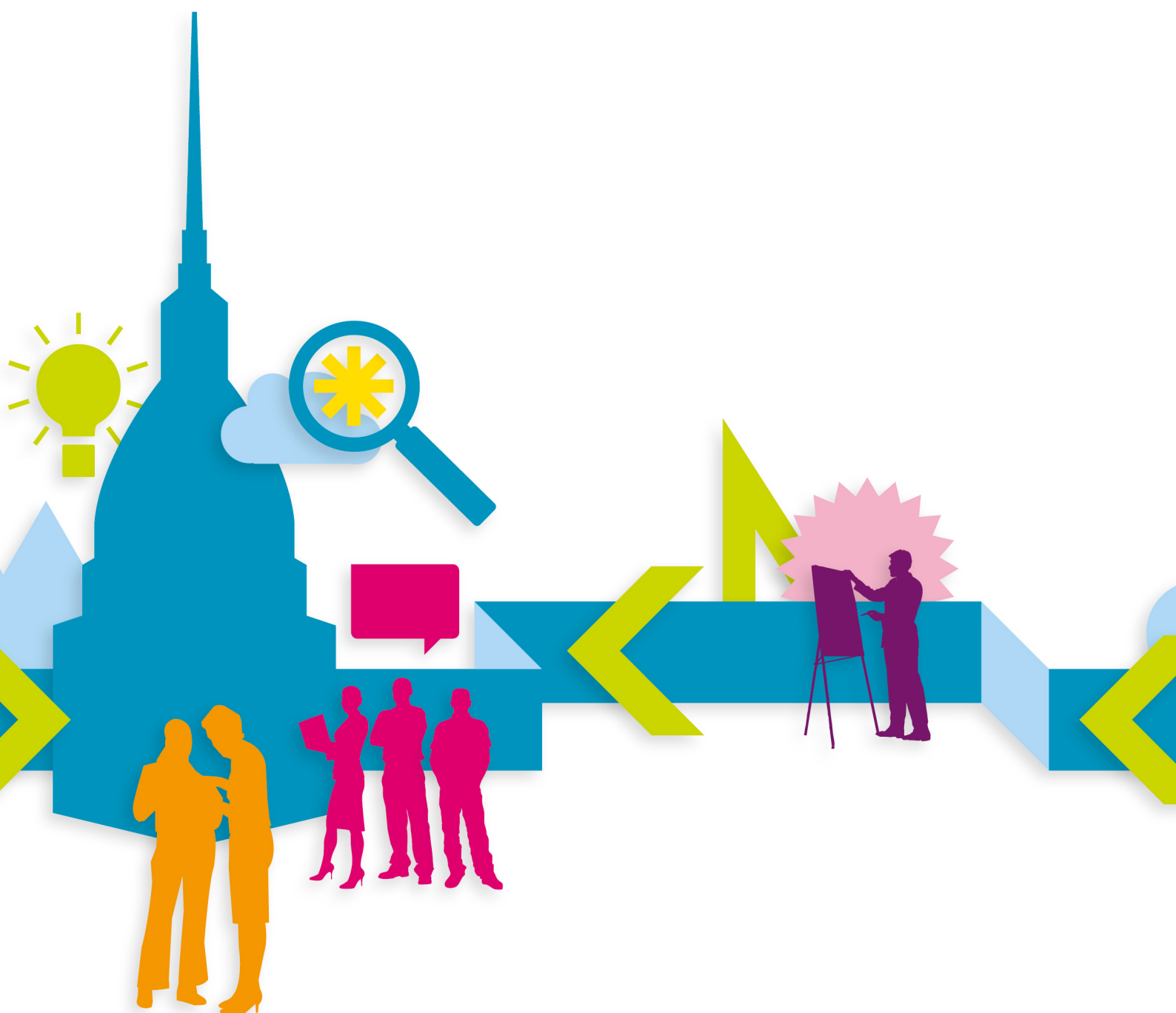


TORINO PROCESS 2012 EASTERN EUROPE



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TORINO PROCESS 2012

EASTERN EUROPE

PREFACE

The Torino Process is a participatory process leading to an evidence-based analysis of vocational education and training (VET) policies in a given country. It is carried out in order to build consensus on the possible ways forward for VET policy and system development, considering the contributions of VET to enhanced competitiveness, and sustainable and inclusive growth. This includes determining the state of the art and vision for VET in each country and an assessment of the progress that countries are making to achieve the desired results. More specifically, the Torino Process is a vehicle for:

- developing a common understanding of a medium/long-term vision, priorities and strategy for VET development, exploring possible options for implementing this vision and/or making further progress;
- designing and evaluating home-grown and affordable VET policies, based on evidence or knowledge and collaboration;
- updating the analyses and achievements at regular intervals;
- providing opportunities for capacity development and policy learning within and among partner countries and with the European Union (EU);
- empowering countries to better coordinate the contributions of donors to achieving agreed national priorities.

The European Training Foundation (ETF) launched the Torino Process in 2010 and the first round was concluded in May 2011 at an international conference entitled 'The Torino Process – Learning from Evidence'. Among the outcomes of the conference was the establishment of the Torino Process as a biennial policy learning exercise founded on country ownership, participation, and a holistic, evidence-based policy analysis. The second round was launched in 2012.

The Torino Process overall is open to all ETF partner countries. This report draws on the lessons learned by the ETF. Its overall objective is to present the progress that has been made in VET policy and system development, and identify constraints and future priorities for the further modernisation of VET policies and systems in the region. It is addressed to policy makers and practitioners in the partner countries, but also to officials, researchers, experts and the donor community who are interested in learning more about the partner countries in the field of VET or related policy fields.

This report was prepared by Manfred Wallenborn, ETF expert, who analysed the information in the national reports for the preparation of this document. Valuable support was provided by Eva Jansova, ETF statistical officer. This report and the Torino Process are the result of a team effort. The ETF would like to take this opportunity to thank all the counterparts from the partner countries who contributed to the national reporting process in 2012, as well as the ETF country teams which facilitated the process in the countries. The ETF is also grateful to the statistical team, the internal peer reviewers and the ETF editorial board members who provided valuable input, comments and suggestions on the final draft of the document.

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EXECUTIVE SUMMARY

This regional report analyses key trends for further VET system development in seven countries of Eastern Europe: Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova¹ and Ukraine plus Russia. These countries (Neighbourhood East region) are covered by the European Neighbourhood and Partnership Instrument of the EU. The document draws on the 2012 Torino Process reports from each country. It also draws on recent ETF human resources development reviews for the different countries and other relevant literature, including 2010 Torino Process reports.

The Torino Process analytical framework designed by the ETF was used for self-assessment in Azerbaijan, Belarus, Moldova, Russia and Ukraine and for ETF-led assessment in Armenia and Georgia. This report builds on the five building blocks of the analytical framework – the vision for VET; its efficiency in terms of addressing demographic, economic and labour market needs; how VET addresses social demands, including social inclusion; the quality and efficiency of initial and continuing VET delivery; and how initial and continuing VET systems are financed and governed, including their institutional capacities for change – and draws on the assessment results for the seven countries.

The broad picture

Since 2010 these countries have developed VET policies and introduced systemic changes that focus strongly on national contexts. This positive trend has triggered country-specific profiles of education systems, labour-market structures, laws and regulations. Ongoing discussions about vision (overall policy priorities) and reform tend to connect societal objectives regarding socio-economic development with potential VET contributions to progress. European policies and approaches play an important role; for instance, all the countries have adopted a national qualifications framework (NQF) or plan to do so, European quality assurance approaches are being applied and approaches to non-formal and informal learning validation are under consideration.

These positive developments have been accompanied by new legislative frameworks and considerable stakeholder involvement (mostly employers) in strategic discussions and in national and regional VET councils. Employers are participating in defining new professional standards and promoting the NQF and revised curricula that are being introduced in a growing number of rehabilitated vocational schools.

Demographic trends are leading to reduced demand by learners and so are affecting education systems in nearly all the countries. Populations shrunk in all seven countries between 1990 and 2008, with rates as follows: Armenia (-13.2%), Azerbaijan (21.2%), Belarus (-5.0%), Georgia (-21.1%), Moldova (-16.7%), Russia (-4.3%) and Ukraine (-10.9%)².

All the countries have experienced a positive economic growth in recent years, except for a slowdown around 2009, soon followed by recovery. In 2011, gross domestic product (GDP) growth ranged between 1.0% in Azerbaijan and 7.0% in Georgia. The two largest countries (Russia and Ukraine) plus Belarus are more comparable in terms of their economic development than the smaller countries; they still have, as well as a rapidly growing service sector, an important industrial sector which operates mainly on the basis of International Standard Classification of Education (ISCED) 3 and 4 qualifications. The smaller countries, in contrast, still have a huge agricultural sector, which serves as a buffer in the event of structural unemployment. The capital-intensive oil sector in Azerbaijan employs a mere 1.5% of the national labour force.

The employment rate in the Eastern European countries is generally high – at between 50.1% in Belarus and 62.7% in Russia in 2010 – with the exception of Moldova, which, in 2011, had an employment rate of 39.4%. Unemployment is relatively low, especially in Russia, Ukraine and Belarus. The situation is rather

¹ Hereinafter 'Moldova'.

² All data in this section has been provided by the national statistical offices indicated in the list of references.

different in Armenia and Georgia, where 18.4% and 15.1% of the labour force, respectively, were unemployed in 2011. Russia still attracts migrants to meet existing labour demand and demographic decline. Consequently, it is the only country in the region with a negative balance for remittance in- and outflows.

All the countries are discussing substantial VET reforms. In Belarus the strong links between vocational schools and enterprises result in positive VET graduate employment outcomes. A well-skilled labour force is constantly required, because the population is shrinking by 40 000 persons annually due to ageing. All the other countries have problems with the labour market relevance of many VET programmes and hence, with employability. Labour market information and analysis is still minimal. In the past, this problem was resolved by means of sporadic education and business cooperation and there is a growing overall awareness of the need for more cooperation.

The four smaller countries – Armenia, Azerbaijan, Georgia and Moldova – face serious employment problems and extremely low employment rates, most of all Moldova (partly explained by high emigration). This is not the case in the other countries where the activity rates are 60% and above. In the smaller countries, a trend towards more university education does not necessarily imply employment after graduation. Consequently, a high percentage of university leavers are unemployed, work in jobs for which they are over-qualified or work in the informal sector.

In the last decade the number of VET students has declined and the share of university graduates has increased, with serious consequences for labour markets. Over-education in the countries with minor employment problems (Belarus, Russia and Ukraine) has had a crowding-out effect: many university graduates are employed in jobs which could be performed by lower-skilled workers (i.e. VET graduates). Simultaneously, the fact that there is an overly small pool of well-qualified workers with middle-level qualifications means that employers complain about skill gaps that hamper economic growth and enterprise development. Such gaps exist because of questionable educational streaming and current poor VET system performance. Undoubtedly, however, there is a growing demand for VET programmes, confirmed by expert reports from the region.

Over-education and skill gaps are the consequence of learner demand for higher education. Learners react to certain signals from the labour markets: as long as the returns for, and reputation of, a university education are higher than for middle-level qualifications and as long as crowding-out recruitment strategies are used by employers, the demand for university education will remain strong. In general, the countries offer few attractive options for VET graduates to continue studying for post-secondary or higher professional qualifications at a later stage in continuing VET (CVET). Awareness campaigns, more permeability and attractive careers for ISCED 3 and 4 achievers could be a way to influence educational streaming.

Funding

The countries previously concentrated funding in general and higher education, taking into account that per capita costs are higher for VET than for general education. Modest resources assigned to VET are a prevailing trend in all the countries, hampering the increase in quality, most of all in modern and capital-intensive manufacturing and craft professions. However, recent developments reveal a growing demand for VET caused by high unemployment rates among higher education graduates and to structural economic adjustments. Hence, the share of students enrolled in VET education at the upper secondary level is quite high in the larger countries, with rates of 48.5% for Russia in 2009 and of 28.6% for Ukraine in 2010. In smaller countries like Georgia and Armenia, VET plays a rather minor role, with 1.2% (2008 in Georgia) and 6.4% (2010 in Armenia) of students attending VET programmes at the upper secondary level.

Apart from the financial aspects – including serious restrictions for updating technical equipment/buildings and a more efficient use of existing resources – there are three common and interrelated areas for further reforms in all the countries: governance, better VET linkages with the economy and training programme quality and relevance. In addition, entrepreneurial learning is an area still in development and there are also further country-specific challenges.

Governance and relevance

Although there is growing involvement of social partners in policy dialogues in several of the countries, coherent, functional multi-level governance modes are lacking despite efforts towards decentralisation and more involvement by stakeholders. The countries are either still developing new governance modes or have not opted for the participation of all stakeholders. Additionally, transition means more democracy and transparency, and this is a long-running social process and not a 'decision today for better governance tomorrow'. Many countries are by now convinced of the advantages of new governance modes and are considering ways to award greater responsibilities to schools in a process which should be further supported by policy dialogue.

In all countries there is room for improvement in pre- and in-service teacher education and in more professional teacher careers – a core issue for better quality in education. Labour market relevance requires, from VET teachers and schools, new forms of cooperation with the private sector in order to ensure quality and update training programmes. Successful modes of cooperation already exist in the region which could be made systemic for initial VET (IVET) and for CVET in a lifelong learning perspective. Existing post-secondary VET offers should also be updated as a viable alternative to higher education and more entrepreneurial learning should be offered to different target groups.

The policy dialogue and applied research promoted by the 2012 Torino Process should further stress the need to design VET policies that build on evidence and on solutions derived from country-specific contexts and commonly agreed objectives. Simultaneously, capacities for implementing reform and innovation must be strengthened. Good practice examples from the EU could contribute to improvements and measures for capacity building should complement policy design and implementation.

1. POLICY VISION IN VOCATIONAL EDUCATION AND TRAINING

New visions (VET policies/strategies) have emerged throughout the region that endeavours to respond to country-specific socio-economic challenges. They even relate to the Commonwealth of Independent States (CIS) development strategy for 2009 to 2011, referring to science, innovation and education as important areas for cooperation. All the countries recognise the importance of VET for economic and social development and all the countries (with the exception of Belarus³) are using the word 'reform' in the context of policies aimed at VET system development. Some of the countries claim VET as even necessary for sustainable development.

Initially, many initiatives for designing VET visions and strategies were driven by donors. Today, the situation is different: the tremendous decline in VET enrolment rates in most countries, the lack of skilled blue-collar workers⁴ with the consequent negative repercussions for employment and enterprise growth (Sondergaard and Murthi, 2012) and the over-qualification of (unemployed) university graduates point to the need for suitable long-term solutions for an education system that better supports the growing demand for VET.

Specific VET vision, however, varies by country according to national priorities. Most countries link their new VET strategies to both competitiveness and social agendas and some also link their vision to additional objectives (Armenia to national security goals and sustainability, Belarus to socio-cultural goals and Ukraine to sustainability). Countries have started to push VET higher on their national policy agendas; Ukraine, for instance, adopted a State Programme for VET Development for the period 2011–15. A top priority of the Moldova National Development Strategy 2020 is the alignment of skills with labour market needs through better quality education and training. Support for small and medium-sized enterprises (SMEs) through an SME sector strategy similarly points to competence and human capital as a key objective. In Azerbaijan, meanwhile, VET policies are still being reformulated. There is awareness that the boom in exports of oil and gas, with spill-over effects to the rest of the economy, requires skilled human capital at the secondary and post-secondary VET level. Consequently, objectives to formulate a new national and non-donor driven VET strategy are high on the agenda.

1.1 MISSION AND PRIORITIES

All the countries have made efforts to further develop their VET systems and better link them to the needs of the economy and society. Positive results are notable, mainly in three areas: the involvement of stakeholders, legislation and the strengthening of institutions.

The policies and strategies of all countries explicitly recognise the added value of systemically implemented stakeholder involvement and the relevance of qualification frameworks and of their compatibility with the European Qualifications Framework. These frameworks stimulate VET quality discussions and more systematic stakeholder involvement. However, an NQF is only in place in Armenia and Georgia; the other countries are still working to close the gap between vision, policy design and implementation. Development of an NQF is not a mere matter of adopting regulations, but is driven by lengthier social processes on which regulations can build. But care needs to be taken to ensure that frameworks are, at least at the outset, simple and affordable.

³ The key words in Belarus are 'innovative development' and 'competitive growth' in increasing the share of highly skilled VET graduates by 30%.

⁴ This transition problem is less dramatic in countries with higher shares of well-qualified VET graduates. Belarus reports employment for VET graduates of 99.05% (Umarov et al., 2011). However, Russia with a high share of VET students has a growing shortage of skilled manual workers and technical specialists, because many VET students continue in higher education (ETF, 2011a).

As for legislation, all the countries have developed new VET strategies and laws. Specific legislation refers mainly to the development and implementation of NQFs, the design of new professional standards/curricula, quality assurance, decentralisation and, in the case of Georgia, liberalisation of an educational market in higher education and VET, steered by accreditation and quality control instruments.

In regard to institutional involvement, all the countries have enhanced their VET departments in ministries, created national VET agencies/councils and are in the process of rehabilitating existing vocational schools. Some schools have been closed down so as to concentrate available resources in centres of excellence according to the needs of different regions. The further training of school directors and teachers is an ongoing process aimed at supporting quality and improving professional careers. The business sector is contributing to the equipment of schools and specialised national VET agencies have been set up to manage accreditation, teacher education and quality control.

The sporadic and unsystematic involvement of the business sector is a characteristic of the fast-changing realities of market-driven economies. Involvement ranges from participation in national VET councils to consultancy and advice in curriculum development and participation in school and assessments boards (ETF, 2011). Trade unions are hardly involved in VET activities. The involvement of stakeholders is an ongoing social process which will hopefully lead to more relevant and systematic consequences for the overall VET system, e.g. by changing the character of internships to longer practical learning phases in enterprises, offering potentially better learning because many vocational schools are poorly equipped.

Georgia's reform process is the most advanced in terms of the privatisation of VET institutions. Currently, only 14 VET centres are publicly funded, largely through a voucher scheme that prioritises professional areas in high demand in the labour markets. A total of 71 private institutions are operating in the country, whose offers must be fully covered by the tuition fees paid by learners (2012 Torino Process country report). It is still too early to determine whether such a VET system, in the future, will deliver the necessary human capital requirements.

1.2 VET AND SOCIETY

Structural misbalances in the labour markets in terms of qualified labour shortages and over-educated workers, which are being experienced in all the countries, are the focus of policy makers, triggering serious attention from the respective governments⁵. This has led to greater awareness of the relevance of VET for societal objectives and also to the formulation of VET policies that, focusing on broader socio-economic development goals, also have a more demand-driven perspective (of learners and enterprises) of strategies and policy documents, involving employers more systematically in VET programme design.

Awareness has been raised through a 2011 review of country policies in support of SMEs, using criteria inspired by the Small Business Act for Europe (OECD et al., 2012). The review reveals shortages in entrepreneurial learning and in training support for female entrepreneurs. Several countries, meanwhile, have decided to tackle these issues.

All the countries are aware of the importance of career guidance and of its potential contribution to avoiding labour market distortions. However, many countries concentrate new policies and activities too much on IVET and do not provide such services to employed and unemployed adults⁶. This is even more the case in the larger countries and in Belarus, as these have an ageing labour force where imbalances could be partly resolved with greater adult integration in the workforce through vocational guidance and (further) training.

⁵ Moreover, 'institutional and social dialogue, capacity, and leadership of implementation will be among the key elements for successful and sustainable reforms' (Castejon et al., 2011, p. 162).

⁶ The employment services of Azerbaijan and Ukraine also focus on adult job seekers.

1.3 VET IN THE EDUCATION CONTEXT

There are three other commonalities among the countries. They all offer IVET and secondary VET providing intermediate qualifications for technicians. A difference exists in terms of permeability, however, as VET programmes, in some countries, do not allow access to higher education (e.g. Georgia, which nevertheless recognises the problem). In other countries, the possibility theoretically exists to continue with higher education; however, in practice few VET graduates continue their education after the secondary level. Georgia is advanced in terms of deregulating the VET system but is encountering severe problems in terms of funding restructuring with public and private providers.

A good example in relation to the importance of vision/policy development that is not necessarily followed up by sustainable implementation and action is lifelong learning, understood in many countries, incidentally, to be the same as adult training. Moldova and Georgia have made systematic efforts to recognise non-formal learning. Ukraine intends to upgrade its state employment service to validate non-formal and informal learning. Data for Russia, Ukraine and Moldova reveal that the shares of adults (employed and unemployed) participating in training programmes are still modest. The rate for Russia was 5%–7% of adults, where one third of the adult population expressed further education needs (ETF, 2011a); in Ukraine the extractive and manufacturing sector provided outstanding shares of further training, at 7.4% and 5.2%, respectively (ETF, 2011b); and in Moldova, the rate was 0.95% in 2010 for the population aged 24–64 years (ETF, 2011c)⁷.

The lifelong learning issue and delays in other policy areas are responsible for a significant gap between policy design and implementation at all levels of the VET systems. Some reasons for the modest progress in implementation include the lack of institutional capacities, the lack of returns on retraining, poor motivation and/or resistance to decisions taken in a non-participative, top-down manner, and a lack of resources and incentives to complement innovation.

Higher education benefited most from educational policies during the transition phase. Secondary VET, often neglected at policy level, managed with outdated governance modes. This process was reinforced by the demands of learners, ever ready to pay high fees for a university education (ETF 2011a; 2011b). This growing demand led most countries to opt for liberalised higher education policies and allowing fee-based public and private universities. Most enrolment is in academic higher education (ISCED 5A), with enrolment in VET higher education (ISCED 5B) has been decreasing since the early 2000s (in 2008, the rates ranged between 12% in Moldova to 27% in Azerbaijan). Professional areas such as engineering, manufacturing and construction (which play a prominent role in the EU New Skills for New Jobs agenda) have seen the lowest increases and even decreases in enrolment compared with other fields (UIS, 2012).

1.4 RESEARCH CAPACITY

The four smaller countries – Armenia, Azerbaijan, Georgia and Moldova – have limited research capacities in the VET sector and hardly any funds for complementing VET system development with targeted research carried out with national resources, as this would create more evidence for further decisions and would support the design of new visions/policies⁸. Belarus, in contrast, invests efforts in skills forecasting and Russia and Ukraine have better developed research capacities.

The remaining problems are twofold: social processes should lead to agreement with stakeholders about suitable perspectives on VET system development and a coherent design that meets social and economic goals. Capacity building for stakeholders in relation to the implementation of innovation and reforms remains a crucial issue and should also involve regional and local authorities in VET system development.

⁷ Across the region the private sector should have a stronger voice and incentive-driven further training schemes, which should be linked to NQFs and sound accreditation policies for providers (Bodewig and Hirshleifer, 2011).

⁸ Azerbaijan is an exception among the small countries. Publicly financed research studies have been implemented covering different VET issues.

2. THE ECONOMIC AND SOCIAL CONTEXT FOR VOCATIONAL EDUCATION AND TRAINING

The region consists of five small countries (with between 3 million and 9 million inhabitants each) and two large countries (Ukraine and Russia, with 46 million and 142 million inhabitants, respectively). The total population is around half that of the EU, which was around 500 million in 2009. The share of the working-age population is higher than the EU average of 67%. However, the region also has a shrinking and ageing population and is rapidly becoming one of the oldest regions in the world (Chawla et al., 2007). Although the shrinking population of young people provides some relief in relation to education financing, both IVET and CVET provision face serious difficulties in terms of skills mismatch.

The income levels of these countries represent major constraints in terms of public investment in education in general and in VET in particular, with new demands being placed on VET systems. Learners are more likely to invest in higher education than in VET, which has led to uncontrolled expansion of the higher education sector in many countries and unbalanced demands being made on the labour markets.

The seven countries share a common past as part of the former Soviet Union, where VET was centrally planned and structures were very similar. Following independence, they all coped with tremendous changes and with the history of a central approach to VET governance. Over the past 20 years substantial progress has been made and the countries have established their own VET identities in their specific national contexts. This process is unfinished because serious problems in the VET systems remain unresolved, as will be described below.

Since both societies and education systems tend to favour academic education over VET, academic drift in education has become more marked. VET has also been negatively affected by education policy choices over the past two decades, with education and businesses remaining, in the majority of the countries, separated worlds (ETF, 2011). As a result, there is a major problem with skill mismatch; in particular, there are pronounced skill shortages, further exacerbated by labour migration, usually from the poorer countries to upper-middle-income countries in the region or to high-income countries outside the region. This has a further negative impact on skills supply, particularly in the lower-middle-income countries.

More attention has been paid in the reform process to IVET rather than CVET, for well justified reasons. However, the 2010 Torino Process revealed that economic transformation and demographic trends have generated strong demands for training and retraining of employed and unemployed adults that have remained unaddressed but which have generated an ETF regional CVET project for Eastern Europe.

2.1 ECONOMIC AND SOCIAL CONTEXTS

Armenia, Georgia, Moldova and Ukraine belong to the lower-middle-income countries, whereas Azerbaijan, Belarus and Russia are upper-middle-income countries. Until the global crisis, their economies were developing extremely rapidly, with GDP growth above 8% in 2007 (except in Moldova and Ukraine) and even reaching 25% in Azerbaijan as a result of the country's vast oil revenues and a constantly increasing oil price.

All countries suffered a 'lost decade' in the 1990s, with high social costs due to economic stagnation/decline, industrial restructuring, emerging informal sectors (Jütting and Laiglesia, 2009) and high hidden and registered unemployment. From 2000 onwards, the countries experienced a remarkably steady period of economic growth and consolidation of public and private institutions that was, however, suddenly interrupted by the crisis of 2008–09. However, economic recovery is back on track since 2010 (**Table 2.1**).

TABLE 2.1 ANNUAL GDP GROWTH, 2008–11 (%)

	2008	2009	2010	2011
Armenia	6.9	-14.2	2.1	4.6
Azerbaijan	10.8	9.3	5.0	1.0
Belarus	10.3	0.2	7.7	5.3
Georgia	2.3	-3.8	6.3	7.0
Moldova	7.8	-6.0	7.1	6.4
Russia	5.3	-7.8	4.3	4.3
Ukraine	2.3	-14.8	4.1	5.2

Source: Author's work based on World Bank, 2012

While there has been substantial economic growth in all the countries, the drivers of growth vary according to national characteristics (e.g. oil and gas exports in Azerbaijan, and exports to Russia in Belarus). The structure of the economies indicates an ongoing trend to an expanding service sector in nearly all the countries. Azerbaijan's huge industrial sector is country-specific and oil-based. Economic restructuring is as yet incomplete. However, the key trend towards a more developed service sector reveals an ongoing and substantial transition towards market economies.

2.2 OCCUPATIONAL SECTORS AND EMPLOYMENT

TABLE 2.2 AGRICULTURE, INDUSTRY AND SERVICE AS SHARE OF GDP, 2008–11 (%)

	2008			2009			2010			2011		
	Agr	Ind	Ser	Agr	Ind	Ser	Agr	Ind	Ser	Agr	Ind	Ser
Armenia	18.4	43.5	38.1	18.9	35.8	45.3	19.6	36.0	44.5	20.7	37.1	42.2
Azerbaijan	6.0	70.2	23.8	6.6	61.1	32.3	5.8	64.7	29.5	5.8	66.8	27.4
Belarus	9.8	44.3	46.0	9.4	42.3	48.3	9.2	43.9	46.9	8.1	41.0	50.9
Georgia	9.4	21.9	68.7	9.4	21.9	68.8	8.4	23.2	68.4	7.2	18.2	74.6
Moldova	10.7	14.3	75.0	10.1	13.1	76.8	14.3	13.2	72.5	13.5	12.4	74.2
Russia	4.4	36.1	59.5	4.7	33.7	61.6	4.0	36.7	59.3	MD	MD	MD
Ukraine	7.9	33.6	58.5	8.3	29.6	62.1	8.2	30.9	60.9	8.3	31.4	60.3

Notes: Agr – agriculture; Ind – industry; Ser – services; MD – missing data.

Source: Author's work based on World Bank, 2012

The data in **Table 2.3** reveals that, with the exception of Russia, the SMEs are the backbone of the national economies. VET policies must take into account the relevance of formal and also informal SMEs for employment opportunities and the specific needs of SMEs in terms of professional standards, qualification profiles and gaps in entrepreneurial competences. However, awareness of these skill needs and the demands they pose to education and training is increasing in the countries.

TABLE 2.3 NUMBER OF SMEs AS % OF ALL ACTIVE BUSINESSES

	%	YEAR
Armenia	97.7	2010
Azerbaijan	94.0	2011
Belarus	97.0	2010
Georgia	93.1	2008
Moldova	97.7	2009
Russia	33.2	2010
Ukraine	99.4	2011

Note: SMEs are defined as follows: Armenia (registered entities only) – up to 249 employees; Azerbaijan – 5–40 employees depending on the sector; Belarus – up to 250 employees; Moldova and Ukraine – up to 249 employees; Georgia and Russia – up to 100 employees.

Source: Author's work based on OECD et al., 2012; Small and Medium Entrepreneurship Development National Centre of Armenia, 2012; Ministry of Economic Development of Georgia, 2009; National Bureau of Statistics of the Republic of Moldova, 2012; Russian Federation Federal State Statistics Service, 2011; State Statistics Committee of Ukraine, 2012; and State Statistical Committee of the Republic of Azerbaijan, 2012

Activity rates are quite different in the region, with Belarus, but most of all Moldova, having very low rates, not only compared with EU targets of 70% but also with other countries in the region. This is possibly explained by the fact that emigrants are classified as inactive by the national statistics because they work abroad. Ukraine, Azerbaijan and also Russia have high activity rates, explains, in the case of Russia, the migration inflows. In Armenia and Georgia, a large share of activities in the informal sector and in the rural economy is included in the activity rates.

TABLE 2.4 ACTIVITY RATES (15+), 2008–11 (%)

	2008	2009	2010	2011
Armenia	59.5	59.2	61.2	63.0
Azerbaijan	63.5	63.9	64.3	MD
Belarus	55.4	55.1	55.5	MD
Georgia	62.6	63.6	64.2	65.2
Moldova	44.3	42.8	41.6	42.3
Russia	67.8	67.8	67.7	MD
Ukraine	63.3	63.3	63.7	64.3

Notes: Armenia – 15–75 years; Russia – 15–72 years; Ukraine – 15–70 years; MD – missing data. Data for Azerbaijan and Belarus are ILO estimates.

Source: Author's work based on ILO-KILM, 2013; National Statistical Service of the Republic of Armenia, 2011; Geostat, 2012; National Bureau of Statistics of the Republic of Moldova, 2012; Russian Federation Federal State Statistics Service, 2012; and State Statistics Service of Ukraine, 2012

The employment structure of the main economic sectors also varies. While agriculture still played a key role in absorbing employment in Georgia (53% in 2007) and Armenia (39% in 2010), industry in Belarus (34% in 2011) and both industry and services in Ukraine (21% and 62%, respectively, in 2011) continued to be very important. Most new jobs created between 2000 and 2007 were created in the informal sector; in Armenia, this sector now makes up 50% of total employment (ETF, 2010) and about one third in Moldova. Across all the countries, employment opportunities in the agricultural and manufacturing sectors decreased, while new employment opportunities emerged in the expanding service sector, requiring different skills than in the former, centralised, economy.

Armenia and Georgia have particularly high unemployment rates, indicating that economic growth is not necessarily linked to more employment opportunities. Georgia's country-specific way of deregulating the labour market has proved ineffective in terms of increasing employment rates and has renewed the government's attention towards unemployment, declared the top problem in the country (Government of Georgia, 2012)⁹. Azerbaijan, Russia and Ukraine are showing signs of recovery, as **Table 2.5** reveals.

TABLE 2.5 UNEMPLOYMENT RATES (15+), 2008–11 (%)

	2008			2009			2010			2011		
	T	M	F	T	M	F	T	M	F	T	M	F
Armenia	16.4	14.4	18.6	18.7	17.8	19.9	19.0	17.0	21.2	18.4	MD	MD
Azerbaijan	6.1	7.1	4.9	6.0	5.2	6.9	MD	MD	MD	MD	MD	MD
Belarus	0.8	0.7	0.9	0.9	0.8	0.9	0.7	0.7	0.7	0.6	0.6	0.6
Georgia	16.5	16.8	16.1	16.9	18.1	15.4	16.3	17.9	14.5	15.1	16.7	13.1
Moldova	4.0	4.6	3.4	6.4	7.8	4.9	7.4	9.1	5.7	6.7	7.7	5.6
Russia	7.0	7.5	6.4	8.4	9.0	7.8	7.5	8.0	6.9	MD	MD	MD
Ukraine	6.4	6.6	6.1	8.8	10.3	7.3	8.1	9.3	6.8	7.9	8.8	6.8

Notes: Armenia – 15–75 years; Belarus – men 16–59 years, women 16–54 years; Russia – 15–72 years; Ukraine – 15–70 years; MD – missing data. Data for Azerbaijan are ILO estimates. Data for Belarus refer to administrative data only. Thus, only those people who are registered with public employment services are considered as unemployed. Since many people do not register, the unemployment rates may be underestimated. On the other hand, employment is still largely guaranteed in Belarus (compulsory job allocation of graduates in publicly-financed higher education and VET, guaranteeing a first job for young people).

Source: Author's work based on ILO-KILM, 2013; National Statistical Service of the Republic of Armenia, 2011; Geostat, 2012; National Bureau of Statistics of the Republic of Moldova, 2012; Russian Federation Federal State Statistics Service, 2012; and State Statistics Service of Ukraine, 2012

Massification of higher education has led in nearly all the countries to greater unemployment among higher education graduates, not much different from rates for secondary education unemployment. In Georgia it is even higher than for secondary education graduates. The crowding-out effect in Russia and Ukraine is a reason for avoiding higher unemployment rates among university graduates.

⁹ Unemployment among higher education graduates is higher than unemployment among graduates from other education levels (2012 Torino Process country report).

TABLE 2.6 UNEMPLOYMENT RATES (15+) BY EDUCATION LEVEL, 2011 (%)

	GE	AM	AZ	MD	RU	UA
Primary	3.5	4.5	4.0	5.4	19.8	–
Basic	10.4	15.1	12.2	7.2	16.8	6.9
Secondary general	13.7	19.0	4.2	7.7	11.6	8.8
Primary VET / VET (AM) / secondary professional (MD)	10.3	20.3	5.7	7.2	7.9	–
Secondary VET / specialist secondary or incomplete tertiary (AM, MD, UA)	13.4	20.3	7.1	5.2	5.8	7.2 (basic/full)
Higher	20.5	19.5	6.2	6.0	4.0	6.7
Total	15.1	19.0	5.4	6.7	7.5	7.9

Country codes: GE – Georgia; AM – Armenia; AZ – Azerbaijan; MD – Moldova; RU – Russia; UA – Ukraine.

Notes: Belarus – data not available; Armenia (2010) – 15–75 years; Russia (2010) – 15–72 years; Ukraine – 15–70 years.

Source: Author's work based on National Statistical Service of the Republic of Armenia, 2011; Geostat, 2012; National Bureau of Statistics of the Republic of Moldova, 2012; Russian Federation Federal State Statistics Service, 2012; and State Statistics Service of Ukraine, 2012

Armenia has a considerable share of long-term unemployed among its population. This might be an indicator that new skills required by a market economy have not been acquired by a certain segment of the population. In addition, employment in the agricultural sector, a buffer in times of structural change and reform, has expanded. Azerbaijan and Belarus, in contrast, have low shares of long-term unemployed. Georgia has no employment service that collects statistics in this area.

TABLE 2.7 LONG-TERM UNEMPLOYED AS SHARE OF ALL UNEMPLOYED (15+), 2008–11 (%)

	2008	2009	2010	2011
Armenia	64.2	54.6	60.2	MD
Azerbaijan	4.1	3.4	3.0	3.0
Belarus	8.2	6.2	6.4	5.8
Georgia	MD	MD	MD	MD
Moldova	31.3	27.9	30.8	32.6
Russia	33.3	28.7	29.9	MD
Ukraine	28.7	18.4	33.9	28.4

Notes: Long-term unemployment refers to the unemployment longer than 12 months. Armenia – 15–75 years; Belarus – men 16–59 years, women 16–54 years; Russia – 15–72 years; Ukraine – 15–70 years; MD – missing data. Data for Belarus and Azerbaijan refer to administrative data. Armenia calculations are based on the length of unemployment from the termination of a job. Russia calculations are based on the length of job search.

Source: Author's work based on National Statistical Committee of the Republic of Belarus, 2012; National Bureau of Statistics of the Republic of Moldova, 2012; State Statistics Service of Ukraine, 2012; National Statistical Service of the Republic of Armenia, 2011; State Statistical Committee of the Republic of Azerbaijan, 2012; and Russian Federation Federal State Statistics Service, 2012

The most relevant issue in the countries is currently the return to a certain socio-economic stability as key to further successful transition. The (numeric) relevance of SMEs for economic and social progress is a matter requiring more attention.

2.3 SOCIAL POLICY: EFFICIENCY AND EQUITY

Efficiency is generally related to how well an economy allocates scarce resources to meet the needs and wants of consumers. Equity, meanwhile, is concerned with the distribution of resources and is inevitably linked with concepts of fairness and social justice.

Redistributive policies can reduce inequality and its persistence across generations by mitigating the impact of market imperfections. But it is a difficult call. Bejakovic (2011) suggests that, for South Eastern European countries in particular, alleviation measures have largely not been implemented. This view can largely be extended to the Eastern European countries.

The discourse on social policy in the broader sense of equity versus efficiency is a relatively new agenda – an agenda of transformational politics. Social policy has been created by economic discourse on market-making policies versus market-correcting policies. Transition countries have been particularly exposed to neo-liberal economic and implicit societal policies.

We can take Moldova as an example (Bejakovic, 2011). One of the most important issues faced by its government was and is long-term reconciliation of two apparently contradictory socio-economic objectives: efficiency and equity. The socio-economic situation after independence was complex, primarily due to the increase in poverty. Moldova's transition process had devastating impacts on the country's social situation. The unfavourable economic situation was further worsened by political instability in a breakaway territory, Transdnestr. The country is highly dependent on migrant remittances, which represent about one third of GDP. The population in big cities runs a significantly lower risk of poverty in comparison with the population in rural areas, mostly due to the fact that the agricultural sector has very low levels of productivity and income. Gender issues also arise, particularly in terms of opportunities in rural areas. From the point of view of the trade-off between efficiency and equity, there are various risks that affect social policy in Moldova, very often linked with the fact that the government is forced to search for hasty short-term and mid-term solutions rather than adopting a long-term vision and, thus, is less 'prospective'. Tensions thus arise in policy and financing priorities among, for example, education, health, employment and overall social support policies.

One focus in this report is of VET as a natural bridge between training and the labour market as well as a bell-weather indicator of social context. The VET system can, in principle, act as an efficient and effective vehicle for economic and social development of a country, through the strengthening and enhancement of human capital and development paths, flexible employment and professionalisation. The hope is that investing in VET can produce positive effects, for individuals, for businesses and for the entire socio-economic system of reference.

3. ADDRESSING ECONOMIC AND LABOUR MARKET NEEDS AND SOCIAL DEMANDS

3.1 MISMATCH BETWEEN SUPPLY AND DEMAND

After more than 20 years in transition, nearly all the countries (with the exception of Belarus) have considerable problems with a skills mismatch (ETF, 2011a–c; and 2012 Torino Process country reports) or employment or both. Belarus has excellent figures for VET graduate transition to the labour market, given the government's responsibility for placing all VET graduates in their first job. All the other countries have a serious over-qualification problem and a high demand for skilled workers with ISCED 3 and 4 qualifications; in Georgia this has already led to higher enrolment rates in VET institutions. However, the quality of the skills currently provided at these levels is frequently unsatisfactory, according to employers, a reason why higher enrolment rates should be linked to quality enhancement.

Structural labour market imbalances are partly triggered by learner demand¹⁰ and by educational policies that historically neglected the VET system. Even imposing fees for higher education could not reduce demand¹¹. These fees are obligatory in many countries because only a limited number of free enrolments are funded. Between 1990 and 2008, enrolment in Russia in higher education almost tripled from 2.82 million in 1990 to 7.42 million in 2008; the result is that many jobs requiring middle-level skills are today held by higher education graduates. In nearly the same period, the number of ISCED 4 VET programme graduates, indexed at 100 in 1990, fell to 42.3 in 2009 (ETF, 2011a). Structural imbalances are linked to the overall drop in educational quality, including in higher education, with growth in the number of institutions not reflected in improved quality criteria.

Russia is a good example for these misbalances in nearly all countries of the region. An example is its output and demand for different education levels (Table 3.1)¹².

TABLE 3.1 EDUCATIONAL OUTPUT AND LABOUR MARKET DEMAND, 2010 (%)

	HIGHER EDUCATION	VET ISCED 4	VET ISCED 3	NO QUALIFICATION
Education system output	60	13	18	9
Labour market demand	35	22	37	6

Source: Data provided by the Russian Union of VET School Director, Umarov et al., 2011, p. 31

¹⁰ Students which enrol in higher education in Russia are not obliged to do the two years of military service.

¹¹ In Azerbaijan, 60% of higher education students pay fees (2010 Torino Process country report).

¹² There are different explanations for labour market shortages. Gimpelson et al. (2012) state that imperfect labour market mechanisms impede the reallocation of better skilled workers in the Russian manufacturing sector.

Ukraine – the second largest country in the region – reports similar labour market imbalances, with 44.4% of employers stating that the shortage of qualified blue-collar workers is the biggest growth obstacle for the country's enterprises (Sondergaard and Murthi, 2012). The high tertiary enrolment and falling VET enrolment is also having crowding-out effects: 62% of blue-collar jobs are held by university graduates (ETF, 2011b) and employers complain that newly contracted staff lack technical and non-technical skills required in the world of work¹³.

Belarus meets country-specific targets for VET-driven labour force development in terms of employment because it still operates a system of compulsory first jobs for VET graduates. However, Belarus employers complain, as do Moldovan and Georgian employers, about the same kind of skill gaps as exist in Russia and Ukraine. In Moldova and Georgia, 41.5% and 26.5% of employers, respectively, identify inadequately educated workers as a major obstacle to enterprise development (Sondergaard and Murthi, 2012), with only about half of companies across all sectors finding the kind of employees they wanted in the previous 12 months (Ministry of the Economy and Sustainable Development of Georgia, 2012). The reasons for the structural imbalances are the same: poor VET quality and, consequently, low enrolment rates; insufficient CVET; and over-qualified university graduates with irrelevant certificates.

Large companies usually have the option of providing training for their staff. An ETF report (forthcoming), however, reveals existing CVET problems in the region. The countries have highlighted the obsolescence of the existing legislation, the lack of cooperation between the public and private sectors, the insufficient expertise to carry out training needs analyses, the lack of quality criteria and funding issues as key factors that negatively affect CVET.

3.2 EMPLOYER PERCEPTIONS

Employer opinions on the relevance of human capital for enterprise development are summarised in **Figure 3.1**. In the three larger countries – Belarus, Russia and Ukraine – around 50% of employers indicate that an inadequately trained workforce hinders company performance and development (EBRD/World Bank, 2010)¹⁴. Employer perceptions deteriorated in all the countries except Georgia between 2005 and 2009.

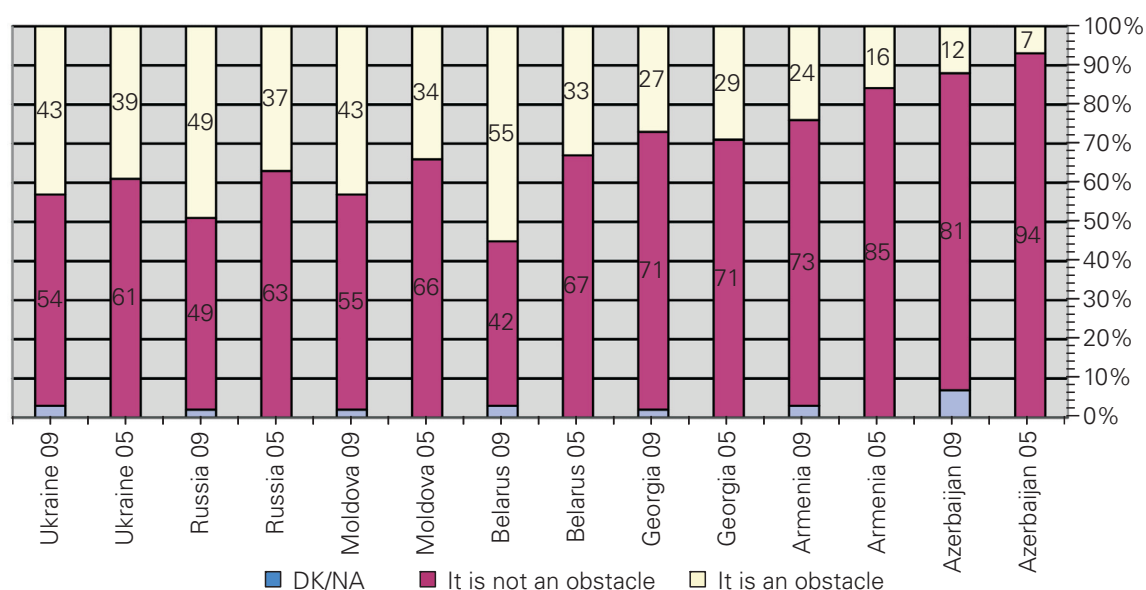
However, given that in Armenia (2012 Torino Process country report), Georgia and Moldova (ETF, 2011c) – and most likely in the other countries – the returns to education correlate positively with the level of education, the propensity of many learners is to enrol in higher education, irrespective of whether the fields of study are labour-market relevant or whether the graduates need to take jobs for which they are over-qualified. This issue is not necessarily complemented by lower unemployment rates for better educated individuals¹⁵ as, for example, one fifth of highly educated people in Armenia and Georgia are unemployed (Bardak, 2011, pp. 186).

¹³ The permeability of the education system is well used by learners: 'two thirds of all students complete general secondary education alongside vocational education' (2010 Torino Process country report) and many of them go on to enrol in higher education.

¹⁴ This contrasts with the opinions of decision makers in ministries stating that the labour force is partly underused and modestly paid and that professional career perspectives for employees are mostly missing.

¹⁵ In Georgia, unemployment among higher education graduates is higher (2012 Torino Process country report) than unemployment among graduates of other education levels, a consequence of the previous deregulation of the higher education sector. This does not undermine the country-specific trend to create an education system, based on credibility and quality that includes private providers at all levels and the elimination of corruption.

FIGURE 3.1 PERCEPTIONS OF WORKFORCE EDUCATION AS AN OBSTACLE TO BUSINESS, 2005–09 (%)



Notes: The 2005 and 2009 data are not fully comparable owing to methodological changes. DK/NA – do not know/not available.

Source: Author's work based on EBRD/World Bank, 2010

The Russian and Ukrainian cases reveal that the imbalance between tertiary over-qualification and ISCED 3 and 4 skill gaps¹⁶ is fairly typical (ETF, 2012) and not unemployment per se. Russia still attracts migrants from other countries and Ukraine has low unemployment rates. Moldova has the lowest employment rate in the region, at only 38.5% in 2010 (ETF, 2011c). Consequently, micro enterprises as an alternative against poverty are mushrooming in the informal sector. Similar trends are evident in Georgia, which also has serious employment problems, and in Azerbaijan, where the booming oil and gas sector accounts for two thirds of GDP, but employs fewer than one in 70 workers (2010 Torino Process country report), representing approximately 1.5% of the workforce.

The limited availability of jobs in the smaller countries, poor wages, poorly functioning labour markets and a poor quality of life have meant that labour emigration and the associated brain drain have become major features of the region. The remittances have contributed 12.1% to the GDP of Armenia in 2011 (2012 Torino Process country report). Russia absorbs the largest number of migrants (in 2005, 1–2 million from Ukraine, around 1 million from Azerbaijan and nearly half a million from Armenia), followed by Europe. Ukraine has the highest number of emigrants abroad: more than 6 million in 2005. Moldova has the highest share of emigrants, at represented 25% of the workforce in 2010. Although skills range across all levels, many migrants are young (aged 20–40 years) and educated.

¹⁶ 'Skill gaps appear in periods of economic restructuring when the new jobs created require different types of skill to those destroyed, before the education and training system has been sufficiently updated to match the pace of change' (Bardak, 2011, p. 187).

3.3 RELEVANCE OF QUALIFICATIONS

Most migrants work in low-skilled or unskilled jobs abroad and there is a common pattern of skills wastage. Net labour migration in 2010 (**Table 3.2**) confirms the trend of flows towards Russia, which attracts most of the migrants, and the employment problems in Armenia, Georgia and Moldova. Russia is the outstanding attractor of human capital from other countries, followed by Azerbaijan, which a decade previously exported labour. Labour migration is also indicated in the negative or positive balance of remittance inflows and outflows.

TABLE 3.2 NET LABOUR MIGRATION AND REMITTANCE INFLOWS AND OUTFLOWS, 2010

	NET LABOUR MIGRATION	REMITTANCE INFLOWS AND OUTFLOWS (MILLION USD)
Armenia	-75 000	839
Azerbaijan	53 264	471
Belarus	-50 010	485
Georgia	-150 000	756
Moldova	-171 748	1 275
Russia	1 335 737	-13 532
Ukraine	-40 006	5 583

Source: Author's work based on World Bank, 2012

In all the countries there is a new quantitative numeric balance between the different education sub-systems in order to cover the demand for ISCED 3 and 4 qualifications. This will only work if rebalancing towards training more VET graduates is linked to the quality and relevance of new VET programmes, offering sound employment and professional development perspectives for learners.

4. INTERNAL QUALITY AND EFFICIENCY

Before turning to issues of quality it is important to remember that nothing happens without a budget line and that VET reform cannot take place without a comprehensive review of the financing of the system. Future development programmes should therefore make such reviews a priority highlighting that the development and improvement of the financing system for VET should complement the vision and mission for VET and the basic principles for its further development. Consequently a financing system should:

- enable vocational schools to deliver VET in an effective and efficient way;
- be supportive in covering the needs of learners and the demand on the labour market;
- secure access for each individual and fund each region equitably from the state budget.

We could point to the three criteria above as the most important criteria in terms of achieving quality objectives.

4.1 QUALITY ASSURANCE

The origins of an emphasis on quality derive from a requirement for greater accountability: how is government money being allocated and with what results and how are results measured?

Quality assurance is quite a complex concept which relates to the overall values and principles behind a system – in this case VET – and also the implementation of specific performance indicators to measure outcomes. Over and above values, systematic quality assurance requires mechanisms that focus on outcomes such as completion rates, employability, satisfaction among stakeholders, societal value, etc.

In the European context a European Quality Assurance Reference Framework for VET model has been/is being developed by EU VET forums (groupings of experts from different Member States). The framework represents an attempt to build an EU-wide instrument which Member States can use to assure and develop quality in their own VET systems and which, hopefully, will have wider applicability in the context of the Eastern European countries.

This sits alongside an attempt to ensure transparency in VET qualifications and competences in both Member States and transition countries. The idea is to improve quality but also to enhance the international mobility of the labour force through recognition by employers of labour qualified in other countries.

The work on the European Quality Assurance Reference Framework carried out at the EU level is intended to bring added value to the efforts of states in improving the quality of VET. Attempts at coherence are necessary, as VET systems and mechanisms reveal a very wide variety of objectives, structures, operating methods and models of governance. The approaches followed by the EU Member States also reflect the diversity of solutions put in place in order to address specific problems confronting national structures and systems. However, from the point of view of transparency of qualifications and competences and the prospective mobility of labour, it has been important to try to establish commonly agreed standards. This explains the approach to extending both the concept and mechanisms from the EU to transition countries.

The European Quality Assurance Reference Framework consists of four elements that represent different stages in the quality cycle: planning (purpose and plan); implementation; evaluation and assessment; and review (feedback and procedures for change).

The basic intention is to improve and upgrade the quality of VET, both at the general and specific levels. The system for quality assurance has multiple functions and goals.

- It provides answers to important questions for stakeholders, social partners and managers.
- It highlights good practice examples.
- It secures feedback information.
- It improves planning, development, monitoring and assessment.
- It restricts quality differences between client groups and enables comparisons.
- It secures a decision-making role for all interest groups.
- It provides an overall picture and coherent overview of all segments of VET.
- It ensures feedback for further planning.
- It takes local and regional needs into consideration.

4.2 ATTRACTIVENESS

Alongside the drive towards quality and as a consequence of the need for financing priorities (see above), investment in VET raises the question of parity of esteem (from students, parents and politicians) in the selection of VET as opposed to general education. In other words, the debate is whether life opportunities (and lifetime income) are best served by entry into general education (and then university) or into work via VET (or both, of course). EU Member States struggle to give equal weight and therefore equal social importance to VET and so enhance its attractiveness (Ryan, 2003).

Many efforts have been invested in promoting VET as an attractive alternative to academic education, leading to the move away from the negative perceptions of VET, often (but not always) seen as a last-resort education option by society. Many countries witnessed a steady enhancement (at least until the 2008 recession), however, of the attractiveness of VET qualifications at any level for entering the labour market. The key issue for young people is when to opt for VET. Categorisation and differentiation becomes a question of not 'what route to opt for' but 'what course to take' at different moments in time – that is, not a decision but a sequence.

4.3 HOW HAVE THE EASTERN EUROPEAN COUNTRIES FARED?

The Eastern European countries have done much to increase the quality of their training, with quality assurance instruments, NQFs and the design of new professions and professional standards as clear indicators of progress. This progress was a major incentive for Russian employers to play a key role in developing the Russian NQF; previously they had complained about the poor quality of technical and non-cognitive skills in VET graduates, stating that they were even worse from 2000 onwards than in the early 1990s (ETF, 2011a). The reality in vocational schools is increasingly distant from technological developments and advances in modern handicrafts, manufacturing and services. Successful work-based learning, which often better covers skills acquisition and which is suitable for professions operating at technological frontiers cannot be implemented in school workshops¹⁷. In terms of new infrastructure and competences of teachers, trainers and school managers, structural limitations affect the possibility of constantly updating school-based VET programmes according to technological and economic changes. Cooperation with the business sector and new learning sequences in the world of work are urgently required to cover an existing skills gap.

The implementation of new regulations (standards, frameworks¹⁸, curricula etc.) led in the past to more stakeholder involvement in national VET dialogues. This represented an opportunity to think about business expectations and about learning outcomes. Standards have since been formulated and new curricula designed. A main challenge now is to implement this in practice and reflect on suitable modes – like more work-based learning – to develop better pathways and teach more practical and employment-relevant skills.

¹⁷ Georgia has decided by law to dedicate 40% of all VET curricula to practical training (2012 Torino Process country report).

¹⁸ NQFs led in Armenia, Georgia and Ukraine to new legislation and are expected to generate results soon in Azerbaijan and Russia.

However, regulations and standards can only be effectively applied if trainers, teachers and school managers are sufficiently updated to fulfil new tasks and when professions are continuously revised and updated. Capacity building of institutions and experts must be complemented by new infrastructure, textbooks, new methodological approaches and a new mixture of learning outcomes comprising technical, individual and social skills in order to respond to the challenges of globalisation. No sustainable solutions are possible if efforts are exclusively confined to new laws, regulations and constructs like frameworks and curricula. Laws and regulations are only one part of complex VET systems, which must be addressed holistically. Many other VET system parts need to be improved for any new regulations to work effectively. Hence, well-qualified teachers and trainers are key to the quality discussion, but currently all countries (except for Belarus) are behind in terms of staff development¹⁹ and working conditions for teachers (Umarov et al., 2011). In other words, wage increases are essential in tackling the shortages of highly skilled vocational teachers and trainers.

Other proposals in the region (Ukraine) suggest strictly separating educational delivery from quality control, with each performed by different bodies (Prokopenko, 2008); furthermore, representatives of the world of work should be systematically involved in professional standard and curriculum development. Russia tends to opt for more external evaluation of the VET system and of the different training programmes. Simultaneously, private sector representatives are involved in governing boards of educational establishments (Umarov et al., 2011). However, such approaches only work well, when corresponding freedom of action and mechanisms for collective bargaining of the different stakeholders are well defined and institutionalised as the preferred governance model. Independent evaluation may remain ineffective if the ground for innovation and change is not sufficiently prepared.

Wherever possible, lifelong learning activities should be the responsibility of the stakeholders, mainly social partners. Improved competitiveness and skill shortages in ageing societies urgently require more efforts regarding lifelong learning, specifically CVET. Governments are responsible for developing suitable legal frameworks, which could include regulations to fund CVET. Good practice examples exist in Europe that the Eastern European countries might benefit from. Large firms have already launched further training programmes for their employees. However, SMEs are the forgotten majority; these need better policies – including CVET – and competent further training providers that offer comprehensive technical and entrepreneurial programmes (ETF, forthcoming).

19 Despite good intentions, the retraining system for VET teachers in Azerbaijan has begun to decline (2010 Torino Process country report), mostly for bureaucratic reasons.

5. GOVERNANCE AND FINANCING

5.1 VET GOVERNANCE AT DIFFERENT LEVELS

Apart from social partnership and under a policy of decentralisation, the state should play a steering rather than controlling role, initiating frameworks and criteria, particularly relating to curricula, educational and occupational standards, assessment and accreditation, and to partnerships with industry for funding and national policy development. VET institutions need to have operational powers to implement priorities established by the state and to become regulated and accountable service providers. The state thus should set the rules of the game, leaving the schools to play the role of decision makers.

Strategic considerations include a capacity for responsiveness to local needs, initial and adult provision, relative school autonomy, acknowledgement of the steering roles of the putative authority and multiple funding resources, including co-financing from the labour market.

However, despite the existing planning traditions and the emerging development of VET strategies in most countries, the accountability of civil society stakeholders is still weak. There are difficulties in implementing long-term visions/policies in VET pilot projects and mechanisms are missing for extending the pilots to the overall system. Education ministry planning traditions in Russia, Ukraine and Belarus²⁰ (ETF 2011a; 2011b; and 2010 Torino Process country report) often block more flexible and more accountability-driven VET institution development. Public entities still centralise decisions and intervene in training programme content and structure, when they should involve private sector initiatives that would articulate demand according to the requirements of enterprises²¹. In this area Georgia is more advanced, although the duties, rights and obligations of the National VET Council are not as yet well defined.

An important step has been taken in Russia towards further decentralisation of VET governance and administration and towards the implementation of regional technical VET (TVET) development programmes to catch up with the decentralisation paradigm (Umarov et al., 2011); meanwhile, a federal VET centre will be strengthened in order to better regulate the emerging market for education and to enhance the quality and transparency of education and training.

Social partnership

In Armenia, recent VET policy documents prepared with the support of international experts are not yet owned by policy makers. In order to stimulate implementation, the Ministry of Education and Science, the Armenian Union of Employers and the Chamber of Commerce signed a memorandum of understanding on VET cooperation that defined employer involvement in VET development and provision.

Ukraine, meanwhile, has established an inter-agency working group in an effort to shape educational planning in line with the demands of the economy²². Where social partners, and especially employers, become involved, the situation changes and the advantages of modern governance modes are increasingly discussed. In Ukraine, a 2012 law on professional development lays the basis for CVET according to the needs and with the participation of social partners. In Moldova, various sector committees are working on these issues. For large countries like Russia and Ukraine, federal and centralised governance modes are questioned. In Russia regional legislation is gaining ground against the previous centralised model.

²⁰ The sectoral orientation of many educational institutions and the orientation to large enterprises are preserved.

²¹ Educational institutions in Belarus, Russia and Ukraine meanwhile developed cooperation modes with enterprises regarding the anticipation of demand, in-service practice and training, developing standards etc.

²² This approach can already build on good practice: in Kiev a vocational school of jewellery works in close cooperation with the Jewellery Association to provide training for workers from all the regions, guaranteeing 100% employment for all graduates. There is also a legal basis that permits experienced workers to work in VET institutions as teachers.

In Russia, a law from 2007 opened the door for the involvement of employers in VET policy formulation. The future systemic involvement of employers, moreover, was codified by an agreement between the ministry and the Russian employer organisation. In recent years, the Russian Union of Industrialists and Entrepreneurs has thus contributed more systematically to VET system development.

Technical support for social partnership

In Ukraine, in spite of the active recent involvement of employers in developing and modernising VET, the implementation of reforms and initiatives is constrained by the lack of technical capacities (such as expertise in competence-based and occupational standards and modern quality assurance mechanisms) and both institutional and financial resources. The ongoing crisis has affected the implementation of a national VET development programme for 2011–15, as the planned financial resources are not available. Nevertheless, working groups with different stakeholders have been launched in order to further develop national VET standards and to coordinate public bodies, employers and social partners.

As regards the implementation of the NQF adopted by government decree in 2011 a number of employer-led pilot projects to develop new occupational standards have been initiated with a view to developing a model for engaging labour market actors in competence-based standards development. However, the lack of technical competences and the absence of a single coordinating qualification agency is a serious impediment for boosting and scaling up NQF implementation. Solutions are sought through new legislative initiatives (such as the draft law on professional qualifications) and funding mechanisms (the establishment of a national training fund is under discussion).

Hence, most countries are today on the way to modifying governance at two different levels. First there is the system level itself, which might, in the future, include instruments like independent external evaluation for better and more informed governance. The second aspect is the progressive involvement of social partners at the local and school level and at the central level. The Belarus education ministry, for instance, now cooperates more systematically with employers. The strong awareness of Belarus employers regarding human capital investment that maintain the competitiveness of the manufacturing sector is supporting this process.

School-level governance

Another aspect is governance at the institutional level of schools, which should operate in the future with more freedom. Most policy papers argue for detailed control of VET organisation, control and evaluation to be decentralised as much as possible towards the level of the school. There should, therefore, be a regulatory framework that allows schools to become more autonomous in the light both of their responsibility for income generation and their need for responsiveness to the local market and enterprises, taking into account the obligations of school boards and management committees as well as social partner involvement on school boards.

Concerning commercial activities, if the school is to have greater autonomy, then it needs to be spelled out (in legislation or regulation or in the school's own statutes) that the school can engage in commercial activities and that it can retain the income (and also what limitations may apply).

Ideally required at the VET institution level (school) are the following:

- curriculum development and short course design;
- local and regional partnerships with industry;
- teaching method selection and teaching materials development;
- organisational structures;
- teacher (and support personnel) recruitment and professional development;
- course marketing and student enrolment;
- additional resources, including equipment, materials and part-funding;
- development planning and internal budget allocations;
- reporting and accountability.

At the central level, the development of quality standards becomes the mechanism by which institutions may be assessed, accredited and awarded funds. The definition of such standards, therefore, is integral to the process of policy formulation and strategy setting.

At the school level, new management responsibilities for institutional development planning and practical implementation need to be in place. In particular, a (relatively) autonomous public VET institution could assume responsibility for its own organisational and staffing structures.

The structure and functions of school governing boards are also of key importance. In general, the managerial structure of a self-managing VET institution (school) would include the following elements (or their equivalents): governing board (institution board; chief executive; academic board; senior management committee; and line and functional managers. These are idealised ambitions, much discussed in principle but little exercised in practice.

The strong case for greater school autonomy is interlinked with the question of decentralisation (de-concentration). Decentralisation implies financial responsibility at the local level but requires national uniform technical guidelines in areas such as occupational standards, VET qualifications and core curricula. It also needs to address the local/regional involvement of social partners. Decentralisation can also signify ministry delegation of technical responsibilities (for standards, qualifications, finance etc.) to bodies at the national level.

Some common problems continue in all the countries, namely, capacity building for stakeholders involved in new governance modes. Included in a multi-level governance model is not only the federal level but also sector and regional organisations and vocational schools; furthermore, teachers and school directors need to be further trained in order to assume different tasks and greater accountability towards learners and the local economy. Pre-service and in-service teacher education and training are critical issues in all the countries²³. In the future, policy makers, trainers, teachers and school managers must be prepared, in their educational careers, for such new governance approaches.

5.2 RESOURCES AND BUDGETS

In some 20 years of political transition, policy makers and learners gave priority to general secondary and higher education. Learner preferences, combined with the low attractiveness of VET, negatively influenced initial training and modest efforts in further training, as governments focused their investment on general secondary and higher education. Funding, moreover, is linked to educational streaming towards different education sub-systems. Many countries have disproportionately low shares of VET students in the totals for the different education levels.

It is very important to remember that reform strategies cannot exist without an attached budget line. Four key questions need to be answered.

- What are the current and future sources of finance?
- How will funds be collected and by whom?
- How will funds be dispersed, by whom and according to what criteria?
- What measures are in hand to reform current finance mechanisms?

Preoccupations in each of the countries need to be:

- the capacity of line ministries to steer the system towards greater decentralisation;
- a decisive role for overall finance ministry budget negotiations;
- the projected role of the municipalities and/or regions;
- the nature of so-called school autonomy;
- the role of intermediate bodies (employment bureau, VET council or centre) detached from the government but still centrally focused.

23 Ukraine has established compulsory in-service training for teachers; every five years teachers must attend a further training programme.

As countries have to reconcile limited available public/private budgets with the need to spread them out more thinly over entire lifecycles, the debate focuses on increasing the volume of financing from private stakeholders (mainly enterprises and individuals) while improving the efficiency and distribution of public funding. The emphasis on efficiency should, however, not lead to an equity-efficiency trade-off. Investment and financing policies and mechanisms need to ensure that equity and efficiency complement each other. Finding an appropriate and feasible mix of financial and non-financial incentives and arrangements to support widespread sharing of costs and access to education and training is a major challenge (Sianesi and Reenen, 2003).

The answer to these questions could inform funding decisions in terms of allocations, sources and the relative benefits of specific choices. However, we did not come across any study that could provide this kind of information. One problem, then, is the lack of information and statistical data concerning VET financing and expenditure even for the EU Member States. A further difficulty is the relative lack of data collection and analysis regarding VET as a whole.

The specific role of VET in economic growth has scarcely been addressed by macroeconomic growth studies. Is it secondary, upper secondary, general education or VET which contributes most to growth and productivity? Does school- or company-based VET yield a higher impact on economic performance? (Sianesi and Reenen, 2003)

The difficulties encountered in isolating financing measures for IVET are even greater when it comes to CVET. For example, the Organisation for Economic Cooperation and Development (OECD) definition of adult and non-formal learning diverges from the definition adopted by most European policy documents. It is not surprising, therefore, that data on participation in CVET and lifelong learning is neither easy to obtain nor to analyse. An international perspective would facilitate the evaluation of financing policies in the light of pre-defined criteria of efficiency, effectiveness, sustainability, etc.

Typical for IVET is ISCED 3 level (except for Belarus, which concentrates on ISCED 4). The shares of VET students compared to all students at this level are as follows: Armenia, 6.4%; Azerbaijan, 11.2% (2012 Torino Process country report); Belarus, 2.6%; Georgia, 1.2%; Moldova, 35.5%; Russia, 48.5%; and Ukraine, 28.6%. Note how no country exceeds 50% and how shares in some countries are extremely low. For example, Armenia spent only 4.8% of total public expenditure for education on VET in 2010 and Georgia's plans were to spend 4.1% in 2012 (2012 Torino Process country report)²⁴.

Note that current enrolment in VET does not automatically mean that the students end up in employment according to their qualifications. Countries with relatively high shares of VET students (like Russia) have a highly permeable system. Hence, students after IVET often enrol in higher education programmes. Moreover, the ISCED 4 level has the potential to meet the demand of both employer and student expectations and the desire to progress. Enhancement and expansion of the post-secondary offer needs to receive more attention and investment on the part of governments.

²⁴ VET spending as a share of total educational spending is only available for Armenia and Belarus. Belarus is to a certain extent exceptional, because spending for VET infrastructure nearly doubled between 2005 and 2008 (Bardak, 2011). The Georgian figures do not include the 13.25% of all VET students paying the full amount of their fees (2012), given the considerable number of private training institutes.

TABLE 5.1 TOTAL NUMBER OF VET STUDENTS COMPARED TO TOTALS BY EDUCATION LEVEL, 2010

	ARMENIA	AZERBAIJAN	BELARUS	GEORGIA	MOLDOVA	RUSSIA (2009)	UKRAINE
Lower secondary (ISCED 2)							
Total number of students	193 364	666 277	468 270	166 586	207 720	6 403 704	2 289 065
■ of which VET students	NA	NA	NA	NA	NA	NA	NA
Upper secondary (ISCED 3)							
Total number of students	88 060	396 397	210 649	131 625	99 899	3 209 844	843 907
■ of which VET students	5 618	176 337	5 433	1 580	35 513	1 556 758	241 706
■ as a % of the total	6.4	44.5*	2.6 (2007)	1.2 (2008)	35.4	48.5	28.6
Post-secondary non-tertiary (ISCED 4)							
Total number of students	NA	37 367	108 991	6 076	1 861	134 750	182 607
■ of which VET students	NA	37 367	108 991	6 076	1 861	134 750	182 607
■ as a % of the total		100	100 (2007)	100 (2008)	100	100	100
Tertiary (ISCED 5)							
Total number of students	153 696	179 579	601 352	102 710	128 240	9 178 199	2 599 426
■ of which VET students	29 986	34 659	166 637	6 403	17 048	1 665 080	354 226
■ as a % of the total	19.5	19.3	27.7	6.2	13.3	18.1	13.6

Notes: NA – not applicable. (*) According to the 2012 Torino Process country report for Azerbaijan, the share of VET students at ISCED 3 level is 11.2%, much lower than the UIS estimates.

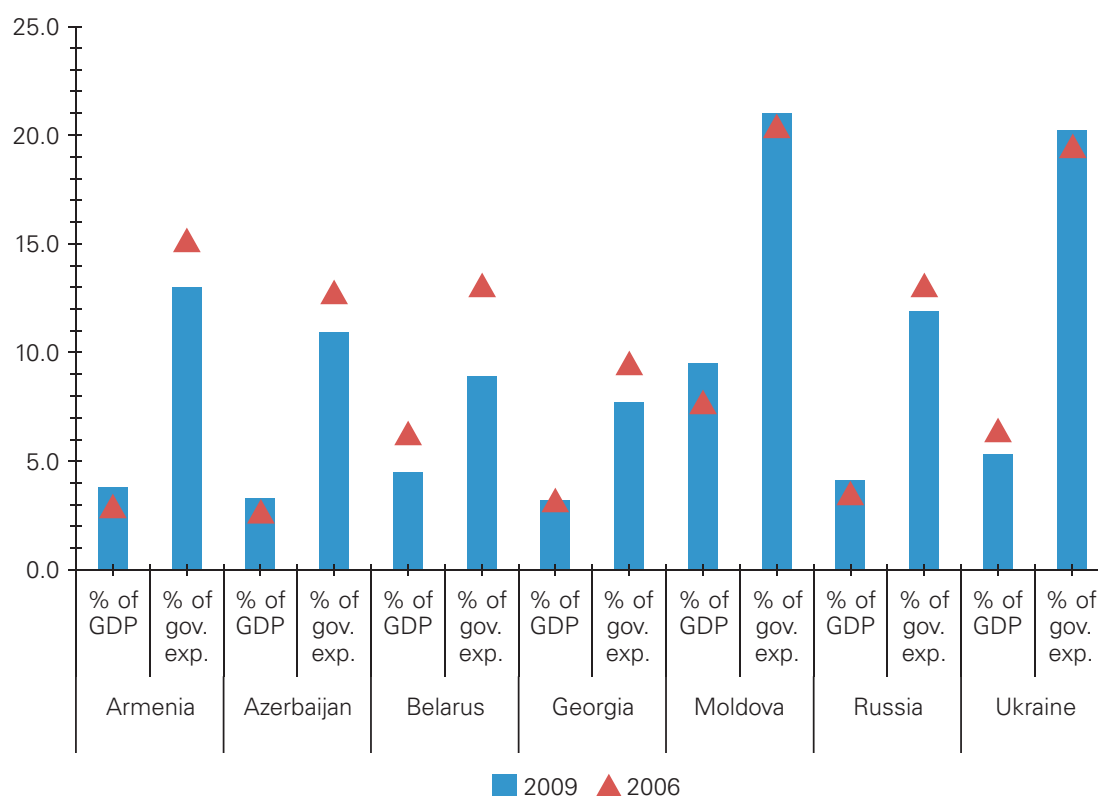
Source: Author's work based on UIS, 2012

Educational expenditure categories

Overall spending on education remains below UNESCO recommendations in four countries; five countries increased educational spending. However, the majority spend below the United Nations (UN) recommendation of 6%. Moldova and Ukraine achieved the recommendation in the past; however, recent data are not available²⁵.

Moldova was outstanding in terms of educational spending – even in the years of the crisis – but still has an inefficient school network because of a declining population, low teacher/student ratios and high maintenance and heating costs. From 2012 onwards, the number of schools will be reduced and this will make educational spending more effective. Schools will be more intensively used with the launching of CVET programmes including for entrepreneurs.

FIGURE 5.1 PUBLIC EDUCATION SPENDING AS A SHARE OF GDP AND OF TOTAL PUBLIC EXPENDITURE (%)



Notes: Russia – data refer to 2004 and 2008; Ukraine – data refer to 2006 and 2007.
Source: Author's work based on UIS, 2012

IVET is more costly than general secondary education if per capita unit costs take into account occupational sector investment in machinery, equipment and materials, including the need for smaller groups and for on-the-job experience. In some countries no such allowances are made.

²⁵ Azerbaijan developed a country specific approach for analysing public educational spending in leaving out the vast and dominating oil and gas sector in terms of GDP creation. Hence, the net share of education expenditures of the state budget without this sector amounted in 2010 to 5.5%.

Reform initiatives need to be seen in the context of available resources. Countries which have not yet systematically developed education and business cooperation in IVET have serious problems in updating the existing infrastructure in schools and in purchasing new textbooks. Donor support has its limits in VET financing and might even reinforce structural discrepancies between VET institutions within countries. In Armenia 12 regional state colleges are relatively well equipped and can cope multi-functionally with IVET and further training; however, the remaining vocational schools are at a disadvantage in terms of infrastructure and equipment (2012 Torino Process country report). Azerbaijan rehabilitated some 20 vocational schools between 2007 and 2012, which is under 20% of the school network.

Enormous constraints in terms of technical equipment, school buildings and furniture are a common problem in all countries²⁶. These problems can only partly be solved by the schools offering educational services to clients²⁷. Human resources in all the countries (teachers, trainers and school managers) need more and constant professional training linked to more attractive professional careers.

Hence, governance and resources are relevant areas for future reform. Sound new governance modes are not only a matter of new laws and regulations but should be undertaken as a social process in which employers and trade unions increasingly engage in VET system reforms. This could mobilise additional sources of funding and other contributions that could improve the learning infrastructure.

26 The Azerbaijani education ministry stated that still 78 out of 107 vocational schools still need restructuring (2010 Torino Process country report).

27 Ukraine is not creating additional structures for the further training of adults/unemployed. Instead, vocational schools are used and savings are invested in school infrastructure and increasing teacher salaries.

CONCLUSIONS

Despite considerable progress in many areas of VET, all the countries have crucial issues requiring further improvement. This improvement should happen in the context of enhanced competitiveness and offering a better response to the demands of learners and the business sector (as partly outlined in the visions and policies of the countries). Apart from constraints with the technical infrastructure and with vocational school refurbishment, all the countries still have problems in three interconnected technical areas:

- multi-level stakeholder-driven system governance, including decentralisation in the larger countries;
- quality and labour market relevance of training offers in IVET and underdeveloped CVET systems;
- linkages between publicly driven VET and the business sector on various levels of governance and delivery of programmes.

Research

The complexity of modern societies makes VET governance and specifically decisions about educational policies complicated. The interrelatedness of VET systems with labour markets, technological developments, the economy etc. requires informational support for decisions regarding mid- and long-term VET strategies. Applied research and the corresponding research capacities should be available to support national decisions with evidence:

‘Evidence can take many forms, such as experience and evaluation of practice, the results of [...] scientific analyses, quantitative and qualitative research, basic and applied research, and the development of statistics and indicators. [...] education and training are part of the diverse cultural traditions and identities of countries and regions and they interact with a web of other policies. In these circumstances, there can be no simple prescriptions about what makes good policy or practice [...]. This makes it all the more important to know as much as possible about what works, for whom, under what circumstances and with what outcomes.’ (European Commission, 2007, p. 5)

Research capacities exist in the larger countries and Belarus. However, decision makers should use local know-how more systematically and formulate educational areas of interest for research, policy monitoring and evaluation purposes. The smaller countries should also enhance their database of existing knowledge on the VET system, using specific instruments and tools like the analytical framework created for the Torino Process and donor resources to further develop and strengthen local research capacities, apart from the applied research which is already carried out by local experts.

A data collection system to support policy design should not be restricted on VET issues, but must be extended to labour market information²⁸, quality issues and to specific aspects of the different national economic sectors in order to better identify relevant trends for future human capital and VET system development. Moldova, which shows an impressive capacity in labour statistics collection, should extend this expertise to the education and training sector.

Country-specific areas needing reform and innovation

The process of reform and innovation in the areas of legislation, institution building and business sector involvement is ongoing at the level of policy design and implementation. This has led to a situation in which many innovation processes are still underway. Apart from the common and overall priority areas of governance, quality/relevance and business sector involvement there is a diverse landscape of additional country-specific needs and priorities (see table below).

²⁸ An inter-ministerial group in Belarus is currently working on a study of labour force demand until 2015.

ADDITIONAL COUNTRY-SPECIFIC NEEDS AND PRIORITIES – AREAS FOR VET SYSTEM IMPROVEMENT

Armenia	<ul style="list-style-type: none"> ■ Dissemination of pilot reform projects to the entire VET system ■ Social dialogue and effective participation by social partners
Azerbaijan	<ul style="list-style-type: none"> ■ NQF implementation (sector committees with more business representatives) ■ New VET strategy design (including policy monitoring and school networking) ■ Creation of a workforce development agency
Belarus	<ul style="list-style-type: none"> ■ NQF design (including occupational standards and sector committees) ■ Innovation for teacher training, VET curricula, entrepreneurship
Georgia	<ul style="list-style-type: none"> ■ Dead-end avoidance in VET (pathways) ■ Teacher training
Moldova	<ul style="list-style-type: none"> ■ Funding (school network restructuring, cost effectiveness, public-private initiatives, school spending autonomy) ■ Lifelong learning including small companies and NQF
Russia	<ul style="list-style-type: none"> ■ VET in <i>oblasts</i> (regions) in economic decline ■ VET guidance and more labour market information
Ukraine	<ul style="list-style-type: none"> ■ NQF implementation by 2014 ■ VET and labour market (career guidance, CVET, skills forecasting)

Note: The above issues are exhaustively described in the 2012 Torino Process country reports.

The influence of drivers – like markets, technological development, employment, migration etc. – on education systems in the transition period is becoming more visible in the countries. Such drivers strongly require further adjustments in the VET systems, which will trigger new policy designs and more effective implementation of reforms and innovation.

The demand side

In all the countries, there is an attempt to shift from merely input-driven to a demand-side orientation in VET. Georgia is more advanced than other countries, because per capita financing, accreditation and quality assurance have already been introduced and because private players have a voice in VET and in higher education. Russia, with strong employer involvement, is currently implementing similar schemes and fostering regionalisation. Such new tools and instruments for steering the system more effectively are likely to gain ground in the future.

The supply side

Many vocational schools still offer outdated programmes or have insufficient enrolment rates due to the prevailing popularity of higher education. Hence, optimisation of school networks plays a key role in reforming VET systems. The countries need to carefully reflect whether some schools could be closed down and on how to move from pilot innovations to the mainstreaming of reform and innovation²⁹. A more efficient school network could free up resources for improvements to VET centres, some of which could be converted into centres of excellence in one or two professional areas, offering both IVET and CVET. Per capita financing and funding correlated with performance indicators (established quality assurance systems, tracer studies, amount of educational services sold etc.) are additional instruments where resources could be invested so as to foster successful educational outcomes.

²⁹ Ukraine has already reduced the vocational school network from nearly 1 200 to around 900 schools.

It should be possible for vocational schools to generate income through additional educational services provided to individuals, enterprises or the local community³⁰. To a certain extent, such incomes could improve the salaries of (low-paid) teachers and to update school infrastructure. This is already legally possible in Georgia, Russia and Ukraine, but partly complicated by bureaucratic procedures.

VET has an image problem in all the countries. Rapidly growing enrolment rates in higher education in the last decade have bequeathed a considerable mismatch to the labour markets. In Russia, Ukraine and Moldova (ETF, 2011a; 2011b; and 2011c), higher education graduates crowd out secondary education graduates and occupy the corresponding workplaces.

Increasing numbers of these graduates are unemployed and reluctant to work under certain conditions. This makes IVET, CVET and entrepreneurial learning increasingly important, provided they are accompanied by quality improvement in training programmes. Awareness campaigns, invitations to enterprises, discussions with employers, decent working conditions, fairs and career guidance in early school years are suitable instruments to influence educational streaming, outside of policy measures like central entrance exams for access to higher education and constantly declining per capita financing in higher education.

However, the attractiveness of VET is also connected to the returns on individual investments in education. As long as higher education careers lead to substantially higher returns (and reputation) and as long as market mechanisms fail to react to shortages of blue-collar workers in many professional areas, there is a risk that VET and the respective professions will remain second-best options in all the countries of the region. Without adequate policy interventions, this could lead to further polarisation of skills in the long run.

30 In Ukraine, only 10% of the budget is spent on institutional development in VET (schools, infrastructure etc.). The rest goes to salaries, scholarships, food etc. (2010 Torino Process country report).

ACRONYMS

CVET	Continuing VET
ETF	European Training Foundation
EU	European Union
GDP	Gross domestic product
ILO	International Labour Organisation
ISCED	International Standard Classification of Education
IVET	Initial VET
KILM	Key Indicators of the Labour Market
NQF	National qualifications framework
SME	Small and medium-sized enterprise
TVET	Technical VET
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VET	Vocational education and training

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