









Two of the world's most prestigious accounting bodies, AICPA and CIMA, have formed a joint venture to establish the Chartered Global Management Accountant® (CGMA®) designation to elevate and build recognition of the profession of management accounting. This international designation recognises the most talented and committed management accountants with the discipline and skill to drive strong business performance. CGMA designation holders are either CPAs with qualifying management accounting experience or associate or fellow members of the Chartered Institute of Management Accountants.

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## **EXECUTIVE SUMMARY**

Youth unemployment and underemployment have reached critical levels and are expected to continue to rise in most G20 economies. Yet many employers cannot find enough people with the skills they need to grow their business and enable the economy to recover. This is threatening the global economic recovery and could lead to a "lost generation" of young adults.

There are mismatches between supply and demand in the labour market. While there is an oversupply of people with low-level skills, there is a shortage of those with advanced, high-level skills.

There are also disconnects in the widely accepted logic that education provides skills and skills enhance employability. Skills are the basis of an individual's competitive position in the labour market. However, having earned degrees to enhance their employability, many graduates are now unemployed or underemployed because there is not enough demand for their skills.

## The changing workplace

The financial crisis and subsequent slowdown may be the immediate causes of the scale of this employability crisis. However, underlying trends include changes in demographics and advances in technology. Working lives will be longer and the digital age will bring further change. Relentless advances in technology continue to drive innovative new ways of doing business and creating wealth. As business becomes ever more complex, there is increasing demand for the most talented individuals. Yet far too many people are being left behind. Young adults need to be better equipped with the skills to gain rewarding employment, and employees will have to be adaptable as the skills they need to remain employable could change over their careers.

Most countries in the Organisation for Economic Co-operation and Development (OECD) are seeing increased participation rates in tertiary education. In management accounting terms, nations use this as a performance indicator to measure how they are developing their skills base, international competitiveness and potential to generate wealth.

## The disconnects between education, skills and jobs

Unfortunately for many young people, education is not providing the skills they need to gain the employment they aspire to. The World Economic Forum report, Global Risks 2014, notes that: "Many current graduates are discovering that despite their academic qualifications - often gained at significant expense they lack the specific technical and professional skills demanded by the ever-changing jobs market."1

The disconnects between education, skills and jobs have implications for a range of different stakeholders: most urgently for those young people who cannot find jobs; for employers, who might generate more wealth but cannot access the skills they need; and for educators, for whom employability skills are not always a priority. These issues also concern the policy makers who are responsible for society as a whole. Each of these stakeholders should accept responsibility for the part they can play and collaborate with others to tackle this crisis.

From the perspective of the management accounting profession, the pragmatic solution is to forge strong connections between education, skills and jobs by taking employability as the starting point.

Employers need to be confident that management accountants have the competencies they expect of their in-house finance professionals. To this end, the American Institute of Certified Public Accountants (AICPA) and the Chartered Institute of Management Accountants (CIMA) are working together in a joint venture to elevate and build recognition of management accounting through the CGMA designation, which is based upon the CIMA qualification.

# Addressing supply, demand and the longer term

The CIMA syllabus has recently been updated to produce the 2015 syllabus, based on research into the competencies employers expect, today and into the future. Together with a new computer-based assessment process, this provides a practical example of a collaborative, technology-enabled approach to improving employability. In terms of management accounting, this will address the supply side of the employability dilemma by giving employers the assurance that CGMA designation holders have the knowledge, skills and competencies they require of their in-house finance professionals.

CIMA and the AICPA will also soon be launching the Global Management Accounting Principles<sup>©</sup>. These alert employers to the range and quality of support that their in-house finance professionals could deliver in order to improve the performance and sustainability of their organisations. This will further raise the profile of management accounting while increasing demand for suitably qualified finance professionals (especially CGMA designation holders).

Furthermore, we are promoting the CGMA Competency Framework and continuing to develop programmes for lifelong learning. These will help CGMA designation holders to identify and meet their learning needs, ensuring their long-term employability.

CIMA and the AICPA are committed to working in the public interest. We welcome the opportunity to engage with members, employers and academics to help address the employability crisis. The collaborative approach we are taking addresses both the supply and demand sides within our profession. We hope that lessons from our experience may have wider applications in addressing this global challenge.

#### Generation lost?

"Generation lost? The generation coming of age in the 2010s faces high unemployment and precarious job situations, hampering their efforts to build a future and raising the risk of social unrest. In advanced economies, the large number of graduates from expensive and outmoded educational systems – graduating with high debts and mismatched skills – points to a need to adapt and integrate professional and academic education. In developing countries, an estimated two-thirds of the youth are not fulfilling their economic potential."

Global Risks 2014, World Economic Forum<sup>2</sup>

## INTRODUCTION: A COMPLEX, UNSTRUCTURED PROBLEM

The global economy may be emerging from the recent recession, but conditions will still be tough. To survive and thrive in an extended era of tight budgets and modest growth, businesses need to combine cost reductions with continual investment to ensure sustainable success. This requires a keen understanding of the competitive environment and the drivers of cost, risk and value in the business. The combination of accounting expertise and business understanding can provide the insights necessary to inform occasional big decisions as well as the ongoing decision-making in managing performance and incremental innovation.

Management accountants can be relied upon to have the technical accounting skills necessary to give businesses the financial information they need to comply with statutory reporting requirements. But management accounting is also about supporting the business. Management accountants can combine accounting and analysis skills with business understanding, enabling them to provide trusted performance metrics and evidence-based, forwardlooking management information.

Management accounting skills are in demand. We are mindful that many others are less fortunate in this regard. Almost 75 million young people are unemployed<sup>3</sup>, even while many employers cannot find people with the skills they need to grow their businesses.

## Simple, structured solutions

During the research conducted to update the CIMA syllabus, one chief executive said that he likes management accountants because: "They can bring simple, structured solutions to complex, unstructured problems."

That is why we have taken a structured approach to preparing this report. We have explored evidence from a wide range of trusted sources about the scale, causes and impact of the present employability crisis. We present the most salient findings on how to address the skills mismatch and better align education, skills and employment.

### Not in work or education

"Official figures assembled by the International Labour Organisation say that 73.4m young people are unemployed, or 12.6% of all 15 to 24-year-olds. But going by youth inactivity, which includes all those who are neither in work nor education, things look even worse. The OECD, an intergovernmental think-tank, counts 26m young people in the rich world as "NEETS": not in employment, education or training. A World Bank database compiled from households shows more than 260m young people in developing economies are similarly "inactive". The Economist calculates that, all told, almost 290m are neither working nor studying: almost a quarter of the planet's youth." The Economist, 2013<sup>4</sup>

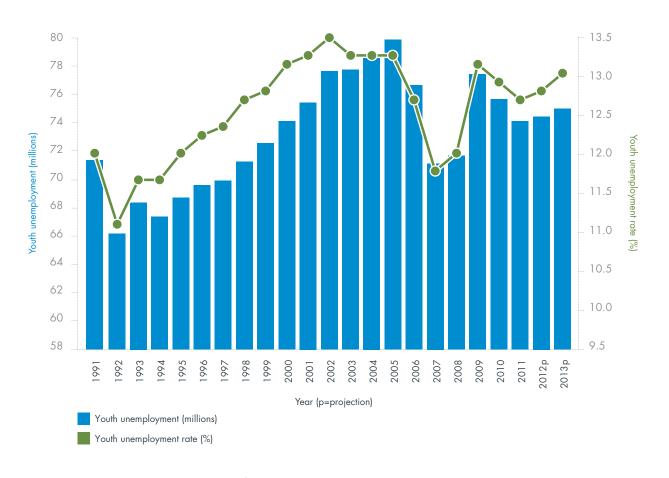
## THE GLOBAL EMPLOYABILITY CRISIS

The current employment crisis is not just a short-term problem caused by the recession. Changes in levels of employment and the nature of work caused by advances in technology suggest longer term structural changes, which have led to a global crisis where unemployment and skills shortages are occurring simultaneously.

Young adults have been hit particularly hard in recent years (see figure 1). The level of youth unemployment had already been rising since long before the recession, however. The situation improved during the boom immediately before the financial crisis of 2008, meaning the recent increase in youth unemployment is a rebound to pre-crisis levels.<sup>5</sup>

As economic growth recovers after a recession, employment would ordinarily pick up as well. This time, however, structural changes caused by advancing technology could lead to a jobless recovery. In some developed economies, such as some in southern Europe, it could take a long time to overcome the underemployment and debt hangover that persist.

FIGURE 1: Unemployment amongst 15 - 24 year olds globally



Source: International Labour Organisation 2013<sup>6</sup>

## Older workers' employability

Although, especially in southern Europe, it can seem to young adults that the benefits and job security enjoyed by older workers give them unfair advantages, employability is an issue for older workers too. Their skill sets can become dated and their benefits can make them relatively expensive. Policy makers may want older workers to be treated fairly and they may need them to continue working rather than to draw welfare or state pensions. However, they must ensure that the labour market is flexible if jobs are to be created.

Statistics from the US suggest that older workers have not fared so well.7 Those in the same employment for a long time have retained their jobs better than their younger colleagues. But when in a job for similar lengths of time, people in their fifties are more likely to lose their jobs than younger people. Older workers also take longer to find their next job and are more likely to suffer a reduction in income through only finding lower paid employment and fewer hours of work. Many withdraw from work, especially those in their 60s who can claim a pension.

## Changing demographics

In some developing countries, advances in healthcare have improved childhood survival rates to drive rapid population growth. As a result, the supply of workers is outstripping employment opportunities. At the same time, ageing populations mean some developed economies are facing talent shortages and a lack of suitably qualified younger people.

For example, in China, policies have led to limited population growth, and the population actually fell in 2012. Its dependency ratio (calculated as the proportion of the population aged under 15 or over 65 to those of working age) is increasing and could limit its growth potential. Japan and Europe have ageing populations too.8

According to the World Economic Forum, "The United States, for example, will need to add more than 25 million workers to its talent base by 2030 to sustain economic growth, while Western Europe will need more than 45 million. In Germany, according to a recent assessment, 70% of employers are hardpressed to find the right people. In developed countries, ageing and the retirement of baby boomers will have significant implications for how to manage workforce quantity, quality and costs."9

## Fewer jobs for people of working age?

Overall, a lower proportion of people of working age are in work today than during the last two decades. In 2012, the global employment to population ratio (EPR) was 60.3%, the lowest since 1991. The EPR has been in a gradual decline, recovering briefly from 2003 to 2007 before the financial crisis caused it to fall sharply again. According to the International Labour Organisation (ILO), a global jobs gap of 67 million has resulted from the economic crisis.<sup>10</sup>

In a 2014 article considering how technology is changing the nature of work, The Economist notes: "In 2000, 65% of working age Americans were in work; since then the proportion has fallen, during good years as well as bad, to the current level of 59%."11

## Impact of technology

The terms "hollowing out" and "polarisation" of employment describe a pattern which has been observed in some OECD countries. Those occupations requiring high levels of skills have been growing fastest; those requiring low levels of skills have been growing fast too, but occupations requiring intermediate levels of skills have been growing much more slowly.

According to the Federal Reserve Bank of New York, between 1980 and 2010, the number of jobs actually doubled for high-skill roles, and nearly doubled for low-skill roles. Upper-middle skill level roles, however, grew at the much slower rate of 46%, while the lower-middle group grew by just 20%. 12

Figure 2 shows long-term trends in the sorts of tasks undertaken at work in the US. <sup>13</sup> The period shown, from 1965 to 2009, includes the period when computers and automation became commonplace in work environments (from the mid-1980s to the mid-1990s). It shows a hollowing out of work, with the time that American workers spend on non-routine interpersonal tasks or non-routine analytical tasks growing while that spent on manual or routine tasks has declined. The growth of tasks requiring more advanced communication skills and more technical expertise is consistent with a demand for more highly skilled workers.

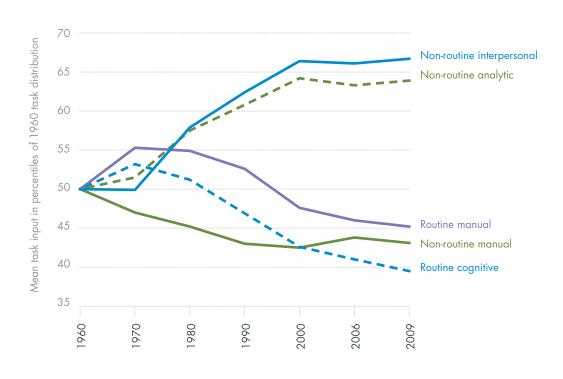
Disruptive technology continues to stimulate innovation and change how business is done, making it possible, for example, for teams to work together from dispersed locations, accessing and sharing expertise or ideas across the world.

According to *The Economist*, the world is about to experience a further wave of technology-enabled innovation. "Technology's impact will feel like a tornado, hitting the rich world first, but eventually sweeping through poorer countries too. No government is prepared for it."<sup>14</sup>

So far, advances in technology have improved the prospects for those with higher level skills while reducing the need for people to perform routine or manual tasks. The next wave may be different; it could threaten some highly skilled roles.

The pattern in the past has been for job losses to be followed over time by greater wealth creation for society. Looking ahead, new industries should grow and deliver new, more rewarding jobs in the longer run. So machine learning and artificial intelligence may be disruptive for today's cohort of workers, but they may also create new opportunities in analytics, machine-assisted manufacturing and the service industries.

FIGURE 2: Trends in routine and non-routine tasks in occupations, United States 1960-2009



Source: OECD Skills Outlook 2013<sup>15</sup>

#### Globalisation

Since the 1990s, advances in computing and communications technology have stimulated the flow of capital, people, services and information. Highly skilled workers can take up assignments in major cities across the world. Lesser skilled workers can also migrate, but they are less mobile. In general, unless their work cannot be automated because it is local, non-routine or personal in nature, it may sooner or later be automated or relocated to where it can be done more cheaply.

Figure 3 illustrates the major mismatches between supply and demand in the global labour market, now and into the future.<sup>16</sup> It shows two key findings: high levels of unemployment coincide with skill shortages in several countries; and talented people are projected to be in short supply in many economies.

FIGURE 3: Significant talent gaps expected by 2020 and beyond



Note: Colour codes based on compound annual growth rates of talent supply and demand by 2020 and 2030 Source: Boston Consulting Group, 2011<sup>17</sup>

## A demanding workforce

"The 21st-century workforce is global, highly connected, technology-savvy, and demanding. Its employees are youthful, ambitious, and filled with passion and purpose. Millennials are a major force – but so are older workers, who remain engaged and valuable contributors. Critical new skills are scarce - and their uneven distribution around the world is forcing companies to develop innovative new ways to find people, develop capabilities, and share expertise."

Deloitte, Global Human Capital Trends 201418

## STAKEHOLDERS: IMPACT AND RESPONSIBILITIES

The impact of the crisis is greatest for young people, and it is policy makers who may be able to do most to resolve the crisis. But all stakeholders – young adults, employees, employers, educators and policy makers – must take some responsibility and collaborate to develop solutions.

FIGURE 4: Implications for stakeholders - impact and responsibilities

	Impact	Responsibilities
Young adults	Many cannot find work  Many have settled for jobs with poor prospects  Could impact their careers for years to come	Make informed choices about further education, based on realities of the labour market  Aim to obtain the education, skills and experience employers expect
Current workforce	Skills may become redundant	Undertake continuing professional development to maintain or advance career
Employers	Skills gap makes it difficult to recruit  Must compete to attract the most talented individuals with leadership potential	Attract, 'on-board', develop and retain talent for all job roles, not just future leadership
Educators	Will lose relevance if they do not equip young people with the skills they need	Integrate employability skills into courses  Work more closely with employers to complement academic learning with hands-on learning  Support students in the transition to world of work
Society and policy makers	Increasing welfare costs Prospects for recovery weakened for many years	Ensure they have the right data to make decisions  Stimulate economy and foster job creation  Ensure young people have the skills employers expect by linking education to business  Ensure there is a demand for current and future skills base in the economy

## Young adults

#### The impact on young adults

The ILO says young people are almost three times more likely than older adults to be unemployed, and the upward trend in global unemployment continues to hit them strongly.<sup>19</sup>

In the UK, many young adults are employed in sales, customer service and elementary roles such as in hospitality. As the nature of work changes, the level of employment in these roles is stagnant or declining. Furthermore, jobs in mid-skill level administrative

roles, which might have provided career paths to more senior roles, are also declining. According to the UK Commission for Employment and Skills (UKCES), "This suggests that unless recruitment patterns change, young people will see their chances of finding a job continue to diminish."<sup>20</sup>

Statistics from the US show a similar pattern. A 2011 Pew study found that during the recent recession 49% of the young adults (aged 18-34) surveyed had taken a job they did not want just to pay the bills. 46% said they lacked the education or training necessary to get ahead.

Young adults' career prospects could be damaged for many years. *The Economist* notes that "A clutch of academic papers, based mainly on American statistics, shows that people who begin their careers without work are likely to have lower wages and greater odds of future joblessness than those who don't. A wage penalty of up to 20%, lasting for around 20 years, is common. The scarring seems to worsen fast with the length of joblessness and is handed down to the next generation, too."<sup>22</sup>

#### What young adults can do

While dropping out of education should not preclude a second chance to succeed, it usually does. According to UK think tank Demos, too few young people with poor attainment at 16 go on to achieve core qualifications in maths or English, do apprenticeships or gain developmental work experience.<sup>23</sup>

In short, education enhances employability. Graduates fare better than less educated workers, in terms of both employment and earnings. Technical knowledge may be a prerequisite for specialist roles, but other skills such as self-organisation, research, critical thinking and communication are also relevant in many roles.

And although higher participation rates may be eroding the prestige of a university degree, the successful completion of a reputable course still provides employers with the assurance that a candidate possesses some important personal qualities such as intelligence, maturity, a work ethic and social skills.

In the US, unemployment rates for graduates aged 25 or over run at about half those of non-graduates (4.5% compared to 9-10%). However, the unemployment rate for recent graduates is nearer 8%. It ranges from a low of 4.8% to a high of 14.7% depending on the major taken.  $^{24}$ 



School leavers and graduates should seek employers who offer development opportunities and continue to learn throughout their careers.

Not all qualifications enhance career prospects. Almost half (48%) of US college graduates are in jobs that the Bureau of Labor Statistics (BLS) suggests require less than a four-year college education. 37% of college graduates who have jobs are in occupations that require no more than a high-school diploma. Another 11% are in jobs that require more education, but not necessarily a degree. 25

The choices of college, course and electives are important decisions which should be taken with due care and informed by appropriate research, including research into graduates' employment. School leavers and graduates should seek employers who offer development opportunities; and they should be prepared to continue to learn throughout their careers.

## Those in employment

#### The impact on working lives

Some people are already benefiting from increased life expectancy and are still working in their 70s. Those starting work today could be working for another 60 or 70 years. The professions' discipline of continuing professional education and development will be relevant to all employees.

### Low-skilled left behind

"As the demand for skills continues to shift towards more sophisticated tasks, as jobs increasingly involve analysing and communicating information, and as technology pervades all aspects of life, those individuals with poor literacy and numeracy skills are more likely to find themselves at risk. Poor proficiency in information-processing skills limits adults' access to many basic services, to better-paying and more-rewarding jobs, and to the possibility of participating in further education and training, which is crucial for developing and maintaining skills over the working life and beyond."

OECD Skills outlook 2013<sup>26</sup>

There will still be a demand for people to fill low skill-level jobs, but there will be an oversupply of people competing for them, including some with higher levels of skills and education. Education will continue to offer the best chance to gain more rewarding employment.

The jobs of the future will require more advanced and specialised skills, but change will be more rapid too.<sup>27</sup> It will be necessary to maintain transferable skills so as to be agile whenever the next change happens. Fortunately, advances in technology are now providing new educational and lifelong learning opportunities.

#### What those in work can do

Millennials, those who started work since the year 2000, can have an advantage over their older coworkers in terms of their confidence in using the latest technology. Recent graduates may also have the latest technical knowledge. However, the pace of change is such that some skills learned today may only have a shelf life of five years. Increasingly, even the most talented individuals with the highest levels of skills and education will have to continually develop new skills.

During CIMA's research to update the CIMA syllabus, a recurring theme was that technical information is perishable. Much of what accountants learn can be out of date before they need to use it.

Therefore, CIMA members and CPAs have long been obliged to undertake continuing professional development (CPD).

### **Employers**

#### The impact on employers

An Economist Intelligence Unit survey found that over 60% of respondents feared that "Talent shortages are likely to affect their bottom line in the next five years." Most of these shortages will be in the highly skilled talent pool.

McKinsey estimates that the world needs 13% more in highly skilled people – with 18 million roles to fill in developed economies and 23 million in China. There is also a 15% shortage of medium-skilled workers to fill 44 million posts in India and developing countries.<sup>30</sup>

UK analysis shows that employers find that a significant minority of young people lack the experience, interpersonal skills and practical competencies they need for employability. The higher the level of a candidate's education, the more these concerns recede. Yet a significant minority even of higher education and university graduates are regarded by employers as being poorly prepared for work.

The main problem areas are commercial awareness, numeracy, literacy, IT and complementary soft skills.<sup>32</sup> Many students gain these skills while studying towards a degree although employability skills may not be addressed directly in education.

#### What employers should do

Employers call the process of inducting new recruits and getting them up to speed and productive "onboarding". As this can be a time-consuming and costly process, employers often prefer to hire candidates who already have the skills and experience they need. Educators and employers could probably help students to resolve this conundrum, maybe through internships or work experience. This problem is not new, but the unprecedented level of the global employability crisis means it must be addressed as a matter of urgency.

Some major employers already develop a value proposition to attract the best candidates for leadership positions. They try to ensure that their brand will be attractive and that their business will be considered a good place to work. Recognising young adults' values, they provide fun working environments, a campus culture, interesting and challenging work, competitive remuneration and good prospects.



Technical information is perishable... Even the most talented individuals have to continually develop new skills. This "war for talent" has been raging for almost 20 years. Employers need to get better at recruiting, developing and retaining their next generation in-house, even for less senior positions, if those with in-demand skills are in short supply.

More flexible recruitment policies are needed. Some employers already adapt their practices to accommodate home and part-time workers. Employers will also consider candidates with transferable skills from other sectors, in other regions or older workers.

As life expectancy increases and people work for longer, employers will have to learn how to manage workforces where there may be wide age differences. By 2018, for example, almost 40 million working Americans will be 55 years or older, an increase of 5.8% in a decade. Workers aged 16 to 24, by contrast, are expected to make up only 12.7% of the labour force.<sup>33</sup>

While conducting research to update the syllabus, CIMA met some multinational employers who spoke of graduates being recruited on different terms in their home and overseas markets. The same training and development opportunities may not be offered overseas, because candidates there are considered less likely to stay. In future, if talent is in short supply, overseas employees could be further developed and retained too.

Over the longer term, businesses will probably take more social responsibility; they will need to collaborate with local colleges and invest more in developing their people. For example, the German apprenticeship model is often touted as a potential solution. However, employers are often concerned about the expense of developing people who might leave when trained.

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Employers need to get better at recruiting, developing and retaining their next generation in-house.

One chief executive told us how a proposal to invest more in developing people was questioned at a board meeting. The question, "What happens if we train them and they leave?" was answered with the retort: "What if we don't train them and they stay?"

CIMA and the AICPA work with organisations around the world on this issue. For example, CIMA and the Chartered Institute of Personnel and Development (CIPD) are now working together to build closer links between the finance and human resources (HR) professions.<sup>34</sup>

Providing training can be expensive, but developments in technology will improve the opportunity for employers to offer blended training programmes more economically. Formal and informal education can already be provided alongside practical experience and on-the-job training. Just as short clips of instruction are freely available on YouTube, dozens of massive open online courses (MOOCs) give access to a wide range of educational content.

#### Educators

#### **Schools**

Although participation in tertiary education is increasing, the majority of young adults across the world still take no further formal education after secondary (high) school. So the quality of education is very important in building skills, whether in school, third-level education, vocational training or less formal personal development.

For more than a decade, PISA, the OECD-sponsored Programme for International Student Assessment, has been assessing the levels of attainment achieved by schoolchildren aged 15-16 in mathematics, reading and science. The 2013 PISA survey covered 65 countries or jurisdictions.

PISA found that differences in school systems' performance at aged 15-16 are very wide. For example, the difference between the highest average score in mathematics, achieved by children in Shanghai, was the equivalent of some two school years ahead of the OECD average; it was six school years ahead of Peru, the lowest-performing country.

The highest-performing school systems are those that allocate educational resources more equitably among advantaged and disadvantaged schools. They also give individual schools more autonomy over curricula and assessments. Their average scores are higher because a higher proportion of their children get high scores; often more significantly, fewer of their children get low scores, meaning that more succeed and fewer get left behind.

Finland and South Korea consistently feature highly in PISA's rankings although they have very different systems. They score highly both for the level of education achieved in each subject and for the extent to which high scores are achieved independently of socio-economic background.

#### University and third-level education

A third-level qualification certainly enhances employment prospects, but it is not so clear that a tertiary education provides the skills that employers require.

The 2013 OECD Survey of Adult Skills assessed adults' proficiency in numeracy, literacy and problemsolving in technology-rich environments. It found that a nation's skill levels can differ markedly from what data about its level of attainment in education would suggest. For example, Italy, Spain and the US rank much higher in terms of the proportion of 25-34 year-olds with third-level qualifications than they do in proficiency among the same age group. More surprisingly, the OECD found that some countries' schools can provide higher levels of proficiency than universities elsewhere. For example, on average, Japanese and Dutch 25-34 year-olds who have only completed high school easily outperform Italian or Spanish university graduates of the same age. 36

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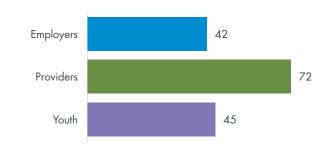
The priorities of educators could be better aligned with ensuring their students' employability.

However, some academics are worried that an emphasis on employability skills could diminish the academic integrity of a university education. The Global Agenda Council on Education and Skills expressed such concerns in a contribution to the World Economic Forum's *Global Risks 2014* report.<sup>37</sup> In this, it notes a need to balance increasing emphasis on professional and vocational education and training with higher education's role in providing graduates who can engage in informed and thoughtful discussions on values and norms.

FIGURE 5: Stakeholder views on the readiness of graduates for the job market

## Agreement that graduates/new hires are adequately prepared

% of respondents



Source: McKinsey & Company, 2013<sup>38</sup>

Nonetheless, the priorities of educators could be better aligned with ensuring their students' employability. Only 42% of employers responding to a 2012 McKinsey survey recorded that, overall, the employees they hired over the past year had been adequately prepared for work by their education (see figure 5).<sup>39</sup> 45% of youth respondents thought their education had not adequately prepared them for work. Yet a majority (72%) of educators thought their graduates were ready for entry-level positions in their chosen field of study. There is a clear disconnect between the views of educators and other stakeholders.

#### Educators risk being side-lined

If educators do not provide training in skills that enhance employability, some may be side-lined as new ways of providing education emerge to meet market demand. These include workplace education, such as on-the-job learning in apprenticeships, which is used mainly in technical or vocational education. The combination of theory, practical experience and the skills needed to apply learning is important for more academic subjects too. In the UK, some of the "Big Four" accounting firms are now offering school-leavers the opportunity to combine academic and practical learning by training under apprentice-type schemes for professional accountancy qualifications. This can be an attractive alternative to going to university.

A few major employers have set up in-house academies, or even their own universities, where people are trained to meet the company's needs. So far, these are mainly used to develop high-potential internal candidates for senior management roles rather than as an alternative to recruiting graduates.

Online provision is a bigger threat to the traditional university model. Universities and colleges with weaker brands risk becoming irrelevant if they underestimate the internet's potential to rewrite the rules of the game. Excellent courses are already available online, often for free. In the USA, MOOCs offered by companies like Coursera, Udacity and EdX have the backing of major universities such as Princeton, Stanford, Harvard, MIT and Berkeley. Similarly, the UK's Open University leads an international consortium, FutureLearn.

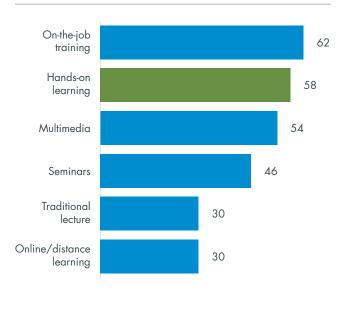
FIGURE 6: How young people prefer to learn

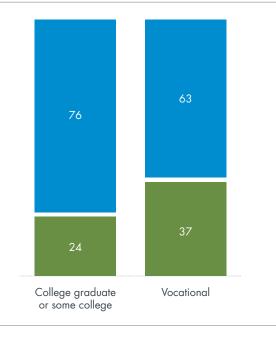
#### Most effective instructional techniques

% of respondents saying technique is effective

## Use of hands-on learning in academic and vocational institutions

% of respondents indicating a majority of hours spent in learning methodology





Theoretical Hands on

Source: McKinsey & Company, 2013<sup>40</sup>

#### What educators should do

As Figure 6 shows, the ways of learning which young people find most effective are on-the-job training and hands-on learning. <sup>41</sup> How they prefer to learn differs markedly from how they are taught; hands-on learning is not used much in tertiary education.

This gap between the worlds of education and work has to be bridged, for example by giving more priority to vocational and technical education or apprenticeships, integrating employability skills into curricula and by developing closer relationships between companies and schools and universities.

The Conference Board of Canada defines employability skills as abilities to communicate, manage information, use numbers, think and solve problems, demonstrate positive attitudes and behaviours, be responsible, be adaptable, learn continuously, work safely, work with others and participate in projects and tasks.<sup>42</sup>

The teaching of generic employability skills as defined here could be integrated into many subjects, including the liberal arts, through changing how a subject is learned or examined. In multilingual regions, fluency in the main business language is an additional core skill. Depending on employers' needs or nations' industrial policies, there could also be a need for greater emphasis on the "STEM" subjects (science, technology, engineering and mathematics).

The UK's Council for Industry and Higher Education identified one of the most crucial measures that universities can adopt to promote employability – taking a structured approach to placements, internships and work-based learning opportunities of significant duration.<sup>43</sup>

Another UK report highlighted some instructive best practice. <sup>44</sup> For example, the University of Melbourne (Australia) ensures that employability is at the heart of the curriculum and Aalto University School of Science and Technology (Finland) provides opportunities for students, employers and entrepreneurs to interact.

## Policy makers

#### Impact on society

A high level of unemployment increases the welfare burden while shrinking the tax base. If employers cannot fill vacancies, economic growth will be restricted. Many governments are already burdened with debt. In addition, some have unfunded pension liabilities for their ageing populations and state employees. Further cuts to government spending are on the way. People losing benefits to which they feel entitled will be less than happy.

According to Grégoire Sentilhes, President of NextStage and co-founder of the G20 Young Entrepreneurs' Alliance, representing the Journées de l'Entrepreneur (JDE) in France: "Youth unemployment is now a ticking bomb for all governments, both from developed countries and emerging countries. In the 21st century, the jobs we need to create will come neither from the big corporations nor from government, but they will come mainly from entrepreneurs who represent 66% of job creation within the OECD and 85% within the EU."

The 2013 OECD Survey of Adult Skills found that adults' proficiency varies a lot by country. 46 An important point for educators and policy makers is that those countries whose populations are most proficient, for example Japan and Finland with regard to literacy, not only have higher proportions of their populations achieving the highest scores but also smaller proportions of their populations being left behind on low scores.

#### What policy makers should do

Policy makers have to ensure that they have the data needed to make decisions and manage the crisis. Many young adults and long-term unemployed people may be keen to work but need more support to become employable. Statistics may understate the scale of the problem, because many people have part-time jobs or lower pay and status than the roles for which they feel qualified. The number of NEETs (not in employment, education or training) may not include some who are nominally in education, doing a course in which they have little interest while looking for work.

Policy makers are being challenged to stimulate growth at a time when tight budgets are making it difficult to afford grants or fiscal incentives. If jobs are to be created, labour markets have to be made more flexible so that the self-employed and entrepreneurs can provide employment without incurring expensive long-term commitments.

#### Combining theory and practice; knowledge and skills

In many countries, policy makers are keen to increase their nation's skill levels to increase its competitiveness and capacity to generate wealth. To this end, policy targets for higher participation in university education are often used as a proxy for the intended outcome which might be described in terms of the level and range of skills that will be available in the economy to improve productivity.

Management accountants are alert to how performance indicators must be selected carefully and constantly adjusted; causal connections may not be as assumed, and performance indicators can have unintended consequences. Targets might be exceeded but intended outcomes missed.

"We need to address the issue of skills, because now we're more interested in degrees than in credentials," says Assistant US Secretary of Labor Jane Oates. "Since 2009 we have had a growing number of four-year college graduates unable to get sound wages in their areas of study."

#### Aligning supply and demand

A recent report by the UK's Chartered Institute of Personnel and Development (CIPD) concluded that "The most glaring absence at the heart of government policy is a coherent, integrated strategy that embraces growth, skills, innovation, employment relations and the labour market – that is, the demand side of the skills equation." <sup>18</sup>

Supply and demand have to be aligned. In the US for example, there are already over 25% more graduates than jobs requiring degrees and the number of graduates is projected to grow at more than double the rate of growth in jobs requiring a degree over the decade to 2020. 49 If skills levels are to be increased to improve a nation's competitiveness, there has to be a strategy to ensure that there will be a demand for the people who acquire those skills.

In the European Union, those countries with rigorous apprenticeship schemes, such as Germany, Austria and Denmark, are the most successful in terms of facilitating school leavers' transition to the world of work. <sup>50</sup> Youth unemployment is relatively low in Germany where there is still a strong tradition of apprenticeships combining practical and theoretical education. This leads to a high degree of specialisation and contributes to the reputation of German engineering.

Workforce planning is required to align education policies with industrial strategy. Where a supply of skilled labour is available but there is a shortage of jobs requiring those skills, inward investment has to be attracted. This is a priority for a country like Ireland where the Industrial Development Authority promotes the country as an attractive place to invest with a business-friendly regulatory environment, grants, tax breaks, the fostering of clusters of industry and the availability of a well-educated workforce.

Where countries have job vacancies to fill, immigration policies can provide a solution for successful economies. For example, the US is able to attract talent from across the globe. At many US companies, foreign nationals are authors of the majority of patent applications filed: 65% at Merck, 64% at GE and 60% at Cisco.<sup>51</sup>

## Reliance on smaller companies and entrepreneurs to create jobs

In many countries, employment opportunities in the public sector will be limited for several years as there is a budgetary imperative to do more with less. At the same time, many large private sector employers are applying lean principles to increase their efficiency, meaning they will not be recruiting in significant numbers either. The third (not-for-profit) sector is relatively small. This leaves smaller business in the private sector as those expected to create jobs at a time when a weakened banking sector is limiting the amount of available borrowing.

According to an EY report, "Entrepreneurs and SMEs are significant engines of both job creation and economic growth. Research by EY found that SMEs with fewer than 250 employees represented, on average, two-thirds of G20 employment. These businesses also add jobs at about twice the rate of their larger rivals and are more likely than larger companies to recruit previously unemployed people." 52

# THE CGMA SOLUTION: A SIMPLE, STRUCTURED SOLUTION

The global unemployment crisis is huge and requires the collaboration of diverse stakeholder groups to resolve. However, it should be possible to tackle employability on a more manageable scale by local area, industry or profession.

McKinsey has noted that the most transformative solutions to tackling employability "are those that involve multiple providers and employers working within a particular industry or function. These collaborations solve the skill gap at a sector level; by splitting costs among multiple stakeholders

(educators, employers, and trainees), investment is reduced for everyone – an incentive for increased participation. Agreements such as non-poaching deals can also boost employers' willingness to collaborate, even in a competitive environment."53

## CIMA 2015 syllabus and assessment case study

The updating of the CIMA syllabus to produce the 2015 syllabus and the development of its assessment process provide an example of a collaborative solution for the domain of management accounting.

CIMA's mission is to help people and businesses to succeed. To this end, we must provide a professional qualification which gives employers the assurance that our members have been rigorously assessed and found to have mastered the competencies employers expect of their in-house finance professionals.

Membership of a chartered professional body provides the further assurance that our members comply with our membership obligations, which include undertaking continuous professional development (CPD) and being bound by a code of ethics. It is this assurance which enhances our members' employability.

#### Improving employability

Therefore employability is a priority for us. Our value proposition includes the commitment that the reputation of our qualification will enhance members' career prospects. We must strive to ensure that our syllabus is relevant to employers' needs so that our qualification continues to meet their changing expectations.

When updating the 2015 syllabus, CIMA found that the content would not need to be changed much. There was, however, a need for more emphasis on

current topics relating to how the finance function is becoming more efficient, more informative and more influential.

The three-pillar structure of the CIMA syllabus (enterprise, performance and financial) has integrity: management accountants need to know how business works and how strategy is formed; they need to be able to provide analysis of performance and manage risk; as accountants, they also have to be able to produce statutory accounts and to develop a financial strategy.

#### What gets examined gets learned

However, the research indicated that we should make greater use of technology to improve how we test candidates' knowledge, skills and ability. Management accountants can tell you that what gets measured gets managed. In education, this principle translates to: "What gets examined gets learned." So, when developing the new assessment process, we had to ensure that it would test candidates' knowledge of each subject, their ability to combine matter from different subject areas and their competence in applying their learning in business situations.

We are confident that the combination of the updated syllabus and the new assessment process is still relevant to employers' needs, that it will continue to be tested with rigour and that our qualification's reputation will give these assurances to members, students and employers.

#### Here is the process CIMA followed:

- 1. We analysed competency frameworks provided by 60 employers.
- We met face-to-face with the representatives of 67 employers around the world to explore how their expectations of finance professionals and their roles are likely to change in the future.
- 3. We identified the technical accounting and analysis skills and the complementary business, inter-personal and leadership skills that management accountants need to meet employers' requirements. We learned that accounting knowledge on its own will not suffice; management accountants should be able to apply their accounting and analysis skills in the business context and to influence others to improve performance and help lead the organisation.
- 4. We conducted roundtables with over 200 organisations and an online survey which was answered by more than 3,000 respondents to validate this approach.

- Based on this research, we developed a competency framework to cover a wide range of accounting and finance roles, from entry level to senior management and subject matter expert roles.
- 6. We commissioned academics to write a syllabus with learning outcomes that address the competencies that an employer might expect of a professionally qualified management accountant.
- 7. We partnered with Pearson VUE<sup>54</sup>, world leaders in assessment technologies, to develop a new assessment process which will allow us to test competencies with rigour; this involves testing knowledge of the subject matter as well as examining candidates' ability to apply their skills in case studies at operational, management and strategic levels.

To find out more about the CIMA 2015 syllabus and CGMA Competency Framework visit cgma.org/building-better-business

#### **CGMA**

We want employers to better recognise the potential to engage professionally qualified accountants in improving corporate performance as management accountants. Therefore, the AICPA and CIMA formed a joint venture to establish the Chartered Global Management Accountant designation and elevate the profession of management accounting.

Use of the CGMA designation is exclusive to CIMA members and those CPA-qualified accountants who have augmented their world-leading accounting qualification with the complementary specialist competencies required for roles as management accountants in business.

 The CGMA designation addresses the supply side of employability by providing the assurance that CGMA designation holders have mastered the competencies employers need of their in-house professionals.

- We are also developing, and will soon be launching, the Global Management Accounting Principles. These will alert employers to the range and quality of support that they should engage their in-house finance professionals to deliver in order to improve the performance and sustainability of their organisations. This will raise the profile of management accounting and increase the demand for suitably qualified finance professionals, particularly CGMA designation holders.
- The pace of change and longer working lives will make continuing professional development ever more important. So we are promoting the CGMA Competency Framework and continuing the development of lifelong learning programmes. These will help CGMA designation holders to identify and meet their learning needs, ensuring their long-term employability.

## CONCLUSION

Employability must be addressed urgently. The levels of youth unemployment and underemployment across the globe, and the related growing disparity in prospects between the best candidates and the rest are contributory factors to income inequality. The World Economic Forum has identified unemployment and income inequality as major global risks that are interconnected with the number one risk: fiscal crises in key economies.<sup>55</sup>

The employability crisis will not be easy to resolve. Global trends, such as advances in technology, are changing how business operates. This in turn is changing what people will do at work and the skills they will need to learn. There are not only mismatches in supply and demand but also disconnects in the logic being applied to raise workforce skills. There is often little connection between the strategy to improve the workforce's skills base and the industrial strategy to generate a demand for their skills.

We need to forge stronger links between academia and business, education and skills, theory and practice, supply and demand.

The collaborative approach that the AICPA and CIMA have taken addresses both the supply and demand in our domain. We have forged stronger connections between education, skills and jobs by simply taking employability as the starting point. The CIMA 2015 syllabus and its assessment will deliver the competencies that employers expect of their in-house finance professionals. We hope that lessons from our experience may have wider applications in addressing this global employability crisis.

CIMA and the AICPA are committed to working in the public interest. We welcome the opportunity to engage with members, employers and academics to help address the unemployment and employability crisis.



The AICPA and CIMA have forged stronger connections between education, skills and jobs by simply taking employability as a starting point.

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