of companies profit tax and no share of personal wages tax.

Grants to municipalities come « from the budget of the Republic of North Macedonia and from the budget of the funds », they include: income from VAT, categorical, capital transfer, block grant, grant for delegated authorities. Block grants represent 98% of total transfers to municipalities, and half of their revenues.

Block grants: Financing for VET schools come from block grants. They Block grants amount was ca 15 Mds MKD (245 M euros) in 2017, 88% of which go to education including secondary (27,4% out of which 65% goes for VET) ; (10% for social protection, 1.6% for culture and the rest for fire-fighting : the 4 main responsibilities of municipalities). Education block grants represent ca 2.1% of GDP.

Grants cover 93,44% of secondary education expenditure (municipal budget 1.18%) and self-financing activities almost 3.38% in secondary education.

Own resources: Disparities across municipalities are huge in terms of own revenue. Per capita revenue spent by municipalities from the City of Skopje are higher than the national average by 33%, or higher than those by rural municipalities by 70%. Most of the tax revenues are generated either in the City of Skopje (54%) or in the urban area (40%) and only 7.44% of the tax revenues are collected in the rural area municipalities.

The value added tax (VAT) serves as an equalization grant for municipalities, as there is none, despite the transferred competency on secondary education

Source: Trenovski B., *Analysis of the current situation and problems in financing of delegated competencies - Block grants*, Inception Report, Skopje, September 2018

Schools are allowed by law to mobilise their own resources¹. In practice, an extremely small number of them do so. According to the findings of the E4E@mk project baseline report, which analysed a sample of 29 schools representing 39% of all VET schools in the country, only 2 were referred to as having income generating activities, by selling some services provided by students – in

¹ According to the law on secondary education, allowed sources of funds for schools include: participation fees from users of schools' services; sales of goods and services resulting from their core activities; private companies, public enterprises, governmental bodies and institutions providing practical training for students; approved projects by the Minister of education and science; interests and dividends; legacy, gifts, covenants.

hospitality/catering)². In total, only 2.9% of school resources come from non tax revenue or Income generating activities (including fees).

PRIVATE STAKEHOLDERS

Businesses are not levied financial contribution for VET, and so far they do not mobilise financial resources through any other financing instrument. There is no data that would quantify their intangible voluntary contribution.

The fees in **private schools** are not regulated by law. There is not an official data on the fees of private schools, but one recent article on fakulteti.mk portal wrote that the fees vary between 1500 to 5000 EUR per year³.

INDIVIDUALS

Given that **public secondary education is by law free of charge and represents almost 90%⁴ of the secondary education**, households (individuals) do hardly participate to the financing⁵. One exception concerns individuals above 17 years old who left school and resume training through evening courses.

In addition, households may incur costs such as little material, textbooks, equipment, uniforms, safety shoes or other work clothing, insurance (for some profiles a special type of insurance is required), medical examinations, travel expenses of the student to the company where the training is held. However, most of the schools' report that they do not have information on the amounts disbursed by students or parents for such costs.

Questions for national awareness-raising

Once the mapping of stakeholders is done, shared and used for inviting the relevant institutions to the discussion table, the first driver for discussion can then be the following question: **Who currently pays, and who should pay (what and why) in the future?** This question goes hand in hand with another fundamental one: **what is the expected role of the State** in education and training? It also raises the issue of possible financial participation from learners or their families – in particular for the higher levels of VET (as individual returns of investment grows, in terms of employability and earning prospects).

Or from another angle: **what is expected from the business/private sector partners, and how they can they contribute, both from a financial and non financial points of view ?** For example, when developing **work-based learning** (as is being done in Republic of North Macedonia), they may participate in incurring the financial burden of students, as they receive them in their premises and devote resources to work-place learning; they could also participate or support the teaching of soft skills in the school-place. The next question is **how to deal with a heterogeneous landscape of companies**: in particular, could small and micro companies be exempted from mobilising resources (which they often do not have, even if non-financial) but still be gradually included in the training

² Source: Dokmanović M., Spasevski D., Shapkova Kocavska K., Gichevska S., 2018, Legal framework and resources in the vocational education and training in the Republic of North Macedonia - Research report

³ Source: <https://www.fakulteti.mk/news/06072018/privatnitate-uchilishta-vo-podem-se-plakja-od-1-500-do-5-000-evra-za-godina>

⁴ At the beginning of the 2017/2018 school year, there were 117 public schools and 14 private schools.

Public secondary education represents 89,3% of total number of schools. The state statistical office does not publish data on number of VET private schools; therefore it may be that schools offer both gymnasium and VET profiles.

Source: <http://www.stat.gov.mk/Publikacii/2.4.18.04.pdf>

⁵ From baseline study (Dokmanovikj et al., 2018, p. 29)

system? In RNM, a discussion on a training levy for companies seems out of the scope: highly immature, unfit to the context, it could even be counterproductive against the objective of engaging companies, if they start to feel it could bind them financially.

These fundamental questions on respective roles and responsibilities go with a practical one: do we know how much the system needs, i.e. **is there a cost estimate of needed resources?** In North Macedonia, it seems that the strategy has been costed, which is a positive achievement, rare enough to be mentioned.

Key points for further discussion and recommendations (Resource mobilisation)

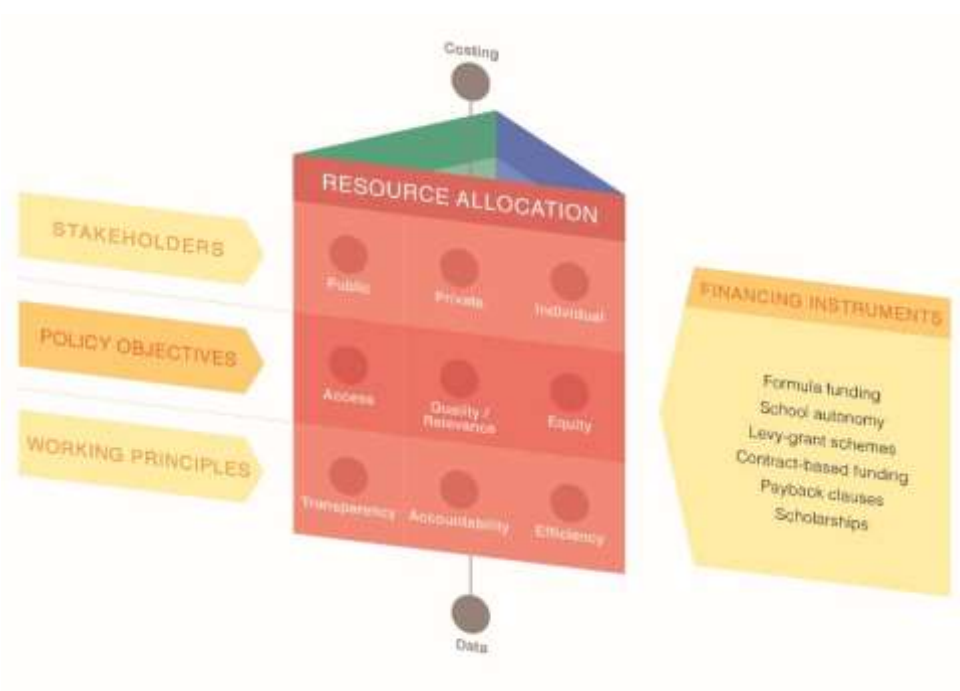
✓ **Fiscal and institutional capacity of municipalities:**

- they are not equally able to raise resources, do not have the same sense of priority (and impetus to prioritize education)
- repeatedly reported is the lack of capacity of municipalities to fulfil their role of monitoring/supervision of the schools⁶
 - discuss the relevance of **an equalization fund that would ensure equity** across schools independently of the wealth of the municipality they belong to,
 - identify the needs for **capacity building actions targeting municipalities** - including the budget needed and the legitimate actors to provide this support- to help them better fulfil their role in the education system.

✓ **Income-generating activities by VET schools**

- The legal possibility of income generating activities exists
- Using it at best raises two issues : i- unequal capacity of schools to do it (linked to sectoral specialties of training provision, dynamism of the local demand according to geographic location (local economic potential disparities)) and the need to smooth them (equalisation scheme?); ii- motivation of school principals to develop them (incentives for schools, or performance management framework incl. this indicator...)
 - review the legal framework for income-generating activities and organise a consultation with school headmasters on enabling measures

⁶ According to the law on secondary education, inspection supervision is performed by the State Educational Inspectorate and the authorized inspectors from the municipalities and the City of Skopje (Art.108). However, there is no official information how many of the municipalities have authorized inspectors with regard to education. In addition, the methodology that some municipalities use for allocation of block grants does not include provisions for monitoring or supervision of schools (4 out of 9 municipalities surveyed in the baseline study reported to use this methodology).



1.2 Resource allocation

In general terms, the discussion on resource allocation can smoothly be anchored to the **objectives of the policy**: to what extent do resource allocation patterns serve, in particular (as most common and generic policy objectives):

- access and participation to VET (not only youth in initial VET, but also adults as company employees or unemployed supported by employment services – although here, given the focus requested by North Macedonian partners on school funding, Continuing VET is not analysed)
- quality (and relevance)
- equity across beneficiaries (who may include individuals – students, workers, unemployed...-, or companies, etc.)

Resource allocation mechanisms may steer the policy in at least three ways:

- **Adopting calculation methods for resource allocation based on outcomes**⁷, rather than repeating historical / incremental budget distribution patterns
- **Encouraging modern forms of teaching** involving more work-based learning, which can not only improve quality and relevance, but also decrease the financial burden on the State
- **Incentivising companies to engage** in continuing training for their workforce

The two first elements are particularly relevant to North Macedonia given the current situation.

⁷ Outcome-based allocation is an ideal paradigm, because it rewards performance and the impact of the VET system (by taking into account for resource allocation learning outcomes, employment outcomes. But it requires reliable data throughout the education -training- employment chain, and needs to be made flexible for integrating unforeseen heterogenous factors that could affect performance (eg: economic crisis, Covid19 pandemia, etc.) but sometimes difficult to implement because

Nota bene: Incentives to companies are also considered in RNM to encourage work-based learning, but this can be dangerous from a sustainability point of view in the long run (the more companies engage in WBL, the most costly to the State budget)

Sample financing instruments for resource allocation include levy-grant schemes (not applicable to NMK, see above), formula funding, contract-based funding/bidding procedures, incentives for companies, vouchers for individuals, payback clauses...

Current situation (Priority objectives and allocation rules)

ACCESS

Per capita funding, which determines the resource allocation to schools, is calculated as follows:

Primary education: number of pupils, adjusted to the population density + transportation costs (based on number of students and routes' length)

Secondary education: number of students and share of students in VET, adjusted with the number of students with special education needs (SEN)

In other terms, there is a **funding formula** for VET schools in North Macedonia since 2008. For each VET school, the standard allocation relies on the following calculation. As previously explained, it is channelled through the block dotations to municipalities (technical details are presented in the box hereafter):

A lumpsum

+ a per student standard price x nb of students

+ a 0.2 weighting factor for VET schools (compared to general education schools) i.e. a 20% bonus for VET (before 2020 this bonus was 10%⁸)

+ 1.0 weighting factor for Students with special education needs (SEN)

⁸ Noteworthy is that the 0.1 coefficient for VET schools has been revised and increased to 0.2 from 2020.

SCHOOLS FUNDING FORMULA IN NORTH MACEDONIA (BASED ON BLOCK DOTATIONS TO MUNICIPALITIES)

$$BDS_{So} = O + PU_{o} \times C$$

BDS_{So} – Block dotation for secondary education for Municipality/City of Skopje

O – Basic sum per Municipality/City of Skopje
PU_o – Pondered number of students in Municipality/City of Skopje

C – Standard (amount) per student

$$PU_{o} = U_{o} + U_{c} \times K_{c} + U_{pp} \times K_{pp}$$

PU_o – Pondered number of students in Municipality/City of Skopje

U_o – Total number of students in secondary education in Municipality/City of Skopje

U_c – Number of students in VET in Municipality/City of Skopje

K_c – Coefficient (ponder) for VET education (0.2)

U_{pp} – Number of students with disabilities in secondary education in Municipality/City of Skopje

K_{pp} - Coefficient (ponder) for students with disabilities in secondary education (1.0)

This funding formula clearly intends to serve **policy objectives of access and equity**: access because the calculation mode takes into account the number of students to be enrolled, equity because SEN reaching out is supported by an additional weighting factor.

In addition, always related to the “access/participation policy objective”, (accredited) schools can receive **contract-based funding** by participating to tenders⁹ organised by the employment agency with the objective to offer targeted training courses for unemployed persons registered at the employment agency; these courses are defined based on the skills needs of the labour market. Once the costs of the course are covered, the remaining allocation can be used to finance the running costs of the school, including for initial training.

Regarding **transportation expenses**, a rather remarkable persistent problem of Macedonian secondary education is the financing of transportation of students to schools. Since the introduction of obligatory secondary education in 2014, the Law on Secondary Education made it an obligation to provide free of charge transportation of students from their residence to the school they have selected. The organization and financing of this new task was entrusted to municipalities. They have to organize tenders through public procurement procedures, select the cheapest offer from transportation companies, and pay the resulting costs. The only reason for not organizing a tender is when the municipality has its own public transportation company (like Skopje) or can use the services of public transportation company of a neighbouring municipality (like Illinden). In practice though, this is one of the main bottlenecks to municipalities’ financial room for manoeuvre, as transportation costs take most of their budget; and still, it is not ensured everywhere¹⁰¹¹.

Seven types of **stipends for individuals** exist¹², but they are not all currently being implemented. One targets the deficit occupation of waiters: students choosing a training to this profession receive an

⁹ According the Law for Adult education, this possibility can be used only by the VET schools that have a “license” as training providers accredited for adult education

¹⁰ Source: <https://meta.mk/srednoshkoltsite-od-tetovo-i-deneska-protestiraa-poradi-problemot-so-prevozot/>

¹¹ Source: <https://www.fakulteti.mk/news/04102018/prespanskite-srednoshkolci-ostanaa-bez-prevoz-za-bitola>

¹² 7 types of stipends are foreseen for the students enrolled in secondary schools in the 2019/2020 year:

allocation amounting 2200 MKD (35 euros) monthly over 9 months. Although little used, this could be in the future an interesting financial tool to regulate demand for occupations, **in complement and support of stronger vocational guidance and a genuine enrolment policy**. This could be crossed with equity considerations, if the pre-requisites for receive these stipends would include

Last but not least, in order to encourage access (participation) of companies to VET, a tool is available: **incentives for companies** are mentioned in the legal texts. The extent to which they are effectively used is unclear. Companies could be allowed to have customs or tax reliefs, for instance. The reflection could first focus on how to activate those possibilities, and then how to broaden their scope, for instance to give priority to companies from lagging behind municipalities, or to offer types of incentives (like preferences or reward in State procurement procedures)

QUALITY

Resource allocation for quality commonly refer to expenses dedicated to equipment or infrastructure renewal, material, manuals, training of teachers etc. Running and capital expenditure are commonly distinguished. For running expenditure, a proxy is the resources available once deduced the teacher's salariesⁱⁱ, as those are uneasy to change.

Based on the figures available through the baseline study (which took a sample of schools, and builds on 2017 data), **total costs that the schools spend on human resources** (including salaries for full time employed, part time workers, temporary employment and other compensation for contractual services) equals approximately **70% of their total revenues** (777 mil. MKD). If this figure is accurate, this would leave around **one third of school resources for 'quality expenses'**, which in theory grants room for manoeuvre and improvement. However, funding for training of teachers/trainers is reported to be an issue.

For capital expenditure, it seems that in North Macedonia, **they represent less than 1% of school expenses, which means that there is little opportunity for infrastructure renewal, whereas the VET schools are somehow poorly equipped**. In addition, in 2017, the state (Ministry of education and science) has spent 6.8 mil. MKD for construction of new secondary schools, 20 mil. MKD for reconstruction of current secondary schools and 2.3 mil. MKD for construction of sport halls for the secondary schools. (Source: <https://finance.gov.mk/files/u6/ZAVRSNA%20SMETKA%202017%20-%20SPOENA.pdf>)

But the data available do not enable to determine the share of these funds dedicated to secondary VET schools.

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- ✓ Stipend for talented students – sportists: 100 students, 2970MKD monthly
 - ✓ Stipend for talented students from secondary schools: 100 students, 2970MKD monthly
 - ✓ Stipend for students with special education needs: 100 students, 2750MKD monthly
 - ✓ Stipend for social support of students: 400 students, 2200MKD monthly
 - ✓ Stipend for orphaned students: 50 students, 2750 MKD monthly
 - ✓ Stipend for students from tourism / hospitality profiles: 15 students, 2200MKD monthly
 - ✓ Stipend for Roma students with GPA in the following intervals: GPA 4.5 – 5: 200 students, 2200MKD monthly; GPA 3.5 – 4.49: 320 students, 1500MKD monthly; GPA 3 – 4.49: 160 students, 1000MKD monthly; Stipends for Roma students with special educational needs with GPA 3 – 5: 50 students, 1000MKD monthly; Motivational stipend for Roma students with GPA 2-2.99: 150 students, 600 MKD monthly

Source: <http://www.slvesnik.com.mk/Issues/9dff084216a1493bbe7b6909f0d7eaef.pdf>, p.9

SCHOOL EXPENSES

The expenses of schools are divided into the following categories:

- **Salaries and allowances**
- **Good and services** (travelling and daily expenses, public utilities, heating, communication and transport, materials, repair and on-going maintenance)
- **Subsidies and transfers** (transfers to companies and NGOs public/private)
- **Capital expenses**
- **Interest costs**

In a baseline study (Dokmanovikj et al., 2018, p. 24), findings for the sample of 29 schools were as follows:

- 65% of the funds were used for salaries and allowances for the employees (590 million MKD),
- 33,5 % were used for procurement of goods and services (304 million MKD – including Travel costs and per diems (3 M, 1%), Temporary employment (2 M, 1%), Maintenance (34 M, 11%), Utilities, heating, transport and communication (49 M, 16%), Contractual services (185 M, 61%) Materials (25M, 8%) and Other running expenses (7 M, 2%)),
- Less than 1% for capital expenditures (almost 9 million MKD)
- 0,5% were used for subsidies, transfers and interest payments (4 million MKD).

EQUITY

Equity seems to be a constant policy objective in North Macedonia. It covers the issue of ethnicity (Strategy, p. 37: “purpose to reduce ethnic prejudice”) and students with special education needs (SEN), but should also be considered from the standpoint of disparities across municipalities (with the need to compensate for those that do not have a sufficient fiscal capacity, hence cannot honour their commitments/function vis-à-vis the education sector).

The menu of available **stipends** includes, as mentioned above, different targets relevant from a social inclusion / equity point of view: those economically vulnerable (Stipend for social support of students), orphaned students, Roma students.

The **issue of regional vulnerabilities** (incl. disparities of wealth across municipalities) does not seem to be systematically addressed yet. This is probably due to the lack of data, but also to politically sensitive issues, and that explains also the old update of the census (2002) which could otherwise be a useful tool to monitor disparities and address inequities.

COVID UPDATE: MAIN DECISIONS TAKEN BY THE GOVERNMENT IN 2020 REGARDING RESOURCE ALLOCATION¹³

“The government will subsidize/finance:

- part of the cost for accommodating of the full-time students from families affected by the health and economic crisis caused by Covid 19
- above 16-year-old students enrolled in public secondary schools to purchase school supplies from low-income families caused by the health and economic crisis
- vouchers for young people up to 29 years of age with at least secondary education, for digital skills training to improve their competitiveness in the labour market.

In a nutshell, various financing tools for resource allocation exist, but it seems they are not fully known, all the less broadly used and efficiently managed, and they do not seem to address the issue of municipalities.

Key points for further discussion and recommendations (Resource allocation)

✓ **What to finance *in priority*, and what would be the most adapted tools?**

(In other terms: what should resources be allocated for). Different types of expenditure are mentioned in the responsibilities of the public actors, including transportation, dormitories, meals... this should be subject to a discussion that would ground into a precise state of play (e.g.: how many VET schools currently offer dormitories, transportation or meals – and are the needs equally important for all segments of the population, or all municipalities, ...). Depending on the type of expenses, different financing tools could be combined (formula funding, stipends/scholarships...). Moreover, these different expenses should be reflected upon in correlation (e.g.: a refined or extended transportation support policy may partially set-off the need for dormitories, for instance)

✓ **How to improve the funding formula to VET?**

The questions that may be discussed, based on experience, include:

- **Are weighting factors in the formula sufficient** to incentivize school directors (e.g.: does a 1.0 factor for SEN encourage sufficiently reaching out efforts to enrol SEN students?; is a 0.2 additional weighting factor for VET appropriate for each profile, ex. construction vs. personal services? Does it sufficiently take into account equipment and material costs?
- **Could the revision of the formula that the Government wishes be combined with other tools of resource allocation** (e.g.: contract-based funding, as for training programmes for unemployed currently existing, or stipends) that would be more effective incentives for reaching out to specific target groups or equalizing disparities (for instance related to municipality inequities)?

¹³ Source: E4E note, ‘Republic of North Macedonia education system in COVID period’

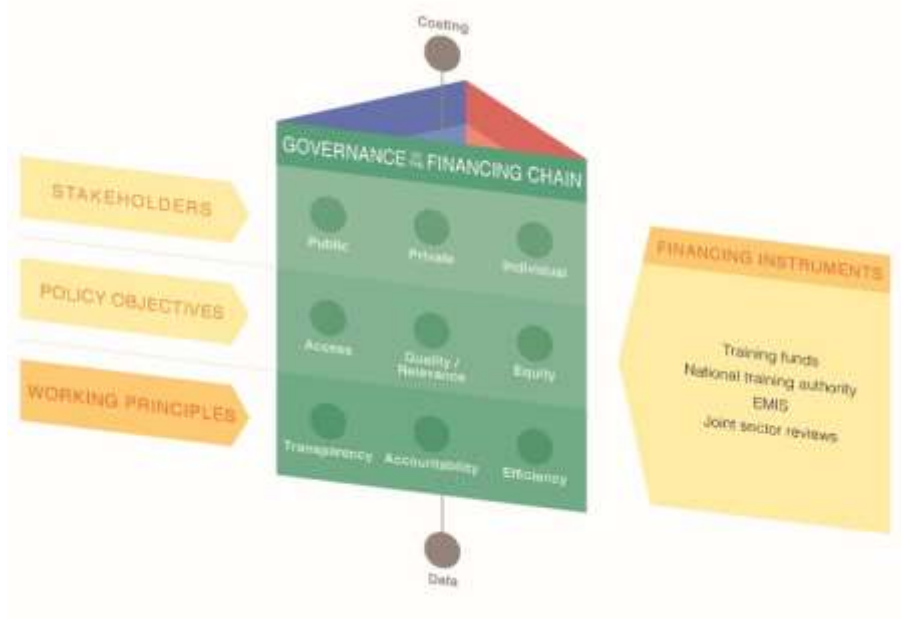
✓ **How to make best and flexible use of existing tools such as stipends?**

See above. Some tools exist and could be more used to serve the policy objectives, provided timely information on needs (from an economic or a social point of view) is made available and processed.

✓ **Could innovative approaches alleviate the cost of transportation?**

(e.g.: mutualisation among parents,...)

Nota bene: This national reflection on revising allocation tools should be done taking into account the budget constraint (i.e. keeping in mind that no increase in the overall budget envelop is foreseen).



1.3 Management of the financing chain

The dimension of “management (or governance) of the financing chain” focuses on the **running aspects and processes**, which will make resource mobilisation and resource allocation smoothly articulate, and will ensure overall good performance of the system. It pays particular attention to the “meta objectives” (or working principles) behind the VET operations. Three key aspects are examined in priority, but each country can choose to have more: transparency of the financing chain, accountability of stakeholders and efficiency of the overall machinery. This means that this facet of the prism also calls for deep attention to the governance setting and how different actors fulfil their roles and obligations.

Current situation (Working principles)

TRANSPARENCY

Some facts affect transparency or reflect transparency issues in the finance management process in North Macedonia.

Between State and municipalities, the regulation does not specify the calculation procedures, or the values of key parameters for State budget allocations. The block grant calculation seems to be in decline, and municipalities ask for more transparency in this calculation. Although the criteria are defined every year by the Methodology, published in the Official Gazette, the actual calculation is not publicly available and the municipalities are not informed about the annual publication of the calculations on the web page of each line ministry – which could be a sufficient measure to address this issue¹⁴.

Besides, one fifth of municipalities have blocked bank accounts, which may jeopardize the financing of VET schools (Cf. Trenovski B., *ibid*, p. 16)

¹⁴ Redefining the manner and determining the criteria for designated and block grants for municipalities, World bank/Ministry of Finance, 2019, Trenovski B. -not published-

ACCOUNTABILITY

Accountability schemes are not clearly defined or at least made public. All institutions should have clear accountability lines, while some bodies could be entrusted with the supervision of this accountability.

At school level, the state educational inspectorate is evaluating school performance/quality and follows a school evaluation document with various topics. Under topic 6 (resources), one of the indicators there is Financial operations in the school and includes 'Procedures ensuring compliance with financial regulation; Transparency in planning and spending of the school budget'. Under topic 7 (management, governance and policy making) is assessed the development planning that includes 'Materials and funds for professional development of the staff, procurement and maintenance, infrastructure'. However, there is no information available on the effectiveness and results of these evaluations.

At macro level, among key bodies for putting accountability in practice, one could tentatively identify:

- the board for education policy development (strategy p. 60)
- the commission for monitoring the development of the system for financing municipalities (Cf. Trenovski B., *ibid*, p. 15)
- the ZELS
- the IPA II sectoral monitoring committee
- the WG on education, employment and social policies ¹⁵

EFFICIENCY

The main issue of efficiency lies in the problem of **low pupil-teacher ratio**, which seems to be worsening¹⁶: while the number of students in VET keeps decreasing, the number of teachers still goes up. The class size norm for secondary is set at 21, but its level is currently 17. The problem is also that there is no difference between the PTR in general secondary and in VET.

Another important question to raise is about the degree of flexibility in the system: in case savings would be made (e.g.: on heating in school buildings), to what extent could the savings made be used for other purposes and remain at the school level (this is a decisive factor to motivate a more efficient management of funds at school level).

Key points for further discussion and recommendations (Management of the financing chain)

✓ HR management analysis

How to increase the pupil teacher ratio in order to improve the efficiency of the system?

A major problem from the efficiency point of view stands in the very low pupil teacher ratio (PTR) in VET, below all other countries' practices. This indicator is key, because teachers costs are the

¹⁵ https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/north_macedonia_erp_2019-2021.pdf

¹⁶ This is not specific to VET: In secondary education, as the number of secondary school students decreased by 24%, number of classes grew by 8% and the number of secondary schools grew by amazing 25%. As a result, also the number of FTE teachers grew by 16% for more detailed analysis, see Trenovski B., *Analysis of the current situation and problems in financing of delegated competencies - Block grants*, Inception Report, Skopje, September 2018

most important source of expenditure. An **urgent debate** should be carried out, based on quantitative evidence, and probably some qualitative study on HR management (the current World Bank work may help on this?) **with teacher unions**, to explore how to have a more reasonable PTR. At some stage, the ministry of finance should also take part in it. This reflection could be advanced through school organisation audit and reviewing organisation of learning processes within the schools. But it could and should also be articulated with the creation of **VET regional centres**, which may have a component on mutualizing the teaching force..., or with the **HR development plan 2020** and the IPA project, which had some proposals to re-use/re-orient plethoric teachers into mentors function or advisors of municipality boards¹⁷. This debate may entail a discussion on the possibility to hire vacataires, or to make more use of part-time teachers, as allowed by the law on teachers¹⁸. This raises the issue of the so-called « **mobile teachers** ».

✓ **Institutional capacity of municipalities**

Weak competencies will be an issue in the perspective of actual 'managing' the financing for education. To what extent could this institutional capacity be reinforced and oriented towards more performance-based management approaches?

✓ **Equalisation fund**

Financing instruments, such as an equalisation fund or other mechanisms, should be considered and further explored to compensate disparities across municipalities, hence across schools. Such new instruments, if designed properly, and with clear and public operations rules, could also help move to a more transparent management of school financing, which would in turn strive for increased efficiency in public resource use.

Costs

The Cost transversal issue (or "pivotal point" in the financing prism conceptual model) relates to 2 elements:

- **Cost of running the VET system**, which needs to be known to enable sound budget planning
- **Cost of envisaged reforms**, which needs to be estimated not only for budget planning but also for serving the pledge towards international development partners

Current situation and key points for discussion

In North Macedonia, there seems to be a need to **determine the actual cost of the transferred competencies**. There is also a crucial need to **review the current content of costs**, in order to see where there is room for efficiency gains. This is to be done in close link with the human resource

¹⁷ As part of IPA, the development of a Human Resource Regional Action Plan for rationalization of the overall VET resources in relation to the establishment of the Regional VET Centers identified is planned. Steps prior to the HR plan development include : i) comprehensive study on the feasibility and legal requirements for the profiles of VET teachers and additional educational professionals needed, including new ones (e.g. career guidance experts, education business facilitators, inclusive education experts) ; ii) validation of the study by the legal departments and their key stakeholder institutions ; iii) development of new educational professionals' profiles ; iv) approval of these profiles and of the HR Plan as the main document for operationalisation of the Regional VET Centers. Source : exchange with IPA coordinator

¹⁸ According to the law on teachers, Art. 11 (2) : « Teachers can work indefinitely and on a permanent basis shorter than full-time, if the workload is at least half of the working week in the work week and do not teach electives, in accordance with the law. » and (3) "Teachers who teach and have incomplete class hours in school, can work part time in other schools until full workload (fund of classes)".

management analysis, as the teacher cost represents the bulk of the costs. Information on costs such as transportation, nutrition or dormitories were not known at the moment of this analysis.

In parallel to the technical work on cost calculation, there would be a need to discuss the additions to be made in the regulatory / legal framework (e.g.: norms for a minimum and maximum PTR or class size)

Data

Data is the other transversal element that is essential to all subjects of discussion related to financing: having an evidence (data)- based approach enables to depassionate the debate and be concrete in recommendations.

Current situation and key points for discussion

In the Macedonian case, data seems to be cruelly missing, as the Strategy states and intends to address (p.159/160, and 57). There are **parallel processes of data collection and use**, ensured by different institutions: State statistical office, Bureau for the development of education, National examination centre... An education management information system (EMIS) has been established in 2010 under the Ministry of education. VET specific data is hardly available at the Ministry of education. Data are **mainly collected on paper**, which implies that digitalisation efforts should be made a priority. Finally, efforts on data should also cover “funding and expenditure (Strategy p. 160)

The **IPA project** has made this issue a key priority. IPA 2017 project¹⁹ on electronic systems of Ministry of Education and Science focuses on more integrated information management systems ; it expects to cover changes and updates to EMIS, the Observatory of Skills, Registry of National Qualification Framework and the Professional Qualifications System / Registry, and new IPA3 will use more horizontal/sector specific data for supporting grant schemes.

At school level, there is no distinction between general secondary and VET financial data and indicators (in mix schools), which makes it difficult to properly monitor Vet specific financing aspects. ²⁰

¹⁹ Specific objectives of IPA 2017 include: Sstrengthening of the policy framework and policymaking, sector governance, statistics and analytical capacities of the leading ministries and relevant institutions in the sector of education, employment and social policy; limprovement of data gathering, data management, forecasting and interoperability in and between the Ministry of Labour and Social Policy, the Ministry of Education and Science and related agencies, such as the Employment Service Agency, schools, Vocational Education and Training Centre, Adult Education Centre, social work centres, social protection or social insurance institutions for greater relevance and more effective use of data for policy making, policy implementation/administration, policy monitoring and for public information purposes.

2. INTERNATIONAL EXPERIENCES ON FORMULA FUNDING



Case study 1: Estonia

Main source: Triin Lassi, director of Tallin VET school.

Context

Vision for VET. Estonia is a small Baltic country that counts 1.32 million inhabitants, a workforce of 600.000 (half of the population) and has one of the lowest unemployment rates in Europe (5.15% in 2019, 7.9% in Nov 2020). In Estonia, VET is considered as a key lever for economic competitiveness and for ensuring flexible and skilled workforce, able to adapt to changes in the labour market; it also contributes to a regionally balanced development.

Institutional setting. VET is under the Ministry of Education and Research's jurisdiction and is free of charge for everyone

VET schools are very autonomous in their management and training provision. In order to respond better to labour market needs, the social partners are closely involved in VET policy design and implementation of studies.

The role of the Ministry has changed from controlling provision to steering the system towards quality and performance: Its main tasks include coordinating the preparation and implementation of education policies; strategic planning, preparation of legislative acts, determining VET public provision supply, developing the financing system for VET and managing the monitoring system on the use of funds, collecting relevant data to national public databases; administering VET public (State) schools, e.g. establishing, reorganizing and closing of public educational institutions, approving the curricula, textbooks and teaching/study aids.

VET system. The VET system in Estonia counts around 24.000 students, 40% of which being adults. It relies on ca 2100 teachers, 48% of them over age of 50 and 8% under the age of 30. Teachers full time salary is set by national minimum - 1315 euros (92% of national average 1433). Few teachers work full-time in one school; instead they teach in different places or do additional tasks for school. The average **teaching hours is 22** hours per week, but hours are not basis for the contract (full time, 35-hours work week based). Teachers can have different contracts (teaching specialists from the field). The class size norm (used for calculating funding) is **28 students per class**.

VET school funding

VET financing in Estonia is underpinned by the **willingness to support VET schools autonomy** in their management and their choices of training provision. With the increased autonomy of VET schools, the role of the Ministry of Education has changed from **controlling** provision to **steering** the system towards quality and performance. The Ministry sets out the conditions under which it will finance schools to deliver VET.

Therefore, funding is distributed according to a formula that provides each VET school with an annual budget over which they have control for recruitment, staffing (including pay), course provision and student enrolments. In other terms, there is a disconnect between how the financing envelop is calculated for each school, and the way the school will effectively disburse it. In addition, schools are authorised to raise their own resources.

Budget planning and resource allocation to VET schools. Since 2016, the accountancy system was centralised to the Ministry of Education. **VET schools draw down funds from their Treasury Account (VET schools do not have bank accounts).** Schools remain responsible for their budgets, how they are spent- and for ensuring the balance and meeting their financial obligations.

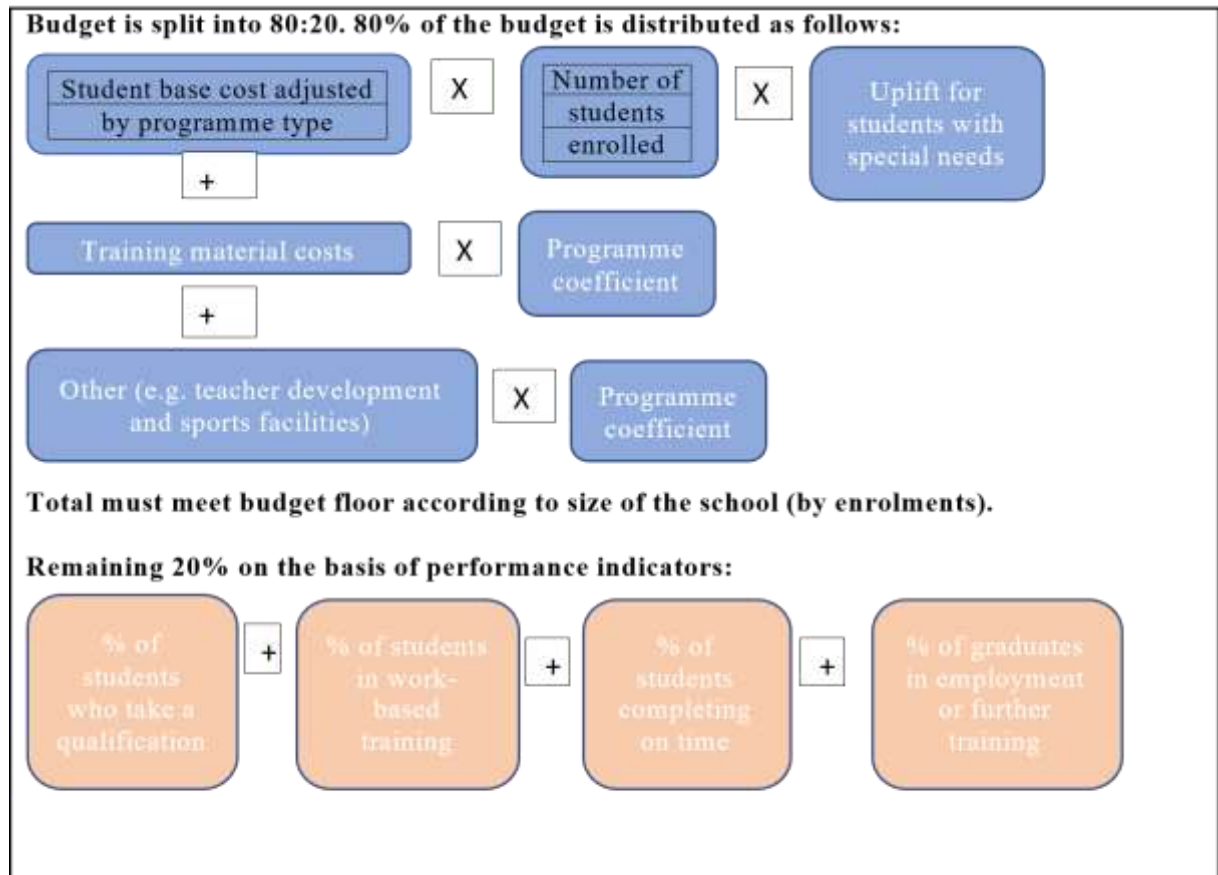
According to a new scheme for VET financing, introduced in 2018, **VET schools receive their budgets according to three blocks:**

1. **Basic funding** (to cover all salaries and material costs), calculated according to a funding formula
2. **Stipends for students** (covering scholarships and grants and a monthly basic allowance for students of EUR 60 per month as well as meals, public transport and dormitory accommodation);
3. **Performance-based funding** (not earmarked to any specified expenditure but they are expected for encourage VET schools to meet VET strategic goals).

Only student stipends are provided as an **earmarked** block grant; the remaining budget is delegated on a **lump-sum** basis and spent at the discretion of each VET school.

The financing of schools is very closely related to the “state order” to schools – which qualifications are needed in the labour market. The Ministry of Education has started an **OSKA system of sectoral (all levels of education) analyses** to identify the needs for labour and skills in a 10-year perspective. The results of these analyses form an integral part of state order to school and have also a considerable impact of school financing. If in some sector the need for qualified labour decreases, also the schools must reduce the number of enrolments.

The funding formula



Lessons learnt from Estonia

- **Budget allocation versus finance management.** There is a disconnect between the way the budget is calculated (to meet the standards set by the Ministry) and the way it can then be disbursed (decided at school level, in the respect of national norms – there is fungibility of the school budget) – only stipends for students are earmarked.
- **School management autonomy:** Therefore, schools are not reporting against pre-defined plans on expenses – and their management autonomy is encouraged: they can decide on recruitment needs, salary levels (respecting a minimum wage) etc.
- **Incentivizing performance.** Introduction of a performance component – still to be applied-
- **Need for new competencies.** This scheme requires excellent management and entrepreneurial competencies at school management level (hence different profiles)
- **A different role for the State.** Besides (and up-stream) the formula, the State orients and dimensions, by State order, the training provision that the VET schools can offer, according to needs, based on robust tools for monitoring the labour market.



Case study 2: Slovenia

Main source: Branko Kumer, former director of VET schools in Slovenia.

Context

Vision. Allowing and encouraging for more flexibility in VET provision at school level (schools should be able to choose how to manage and use their resources to increase the quality of education), as well as increasing the transparency of spending were among the main reasons for reforming VET financing in 2003 in Slovenia. The reform introduced a new budgeting process for VET schools, primarily based on student enrolments and their choice of programme.

Institutional setting. In Slovenia, VET schools are either founded and owned by the state or owned by the municipalities. The funding system for VET is centralized for providers founded by the **state**; for basic and adult education providers founded by **municipalities**, these are jointly responsible for their funding. IN addition, the fully state-funded schools are allowed to raise their own resources - from adult training programmes (including training for unemployed people), sale of training products (e.g. operating a restaurant), leasing of assets, EU project funding (Erasmus+ and European Social Funds) and donations. Each VET school has a governing council.

School funding formula: the “virtual school” approach

Budget allocation. The funding process of schools is designed to meet two types of cost: teaching costs per programme and student, and material costs per student which together form the ‘annual price’ of educating and training a student within each programme, in conformity with the legal requirements (e.g. in terms labour wages, material and equipment norms, etc.).

These costs are calculated on the basis of a “virtual school”. Interestingly enough, this virtual school is *not* derived from the norms, nor does it exist, but it is built from the average observed data for schools over past years.

For each VET school, an enormous amount of previous years’ data is collected, and a series of averages are calculated for different types of costs in schools of different characteristics (for example VET schools of different sizes). The averages form a virtual school upon which the per student ‘price’ is calculated

Step 1: Build the **virtual VET school** based on average characteristics with a calculation of average labour and other costs (based on observed data)

Step 2: Calculate the average price and coefficients for each programme type (defined by qualification attained) and course type.

Step 3: Apply the per capita price adjusted by each relevant coefficient to achieve each VET school budget.

The **'virtual VET school'** is created based on an 'average' sized school following the class size averages **based on past data (rather than the norms)**. The table below shows the 'virtual school' numbers for each type of programme. Enrolment data show that the average class size in a 4-year course is 26 students (lower than the norm) with 6 classes per year. This gives a total number of 624 full-time students (over the total 4 years) with 24 classes.

TABLE 1: THE 'VIRTUAL' VET SCHOOL BASIS FOR CALCULATING BASIC STUDENT COSTS IN SLOVENIA

Type of education programme	Number of students per class	Number of classes/per year of education	ratio students/classes
4 year, Full-Time	26	6	= (4x26x6) = 624/24
3 year, Full-Time	21	7	= (3x21x7) = 441/21
2 year, Full-Time	10	9	= (2x10x9) =180/18

The funding formula.

VET schools receive a lump-sum budget based on:

1. a 'per student (teaching) 'price' x enrolment numbers,
2. an 'per student (material and equipment) 'price' weighted by type and level of VET x enrolment numbers

1. The per student 'price'

The **per student (or per capita) 'price'** (also called sometimes *per student cost*) is based on the data averages calculated for the virtual school. It integrates **labour costs**, based the norms for staff numbers and grades of staff within each position. The regulation lists **20 different staff roles with 65 pay grades** from head teacher to cleaners with adjustments for staff working across grade tariffs. These labour costs take into account "salaries and employer contributions and other benefits to be paid to staff delivering secondary education programmes", coefficients and wage steps.

The per student 'price' is agreed annually by the Minister and published. The Minister can make in-year adjustments to the 'price'.

This per student price is then multiplied by the enrolment numbers to obtain the amount to be allocated to each school.

2. The material and equipment costs

Three types of material and equipment expenditure costs are considered for each secondary education programme, agreed by the Minister and published annually by the Ministry of Education:

- **running costs** (utility costs, training materials, tools and communications)
- **maintenance costs** (maintenance of fixed assets, library materials, teacher/trainer training and publications of reports)
- **additional costs** (exam costs, excursions and health insurance)

They form a per student allocation for material and equipment. But since January 2019, this allocation is weighted according to the level and type of education (while an additional allocation is provided for boarders). This means that once the Minister has decided the per student allocation for material costs, each student attracts (for the school funding) an equal, lower or higher proportion of this allocation, depending on where s/he studies (see Table below).

TABLE 2: WEIGHTINGS APPLIED TO MATERIAL COSTS IN DIFFERENT VET PROGRAMMES IN SLOVENIA

Programme	Weighting
High School (gymnazija)	1.0
Gymnasium sports section (gymnazija športni oddelek)	1.0
Secondary vocational education (Srednje strokovno izobraževanje)	1.0
Lower vocational education (Nižje poklicno izobraževanje)	2.0
Secondary vocational education (Srednje poklicno izobraževanje)	1.1
Vocational technical education (Poklicno-tehnično izobraževanje)	1.0
Vocational course/Matriculation course (Poklicni tečaj, Maturitetni tečaj)	0.8

3. Other costs:

Some financial items are kept outside of the formula, for example, staff rights to redundancy allowances; staff compensation and certain aspects of support for students with special needs as well as language support for non-Slovenian speaking students and trade union representation.

Allocation process

The per student part of the budget is allocated according to the enrolment process (run centrally). Each VET school attracts its own students according to the courses and pathways it offers. The numbers of students (in 2, 3 or 4-year programmes) on 15th September drive the budget calculation process with VET schools receiving their allocation at the end of November. **A VET school can apply for additional funds and variations based on a limited number of justifications (e.g. large numbers of senior staff, and/or students with special needs).**

The budget is allocated on a 12-monthly basis from September of the academic year. There can be in-year adjustments to the per student cost if required. The Ministry holds back 2% of the budget for in-year contingencies.

Once each VET school's budget is confirmed, **each school prepares a financial and business plan** and submits it to the Ministry of Education. These plans are updated regularly and monitored and checked by the Ministry.

Lessons learnt from Slovenia

- **From norms to average observed data.** The Slovenian calculations used to rely on detailed norms. Over time, the norms no longer drive the calculations of the per student cost, they have been replaced by the observed averages (which are currently lower than the norms). This alleviates heavy administrative compliance approach, but increases the need for accurate data and monitoring system.
- **Virtual school and funding stability.** the use of the 'virtual' school to make cost calculations based on past data means that as long as the total budget and total enrolment numbers remain (approximately) constant, funding stability is guaranteed for each school provided they are able to maintain their enrolments. For the record, per student price mainly considering labour costs, and material and equipment price are the two main parameters for the funding formula.
- **Enrolment versus policy objectives.** The trade-off to this calculation basis is **the lack of other factors linked to other strategic policy priorities** (for example, ensuring better adequacy of training to labour market needs or rewarding performance). This also calls for additional policy measures to accompany/give sense to this formula funding based on enrolment at school level, like enrolment planning framework, Labour market skills needs monitoring, etc.
- **Evaluation.** The new Slovenian model being in its first iteration, accurate data collection and monitoring, as a **proper evaluation will be key** to assess the effects of this new formula and model future changes.



Case study 3: England

Sources: *ETF - Policy guidance note on formula funding (2018)*, *British Council - the UK Skills system: an introduction (2015)*

Context

The VET system. England is one of the four nations that make up the United Kingdom (UK), in which skills are delivered through a range of organisations within the technical and vocational education and training (TVET) sector. These include: i) **schools**, which deliver a range of core skills and vocational courses particularly for learners aged 14 to 18, ii) **further education colleges**, which are at the heart of the TVET system, open to learners from the age of 14 (so for both young people and adults), iii) **universities**, where learners usually start their education from the age of 18, iv) private training providers (from 16 years olds onwards) and v) employers, many of them providing on and off-the job training opportunities, often through apprenticeships.

Many providers (except schools) are free to decide their own profile of provision in both academic and vocational qualifications for young people and adults. They operate as public corporations and are governed by a board. Whilst they have significant management autonomy, they must meet **quality standards attested through both inspections and external accreditation of the qualifications** they deliver. **All providers must deliver recognized qualifications and courses to secure public funds.** Students and trainees can choose whether they attend a school, college or other publicly funded provider and in some parts of the country schools are oversubscribed and there is intense competition between providers. Each year, qualification performance tables are published.

One specificity of England is that **further education colleges are autonomous corporations with many freedoms.**

VET school funding

England has **one of the most transparent and longest-running examples of formula funding for VET.** As a steering mechanism, the formula is an important means to achieve VET policy. **The rationales for using centralised funding formulae include simplicity** (there is one formula either per budget line or per stream of providers which has universal applicability), **transparency** (all providers know why their budget is what it is) and **fairness and objectivity** (No provider can negotiate an advantage over another (or conversely be disadvantaged)).

Formulae **drive the allocation of all public financing for young people and adults** in England, regardless of where they choose to learn.

Different formulae operate according to the type of learners:

- for young people aged 16-19, where the VET is fully publicly funded
- for adults, where public VET may be fully or co-funded (with additional funding from individual participants and/or their employers).
- for apprentices (formula changed in 2017)

These formulae are applied by the newly merged **Education and Skills Funding Agency (ESFA)**. This intermediary body, which also is the point of communication between providers and the Department for Education, distributes the budgets for young people and adults according to two separate formulae, following centralized procedures. Formulae are **decided (and can change) each year** and published in statutory regulations. The formula is used as a steering mechanism to promote quality and equity, and to target specific groups of people and/or qualifications provision.

Through the parameters used, the formula ensures that:

- the primary budgetary allocation is **based on numbers of learners**
- **disadvantages**, both of learners and providers, are taken into account
- **performance** is rewarded, hence promoted
- **government priorities** can be promoted through the adjustment of formula.

NB: This case study focuses on the first funding formula. Formula for adult education and apprenticeships will therefore not be addressed here. A box below is simply presenting some inspiring features of the adult education funding formula

THE FUNDING FORMULA FOR ADULT EDUCATION IN ENGLAND

In England, the adult education funding formula contains three main factors; each of them can be weighted or unweighted and is calculated for each participant and, in aggregate, forms the budget allocation for each provider:

- the funding rate, which is determined by time, i.e. guided learning hours (instead of the usual teaching time).
- the disadvantage uplift which provides extra funding to support disadvantaged learners. The uplift is based on social data on learners living in areas defined as 'deprived'. (+ 8% to +30%)
- the area uplift is applied to reflect the additional costs of delivering education and training in certain parts of the country; based on the postcode location, it can add up to +20% funding, e.g. for providers operating in London.

Performance is included, as the formula specifies that 20% of the payment depends on learner results, including for instance employment result for unemployed following the adult training.

Formula for 16-19 years olds

The **16-19 funding budget covers all provision for any student aged 16-19** (excluding those pursuing an apprenticeship) attending a school, further education college, higher education institution, independent specialist providers, commercial or charitable provider.

There are seven key aspects to the funding formula:

1. **Number of students.** This is the starting point for the formula, based on lagged data from the previous year, specified for each provider type. The principle of the formula is that it is driven by

student numbers and that **funding follows the student**. If a student transfers to another provider, the money follows him/her, based on detailed tracking data.

2. **National funding rate per student**. All full-time students are funded at the same basic rate per year based on the planned hours in a study programme, derived as a proportion of a full-time rate. Each enrolled student should have a core learning aim which defines whether the programme is academic or vocational.
3. **Programme cost weighting**. These are applied to reflect that some programmes are more expensive to deliver than others. There are **4 programme weighting factors** (base = 1.0, medium = 1.2, high = 1.3, and specialist = 1.75).
4. **Retention factor**. Providers receive only a proportion of funding if the student leaves the course before completion.
5. **Disadvantage funding**. There are two blocks of funding for disadvantage, Block 1 is based on **general economic deprivation** and is calculated by the residence of the learner. Block 2 funding provides **uplifts for students with low levels of previous attainment** recognising their additional learning costs. There is more than one definition each of which triggers an additional per learner payment.
6. **Large programme uplift**. For certain larger programmes which stretch students, additional funding is available (10-20%), for example, for studying qualifications to progress to university.
7. **Area cost allowance**. A budget uplift is available to recognise the additional costs of provision in certain areas of the country, ranging from 1% to 20% depending on location.

$$\begin{aligned} & \text{Total programme funding} = \\ & (\text{student numbers} \times \text{national funding rate per student} \times \text{retention factor} \times \text{programme cost} \\ & \quad \text{weighting} + \text{disadvantage funding} + \text{large programme uplift}) \\ & \quad \times \\ & \quad \text{area cost uplift.} \end{aligned}$$

Nota bene: The formula no longer includes an output or outcome related payment. After many years of using an output related element within the formula it was removed due to concern that it was skewing provision towards easier to achieve courses. Instead the formula for young people is experimenting incentives for better provision and delivery.

Lessons learnt from England

Formula-funding is embedded into the English VET funding system. The following points are among the characteristics that contribute to its success:

- **Providing choice both to providers and learners.** The funding formula is attached to the type of audience (youth, adults), not to the type of VET provider. Therefore, a provider can operate in a range of markets, and a learner can choose between providers. Despite some limitations, this enforces the principle of autonomy.
- **Funding standardisation versus learner differentiation.** The basis for the formula is the learner numbers, which is the key parameter in the formula. The type of additional needs which a learner and a provider can experience are standardized through formula additions, either updated weightings or fixed allocations, on both the provider and learner side. There are numerous additional payments available through the formula to reflect disadvantage, both generic proxy measures and tailored to individual situation.
- **Performance-related funding.** Retention is the only “performance-related” parameter; although it relates more to internal efficiency than to outputs, it helps steer the provision towards quality.
- **Transparency.** The formula relies on data submitted by providers which is based on verifiable information. In turn, providers can see the basis for their budget calculation and can appeal or change this data, if found to be incorrect.
- **Using the formula as a policy steering mechanism.** The current formula has a number of steering elements within them, including an extra allocation is available for programmes which prepare learners for higher education (in adult education formula, there is additional funding for adult learners to incorporate basic and advanced qualifications in Maths and English).
- **Establishing data monitoring and evaluation tools and mechanisms.** Systems have been built over a number of years to collect correct and verifiable data. Regular reviews of the formula are conducted to check if factors operate as expected, if there are unintended consequences, etc. This is the basis for revising the formula.
- **Change flexibility and providers’ protection.** The formula can be re-designed, and has been on many occasions. But changes in the formula impact budget allocations to many providers. Without budgetary increases, there are winners and losers, so there needs to be transitional protection for providers who lose funds (currently the case).
- **Maintaining a quality framework.** A robust system of labour market needs analysis, qualifications, certifications, accreditation and inspection enables the formula to operate. It mitigates the risks of enrolling learners for the sake of getting funds, with no attention to quality or effectiveness.



Case study 4: Denmark

ETF - Policy guidance note on formula funding (2018), EU apprenticeship toolbox

Context

A series of reforms in post-compulsory education funding took place in Denmark in the 1990s. The principle was to give VET and higher education providers more autonomy to adjust provision and be more responsive to student and learner needs. The funding approach was changed from a supply-side to a demand-side system. Budgets which had previously been calculated from staff-student ratios and linked to programme areas were reformed.

The reform took place in 1992, with the following rationale (Canton & van der Meer, 2001):

- Promote efficiency and become more results-oriented and customer focused
- Link the allocation of provider grants to student numbers and performance
- Implement a system that is simple, fair, transparent and objective
- Promote quality-based competition among providers.

With a focus on protecting educational standards and quality, the 1992 reform comprised a new funding system with delegated management. The main changes were:

- Introduction of block grant funding calculated through the taximeter principle
- Introduction of a planning process with four-year agreements based on the total number of study places per institute, rather than a single year, whereby providers can choose how they allocate student places per study programme to meet local demand. A few expensive programmes continue to have nationally planned admission.

The self-governing education and training institutions have three sources of revenue:

1. **Activity-led block grants.** 80% of the total budget is distributed through grants based on forward planning of expected student numbers (full-time equivalent calculations); and programmes which are grouped in bands and given an annually decided taximeter weighting.

There are three activity-led grants calculated through a taximeter rate:

- the **teaching** grant, to cover salaries, educational equipment and materials;
- a **buildings and maintenance** grant, for capital expenses, and
- a **collective expenses** grant, to cover non-educational expenses – primarily administrative costs.

A proportion of the block grant funding is held back until the end of the year on the basis of achievement of the activities specified (or outputs). **Block grants provide 92% of institutional budgets.**

2. **Own income**, including participant fees. In addition, providers can enter private training markets and use resources raised to initiate new activities.

3. **Basic fixed and supplementary grants and loans.** The basic grant supplements the activity-based grants at a fixed rate and **protects smaller providers and those located in remote areas**. Other supplementary grants include, for example, research and development funding and other ad hoc funds to meet various policy priorities. Loans are available, under strict supervision, to support providers in financial difficulty and restructuring their provision.

$$\begin{array}{c} \text{Block grants =} \\ \\ \text{Planned activities, based on projected student numbers and programme} \\ \\ \text{X} \\ \\ \text{Politically determined taximeter rates per activity unit} \end{array}$$

The block grant appropriation is not earmarked, and providers can use them as they see fit within the financial rules of expenditure. Providers are responsible for their own financial management and for aligning their programmes to demand. The taximeter system and the size of the grants are linked to the provider's ability to attract students to participate in their programmes, measured in full-time equivalents. They have the flexibility to reduce programmes where participation is falling and to expand them where it is increasing and to protect their budgets through managing adjustments and maintaining enrolment levels. This is all calculated through 'activities' rather than through negotiation or administratively decided redistributions.

Budgetary certainty and stability are improved, for both the government and providers, by allocating funds on the basis of objectively defined activities and their taximeters, which gives a fixed unit cost. Providers can plan for maintaining stability. In the case of over-estimation of 'activities' funding can be clawed back by the government. The taximeter rates are provided in the annual Appropriations Acts and their determination is independent of an individual institution's expenses. There is limited opportunity for pressure from interested parties and there is transparency across the rates given for programme classifications.

A number of external stakeholders, including the Confederation of Danish Industries and the Danish Innovation Council, recommended that development funds should be allocated as a supplement to the taximeter system to encourage change and innovation (Schmidt et al, 2006).

Lessons learned from Denmark

- **Formula factors in the Danish Taximeter system:** students, outputs, programme specificities
- **Taking students' needs into consideration.** Evaluations made concluded on : increased awareness of student needs, more open attitude towards students' suggestions, for instance by taking their feedback more seriously; teachers' "professional ethic", as well as the use of external examiners, prevented them from allowing more students to pass as a response to output-based funding.
- **Focus on "value for money".** buying new equipment and assessing the value of course provision; Unprofitable activities were more rapidly discontinued, and institutions improved their ability to adjust and take up new initiatives. Educational institutions were viewed as being more inclined to provide a good service to their students, and additional effort was made to reduce dropouts.
- **Demand and productivity management.** As money follows the learner, this creates incentives for providers to meet their requirements and to increase educational activity levels. There is also an incentive to improve institutional efficiency, for example through providers linking to deliver smaller courses. **Providers can decide their own provision and adjust to demand**, rather than being required to provide courses where enrolment is falling.
- **Risks or negative effects of the taximeter system:**
 - No incentive to quality and relevance, nor to innovation
 - The system based on freedom of choice supposes good information for students on the provision offer
 - The system tends to disadvantage less popular courses, which may be important from a societal perspective.
 - A bad year in terms of students has financial consequences for institutions for years to come

3. RECOMMENDATIONS FOR NORTH MACEDONIA

The accurate analysis of VET financing in North Macedonia (Chapter I) and the review of other countries experiences in terms of VET schools' funding (Chapter II) leads us to make two types of recommendations:

- **General recommendations** identify urgent and transversal measures to take, as “key success factors” for any type of reform of VET financing. They focus on processes, tools and systems that should be put in place to ensure not only sound design but also smooth implementation of VET reform measures, especially but not only in the financing field;
- **Thematic recommendations** dig into a limited number of topics which deserve a dedicated attention, based not only on technical work but also on “political” moments gathering the various stakeholders for evidence-based discussions on options for change.

If this path is not followed, the risk is high to go for marginal measures, including isolated changes in parameters of the school funding formula. While these could bring limited and provisional quick fixes, they would absolutely not be sufficient to ensure the expected qualitative and structural improvements that the VET system urgently needs, not only in terms of financial management, but also in terms of overall planning and management in order to ensure efficiency and impact, both for the learners and the labour market.

General recommendations

1. Setting up an official, enabling, pragmatic framework for VET financing reform design.

If VET financing is to be granted a serious, i.e. steady and high-level political interest in North Macedonia, there are a number of key topics that should be paid priority attention. These topics, listed under the section thematic recommendations below, would benefit from setting up a combined **approach of evidence-based analysis** -which could be entrusted to members of the FEG-, **and national discussion/consultation**. It would also mean that this approach translates into an **official workplan**, which clarifies i) priority issues (topics) to work on ii) expected deliverables (e.g.: one roadmap with steps and evaluation review for the school formula funding review), iii) time frame (with deadlines, mirroring if possible national agenda opportunities) and iv) roles and responsibilities of technical and political levels.

2. Ensuring a strong political leadership to make full use of existing room for manoeuvre.

Before exploring reform measures possibly needed, it is important to **identify and make full use of existing room for manoeuvre**: Opportunities for **improving the efficiency of the system** exist through a number of norms (e.g. pupil teacher ratio, rules for staff allocation...) and instruments (e.g. stipends) that are not fully applied or activated. Setting up a genuine **enrolment policy** would also help guaranteeing the relevance of budgetary expenses, as it would dimension the training provision to labour market needs, and the size of schools to effective demographic needs. While this would help steer the system towards its policy objectives, it also **requires a strong leadership from the highest level** (Prime minister office and Minister of Education).

3. Recognizing “Data” as a key success factor, by substantial investments on improving access, reliability and use of data and information.

For the two recommendations above, as for the thematic ones after, it is crucial to be able to have reliable data, which is not currently the case. This includes to work along 2 dimensions: **the “picture” and the “movie”**.

- PICTURE: Need for a precise and holistic diagnosis of the VET sector.
- Any future decision on financing needs to build on the current situation. Today, a accurate state of play, or diagnosis, of the VET system does not exist. Detailed terms of reference should be drafted, and support sought from donors, to carry out this diagnosis. For instance, the following dimensions, which have a great impact on financing, should be documented:
 - **Efficiency and respect of the norms:** are current norms defined for the system (class size, number of teaching hours per teacher) respected?
 - **Relevance of the provision to the labour market:** Do current specialties open respond to labour market needs, and lead to employment (in link with MoL)? Is the training supply redundant in defined geographical areas? Could there be mutualization across some VET schools that are close by?
- MOVIE: Need for a monitoring framework and an information management system. This entails **information management systems** from a technical point of view, but also identifying which data, and the **workflow and processes** for producing, populating and using data, as well as roles and responsibilities at each step. Should also be decided in this regard a move to the **public availability of data at all levels of the system** (from the State to the schools), in order to improve transparency, trust and governance, increase accountability. Such a decision can only be made at the Council of Ministries, and would also demonstrate the pioneering approach of the Ministry of education, paving the way for similar efforts in other sectors.

Thematic recommendations

4. Decentralised governance of schools: re-thinking the status of schools, their responsibilities, their network, and the role of municipalities

In theory, the legal status of all but 3²¹ of VET schools, i.e. being the property of municipalities, is interesting : it should make them closer to their environment, as the municipalities have the overview on the economic and social situation of their territory and could tailor the VET provision offer accordingly. In practice, this municipal belonging proves to be problematic.

- The local anchorage increases the risk of politicisation of schools and untransparent procedures (e.g. for the nominations of teachers, school directors, or when there is an objective need to decrease specialties numbers...). It results in schools that are not well equipped to perform correctly and efficiently.
- Municipalities lack the human resources to coordinate and supervise them
- Municipalities lack the financial resources to maintain them - the transportation costs hijack the municipalities budget for other expenses ;

²¹ Recently the process of taking over of 3 schools from municipal governance and establishment of 3 regional VET centres owned by the state has begun.

In financial terms, this situation translates into the fact that many schools are in deficit, and as a consequence an importance share have their bank account, and no financial room for manoeuvre whatsoever.

Therefore, it is urgent to open a negotiation with the 83+ municipalities or their representing body. Beyond the legal status and critical issue of the debt management, these discussions could usefully cover the questions of:

- Transportation responsibility and boarding opportunities (together)
- Utility and maintenance costs, and possible options to mutualise some of these or to find incentives to reduce others (e.g.: heating)
- Investment/rehabilitation needs, and opportunities for schools' merging

It would be important to discuss transportation, boarding and rehabilitation needs together as costs are closely interdependent.

Municipalities' role could then also be revisited and recentred, to become a kind of guarantor, or spokes-institution of economic and social interests at stake in the given territory.

5. Access to VET: regulating VET provision according to the norms and needs

Currently, the situation is not only unoptimal for the learners, but it is also financially ineffective:

- Enrolment planning is not based on labour market needs analysis, nor are norms imposed to schools: as a consequence, it is common to observe schools keeping open VET specialties/programmes with no prospect of employment after graduation (although sometimes plebiscited by the demand because they are fashionable);
- School enrolment practices do not abide by the norms: some schools run programmes with very low student-teacher ratios (because there is little demand from learners). While they may have various reasons for these choices at internal level (e.g. keeping teachers employed, responding to the educational demand), they should not be allowed by the central level, as it is highly ineffective
- VET supply is redundant across schools in certain areas, with not always a rationale for this duplication in reasonably small perimeters.

To address these inefficiencies, **the Ministry of education should roll out complementary efforts all aimed to reinforce and inform its regulating role**, at all stages of the VET systems operations (planning, implementation, and evaluation):

- School data collection and accurate monitoring school by school (identify the MoES department in charge and reinforce staffing and statistical competencies) : the database needs to be visible and accessible (type of education, qualifications, students by sex and language, teaching staff, subjects, number of classes);
- Supervision and/or inspection force mobilisation to make sure that at least the norms are abided by
- Coordination with the Ministry of Labour for a labour market information system that can feed the VET planning with accurate information on skills needs – if the LMIS is weak, and skills needs analyses need to be systematised, emergency measure could be to involve social partners (companies) in an ad hoc exercise to identify unmet current needs and new needs for qualifications.

In financial terms, this would naturally translate into higher value for money, and greater effectiveness of public expenses.

6. VET Schools budget and funding: organising the revision of the funding formula by steps, according to priority needs, and in relation with other critical reform measures

The strategic reflection on the VET school funding system needs to be organised and sequenced. Revision of the funding formula is part of the solution, but it will not address all the issues. Below are listed a number of ways forward:

- **Define the scope of the “new” funding formula – and its complementarity with other financing tools:** revisit the expenses that should be taken into account through the formula funding, and those which could be covered outside, by other financing tools ; this could be namely for the reason that the parameters included in the funding formula are “diluting” the effectiveness (eg: if vulnerable children are to be incentivised to access VET, maybe specific stipends would be more effective; or if new specialties should be open to respond to labour market needs, maybe contract-based funding of schools could incentivise more strongly this additional effort, etc.)
- **Agree on the current biggest weaknesses of the current funding formula, and take them as the key objectives to integrate for the new funding formula,** in particular:
 - Currently, the **funding formula for VET is almost the same as the one for general secondary education**, apart from a weightening factor – this does not reflect the reality of huge cost disparities; hence there is need to disconnect the two, and a need for mixed schools to find a way to estimate respective costs even if teachers are split for instance. This is where the experience of Estonia, which disconnects the calculation of the envelop, through standard costs, from the actual use of the envelop, can be helpful.
 - Currently, the VET funding formula does not take into account the **disparities in the costs of the programmes/specialties** (eg; construction vs esthetics: highly different equipment and material costs). Therefore, the funding formula should probably include different lines of calculation, to be summed, according to the types of costs, which cannot be all related to the “per student and enrolment numbers ” price’ approach :
 - The **equipment and material costs** could be taken out of the calculation based on student numbers – which would then essentially take into account staffing costs; **digitalisation, connectivity** and other needs made burning by Covid19 should be considered and estimated here
 - A weightening factor to **differentiate occupations** could be introduce (as per Estonia example); while avoiding too many categories (for formula simplicity), it could help fund expensive training programmes, but also put a reward on demanded occupations. NB: This seems a more effective way than a distinction by type and level of VET (like in Slovenia) which does not solve the problem as the differences in costs are probably less linked to the VET level and type than to the type of programme/occupation prepared.
 - Currently, the VET funding formula is not **performance**-based. In the current state of data systems, it is little realistic to envisage real performance i.e. output-based factors, for which data would not be easily available. What could be reflected though, as in the case of England, would be insert a retention factor (or “non **dropouts**”) through a cycle, in order to encourage schools to help their students complete the programme until graduation
- **Identify and advance the agenda of closely related reform measures for effective school management, and/or having financial implications for schools budget,** in particular:
 - The **teaching force and the school management force:** need for an inventory of teachers and trainers, identification of skills needed by headmasters, systematization of job positions, recruitment, requalification and training needs
 - The **merging of schools**, or mutualisation of support services currently within each school for efficiency gains: which services (procurement, accounting, career guidance, other) could be mutualised, what transitional protective measures should be designed (e.g. as in England) – this should be explicitly **articulated to the roadmap for VET regional centres.**

- The **curricula organisation**: any room for optimizing the use of premises (double shifts, use of work-based learning organisation for alternating in class, digital/on-line learning...)
- The willingness to move towards more **school management autonomy**

7. Equity in VET, and other policy priorities: making better use of existing financial instruments as tools for steering the system towards government's objectives

There are a number of financial instruments that legally exist but are currently underused. **Their legal existence is an opportunity as they could be activated quickly**, with short term and visible results.

- Stipends for students are of six types, but little used (some schemes are not even used at all). For instance, the “**stipends for in-demand (or deficit) occupations**” could be updated to encourage students to choose (more/other) needed professions, especially those demanded by the labour market without being attractive
- The funding formula seems to be the (almost) only topic considered when reflecting on changes for resource allocation to schools – whereas **income generating activities** (training with production, selling of services, or products) by schools, if better framed and incentivized, could be a topic to alleviate the financial pressure on schools, or at least to fund specific measures targeting in particular equity. The advice here is to **review the legal framework for income-generating activities** and organise a **consultation with school headmasters** on enabling measures: what needs to be changed in the current legal framework and in the Ministry of education and sciences' role to further encourage this practice while monitoring it better.

Other (non-existing yet) financing tools could also be explored, in particular:

- If schools remain under municipalities remit, discuss the relevance of **an equalization fund that would ensure equity** across schools independently of the wealth of the municipality they belong to

8. Other “stand-alone” recommendations

- **Take the necessary measures to make data publicly available on the web**, including the (financial) data by educational institution and by school, is an excellent way to increase transparency, hence trust in the system, to distil soft peer pressure for better results, and to fight against bad governance
- **Bridge data gaps, namely on costs structure**: important to conduct analyses to know more accurately the cost structure of schools: recurrent / capital expenditure, teaching / not teaching expenses, VET/ general education expenses in mixed schools...
- **Identify the needs for capacity building actions targeting municipalities** - including the budget needed and the legitimate actors to provide this support- to help them better fulfil their role in the education system
- **Set-up an association of school principals/Headmasters** to give a stronger voice to practitioners, but also to then have a channel for capacity building and creation of a pool of VET schools “managers”
- **Develop a real social communication component (by the MES)**: social campaigns on VET, to attract both companies and students/families (success stories...) – specific actions are needed towards enterprises, which could be under the umbrella of the work-based learning development strategy but will have implications in terms of costs incurred by companies (or incentives to engage them)

SUMMARY LIST OF RECOMMENDATIONS

General recommendations

1. Setting up an official, enabling, pragmatic framework for VET financing reform design
2. Ensuring a strong political leadership to make full use of existing room for manoeuvre.
3. Recognizing “Data” as a key success factor, by substantial investments on improving access, reliability and use of data and information.

Thematic recommendations

4. Decentralised governance of schools: re-thinking the status of schools, their responsibilities, their network, and the role of municipalities
5. Access to VET: regulating VET provision according to the norms and needs
6. VET Schools budget and funding: organising the revision of the funding formula by steps, according to priority needs, and in relation with other critical reform measures
7. Equity in VET, and other policy priorities: making better use of existing financial instruments as tools for steering the system towards government’s objectives
8. Other “stand-alone” recommendations

ANNEX 1: FEG MEMBER'S PROPOSAL FOR A FINANCING MODEL INVOLVING COMPANIES

The following proposal, discussed by the Finance Expert Group, has been given by the representative of the Cabinet of Deputy Prime Minister for Economic Affairs.

Introduction

The systematic organization of practical on the job training at the employer of students from secondary vocational education (VET) was, and still is part of a more significant reform process in the education system in North Macedonia. It is expected that reform will significantly affect the labour market and education in general hence contribute to: strengthening links and cooperation between educational institutions and the business sector, increase productivity of employers, greater labour force mobility, workforce with appropriate and advanced skills, reduced unemployment, reduced costs and time to balance supply and demand in the labour market, appropriate teaching in vocational schools, more efficient and financially sustainable educational process, etc. Supported by the Swiss Agency for Development and Cooperation (SDC), in the Republic of North Macedonia in March 2018, the Employment Education Project (E4E @ mk) was launched, in which one of the goals is to help institutions improve funding of VET with an emphasis on the educational process (such as work based learning, dual approach, etc.) oriented to the labour market with greater involvement of employers, especially in the realization of the practical part of education.

Starting from December 2019, the Ministry of Education and Science in North Macedonia, established a working group (Financial Expert Group - FEG) with representatives of the Cabinet of the Deputy Prime Minister of the Republic of North Macedonia in charge of economic affairs, from key ministries (education and science, labour and social policy, finance, economy, local government), institutions (centre for vocational education and training) and employers (Chamber of Craftsmen, Economic Chamber of Macedonia and the Council of Foreign Investors, as well as Economic Chamber of Northwest Macedonia). FEG, supported by E4E@mk and ETF has a mandate to propose to the Government of North Macedonia models for improving and innovating the current VET financing, with greater involvement of the business sector.

Background for the suggested model

Considering the need to adopt industrial policy measures that will stimulate investments, economic growth and development and will be aimed at improving the competitiveness of The Macedonian economy the Law on Financial Support of Investments ("Official Gazette of the Republic of North Macedonia", number 83/18) has been adopted and is in force starting from 08.05.2018. The Law prescribes the types, height, conditions, manner and procedures for allocating financial support related to the investments of companies that will invest in the Republic of North Macedonia. The purpose of the Law is to create a legal framework for stimulating economic growth and development through Government support in order to increase competitiveness of the economy and increase employment.

In order to increase the economic security of business entities that want to invest, the procedures of this Law related to obtaining financial support, provide transparency, precision, simplicity and which are standardized or the same for all subjects.

Article 14 of the Law on Financial Support stipulates that state support can be obtained for: new employments, cooperation with suppliers, technological development and research, investment projects of significant economic interest, increase of capital investments and revenues, purchase of

funds from companies in difficulty, market competitiveness, as well as conquering new markets and increasing sales. During the past years, this law has supported a large number of Macedonian and foreign companies, in 2019, 144 domestic companies and 10 foreign companies from different sectors were supported.

Also it is wisely to consider the possibilities for cooperation with the Fund for Innovation and Technological Development which so far (the starts were in 2017) has supported 343 companies through the third pillar of the economic growth plan.

Proposed mode

In the context of financing vocational education and increasing the involvement of companies in practical training, we should consider the possibility that through this Law (Financial Support of Investments) and via Fund for Innovation and Technological Development, the companies could be encouraged to take a proper role in such processes in the long run and thus build the necessary workforce profiles for the Macedonian economy.

The suggestions that could be integrated would be the following:

- Companies that would accept students into practical learning will have advantage in selection processes for receiving financial support;
 - Within the types of state support (mentioned above), financial assistance could potentially be provided for the students that participate in practical classes in the company;
 - The companies that are beneficiaries of the grants of the Innovation Fund should be in the position to include in their operational activities students of practical training in a more efficient manner and at the same time receive state support;
 - An instrument or specific call can be created that would motivate companies to involve students in practical training and experiences in cooperation with the Fund for Innovation and Technological Development.
-