Hosted by the French Ministry of Education, the expert meeting convened 30 participants from 16 countries and from diverse occupational backgrounds: economists, sociologists, educational experts, trade unions, business unions, university representatives, student representative and policy-makers.

The meeting aimed to identify recent trends and expected changes in OECD labour markets in the coming decades and how these changes might affect higher education in the future. It prolonged the work under the other strands of the CERI project on the Future of Higher Education, also known as University Futures.

**Changes in the economy: skill and job forecasts**

The meeting first focused on expected changes in the economy and how they might change the social and individual demand for higher education, in both qualitative and quantitative terms. Participants agreed on the importance of globalisation, technology and demographic shifts as strong drivers of change in OECD labour markets, leading *inter alia* to a stronger focus on the consumer and services to consumers. This increasing customization of products and services implied more flexible and responsive business models, and one aspect of the discussion was about the implications for human capital. Despite common trends, OECD economies and labour markets are still diverse.

The kinds of skills that would be required in tomorrow’s economies, and their implications in terms of general vs. vocational education, were at the heart of the discussion.

**Qualitatively, more general education and general skills were expected to be needed in the future, but with a stronger emphasis on social skills than in the past – specialization remaining important though in some fields such as engineering.** More specialised skills would indeed have to be refreshed regularly and thus needed a broader general basis. For some participants, there was a strong mismatch between the discourse of employers and the reality of recruitments and of the workplace. There was some concern, but no consensus, about the emergence of a new employment relationship focusing more on short term rewards (wages, credentialism, etc.) than career development, and which could thus possibly induce...
less firm-paid training in the future. Some reminded that given their huge financial investment in training employers could hardly be suspected of not being interested in education and training of the workforce.

Quantitatively, forecasts showed an increasing demand for both low and high skill jobs in the future, although an increase of the general level of skills was generally expected. Employment prospects would be more difficult for graduates with lower educational attainment, as was shown by the French forecasts where unemployment was forecast to almost disappear for tertiary education graduates and to rocket to about 40% for upper high school graduates. Here it was noted that current statistical economic classifications do not help discuss changes in the economy, no longer match the reality of current economies and aggregate too many different things under the same category (e.g. “services” include many different types of services).

**Transition of graduates into the labour market: is there a risk of skill mismatches and “over-education”?**

The meeting then turned to the topic of over-education and whether individuals and governments in OECD countries would need to continue to invest in higher education and get adequate labour market returns for this investment. Two presentations reviewed recent trends in the transition of tertiary education graduates into the labour market in several OECD countries. The conclusion of the discussion was clearly that there was no major transition problem of tertiary graduates into the labour market and that, although they may have decreased in some countries, and may vary depending on the field of study or the reputation of the higher education institution, individual returns to tertiary education graduates were still high compared to upper secondary graduates. This was true in terms of wages, employment and unemployment rates. One explanation was that recent technological progress was biased towards tertiary educated people. This also held true when looking at subjective assessments of former graduates in employment: most of them had found a job relatively quickly, are satisfied with it and find that they use their skills in their job – and thus do not feel over-educated. There were again variations across countries depending on several factors (like their economic growth or the level of their structural unemployment), but no country seemed to have a major problem.

A presentation of returns in France showed that one could look at this issue from different perspectives: while there is still a wage premium for tertiary education graduates compared to upper secondary education graduates in France, recent studies indicate some “over-education” when comparing actual skills of job holders and the required skills for the job (according to an official classification of jobs negotiated between employers and social partners). One question was whether the skills required for certain jobs (or the job contents themselves) no longer match the classification. A decrease of the wage premium over time could also lead to inter-generational equity debates in a broader societal perspective, but could not be seen as an evidence of over-education. So the results did not contradict the former presentations and illustrated sociologic changes that had some relevance in broader social debates – but not really for the question of whether the investment in tertiary education would continue to be worthwhile in the future.

In conclusion, it was considered that framing transition problems as “over-education” was misleading, and that possible shortages, or too long transition periods from higher education to labour market, should rather be viewed as “skill mismatches”.

**Responsiveness of tertiary education systems and institutions**

The participants discussed how systems and institutions could be even more responsive to the needs of the labour market (given that higher education institutions had already been very responsive in the past decades). This topic covers a wide range of issues: 1) providing students with the adequate information about the labour market so they can choose appropriate study paths; 2) strengthening the links between
higher education institutions and employers through the design of curricula, through alternate work and study periods, etc.; 3) finding the right balance between vocational and general higher education within systems and putting in place the adequate pathways allowing between different types of study; 4) having a system whose governance or characteristics facilitate the responsiveness of higher education institutions to labour market changes.

Student information

It was reminded that by their study choices students played a crucial role in the responsiveness of tertiary education to the labour market, as in a sense higher education institutions responded to the students. Although students’ perception of labour market opportunities and employer needs do not necessarily match the actual labour market and employer needs, students clearly have labour market outcomes in mind when they make their study choices. Reasons for mismatches could lie in bad information, wrong interpretation of labour market ‘signals’, but also merely to the fact that the labour market (or its perception) may have evolved significantly between the start and end of their studies. One should not forget the time lag between study choice and graduation. It is therefore important to design smooth pathways between educational programmes, allowing students to continue and change easily their study paths if they wish.

Type of teaching and curricula

One aspect of responsiveness lies in the design of the courses themselves. While there was some discussion about whether employers should be more involved or not in the design of curricula and course content, there was neither evidence nor consensus that this should (or should not) be the case. General education seems to lead to smooth and often smoother transition into the labour market than more vocational courses – which is not very surprising given the hierarchy between vocational and general courses prevailing in most OECD countries. Pedagogy and organization of studies could actually be more important than the course content: a stronger emphasis on teamwork, project-based learning, and application of knowledge could indeed develop the soft skills that seem to be increasingly important in the workplace. Mainstreaming internships or alternate periods of work and study was another possible way forward.

Systems

How tertiary education systems deal with occupational and professional education as well as, more generally, the labour market orientation of general tertiary education varies significantly across countries. The cases of the Czech Republic, Denmark, Ireland, Korea and the United States illustrated these sharp differences. In most countries, a division of labour between institutions has been put in place and has significantly contributed to the massification of higher education – generally with the introduction of a binary system of universities and vocational institutions but also through the development of professional programmes and degrees in universities (e.g. professional bachelors). Some countries, especially in post-communist countries, still need to diversify further their system to continue their massification process, especially as universities still have a strong “ivory tower” culture.

In the United States, tertiary education is to a large extent oriented towards professional and occupational education, at 4-year institutions as well as at community colleges. Community colleges are interesting institutions not only because of the role they play in democratizing tertiary education in the US, but also because of their high responsiveness to the needs of employers and adult learners. While one explanation of the high responsiveness of community colleges to labour market could lie in the financial incentives of enrolling more students (as they get publicly funding according to their enrolments), similar incentives have not worked to the same extent in other countries. Culture and perceived mission might thus be possible explanations, especially as community colleges themselves have very different levels of connections with employers across the US. In Denmark, an interesting feature of responsiveness is the
institutionalized dialogue between employers and higher education institutions. In other countries, labour market forecasting or planning is used as a tool to inform students and institutions (rather than as a tool to predict with accuracy what the labour market will really be in the future). In Ireland, planning has been an effective tool. In France, where professional programmes have been strongly encouraged over the past 40 years, labour market forecasts have had difficulties to reach students and study and career guidance has become an important issue, currently tackled with the development of a student information portal.

While the design of tertiary education systems probably played some role in their responsiveness to the labour market, it was not clear whether this responsiveness could be traced back to the diversity within the systems. In some cases, skill mismatches (or high graduate unemployment) have disappeared without any change in the system, just because of a boom in the economy.

One difficulty to think of the responsiveness in terms of system characteristics is that the diversity of tertiary education systems is very difficult to capture with an international comparative approach. The ISCED classification and thus international data do not say anything about institution types and horizontal stratifications: given this limit, institutions might not be the right channel to approach these issues and focusing on the learners and their cumulative learning might be more appropriate in an international context.

In the case of Europe, one question was how the new degree structure introduced by the Bologna process would affect systems and their diversity in the future. In some countries, an academic drift of vocational higher education institutions was observed in recent years. Another question was also how this new structure would change students’ behaviour.

Lifelong learning

Lifelong learning was rarely mentioned in the discussion, and the group discussed why this has not become rooted in higher education. In some countries, such as the United States, the supply was clearly there, with evening, week-end and distance courses designed for working adults – but lifelong learning still remained marginal within higher education. For adults, the major barrier to lifelong learning is their foregone earning. Whether and why lifelong learning should take place within the tertiary education sector rather than within firms and specialized “continuing education” sectors, as it is the case in most countries, was not clear either: most people enrol in tertiary education for their initial education only, but this does not mean that they are not trained afterwards outside the tertiary education sector. This raises an equity issue though as the more educated people are also the most likely to get further training and adequate supply for those who were less privileged is under-developed.

Scenarios

The group then split in two groups for a very short scenario building exercise on the possible futures relationships between higher education and the labour market.

One group organized its discussion around labour market and production characteristics: its chose a possibility space according the following dimensions: percentage of stable jobs (related to specific skills) vs. percentage of temporary jobs (related to general skills) on one hand; customised production (related to more versatile workers needed) vs. mass production (more specialized workers needed). The scenarios then speculated on what type of education (general or vocational) would be the most needed, and what incentives individuals and firms would have to invest in their training. A further elaboration of the reflection has been developed by Marino Regini and can be found as a separate paper on the CERI website.
The other group organized its discussion around two other dimensions, one relating to the labour market, the other to the governance of higher education: one dimension was whether the labour market would be more turbulent or more stable, the other whether there would be more government control of tertiary education or more institutional autonomy. The group then developed two scenarios for the more turbulent labour market highlighting the benefits and drawbacks of government control and of institutional autonomy for a good responsiveness to labour market. The former was found more inflexible and less responsive but more driven by long term objectives while the latter was seen as driving more diversity, more competition, more modernization, but also more diversity in quality and more risks for students.