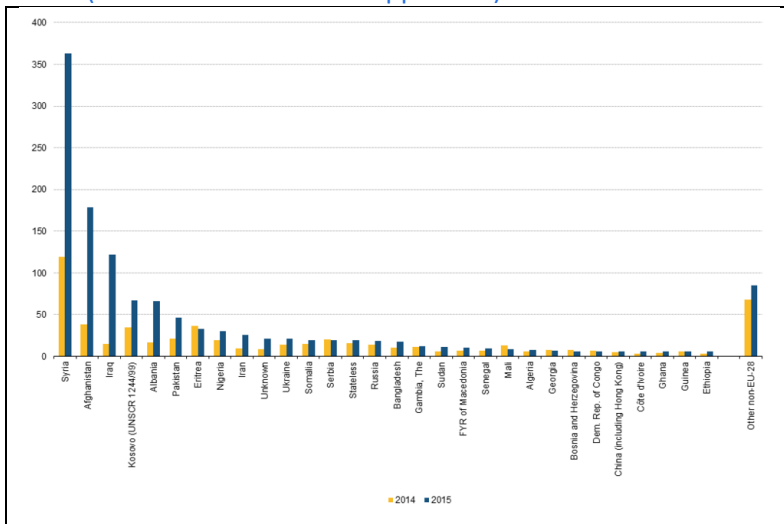


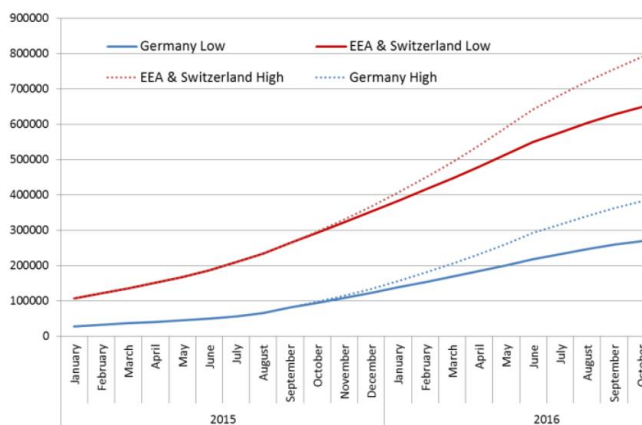
- A.** Consider the information conveyed in the graphs (figures 1-7) and answer the following questions.
1. What does the graph show?
  2. What is the most important/noteworthy trend or information that it shows?
  3. How is that trend or information relevant to one of the subthemes: the impact of migrants in the EU or jobs in the future? What issues does it raise?

Figure 1: Countries of origin of (non-EU) asylum seekers in the EU-28 Member States, 2014 and 2015 (thousands of first time applicants)



Source: Eurostat

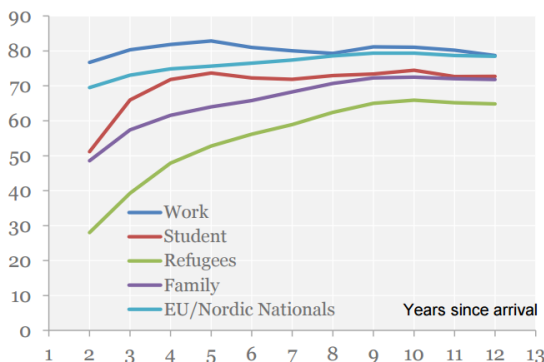
Figure 2: Estimated cumulative entries in the labour market due to refugees who have arrived since January 2014



\* EEA = The European Economic Area is an agreement which entered into force on 1 January 1994 that links Iceland, Norway and Liechtenstein to the European Union Internal Market through the creation of a "European Economic Area".  
<https://stats.oecd.org/glossary/detail.asp?ID=866>

Source: Migration Policy Debates, OECD n° 8 November 2015

Figure 3: Percentage of employed, by duration of residence in Sweden, Men, cohort arriving 1997-99



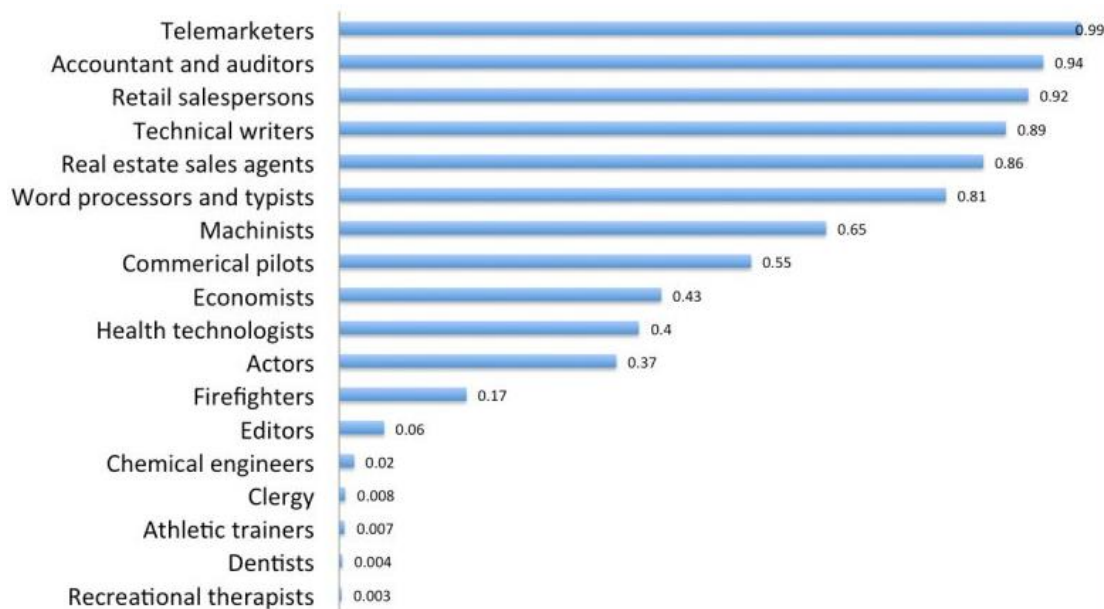
Source: Swedish Public Employment Service (Arbetsformedlingen) in Migration Policy Debates, OECD n° 8 November 2015

Figure 4: Employment security & job insecurity by occupation (% of employees who strongly agree with each statement)



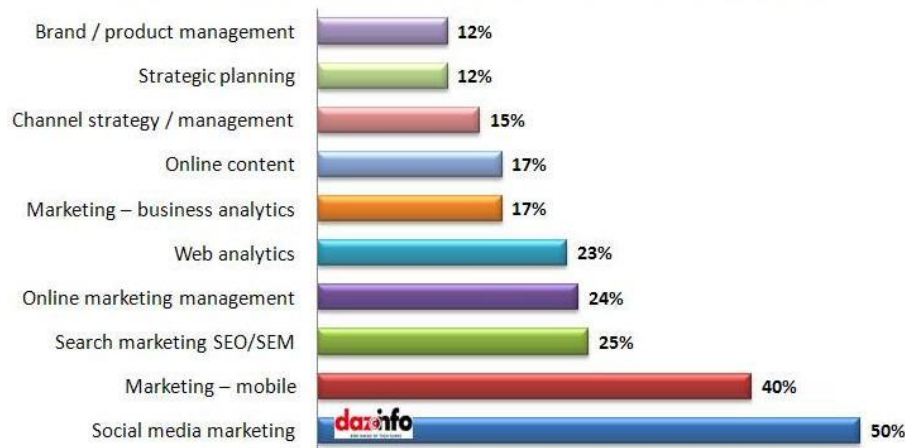
Source: Eurostat : Sixth European Working conditions Survey, 2015  
[http://www.eurofound.europa.eu/sites/default/files/ef\\_publication/field\\_ef\\_document/ef1568en.pdf](http://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1568en.pdf)

Figure 5: Probability Robots Will Take Your Job in Next 20 Years, 1 = Certain



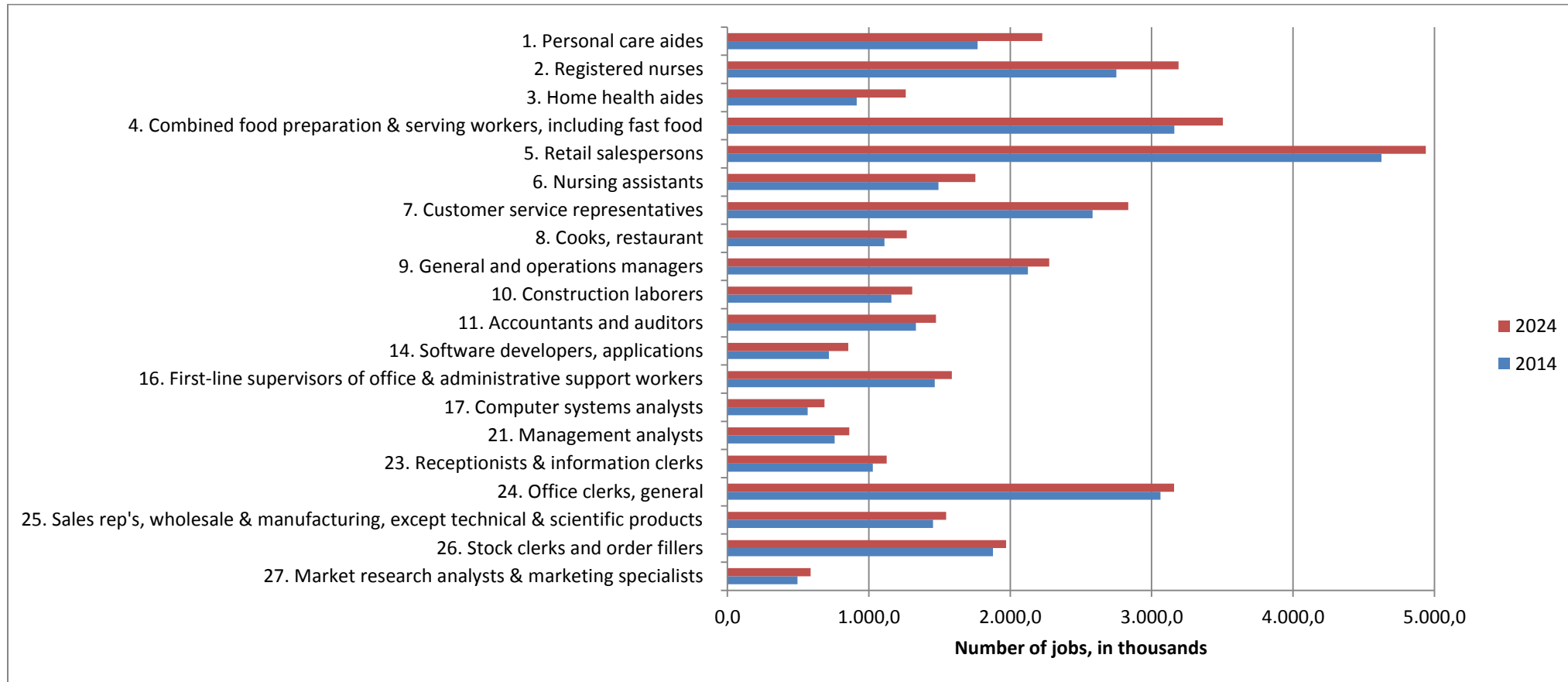
Source: Business Insider from *The Economist*, 17 Jan. 2014

Figure 6: Social media jobs which are expected hot in next 2-3 years (2013)



Source: dazeinfo.com

Figure 7: Occupations with the most job growth (ranked), 2014 and projected 2024 (Numbers in thousands)



Source: [www.bls.gov](http://www.bls.gov) (US Bureau of Labor Statistics)

- B.** Using the word given, write a sentence that compares information from 2 different graphs or different information from the same graph.

E.g. Figure 5: retail sales persons / Figure 7: retail sales persons **DESPITE**

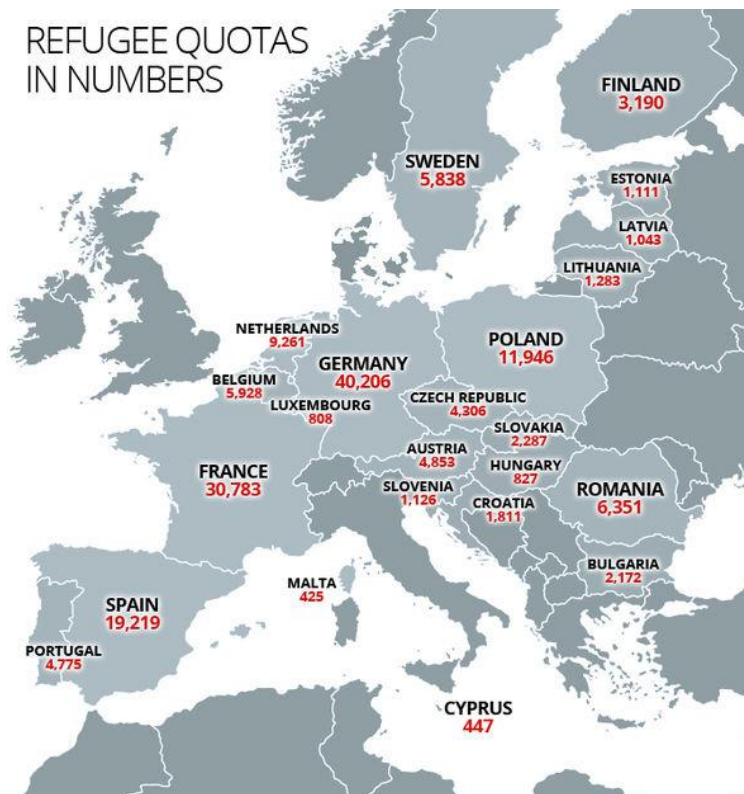
Despite the high probability that retail salespersons will be replaced by robots in the next 20 years, their number is expected to grow by about 250,000 in the US by 2024.

1. Figure 5: accountants and auditors / Figure 7: accountants and auditors **ALTHOUGH**
2. Figure 5: clergymen, athletic trainers, dentists, and recreational therapists / Figure 5: telemarketers, accountants and auditors, and retail salespersons **UNLIKE**
3. Figure 4: plant and machine operators / Figure 5: machinists **DESPITE**
4. Figure 6: web analytics, marketing - mobile, social media marketing / Figure 7: market research analysts, marketing specialists **SIMILARLY**
5. Figure 4: clerical support workers (job insecurity) / Figure 5: word processors and typists **ALTHOUGH**

### C. The migrant crisis in EU

Consider the quotas for relocation of refugees in Europe (figure 8), which were decided upon by EU interior ministers in September, 2015. Consider also the more recent information on migrants who entered Europe illegally in 2014, 2015 (figure 9). In light of the more up-to-date data, to what extent are the quotas in figure 8 reasonable for the following countries: Portugal, France, Germany, Estonia, and the Netherlands? Use relevant information from figure 9, your knowledge of the country and economics, and the economic indicators data about the relevant country on [www.tradingeconomics.com](http://www.tradingeconomics.com) to justify your answer.

Figure 8: Refugee quotas in numbers



Source: [www.express.co.uk](http://www.express.co.uk)

Figure 9: Migrants detected entering the EU illegally, 2014-2015



Source: Frontex on <http://www.bbc.com/news/world-europe-24583286>, 3 March 2016

## D. France's labour reforms

Working nine to four

### The Socialists are torn over a move to dismantle the 35-hour week

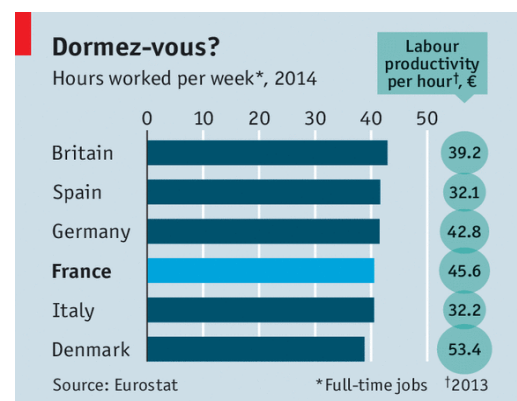
Mar 5th 2016 | PARIS

1. IN THE eyes of many foreigners, two numbers encapsulate French economic policy over the past decade or so: 75 and 35. The first refers to the top income-tax rate of 75%, promised by François Hollande to seduce the left when he was the Socialist presidential candidate in 2012. The second is the 35-hour maximum working week, devised by a
5. Socialist government in 2000 and later retained by the centre-right. Each has been a totem of French social preferences. Yet, to the consternation of some of his voters, Mr Hollande applied the 75% tax rate for only two years, and then binned it. Now he has drawn up plans that could, in effect, demolish the 35-hour week, too.

10. Mr Hollande's government is reviewing a draft labour law that would remove a series of constraints French firms face, both when trying to adapt working time to shifting business cycles and when deciding whether to hire staff. In particular, it devolves to firms the right to negotiate longer hours and overtime rates with their own trade unions, rather than having to follow rules dictated by national industry-wide deals. The 35-hour cap would remain in force, but it would become more of a trigger
15. for overtime pay than a rigid constraint on hours worked. These could reach 46 hours a week, for a maximum of 16 weeks. Firms would also have greater freedom to shorten working hours and reduce pay, which can currently be done only in times of "serious economic difficulty". Emmanuel Macron, the economy minister, has called such measures the "de facto" end of the 35-hour week.

20. At the same time, the law would lower existing high barriers to laying off workers. These discourage firms from creating permanent jobs, and leave huge numbers of "outsiders", particularly young
25. people, temping. For one thing, it would cap awards for unfair dismissal, which are made by labour tribunals. Laid-off French workers bring such cases frequently; they can take years and cost anything from
30. €2,500 to €310,000 (\$2,700 to \$337,000) by one estimate.

35. The underlying principle, laid out in government-commissioned reports over the past six months, is simple and radical. The country's ponderous labour code, currently longer than the Bible, should limit itself to basic protection of workers, and
- leave bosses and unions within firms to hammer out finer details. This is based on the belief that French employees—only 8% of whom belong to a union—are more



pragmatic and flexible than the national union leaders in Paris who supposedly negotiate on their behalf. At a car factory making Smart vehicles in eastern France, for instance, a recent deal to work 39 hours a week was approved by most employees, yet  
 40. blocked by the firm's unions. Under the new law, if no deal can be reached with a company's unions, employees may vote in a binding internal referendum.

The draft law does not deal with all the rigidities of the French labour code. Nonetheless, "it's the most important piece of labour-market legislation for 15 years," says Ludovic Subran, chief economist at Eurler Hermes, a credit-insurance firm. It is the  
 45. closest France has got to the reformist Jobs Act rammed through in Italy by Matteo Renzi's government. And it could be the legacy that Manuel Valls, the ambitious centre-left prime minister, seeks as he and Mr Macron try to steer the Socialists in a more market-friendly direction.

The great difficulty is political. For much of the left, the 35-hour week remains  
 50. not only a badge of progress but the mark of a preference: for shorter hours, more holidays and higher productivity—even at the price of fewer jobs. French productivity per hour remains far higher than Britain's and even a touch above Germany's (though yearly hours worked in France are lower, and the unemployment rate twice as high). In fact, the French already work more than 35 hours a week on average, partly because so  
 55. many employees get extra holidays to compensate. White-collar employees at EDF, an energy firm, average 39 working hours a week, but until recently got 23 extra days off each year on top of the statutory five weeks' holiday. (A hard-won deal has reduced this to a mere 16.) Managing so much absence has become an art. "Employees prefer to work less, earn less and have more time," says Pierre Vauterin, who runs a firm that  
 60. makes ball bearings on the outskirts of Paris.

Challenging this doctrine is becoming a stinging headache. Already, Mr Valls has postponed the presentation of his draft law to the cabinet, thanks to an uproar within his own party and the threat of street protests by unions and students. In a barbed article in *Le Monde*, Martine Aubry, mayor of Lille and architect of the 35-hour week,  
 65. accused him of selling out socialist ideals. "Who could imagine", she asked, "that making redundancies easier...will encourage employment?" Mr Hollande is enfeebled. Even France's more moderate unionists are wary. If Mr Valls waters down the draft, his reformist credentials will be damaged. If he pushes ahead, he could find himself with a choice between unmanageable unrest—or resignation.

## E. Views on the refugee crisis

1. Complete the definition of net migration using words from the box.

citizens	emigrants	migrants	immigrants	non-citizens
----------	-----------	----------	------------	--------------

Net migration is the net total of ..... during a given period, that is, the total number of ..... less the annual number of ....., including both ..... and .....

2. Choose the answer the answer that best illustrates the meaning of the underlined expression.

- |                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>i. When something <u>shrinks</u>, it</p> <p>a. becomes more expensive.</p> <p>b. becomes smaller.</p> <p>c. makes a noise.</p>                                                                                | <p>ix. A <u>newcomer</u> is someone who</p> <p>a. has recently arrived.</p> <p>b. has just begun studying.</p> <p>c. will have to learn a lot.</p>                                                                                                                                                                                                            |
| <p>ii. The prices paid for health care continue to <u>outpace</u> the prices paid for everything else.</p> <p>a. to surpass</p> <p>b. to remain on par with</p> <p>c. be less than</p>                           | <p>x. There's been a tremendous <u>boost</u> in food prices.</p> <p>a. research.</p> <p>b. interest.</p> <p>c. rise.</p>                                                                                                                                                                                                                                      |
| <p>iii. The gains <u>offset</u> the losses.</p> <p>a. compensated for</p> <p>b. were significantly more than</p> <p>c. were significantly less than</p>                                                          | <p>xi. Sought is the past of which verb?</p> <p>a. To sought.</p> <p>b. To seek.</p> <p>c. To sink.</p>                                                                                                                                                                                                                                                       |
| <p>iv. The argument relies on the <u>underlying assumption</u> that all criminals are dangerous.</p> <p>a. hypothesis</p> <p>b. evidence</p> <p>c. belief that forms the basis of an opinion</p>                 | <p>xii. Today, with the <u>influx</u> of western influences in China, hairstyles and clothing vary from one person to the next.</p> <p>a. [the act of] flowing in</p> <p>b. increase</p> <p>c. beginning</p>                                                                                                                                                  |
| <p>v. Her <u>stance</u> on funding for such programs as governor led to attacks during the campaign as well.</p> <p>a. refusal</p> <p>b. position</p> <p>c. commitment</p>                                       | <p>xiii. Every infected person brings us closer to the <u>tipping point</u>, when the outbreak becomes an epidemic.</p> <p>a. the point in a situation at which a minor development precipitates a crisis.</p> <p>b. the point in a situation at which no further change is possible.</p> <p>c. the point in a situation at which there is a sudden rise.</p> |
| <p>vi. When you <u>put a ceiling on the number</u> of something, you</p> <p>a. cover and protect the things.</p> <p>b. impose a limit that cannot be surpassed.</p> <p>c. make sure all aspects are covered.</p> | <p>xiv. Any language must <u>accommodate</u> new concepts.</p> <p>a. encourage.</p> <p>b. adjust to.</p> <p>c. explain.</p>                                                                                                                                                                                                                                   |
| <p>vii. The chairman <u>weighed in</u> with an idea for a fundraiser.</p> <p>a. offered an opinion.</p> <p>b. rejected.</p> <p>c. criticized.</p>                                                                | <p>xv. The inflation figure <u>confounded</u> economic analysts.</p> <p>a. confused.</p> <p>b. surprised.</p> <p>c. corroborated.</p>                                                                                                                                                                                                                         |
| <p>viii. It is unclear how to <u>mitigate</u> the effects of tourism on the island.</p> <p>a. encourage</p> <p>b. manage</p> <p>c. make less harmful</p>                                                         | <p>xvi. After the 2008 financial crisis, unemployment <u>surged</u>.</p> <p>a. Went up dramatically.</p> <p>b. Went down dramatically.</p> <p>c. Remained constant.</p>                                                                                                                                                                                       |



3.

On the following pages are 3 articles from *The Guardian* on the refugee crisis in EU. The third article has been divided in two. From each text two sentences have been replaced by sentences from the other texts.

i. Read your text to identify its main social purpose.

i.e. Is your text an information report? (It describes or classifies information.)

Is it a narrative? (It tells a story.)

Is it an argument? (It presents and justifies a point of view.)

Is it an explanation? (It explains how and why something happens.)

ii. Reread your text to identify the two sentences that do not belong to it. Underline them.

iii. Reread your text. As you read, MAKE NOTES IN THE MARGINS on information it conveys. These notes will be used to synthesise the content of your section so must include any important information ideas, facts, figures, or details. Ignore the 'alien' sentences.

iv. USING YOUR NOTES, orally synthesise the information from your text to the other members in your group. Do not simply read it. Begin by identifying its main social purpose. Student A starts. As you listen to the other students' syntheses, identify the texts from which your two isolated (alien) sentences came.

v. As a group, WITHOUT SHOWING each other your texts or sentences, recreate the original texts.

4.

As a group, link each belief on the left (i. – iv.) to a corresponding issue on the right (a. – d.).

- |      |                                                  |    |                                             |
|------|--------------------------------------------------|----|---------------------------------------------|
| i.   | "There are too many asylum seekers invading EU." | a. | fiscal burden                               |
| ii.  | "The refugees are crushing our economies."       | b. | economic collapse                           |
| iii. | "The refugees are taking our jobs."              | c. | demographic changes /<br>population decline |
| iv.  | "The refugees are wasting our tax dollars."      | d. | rise in unemployment                        |

5.

As a group, use the information you gathered from your articles to debunk (show why an idea is false or hollow) the commonly held beliefs about the impact of the refugees in EU above.

## 6. Writing assignment

Use the information on the refugee crisis we have studied so far to write a text on the economic impact of the current inflow of refugees. You will need to decide on the main social purpose of your text. It could be:

an argument (it presents and justifies a point of view); or

an explanation (it explains how and why something happens).

You will need to structure the text in accordance with its main social purpose. Whether it is an argument or explanation should be clear in the first paragraph.

(max. 1 page)

**Student A****Refugee influx helps halt decline in Germany's population**

Alberto Nardelli

Nation's population is growing again although longer-term trends still point to a decline – and the need for continued high levels of immigration

*The Guardian*

Wednesday 6 January 2016

Germany's population is no longer shrinking. Four consecutive years of increasingly high net migration have outpaced the country's birth deficit, taking the country's population to nearly 82 million people – a level last seen in 2009. The population growth has been particularly concentrated among those of working age. The number of people employed in Germany hit 43 million in 2015, according to data released by Destatis, the German statistics office, on Tuesday. The figure represents the highest number of people in work since German reunification. Meanwhile, the number of unemployed people has dropped below 2 million for the first time since the fall of the Berlin Wall.

Over the past 12 months the active labour force (the total number of people in employment and unemployed) has increased to 44.9 million, driven by higher labour force participation of the domestic population and the immigration of foreign workers, which has offset negative demographic effects. Net migration has exceeded 300,000 every year since 2011, hitting 676,730 in 2014, according to data published by Germany's federal office for migration and refugees.

But one group's voice has been conspicuous by its absence: business. The most recent estimate, released in April last year, puts the country's population at 81.3 million, compared with 80.2 million in 2011. The trend is likely to continue, in the short term at least. Net migration in the first six months of 2015 was 435,365, a 53.7% increase compared with the first six months of 2014 on the back of Angela Merkel's refugee policy.

The IMF estimates the largest impact in Austria, with GDP rising by 0.5% by 2017, followed by Sweden (0.4%) and Germany (0.3%). Longer-term forecasts are nevertheless complicated because they are dependent on factors such as future migration levels (which for the past four years have exceeded the higher end of the current forecast's underlying assumptions), the age structure of migrants and birth rates of what demographically, in Germany's case, is a rapidly and dramatically changing population.

Last year, the country registered the arrival of 1 million asylum seekers, the near entirety of whom were under 65 and of working age. Nevertheless, whether to restrict the number of arrivals remains a point of debate despite public and business support for Merkel's stance on refugees, and backing by her party, the CDU. At last month's congress, only two of the party's 1,001 delegates voted against her decision not to put a ceiling on the number of refugees to welcome. In her annual new year's address, Merkel urged Germans to see refugee arrivals as an opportunity.

*The Guardian*

**Student B****IMF says refugee influx could provide EU economic boost**

Julia Kollwe

Migration into Europe could lift GDP via greater state spending and long-term boost to jobs market with negative effects short-lived, says report

*The Guardian*

Wednesday 20 January 2016

The recent influx of refugees into Europe is likely to raise economic growth slightly in the short term – mainly in Austria, Germany and Sweden – and could deliver a bigger long-term economic boost to the EU if refugees are well integrated into the job market, according to the International Monetary Fund.

The Washington-based organisation described the surge in refugees from Syria and other conflict zones as a “humanitarian catastrophe” with important ramifications across the Middle East, Europe and beyond. The number of asylum seekers arriving at EU borders is unparalleled in recent times – in the first 10 months of last year, 995,000 first-time asylum applications were submitted to EU countries, more than twice the number over the same period in 2014, the 50-page report said.

The fund said this is likely to result in a “modest increase in GDP growth” in the short term, due to higher state spending on housing and benefits for asylum seekers, as well as a boost to the job market from the newcomers. Austria, Germany and Sweden, which have been taking in most of the refugees and have low unemployment rates, will see the biggest economic impact.

GDP in the EU as a whole could be lifted by 0.05%, 0.09% and 0.13% in 2015, 2016 and 2017 respectively. Just as the German chancellor, Angela Merkel, has been at the political forefront of the migration crisis, the Federation of German Industries (BDI) has been at the business forefront.

In the long run, the economic impact could be larger, but will depend on the integration of refugees into the labour market. Assuming this is successful, by 2020 the level of GDP could be 0.25% higher for the EU as a whole, and between 0.5% and 1% higher in Germany, Austria and Sweden, the IMF estimates.

“Rapid labour market integration is key to reducing the net fiscal cost associated with the current inflow of asylum seekers.” They are an antidote to ageing populations and low birth rates, and many come ready to work.

The authors said government spending on the refugee crisis should be taken into account when looking at fiscal targets, for example, Greece.

Confounding widespread fears, the IMF said most immigration studies showed that the effect of new arrivals on domestic workers is usually small, possibly because they are in different segments of the job market or because of a rise in investment in response to a sudden surge in workers. Enrica Detragiache, one of the report’s lead authors, said: “By and large the negative effects tend to be short-lived and temporary.” She also said the analysis had not found a “tipping point where we say the inflows [of refugees] are so large that the economies cannot accommodate them any more.”

*The Guardian, Wednesday 20 January 2016*

## Student C

**Europe's refugee crisis is a major opportunity for businesses** (Part 1)

Lucy P Marcus

European firms should be quick to help refugees – they are an antidote to ageing populations and low birth rates, and many come ready to work

*The Guardian*

Friday, 11 September 2015

In the face of the largest influx of refugees into Europe in decades, the responses and policy proposals from the European Union and its member governments have varied enormously, and the debate has become deeply politicised. International organisations and non-governmental agencies such as the UNHCR and the International Rescue Committee, and religious leaders including Pope Francis and the archbishop of Canterbury, have weighed in as well. However, long-term projections still forecast Germany's population to decline to 73.1m by 2060 due to a growing birth deficit after 2020 that cannot be compensated even by net immigration levels of 200-300,000 people.

While governments, charities, and donor organisations actively discuss how to share responsibility for refugees on all steps of their journey – from camps in Jordan, Lebanon, and Turkey to transit to settlement – European business has been strangely silent. But, at a time when business is more powerful than ever, with multinational corporations stretching around the world, the private sector must work with governments and NGOs to help address the short-term and long-term challenges posed by the massive refugee inflows. Indeed, industry leaders in all sectors owe it to themselves to be involved from the start. Only by turning the challenges into opportunities can social, political, and economic risks be mitigated.

There has been one notable exception to the pattern of private-sector silence. Not all of these refugees will remain in Europe permanently. The BDI has spoken clearly and decisively about the benefits of refugees for business and has proposed changes to Germany's labour laws and regulations, including fast-tracking the newcomers' right to work. In order to make business engagement and investment sustainable, the BDI has also sought assurances that migrants who find employment will not be deported.

Now it is time to hear from other countries' business associations. How do the Confederation of British Industry or France's MEDEF intend to respond? And what of individual multinational corporations? What legislative changes do they think they will need to aid governments and the EU in addressing the refugee crisis and ensuring long-term stability in Europe?

The challenge, everyone agrees, is not confined to managing the huge inflows and processing asylum applications. In the coming months and years, destination countries must lay the foundations for integrating refugees into their workforces. To wait too long is to miss an important opportunity to be involved in developing a strategy that works for businesses, governments, and societies alike.

**Student D****Europe's refugee crisis is a major opportunity for businesses** (Part 2)

Lucy P Marcus

European firms should be quick to help refugees – they are an antidote to ageing populations and low birth rates, and many come ready to work

*The Guardian*

Friday, 11 September 2015

Becoming involved early in the process of assessment, education, and integration planning would allow the private sector to help shape policy from the outset, rather than complaining about the government's failures after the fact. Business leaders can help identify the skills and abilities that would most benefit their sectors, establish guidance and training programmes, and offer apprenticeships.

The benefits are clear. The refugees arriving on Europe's shores are often young, well-educated, skilled, and eager to integrate quickly into society. By contrast, in 2014 for example, 714,927 births and 863,373 deaths were recorded. By collaborating with the public sector, business can help to ensure that they get the training and jobs they need.

Business also has a role to play in helping to shape societal attitudes toward refugees. This is particularly true of public-facing organisations. Football clubs across Europe are not only donating money, but also taking concrete steps to encourage a welcoming atmosphere, with welcome banners, training camps for refugees, and, in the case of Bayern Munich, language lessons.

Indeed, the sooner the refugees gain employment, the more they will help the public finances by paying income tax and social security contributions," the report said. One day, many may return to their homeland. When they do, they will have the skills to help rebuild their societies and economies, as well as provide strong ties to the country where they sought refuge. The importance of this investment in future state building, as well as business relationships, cannot be underestimated. Although the payoff may seem distant, investing in today's refugees could make all the difference in building tomorrow's strong, stable trading partners.

Europe's refugee crisis continues to be viewed solely as a political problem, in part because that is how the media portray it. The only business coverage tends to focus on the financial impact caused by the disruption of transport links such as the port of Calais. But Europe's refugee crisis is also a business problem. By addressing it now, business can turn that problem into an opportunity for all.

*Lucy P. Marcus is Professor of Leadership and Governance at IE Business School and a non-executive board director of Atlantia SpA.*

## F. AI and robots threaten to unleash mass unemployment, scientists warn

1. In part 1 complete each gap in the text with one word.
2. In part 2 put the verb into the correct tense or form.

1. Scientists have warned that rapid strides in [1]..... development of artificial intelligence and robotics threaten the prospect of mass unemployment, affecting everyone from drivers to sex workers. Intelligent machines will [2]..... replace human workers in all sectors of the economy, senior computer scientists [3].....
5. the American Association for the Advancement of Science meeting [4]..... Washington at the weekend.

“We are approaching the time [5]..... machines will be able to outperform humans at almost [6]..... task,” said Moshe Vardi, computer science professor at Rice University in Texas. “Society [7]..... to confront this question before it is upon us: if machines [8]..... capable of doing almost any work humans can do, what will humans [9].....? A typical answer is that we will be [10]..... to pursue leisure activities,” Prof Vardi said. “[But] I do not find the [11]..... of leisure-only life appealing. I believe that work is essential [12]..... human wellbeing.”

“AI is moving rapidly from academic research into [13]..... real world,” said Bart Selman, professor of computer science at Cornell University. “[14]..... are starting to ‘hear’ and ‘see’ as humans do . . . Systems can [15]..... to move and operate among us autonomously.” He said companies [16]..... as Google, Facebook, IBM and Microsoft were scaling up [17]..... in AI systems to billions of dollars a year.

20. Professors Vardi and Selman said governments — and society as a [18]..... — were not facing up to the acceleration of AI [19]..... robotics research. Prof Selman helped draft an open letter issued last year by the Future of Life Institute in Cambridge, Massachusetts, urging policymakers to explore the risks [20]..... with increasingly intelligent machines.

25. Among the 10,000 or so signatories to the letter [be]..... Elon Musk, the tech entrepreneur whose company Tesla Motors [have]..... a large AI research programme [aim]..... at [develop]..... self-driving cars. Mr Musk [fund]..... research at Cornell University “on keeping AI beneficial to humans”, [say]..... Prof Selman. The project [predict]..... whether and, if so when, “super-intelligence” —

30. all-round superiority of machine to human intelligence — [achieve].....

According to Prof Selman, one of the fastest advancing areas of AI [be]..... machine vision, and particularly facial recognition. “Facebook [recognise]..... faces better than any of us,” he [say]..... Machine vision [be]..... key to the self-driving vehicles that scientists [predict]..... [take over]..... our roads in the next

35. 25 years. Prof Vardi [say]..... automated driving [cut]..... accidents by 90 per cent or more, compared with vehicles [drive]..... by error-prone people.

“With so many lives saved and injuries [prevent]....., it [be]..... hard morally for anyone [argue]..... against it,” he said. Yet around 10 per cent of all US jobs [involve]..... [drive]..... a vehicle, he [add]....., “and most of those

40. [disappear].....”.

Prof Vardi [say]..... it [be]..... hard [think]..... of any jobs that [not be]..... vulnerable to robotics and AI — even sex workers. “[you, bet]..... against sex robots?” he [ask]..... “I [not be].....”

Clive Cookson in Washington

*The Financial Times*, February 14, 2016

**G. AI**

<http://video.ft.com/4712786256001/Davos-2016-the-rise-of-AI/companies>

Listen and watch the video and answer the following questions.

1. What new tasks are robots now being used to do? Complete each task with up to 5 words.
  - a. Drive ...
  - b. Respond ...
  - c. Diagnose ...
  
2. Complete the sentences with information (not necessarily the words) from the video:
  - a. In the first machine age, machines...
  - b. In the second machine age, machines have ...
  - c. In the first wave of the second machine age, machines ....
  - d. In the second wave of the second machine age, machines ...
  
3. What can't robots currently do? Tick the things mentioned.
 

a. Pick up a coin	
b. Recognise faces	
c. Walk up stairs	
d. Detect fraud	
e. Show creativity	
f. Motivate and coach people	
g. Carry out routine information processing tasks	
h. Drive trucks	
  
4. What advice does Erik Brynjolfsson give to policy makers? Tick the things he mentions.
 

a. They should acknowledge that robots will massively change job markets.	
b. They should create more creative jobs.	
c. They should displace jobs.	
d. They should reorient education to foster creativity.	
e. They should foster entrepreneurship.	
f. They should foster research and development.	
g. They should consider changes to the tax legislation for wealth distribution.	