REFUGEES WORK:
A HUMANITARIAN INVESTMENT THAT YIELDS ECONOMIC DIVIDENDS

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ABOUT THE AUTHOR


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This report uses the exchange rates prevailing on 22 January 2016, whereby 1 euro = 1.08 US dollars, 1 British pound = 1.43 US dollars and 1 US dollar = 1.42 Canadian dollars, 1.42 Australian dollars, 8.57 Swedish krona and 6.90 Danish krone.
EXECUTIVE SUMMARY

INVESTING ONE EURO IN WELCOMING REFUGEES CAN YIELD NEARLY TWO EUROS IN ECONOMIC BENEFITS WITHIN FIVE YEARS.

That is a key finding of this report – to our knowledge, the first comprehensive, international study of how refugees can contribute to advanced economies. The return on investing in refugees has been calculated using International Monetary Fund (IMF) estimates of the economic impact of asylum seekers and refugees on the European Union (see Appendix).

The world is facing its biggest refugee crisis since the Second World War, with more than 22 million people forcibly displaced from their countries by war and persecution. Advanced economies such as those of the EU, the United States (US), Australia, Canada and Japan are often reluctant to admit them, partly for cultural reasons but also for economic ones. Yet welcoming refugees is not only a humanitarian and legal obligation; it is an investment that can yield significant economic dividends.

When nearly a million Vietnamese “boat people” fled their country in the late 1970s and early 1980s and sought refuge elsewhere, they were typically seen as a burden and often turned away. Eventually, many were allowed to settle in the US and other countries. Most arrived speaking little or no English, with few assets or relevant job skills. Yet refugees from Vietnam now have a higher employment rate and greater average incomes than people born in the US, and they have played a key role in promoting trade and investment links with Vietnam.

Refugees can contribute economically in many ways: as workers of all skill levels, entrepreneurs, innovators, taxpayers, consumers and investors. Their efforts can help create jobs, raise the productivity and wages of local workers, lift capital returns, stimulate international trade and investment, and boost innovation, enterprise and growth. From a global perspective, enabling people to move to more technologically advanced, politically stable and secure countries boosts their economic opportunities and world output.

Welcoming refugees generally requires an initial investment, typically of public funds. In economies where demand is depressed, this increased investment yields an immediate demand dividend. The IMF calculates that additional spending in the EU on refugees of 0.09% of gross domestic product (GDP) in 2015 and 0.11% in 2016 will raise its GDP by 0.13% by 2017. Add in the boost to the economy from refugees working and GDP could be 0.23% higher by 2020: a total increase of 0.84% of GDP between 2015 and 2020.

Once refugees start working, this investment may yield seven additional dividends. Some refugees do dirty, difficult, (relatively) dangerous and dull (4D) jobs that locals spurn, such as cleaning offices and caring for the elderly, which is the fastest area of employment growth in advanced economies. This 4D dividend enables locals to do higher-skilled and better-paid jobs that they prefer.

Higher-skilled refugees (and refugees’ highly skilled children) can provide a deftness dividend. Their different and complementary skills can fill gaps in the
Labour market and enhance locals’ productivity. A third of recent refugees in Sweden are college or university graduates and two-thirds of those have skills that match graduate job vacancies.

Entrepreneurs start new businesses that create wealth, employ locals, make the economy more dynamic and adaptable, and boost international trade and investment. This dynamism dividend can be huge. Sergey Brin, who arrived in the US as a child refugee from the Soviet Union, co-founded Google, America’s second-most valuable company. Li Ka-Shing, who was among the mainland Chinese who sought refuge in then British-run Hong Kong after the Communist Revolution in 1949, is now a business magnate and Asia’s richest man. In Britain, migrants are nearly twice as likely as locals to start a business and in Australia refugees are the most entrepreneurial migrants.

Thanks to their diverse perspectives and experiences, refugees and their children can help spark new ideas. Thanks to their diverse perspectives and experiences, refugees and their children can help spark new ideas. Refugees are the most entrepreneurial migrants. Refugees’ ability to contribute to the economy depends partly on their characteristics and also on the policies and institutions of the welcoming country. For instance, while only 25% of Somali refugees aged 25–64 in Sweden were employed in 2010, 57% of those in the US were.

There is a spectrum of models for welcoming refugees. At one extreme, the US gives refugees a burst of initial help, after which they are expected to fend for themselves. At the other extreme, Sweden has traditionally provided refugees with generous social support, but made it hard for them to work. While Sweden now focuses more on getting refugees into work, barriers to employment remain high. Overall, the US is much more successful than European countries at getting refugees into work. Refugees in the US have a higher employment rate than people born in the US, and their earnings tend to rise rapidly over time, while their reliance on social assistance declines sharply. While the US has room for improvement, it provides a benchmark for EU countries in many respects. Arguably, an ideal refugee welcome programme would combine the active assistance of the Swedish model with the job and enterprise opportunities of the US one.

Other EU countries have a lot to learn. Many provide the worst of both worlds: little help for refugees and high barriers to employment and enterprise. This breeds hardship and failure for refugees, and misplaced resentment towards them from locals. Greater investment in refugees combined with reforms to open up opportunities for progress are both economically and politically desirable.

The first priority should be to get asylum seekers and refugees into work quickly. They need the right to work (often denied to asylum seekers), appropriate skills and job opportunities. Making it easier for people to claim asylum from outside the EU and be resettled once their claim has been accepted would give them the right to work as soon as they arrive. All governments should endeavour to process asylum claims quicker and give asylum seekers the right to work while their claims are being assessed, as happens in Sweden and Canada (but not the US).

Employability is also crucial. On arrival – or even beforehand, if resettled from camps – refugees’ education level and skills should be assessed to identify and provide for their training needs and better match them to employment opportunities. Literacy training should be provided to those that need it. Language training should be tailored to refugees’ workplace needs. Job training and skills development can enable refugees to find higher-skilled and better-paid work in the longer term. The recognition and conversion of foreign qualifications should be streamlined. It costs only $25,000 ($35,750) to train a refugee doctor to practise in the UK, compared with over $250,000 ($357,500) for a new British one.

Skills aren’t much use without job opportunities. Refugees should be resettled in areas where there are jobs, not in areas where cheap housing is available and jobs aren’t. Governments should vigorously enforce anti-discrimination laws. Making it easier for refugees to find work is yet another reason why countries with rigid labour markets that privilege insiders at the expense of outsiders should open them up. Enabling refugees to start businesses is a further reason why governments should cut through red tape that stifles enterprise. While government assistance for refugees ought to be generous, prompt and wide-ranging initially, open-ended welfare provision can have a negative impact. Looking to the future, ensuring refugee children don’t get left behind at school is vital.

Businesses – above all, by employing refugees – and non-profits also have a vital role. For example, through the Tent Alliance, business leaders can commit to make a difference to the lives of refugees and their host communities.

The key message of this study is that policymakers and practitioners should stop considering refugees as a “burden” to be shared, but rather as an opportunity to be welcomed. With a suitable upfront investment and wise policies, welcoming refugees can yield substantial economic dividends.
The world is facing its biggest refugee crisis since the Second World War. But even after the recent influx of people seeking refuge in Europe, advanced economies such as the EU, the US, Australia, Canada and Japan take only a small fraction of refugees worldwide (see Box 1). Six in seven refugees are in developing countries.

Governments that are signatories to the United Nations Convention and Protocol Relating to the Status of Refugees are legally committed to offer refuge to people forcibly displaced from their country (see Box 2). But in practice, all advanced-economy governments limit their refugee intake by a variety of means. As well as being reluctant to admit many poor, non-white, often Muslim people from developing countries, developed countries tend to view refugees as a fiscal burden.

Yet the notion that refugees are an economic drag is a misconception. Like other international migrants, refugees can – and do – contribute economically. While welcoming them typically requires an initial investment – which acts as a fiscal stimulus in economies where demand is depressed – that investment can yield many dividends as they start working and setting up businesses.

As well as bettering their own lives, refugees can contribute to advanced economies as workers of all skill levels, innovators, entrepreneurs, taxpayers, consumers and investors. They help create jobs, raise the productivity and wages of local workers, enhance capital returns, stimulate international trade and investment and boost innovation, enterprise and growth.

From a global perspective, enabling people who have limited economic possibilities in countries with oppressive governments or crippling insecurity to benefit from the opportunities of working with much greater security in more advanced economies with better-functioning institutions provides a boost to the world economy.

The economic contribution to England of Protestant Huguenots who fled persecution in Catholic France in the 17th and 18th centuries is well documented. Jews who fled from the Nazis in the 1930s and 1940s, notably Albert Einstein, made a huge difference to the US, Britain and Australia. Ugandan Asians, who in 1972–3 were expelled by Idi Amin, that country’s then dictator, have succeeded in business and other walks of life in Britain.

Some refugees turn out to be truly exceptional people. Sergey Brin, who arrived in the US at age six as a refugee from the Soviet Union, went on to co-found Google. Its parent company, now known as Alphabet, is America’s second most valuable firm, worth $522 billion at the end of 2015. Yet nobody could have known that he would go on to be so successful. Had he been turned away, the US (and the world) would never have realised the opportunity that it had missed.

How many people like Sergey Brin do the US and the EU turn away – and at what cost?
**Box 1: Facts & Figures**

**More than 60 million people worldwide have been forcibly displaced, most remain within their own country.**

- **20.2 million** are refugees.
- **2.3 million** are asylum seekers.

**Biggest source countries**

- **4.2 million** refugees are from Syria.
- **2.6 million** refugees are from Afghanistan.
- **1.1 million** refugees are from Somalia.

86% of the refugees under the mandate of UNHCR, the United Nations' refugee agency, are in developing countries.

**More than 1.3 million asylum applications were received across the EU in 2015, double the 628,000 registered in 2014.**

- **85,000** is the proposed annual ceiling on refugee resettlement to the US in fiscal year 2016, up from 70,000 in fiscal 2015.
- **69,933** refugees were resettled in the US in fiscal 2015.

- **23,533** people were granted asylum in the US in 2014 (from the most recent data available).
- **13,756** humanitarian visas were granted in Australia in 2014-15.
- **12,647** people gained refugee visas in Canada in 2014.

- **9,000** asylum applications were approved in Japan in 2014.
- **3** Syrians were granted refugee status in Japan in 2014.
- **33** Syrians have been granted refugee status in the six wealthy Gulf co-operation council countries since 2011.

**In 2014**

- **183,365 people** obtained a positive decision.
- **103,595 people** were granted refugee status.
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**The rest were rest were given subsidiary protection status or authorisation to stay for humanitarian reasons.**
Of course, not all refugees are quite so successful, especially not immediately on arrival. But prejudice is a poor predictor of how they will fare. When nearly a million Vietnamese “boat people” fled their country in the late 1970s and early 1980s and sought refuge elsewhere, they were typically seen as a burden and were often turned away. Eventually, many Vietnamese refugees were allowed to settle in the US, Canada and Australia. Most arrived speaking little or no English, with scarcely any assets or relevant job skills. Yet within a decade of their arrival in Canada former boat people had a lower unemployment rate and relied less heavily on social assistance than the general population, one in five had started their own business.

In America, Vietnamese refugees are now more likely to be employed and have higher household incomes than people born in the US. Some have become successful entrepreneurs, notably David Tran. He fled Vietnam in 1979 and, after spending time in a UN refugee camp, arrived in the US in 1980. He then established Huy Fong Foods, whose leading product is Sriracha Hot Chili Sauce, a global brand with total sales of $60 million in 2012, 80% of which consisted of exports to Asia.

Once the US lifted its trade embargo of Vietnam in 1994, hundreds of thousands of entrepreneurial Vietnamese refugees helped foster trade between the two countries, including by founding the first companies to provide long-distance telephone and establish airline routes to Vietnam. Many supply information and services to US multinationals wishing to do business in Vietnam and help them navigate legal hurdles. Indeed, a study by Christopher Parsons of the University of Western Australia and Pierre-Louis Vézina of King’s College London found that from 1995 to 2010, US exports to Vietnam were higher and more diversified in states with a larger Vietnamese population resulting from refugee inflows during the previous two decades.

Individual success stories are important, as is evidence of how particular refugee communities have fared. But to our knowledge, the only developed country in which studies have attempted to measure refugees’ overall contribution to the economy and society is Australia, where more than 700,000 refugees have settled since 1945, nearly two-thirds of them since 1978. Some Australian studies focus on refugees’ readily quantifiable economic impact, notably on public finances, while others look more broadly at their social contributions, such as through volunteering. All find that refugees’ net contributions are positive, the broader studies especially.

That shouldn’t be surprising. Studies of the economic impact of international migrants as a whole tend to find that they make a positive contribution to the receiving economy, aid their country of origin (not least by sending back money), and can transform their own lives – often increasing their standard of living and that of their children many times over. For example, Giovanni Peri of the University of California at Davis finds that in the US immigrants boost total factor productivity without displacing US-born workers from the labour market. In a study with Francesc Ortega of the City University of New York, Peri also finds that a host country’s openness to migration, by increasing the range of skills and ideas, helps account for cross-country differences in per capita income, beyond the important roles played by geography, history and institutions.

While refugees do not move explicitly for economic reasons, and are not selected by host-country governments on the basis of their skills, they are typically just as determined to get ahead as other migrants – if not more so, since they do not have the option to return to their home country. A study by Kalena Cortes of Texas A&M University found that among immigrants who arrived in the US between 1975 and 1980, refugees progressed faster than “economic migrants.” Whereas refugees earned 6% less and worked 14% fewer hours than economic migrants in 1980, by 1990 they were earning 20% more and working 4% more hours, notably because they improved their English faster and accumulated more human capital (skills and education) in general over that period.

Impressive as those findings are, most economic studies underestimate migrants’ contribution. They are often partial analyses of migrants’ impact on the labour market or public finances ignore their impact on the economy as a whole – and its effect on the labour market and public finances. They are usually static: broader “general equilibrium” models analyse the impact of immigration in an artificially stable world without economic growth, where migrants’ dynamic impact on investment and productivity growth, and hence on future living standards, is ignored. Even dynamic models generally define away diverse migrants’ contributions to innovation and enterprise, because they assume that new ideas are exogenous and ignore the role of institutions and individual entrepreneurs altogether. Sergey Brin and Silicon Valley don’t feature in a standard growth model.

This study – to our knowledge, the first comprehensive, international study of how refugees can contribute to advanced economies such as the EU and the US – takes a broader approach. It highlights the personal stories and achievements of successful refugees. It provides broader economic evidence and analysis to show that admitting refugees can be an economic benefit, not a burden. And it analyses which policies and institutions best enable refugees to progress and contribute economically and makes policy recommendations on that basis.
An international migrant, migrant or immigrant, is someone living outside their country of birth for an extended period of time, often defined as a year or more. A refugee is a type of migrant. For the purposes of this study, non-migrants, people who live in the country in which they were born, are called locals.

A refugee is defined by the United Nations Convention and Protocol Relating to the Status of Refugees as someone:

- located outside their country of nationality or habitual residence;
- with a well-founded fear of being persecuted because of their race, religion, nationality, political opinion or membership of a particular social group; and
- unable or unwilling to avail themselves of the protection of their country, or to return there, for fear of persecution.\(^{33}\)

The Convention was signed in 1951 and was updated with a Protocol in 1967 which extended its protections to non-Europeans.

An asylum seeker (or refugee claimant) is a person who has left their country of origin and formally applied for asylum elsewhere but whose application has not yet been concluded.

Refugees have the following rights:

- not to be returned to a country where they face serious threats to their life or freedom. This protection may not be claimed by refugees who are reasonably regarded as a danger to the security of the country or, having been convicted of a particularly serious crime, are considered a danger to the community;\(^{34}\)
- not to be punished for illegal entry into the territory of a contracting state;\(^{35}\)
- to work;\(^{36}\)
- to housing;\(^{37}\)
- to education;\(^{38}\)
- to freedom of religion;\(^{40}\)
- to access the courts;\(^{41}\)
- to freedom of movement within the territory;\(^{42}\)
- to be issued identity and travel documents.\(^{43}\)

Refugees have the obligation to abide by the laws and regulations of their country of asylum and respect measures taken for the maintenance of public order.\(^{44}\)

Contracting states must apply the Convention and Protocol to refugees "without discrimination as to race, religion or country of origin."\(^{45}\)
Welcome refugees generally implies an initial investment, typically of public funds. In economies where demand is depressed, this yields an immediate demand dividend. Once refugees start working, that investment may also yield deftness, dynamism, diversity, demographic and debt dividends. Refugees can also provide a development dividend, notably by sending money to their country of origin. Thus, admitting refugees is an investment that can yield eight big economic dividends.

INITIAL INVESTMENT
Admitting asylum seekers and refugees usually requires an initial investment. This typically involves public funds and sometimes private sponsorship; a few wealthy refugees are self-sponsoring. Upfront costs may include food, clothing, shelter and basic income support; healthcare and trauma counselling; language training and schooling; the administrative costs of processing asylum claims, including security vetting; and those of identifying refugees’ skills and helping them to find work.

The size of the initial investment depends on the generosity and duration of public assistance, the stringency and efficiency of the admissions process, and the speed with which asylum seekers and refugees can start working. While some upfront costs are a humanitarian necessity, additional spending on refugees may (or may not) be a worthwhile investment, as section 3 discusses.

Another important factor is whether someone is an asylum seeker (who claims refugee status upon arriving in a country) or a resettled refugee (whose refugee status has already been accepted before arrival). It tends to be cheaper to process asylum claims before people arrive and then to resettle only those whose refugee status has been accepted, not least because asylum seekers are sometimes detained at public expense and those whose claims are rejected may then be deported.

The US, Canada and Australia focus their initial investment on resettled refugees, spending around $7,400–$9,100 on each. The EU mostly receives asylum seekers and spends up to €12,000 ($12,960) on each in the first year. Further details are provided in the bullet points.

• In the US, the budget for refugee resettlement was $582 million in fiscal year 2014. Since around 70,000 refugees were resettled, this amounts to $8,300 per refugee. Refugees are also eligible for other federally funded benefit programmes, if they meet all other requirements, including Supplemental Security Income (SSI), Temporary Assistance for Needy Families (TANF), and the Supplemental Nutrition Assistance Program (SNAP). But refugees are expected to repay the cost of their resettlement flight to the US. In contrast, asylum seekers are eligible for few, if any, social or medical benefits until their application is granted or they receive authorization to work (which is hard to obtain, as section 3 explains). 46
• In Canada, government-assisted refugees who lack their own financial resources or income get a one-off set-up allowance of about C$900 ($634) plus about C$800 ($563) a month for up to a year, so a maximum of around C$10,500 ($7,394) each.\textsuperscript{59} There are sometimes small one-time allowances for pregnant women, newborns and young school-age children. But government-assisted refugees are required to pay back with interest the cost of their trip to Canada and their initial medical exam. Privately sponsored refugees must rely on their sponsor for the sponsorship period, usually about a year. Asylum seekers receive no social assistance until they’re permanent residents, at which point they’re eligible for provincial social assistance.

• In Australia, the budget for settlement services in fiscal year 2014–15 was A$142.8 million ($100.6 million). Since around 11,000 visas were granted to refugees and beneficiaries of the special humanitarian programme, this amounts to A$12,982 ($9,142) per refugee.\textsuperscript{50} A further A$27.8 million ($19.6 million) was allocated in support for 2,750 “authorised onshore arrivals” (people who arrive in Australia with a visa and then seek asylum), amounting to A$10,009 ($7,119) per person. Asylum seekers who attempt to reach Australia by boat are detained offshore in Nauru or Papua New Guinea, at a cost of A$430,000 ($296,000) a year each.\textsuperscript{51}

• In Europe, monthly allowances for asylum seekers vary widely across countries, from about €10 ($10.80) for single adults housed in reception centres to more than €300 ($324) for those without accommodation.\textsuperscript{61} The total cost of accommodating an asylum seeker and processing their claim typically ranges from €8,000 ($8,640) to €12,000 ($12,960) for the first year, but may be much lower for fast-track processing.\textsuperscript{52}

**DEMAND DIVIDEND**

In economies where demand is depressed – as is the case in many European economies now – this initial investment in refugees acts like a fiscal stimulus, yielding an immediate demand dividend. Spending on refugees in advanced economies is typically too small to have a significant macroeconomic impact. The US budget for refugee resettlement is equivalent to only 0.003% of GDP.\textsuperscript{54} But in some EU countries spending in 2016 is set to be large enough to affect the economy as a whole. With the eurozone economy still weak and interest rates near zero, this additional spending is likely to boost growth, especially since it will mostly go on local goods and services.

The IMF estimates that government spending on asylum seekers and refugees in Europe will rise from 0.08% of GDP in 2014 to 0.19% in 2016 (see Table 1).\textsuperscript{55} The biggest rise is projected to be in Sweden, from 0.3% of GDP to 1%. Germany’s spending is forecast to increase from 0.08% of GDP to 0.35%. The European Commission also proposes to reallocate €1.7 billion ($1.8 billion, or 0.01% of EU GDP) from the EU budget to address the refugee crisis, bringing total spending to €9.2 billion ($9.9 billion, or 0.07% of EU GDP) in 2015–16.

**TABLE 1: ESTIMATED FISCAL COSTS OF ASYLUM SEEKERS AND REFUGEES IN SELECTED EU COUNTRIES (% OF GDP)**

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>0.08</td>
<td>0.16</td>
<td>0.31</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.07</td>
<td>0.09</td>
<td>0.11</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.24</td>
<td>0.47</td>
<td>0.57</td>
</tr>
<tr>
<td>Finland</td>
<td>0.09</td>
<td>0.13</td>
<td>0.37</td>
</tr>
<tr>
<td>France</td>
<td>0.05</td>
<td>0.05</td>
<td>0.06</td>
</tr>
<tr>
<td>Germany</td>
<td>0.08</td>
<td>0.20</td>
<td>0.35</td>
</tr>
<tr>
<td>Greece</td>
<td>n.a.</td>
<td>0.17</td>
<td>n.a.</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.03</td>
<td>0.04</td>
<td>0.05</td>
</tr>
<tr>
<td>Italy</td>
<td>0.17</td>
<td>0.20</td>
<td>0.24</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.10</td>
<td>0.18</td>
<td>0.23</td>
</tr>
<tr>
<td>Spain</td>
<td>0.006</td>
<td>0.006</td>
<td>0.03</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.3</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>UK</td>
<td>0.05</td>
<td>0.016</td>
<td>n.a.</td>
</tr>
<tr>
<td>GDP-weighted average</td>
<td>0.08</td>
<td>0.13</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Source: IMF estimates\textsuperscript{56}
The IMF calculates that this additional spending on asylum seekers and refugees will boost EU GDP by 0.09% by 2016 and by 0.13% by 2017. By 2017, the largest impact is likely to be in Austria, where GDP is estimated to be 0.5% higher, followed by Sweden (0.4%) and Germany (0.3%). Similarly, the Organisation for Economic Co-operation and Development (OECD) estimates that in 2016 and 2017 additional government spending on asylum seekers and refugees will boost growth in the EU by about 0.1–0.2% of GDP.

WORK PAYS

In addition to this demand dividend, refugees can provide further economic dividends once they start working. The IMF calculates that EU GDP could be about 0.25% higher by 2020, with Austria, Germany and Sweden experiencing a GDP increase of 0.5–1.1% (see Box 3).

Looking specifically at Germany, Marcel Fratzscher and Simon Junker of the German Institute for Economic Research (DIW Berlin) use a simple investment model to project refugees’ economic contribution. On the basis of conservative assumptions about refugees’ potential contribution to labour supply and economic demand, they calculate that within five years refugees will provide a net benefit to the German economy (see Chart 1) and that by 2030 they will have boosted the average income of the existing German population by 0.5% (see Chart 2). Even in a pessimistic scenario, refugees provide a net benefit within ten years and a fractional boost to German incomes by 2030. All these calculations are likely to be underestimates of refugees’ economic contribution, since they omit their broader dynamic impacts.

How great a return does an initial fiscal investment in asylum seekers and refugees yield? IMF estimates of the economic impact of asylum seekers and refugees on the EU suggest it can be considerable. Calculations based on data kindly provided by the IMF suggest that funding through borrowing the initial costs of welcoming refugees together with ongoing social transfers and unemployment benefits for those who remain out of work would increase public debt by €68.8 billion (in 2014 euros) between 2015 and 2020. Cumulative GDP over that period would be €126.6 billion higher (in 2014 euros). Thus, investing one euro in refugee assistance can yield nearly two euros in economic benefits within five years (see Appendix for calculations). This is likely to be an underestimate of refugees’ economic contribution, since it does not include their dynamic contribution to enterprise and growth.

| AN EXCELLENT RETURN ON INVESTMENT |

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| CHART 1 | NET BENEFIT OF REFUGEES TO GERMAN ECONOMY (% OF GDP) |

| Chart 1. Net benefit to German economy (% of GDP) |

| Chart 2. Change in income per person of existing German population (%) |

Source: DIW Berlin

| CHART 2 | CHANGE IN INCOME PER PERSON OF EXISTING GERMAN POPULATION (%) |

Source: DIW Berlin
4D DIVIDEND
Once they start working, some refugees do dirty, difficult, (relatively) dangerous and dull (4D) jobs that locals spurn, freeing locals to do higher-skilled jobs that they prefer.1

A common misconception is that refugees’ economic contribution depends on their skill level, with highly skilled refugees making a positive contribution and less-skilled ones having a negligible – or even a negative – impact. But in fact, refugees’ labour-market contribution depends not on how skilled they are, but largely on whether their characteristics are different and complementary to those of the local workforce.

Low-skilled refugees – and, indeed, higher-skilled ones who cannot initially find work commensurate with their skill levels – are likely to be more willing to do jobs that locals with higher aspirations would rather not do, such as clean offices, pick fruit, work in hotels and restaurants and care for the elderly, the fastest area of employment growth in both Europe and North America (see Box 4).6

In the US, for instance, 13 of the 20 occupations with the biggest projected employment growth over the next decade pay less than the median wage (see Table 2).61 The top three occupations, and the sixth, are all primarily related to care for the elderly. Many others are low-skilled occupations, such as food preparation workers, construction labourers, janitors and cleaners, freight and stock movers, and maids.

| TABLE 2 | TOP 20 OCCUPATIONS IN THE UNITED STATES WITH THE BIGGEST PROJECTED JOB GROWTH (THOUSANDS) |
|----------|--------------------------------------------------|----------------------------------|-----------------|-----------------|---------------------|
| People employed | Change, 2014-24 | Median annual wage |
| 2014 | 2024 | Number | % | |
| Total, all occupations | 150,539.9 | 160,328.8 | 9,788.9 | 5.5 | $35,540 |
| Personal care aides | 1,768.4 | 2,226.5 | 458.1 | 25.9 | $20,440 |
| Registered nurses | 2,751.0 | 3,190.3 | 439.3 | 16.0 | $66,640 |
| Home health aides | 913.5 | 1,261.9 | 348.4 | 38.1 | $21,380 |
| Food preparation workers and servers, including in fast food | 3,159.7 | 3,503.2 | 343.5 | 10.9 | $18,410 |
| Retail salespersons | 4,624.9 | 4,939.1 | 314.2 | 6.8 | $21,190 |
| Nursing assistants | 1,492.1 | 1,754.1 | 262.0 | 17.6 | $25,100 |
| Customer service representatives | 2,581.8 | 2,834.8 | 252.9 | 9.8 | $31,200 |
| Cooks in restaurants | 1,105.7 | 1,268.7 | 158.9 | 14.3 | $22,490 |
| General and operations managers | 2,124.1 | 2,275.2 | 151.1 | 7.1 | $97,270 |
| Construction labourers | 1,159.1 | 1,306.5 | 147.4 | 12.7 | $31,390 |
| Accountants and auditors | 1,332.7 | 1,475.1 | 142.4 | 10.7 | $65,940 |
| Medical assistants | 591.3 | 730.2 | 138.9 | 23.5 | $29,960 |
| Janitors and cleaners | 2,361.6 | 2,496.9 | 116.3 | 5.8 | $22,840 |
| Software developers, applications | 718.4 | 853.7 | 135.3 | 18.8 | $95,510 |
| Labourers and freight, stock, and material movers, hand | 2,441.3 | 2,566.4 | 125.1 | 5.1 | $24,430 |
| First-line supervisors of office and administrative support workers | 1,466.1 | 1,587.3 | 121.2 | 8.3 | $50,780 |
| Computer systems analysts | 567.8 | 686.3 | 118.6 | 20.9 | $82,710 |
| Licensed practical and vocational nurses | 719.9 | 837.2 | 117.3 | 16.3 | $42,490 |
| Maids and housekeeping cleaners | 1,457.7 | 1,569.4 | 111.7 | 7.7 | $20,220 |
| Medical secretaries | 527.6 | 635.8 | 108.2 | 20.5 | $32,240 |

Source: Bureau of Labor Statistics64

Christine Kayisanabo’s aunt sponsored her move to Canada in 2010, after she lost eight members of her family in Rwanda’s 1994 genocide and lived in fear of her killer, who is still free.62 Now settled in Ottawa, she works full-time at the Perley and Rideau Veterans’ Health Centre, a long-term-care facility for the elderly, including military veterans.

After a year of English classes, she took an evening course to become a personal service worker, aiding nursing staff and helping patients bathe, dress and eat. She then decided to volunteer at the Perley and Rideau, where she was eventually hired. “In my culture, we respect old people,” said Kayisanabo. “I compare the old people with a dictionary. They know many things.”

Barbara Wilson, her supervisor, said the health centre hired people from around the world so it was easy for people who, like Kayisanabo, are from a different culture and still learning English to fit in. “She’s good with the residents, she’s very thorough, has a lot of commitment. We’re proud to have her here as a member of staff.”

The Perley and Rideau’s CEO, Akos Hoffer, who was a child refugee from Hungary, is one of nine former refugees who work at the centre. “When you get people who have been refugees and people who have been in conflict in a safe place together, they’re probably pretty comfortable with one another,” he said.

Because of stringent safety and health regulations in developed countries, even relatively dirty jobs are much less dangerous than elsewhere or previously. The sector with the highest fatal injury rate in the US is agriculture, forestry, fishing and hunting, where there were 24.9 fatal work injuries per 100,000 full-time equivalent workers in 2014. Bureau of Labor Statistics. “Census of Fatal Occupational Injuries Summary, 2014.” http://www.bls.gov/news.release/cfoi.nr0.htm
Fears that refugees who do low-skilled jobs harm the labour-market prospects of low-skilled locals are typically misplaced. To put it simply, there is not a fixed number of available jobs. Refugees who take jobs also create them. When they spend their wages, they boost demand for the people who produce the goods and services they consume. And they also create jobs for people in complementary lines of work. For instance, refugees who become construction workers create jobs for locals who are supervisors or sell building supplies. Nor do refugees tend to depress local wages, not least because an influx of workers tends to boost investment. In fact, by doing low-skilled jobs, refugees enable low-skilled locals to do higher-skilled, more productive work that they prefer, and thus to enjoy higher wages and job satisfaction.44

In a study of the impact of refugees on the Danish labour market between 1991 and 2008, Mette Foged of the University of Copenhagen and Giovanni Peri of the University of California at Davis found that an influx of low-skilled refugees, who mostly did not speak Danish and filled elementary and manual-labour positions, caused unskilled and low-skilled locals to shift towards more complex, higher-skilled, non-manual work, thereby boosting their wages, employment and occupational mobility.45 Foged and Peri found no evidence that refugees raised unemployment or decreased employment for unskilled locals. Denmark has a very flexible labour market, with low hiring and firing costs and decentralised wage setting. This flexibility was crucial in enabling local workers to shift to non-manual occupations and more complex tasks. Foged and Peri argue that an influx of low-skilled refugees ought to have a similarly positive impact on other economies with a flexible labour market, such as the US and the UK.

A similar effect has been observed in Turkey, which has received more than 2 million refugees from Syria since the civil war broke out in 2011.48 A study by Ximena Del Carpio of the World Bank and Mathis Wagner of Boston College based on 2014 data from the Turkish Labour Force Survey found that Syrian refugees, hardly any of whom have Turkish work permits, displaced informal, low-educated, female Turkish workers, especially in agriculture.47 At the same time, the inflow of refugees created higher-wage formal jobs, allowing Turkish workers to upgrade their occupation. That, in turn, raised average Turkish wages.

Flexible labour markets can adjust rapidly to even very large inflows of people. After the collapse of the Soviet Union, more than 710,000 Russian Jews emigrated to Israel, increasing its working-age population by over 15% in only seven years. While not technically refugees, they were admitted for political reasons, rather than because there was a higher risk that refugees will end up unemployed; section 3 discusses how to address this. In Sweden, which has such an insider-outsider labour market, a study by Joakim Ruist of the University of Gothenburg found that while refugees often took jobs previously filled by earlier immigrants from low and middle-income countries, they did not raise the overall unemployment rate, indicating that they may also have created jobs for people in complementary lines of work.49

The bottom line is that refugees who do low-skilled jobs make an important contribution to the economy through the work they do, while also having a positive impact on locals’ labour-market prospects.46

DEFTNESS DIVIDEND

Higher-skilled refugees (and refugees’ children who end up highly skilled) may have or acquire different and complementary skills that enable them to fill gaps in the labour market. Even economies with high unemployment often have shortages of workers with particular skills. Skilled refugees can also enhance the productivity of local workers. For example, a hard-working Syrian nurse may boost the productivity of a Swedish doctor; enabling them to deliver better patient care.

Some refugees are truly exceptional (see Box 5). Many more are highly educated. In the US, 28% of refugees aged 25 and older had a graduate degree in 2009–11, a similar proportion to that among people born in the US.52 Some refugee groups have much higher education levels than Americans, notably Russians, Iranians and Ukrainians.53

The most recent figures for the EU as a whole are from 2008. In the EU-15, the 15 wealthiest countries that joined the EU before 2004, 26% of longstanding male refugees (those in the EU more than ten years) were university educated in 2008, compared with 25% of an equivalent domestic workforce (aged 35 and over).54 Among recent male refugees (those in the EU less than 10 years), 16% were university educated, compared with 24% of an equivalent domestic workforce (aged 20–34). Among women, 25% of longstanding refugees and 22% of the equivalent domestic workforce were university educated, as were 19% of recent refugees and 32% of an equivalent domestic workforce.
Refugees can help fill the many skills shortages in European countries such as Sweden, the Netherlands and Germany where there are currently many skills shortages, refugees can help fill them. In Sweden, 30% of refugees in 2015 had a college or university education. More than two-thirds of those had skills that matched graduate job vacancies. Syrians tend to be particularly well educated: 37% of newly arrived Syrian refugees in 2014 had a college or university education.

The Swedish government’s long labour-shortage list includes graduate occupations, such as software developers, physicists and doctors, as well as skilled vocational ones, such as bricklayers, nurses and mechanics. Refugees are often a good fit for these kinds of roles. In October 2015, the most common occupations for which refugees had experience and/or education were nurses, dentists, pharmacists, chefs, teachers, mechanics and various kinds of technicians and engineers.

Refugees could also help fill gaps in the Dutch labour market. In the Netherlands, about a third of working-age refugees surveyed in the first half of 2015 by Centraal Orgaan opvang asielzoekers (COA), the Dutch asylum agency, were university educated. In Germany, where asylum seekers are asked on a voluntary basis during their asylum application about their education level, skills and qualifications during their asylum application, 15% of respondents in 2014 reported having a degree. Refugees could also help fill gaps in the Dutch labour market. In the Netherlands, about a third of working-age refugees surveyed in the first half of 2015 by Centraal Orgaan opvang asielzoekers (COA), the Dutch asylum agency, were university educated. In Germany, where asylum seekers are asked on a voluntary basis during their asylum application about their education level, skills and qualifications during their asylum application, 15% of respondents in 2014 reported having a degree.

**Box 5 | Exceptional People**

- **Henry Kissinger**, who fled Nazi Germany to the US in 1938, is a world-renowned political thinker who was US secretary of state from 1973 to 1977.
- **Isabel Allende**, who fled to the US after General Augusto Pinochet’s coup in Chile, is a world-famous author of books such as *The House of Spirits*.
- **Milan Kundera**, a refugee from Communist Czechoslovakia, is the author of bestselling books such as *The Unbearable Lightness of Being*.
- **Madeleine Albright**, a refugee to the US after the Communist takeover in Czechoslovakia, became America’s first female secretary of state, serving from 1997 to 2001.
- **Milos Forman**, a refugee to the US after the crushing of the Prague Spring in 1968, is an Oscar-winning director of films such as *One Flew Over the Cuckoo’s Nest* and *Amadeus*.
- **Carlos Acosta**, a refugee from Cuba, was until recently a principal dancer at London’s Royal Ballet.
- **Alek Wek**, one of the first black supermodels, was a refugee to Britain from Sudan.
- **Saido Berahino**, a refugee from war-torn Burundi, is a rising star who plays football (soccer) for England’s national team.
- **Luol Deng**, a refugee from Sudan, was twice an NBA All-Star, played basketball for the Chicago Bulls for many years and is now with the Miami Heat.

- **Saido Berahino**, a refugee from war-torn Burundi, is a rising star who plays football (soccer) for England’s national team.

**Box 6 | From Syria to Spotify**

Rami Sabbagh, a 31-year-old financial analyst, fled Damascus after President Bashar al-Assad’s regime put his name on a wanted list for helping refugees from the Syrian capital’s bombed-out suburbs. Some two years later, in March 2015, Spotify, a Swedish music-streaming service, hired him after a four-month work placement at its Stockholm headquarters.

“For four years I would never have imagined ending up in Sweden,” he said, recalling how his life was changed by the civil war that erupted in his country in 2011. “My career was moving forward, I’d been promoted at my bank, I had my own apartment, my own car and my family there. I had a life. But some things force you to move forward, just leave everything behind and try to start a new life.”

After he arrived in the Swedish town of Malmö in December 2012, migration authorities placed him in a village 1,200 kilometres (750 miles) further north where he waited for his residence permit.

Eight months later, papers in hand, he used family contacts to find a room in Stockholm and spent a year studying Swedish, working odd jobs and applying for positions at English-speaking companies before starting Korta Vagen (Short Cut), a fast-track state-funded programme for university graduates, which led to his employment at Spotify.
Refugees could help fill skills shortages in Germany. According to the government, the country needs 173,000 workers trained in mathematics, IT, natural sciences and technical subjects (known as MINT jobs) and this shortage could almost quadruple by 2020 without additional measures.40 The government’s “Make it in Germany” website says the country also needs 5,000 doctors.40 Germany is also looking for workers with vocational qualifications in areas from welding to masonry.44 More than 1,800 employers offer work and apprenticeships on workeer.de, a website specifically aimed at matching refugees to jobs.46

### BOX 7 | A PERFECT FIT IN GERMANY

Daniel Kok, the owner of a small flooring business in the German city of Dortmund, had been searching for a suitable trainee for over a year when the local trades association asked if he would take on an asylum seeker.87 Kok was sent Tesfagebriel Abraha, a 31-year-old refugee from Eritrea who had never heard of parquet floors before he started laying them. Abraha, who fled Eritrea in 2012 after six years in the military, made it to Germany in November 2014 and began learning German at his refugee shelter. After a successful two-week trial in July 2015, he is doing an apprenticeship that lasts until 2018. “I didn’t hire Abraha out of starry-eyed idealism but because he is qualified, enthusiastic and eager to work,” said Kok, who said he has had many unsatisfactory trainees. Nearly one in four businesses in Dortmund have open positions, according to the local Chamber of Trades. “The jobs are there but there aren’t always appropriate applicants that have the right qualifications,” a spokeswoman said. Apprenticeships often do not appeal to Germans, who prefer to go to university instead.

To fill the gap, the Chamber invited some 85 refugees to take language and mathematics tests earlier this year and chose 15 from Syria, Congo and Eritrea to train as opticians, electricians, mechanics, metal workers and parquet-floor fitters.

### DYNAMISM DIVIDEND

Enterprising refugees often start new businesses that create wealth, employ locals, make the economy more dynamic and adaptable, and boost international trade and investment. Like migration itself, starting a business is a risky venture that takes hard work to make it pay off. For those who arrive in a new country without contacts or a conventional career, it is a natural way to get ahead. Migrants in general and refugees in particular have made an astonishing contribution to America’s economic success. A study by the Ewing Marion Kauffman Foundation found that in 2012 immigrants to the US were almost twice as likely to start businesses as people born in the US.44 Indeed, more than 40% of Fortune 500 companies in 2010 were founded by an immigrant or the child of one.

Andy Grove, a refugee from Hungary after the Soviet invasion in 1956, helped found and lead Intel, the world’s leading semiconductor chip maker, which was valued at $163 billion at the end of 2015.45 George Soros, who fled Hungary after the Soviet occupation in 1944, is perhaps the world’s most successful hedge-fund manager, with an estimated net worth of $24 billion, and is also a philanthropist who intends to donate his fortune to charitable causes.46 Jan Koum, who fled anti-Semitism in Ukraine and grew up using food stamps in California, co-founded WhatsApp, a smartphone-messaging service that was bought by Facebook for $22 billion in 2014 and now has one billion users.47 The father of Apple co-founder Steve Jobs was a refugee from Syria.48

Refugees have also made an outsized entrepreneurial contribution to Australia. Official figures confirm that refugees are the most entrepreneurial migrants.90 After five years in Australia, around 10% of refugees have started their own business.48 After ten years or more, around 30% have done so. Graeme Hugo of the University of Adelaide found that longstanding refugees from countries such as Hungary, Romania and Lebanon were the most entrepreneurial, while recent refugees from countries such as Somalia, Iran and Iraq also had relatively high levels of business ownership.91 Australia’s most successful refugee entrepreneurs include Frank Lowy, who fled post-war Czechoslovakia. He co-founded the Westfield Group, which owns and operates shopping centres worldwide and was valued at A$14 billion ($10 billion) at the end of 2015. Lowy is now Australia’s fourth richest man, with a personal fortune of A$5 billion ($3.5 billion).48 Harry Triguboff, who fled the Communist takeover of China, is a residential property developer who has become Australia’s third richest man, with a personal fortune of A$6.9 billion ($4.9 billion).90 Another billionaire property developer who is among Australia’s richest people is John Gandel, the son of Polish-Jewish refugees.90 Tan Le, a refugee from Vietnam, co-founded Emotiv, a producer of headsets that read brain signals and facial movements to control technology in computer games and apps. She then co-founded SASme, a pioneering business which provides platforms for the SMS applications market.48 Huy Truong arrived in Australia in 1978, at the age of seven, on a small fishing boat carrying him and 40 other Vietnamese people. In 1999, together with his wife and sisters, Truong set up wishlist.com.au, a gifting site, which was sold to Qantas in 2012. He is now a private-equity investor.90
**REFUGEES WORK: A HUMANITARIAN INVESTMENT THAT YIELDS ECONOMIC DIVIDENDS**

Hoshi Kaar, a refugee from war-torn Somalia who grew up in a refugee camp in Kenya, arrived in Australia as a 17-year-old boy unable to speak English and without much schooling or understanding of the internet. Thirteen years later, he had co-founded three tech companies which employed 15 people.

On his second day in Australia, a librarian helped Kaar get started on the computer. “A lady asked me if I wanted to use the internet,” he recalls. “I was very confused because I didn’t know what the internet was. It became a fascination and, within a week, I was googling African music and things like that.”

Soon he got a job stacking shelves, bought a computer and connected it to the internet. “From there, it was lift-off,” he says. “Even though I didn’t go to school, I realised I was a quick learner.” Kaar took advantage of government programmes to learn English and study. These helped him get started in a career.

Kaar started Plycode, a software development company, with former colleagues, as well as Kazleko, an online recruitment platform for computing jobs that uses skills tests and video interviewing. Employly, which was launched in Kenya in 2014, is a similar platform. “I always have a dream to make a difference to where I come from,” Kaar says.

In Britain, newcomers are nearly twice as likely as locals to start a business. Successful refugee entrepreneurs include Maurice and Charles Saatchi, founders of Saatchi & Saatchi advertising agency, who fled Baghdad in 1947. George Weidenfeld, who fled Austria in 1938, founded the Weidenfeld & Nicolson publishing house. Stephanie Shirley (née Buchthal), who fled from Germany to Britain in 1939 as a Kindertransport child refugee, founded Freelance Programmemers, a software company now known as Xansa, which had revenue of £380 million ($543 million) when it became a private company in 2007. Sukhpal Singh Ahluwalia arrived in the UK at age 13 when his family was expelled along with other Ugandan Asians by Uganda’s brutal dictator, Idi Amin. After borrowing £5,000 ($7,150), he took over a struggling car parts business, Highway Autos. This later became Euro Car Parts, which he sold in 2011 for £225 million ($322 million). Laxmishanker Pathak, an Asian refugee from Kenya, arrived in Britain in the 1950s with £5 ($7) in his pocket. He began working as a street sweeper, then started Patak’s, a brand of curry pastes and spices that has become a staple of British Indian food.

Li Ka-Shing, who was among the mainland Chinese who sought refuge in then-British-run Hong Kong after the Communist Revolution in 1949, is now Asia’s richest man, with a fortune estimated at $33 billion.

DIVERSITY DIVIDEND

Thanks to their diverse perspectives and experiences, individual refugees and other migrants individually, and the interaction between diverse people more generally, can help generate new ideas. Since refugees are migrants who have had particularly distinctive experiences, their perspectives may be especially valuable.

Notable refugee inventors include Carl Djerassi, a Jewish refugee from Austria, who together with Mexican scientists developed the oral contraceptive pill. Many refugees have won Nobel prizes, including three German-Jewish refugees who fled to Britain: Max Born, who helped develop quantum mechanics; Hans Krebs, for his work on cell biology; and Bernhard Katz, for his work on nerve biochemistry. These were clearly exceptional individuals. But at the same time, people with a diverse background have a natural advantage. “Persons who have been uprooted from traditional cultures, or who have been thoroughly exposed to two or more cultures, seem to have the advantage in the range of hypotheses they are apt to consider, and through this means, in the frequency of creative innovation,” according to Donald Campbell, one of the leading psychologists in creativity research in the 1960s. Simply by being aware that there are several ways of approaching a problem, someone from a multicultural background is more likely to view any situation from multiple perspectives. “The mere fact that an individual is different from most people around him promotes more open and divergent, perhaps even rebellious, thinking in that person. Such a person is more prone to question traditions, rules, and boundaries — and to search for answers where others may not think to.”

People who are fluent in several languages also tend to be more creative. “Languages codify concepts differently, and the ability to draw upon these varied perspectives during a creative process generates a wider range of associations,” Frans Johansson explained in The Medici Effect: Breakthrough Insights at the Intersection of Ideas, Concepts, and Cultures.

**BOX 8 | A YOUNG SOMALI TECH ENTREPRENEUR IN AUSTRALIA**

**BOX 9 | FROM IRAN TO INVENTION**

Saeid Esmaeilzadeh, who was born in Iran, moved to Sweden as a refugee at the age of eight. When he was growing up in the 1980s, his parents were unemployed and he resolved that he would not suffer the same fate. He studied hard and at the age of 28 became the youngest associate professor in Sweden. He went on to discover the world’s hardest glass and set up his own company to commercialise his invention.

Esmaeilzadeh has since built more than 15 businesses to sell all sorts of ground-breaking inventions. They include a medical technology company, listed on the NASDAQ stock exchange, that designs and manufactures individually customised implants for damaged joints, as well as a clean-tech company that finds environmentally friendly ways to treat wood pulp and textiles.
What is true of individuals is also true of groups. Those that display a range of perspectives outperform groups of like-minded experts at problem solving, as Scott Page of the University of Michigan at Ann Arbor explained in *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies.*

**DEMOGRAPHIC DIVIDEND**

Refugees are different in another important way: they are mostly young. Those resettled in the US in fiscal year 2013 had a median age of 25 in 2013, 83% of asylum seekers registered in the EU were younger than 35, they had a median age of around half that of the German population, which is 46. Younger refugees are of particular benefit to ageing societies, especially those with shrinking local working-age populations, because they complement older, more experienced workers, can help care and pay for the swelling ranks of pensioners and can help support population numbers, thus spurring investment and growth.

Refugees and other migrants can offset and mitigate some of the costs of ageing populations and shrinking workforces. These effects are starker in Europe, but also affect the US, Canada and Australia (see Table 3).

Because people in advanced economies are having fewer children, the native working-age population in many of these countries is declining. On average, a woman in the EU is expected to have 1.55 children in her lifetime. This total fertility rate is well below the replacement rate of 2.1 children needed to ensure population numbers, thus spurring investment and growth.

**Societies**

Diversity Creates Better Groups, Firms, Schools, and Societies

The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies

His research shows that "organisations, firms and universities that solve problems should seek out people with diverse experiences, training and identities that translate into diverse perspectives and heuristics." That diversity dividend can be large, because an ever-increasing share of our prosperity in advanced economies comes from solving problems – such as developing new medicines, computer games and environmentally friendly technologies, designing innovative products and policies and providing original management advice.

Empirical evidence confirms that this diversity dividend can be substantial. An exhaustive study by Richard B. Freeman and Wei Huang, both of Harvard University, of over 15 million scientific papers written in the US between 1985 and 2008 found that those co-authored by people of different ethnic backgrounds tended to be published in higher-impact journals and cited more often, leading them to conclude that "diversity in inputs into papers leads to greater diversity in outputs and cited more often, leading them to conclude diversity in outputs into papers leads to greater diversity in outputs."

More than three in four patents generated at the top ten patent-producing US universities had at least one foreign-born inventor in 2011, according to a study by the Partnership for a New American Economy. Using a global patents database, Canten Fink, Ernest Miguel and Julio Raffo of the World Intellectual Property Organization (WIPO) found that in the US, which is by far the most popular destination for migrant inventors, migrants accounted for 18% of all inventors. In Europe, studies find that diversity is beneficial at an economy-wide level, in specific sectors and within individual firms. Diversity boosts both productivity and patenting.

**TABLE 3 | DEMOGRAPHIC TRENDS**

<table>
<thead>
<tr>
<th>Total fertility rate</th>
<th>Projected population change (zero migration)</th>
<th>Old-age dependency ratio*</th>
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<td>2013–2020 Retirement-age population (65+)</td>
<td>2015–2030 Retirement-age population (65+)</td>
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<tr>
<td>Iceland</td>
<td>1.93 -2,243 8,978 -4,328 29,963</td>
<td>4.8 3.0</td>
</tr>
<tr>
<td>Norway</td>
<td>1.78 -913 104,644 -63,785 335,594</td>
<td>4.1 2.8</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1.52 -509,363 160,67 -514,915 624,916</td>
<td>3.7 2.4</td>
</tr>
<tr>
<td>United States</td>
<td>1.87 -1,083,440 8,042,782 -8,023,340 17,833,480</td>
<td>4.5 2.8</td>
</tr>
<tr>
<td>Australia</td>
<td>1.77 -20,596 568,943 -87,918 1,336,225</td>
<td>4.4 2.9</td>
</tr>
<tr>
<td>Canada</td>
<td>1.58 -568,717 1049,556 -2,358,960 2,514,639</td>
<td>4.2 2.4</td>
</tr>
</tbody>
</table>

Source: Eurostat, UN Population Division

*Ratio of working-age population to retirement-age population*

*Refugees Work: A Humanitarian Investment That Yields Economic Dividends*
Because the post-war baby-boom generation is retiring en masse and people are living longer, the number of pensioners who need to be supported by a declining native working-age population is soaring. Without migration, the EU’s retirement-age population (aged 65 and over) is projected to rise by 8.5 million between 2015 and 2020 and by 279 million by 2030. In the US, it is projected to increase by 8.0 million and by 17.4 million over the same periods (see Chart 3).

As a result, without migration, the number of people of working age in the EU per person of retirement age is projected to fall from 3.5 in 2015 to 2.5 in 2030. In the US, the projected shift is even greater, from 4.5 to 2.8, as it is in Australia, from 4.4 to 2.9, and in Canada, from 4.2 to 2.4.

The expected demographic changes in Germany are particularly stark. Without migration, by 2030 the working-age population is projected to shrink by a sixth (8.7 million people), while the retirement-age population is likely to grow by more than a quarter (4.7 million people) and the overall population to shrink by 5 million people. Germany would then have only two people of working age for each person of retirement age.

Youth, hard-working, taxpaying refugees would be a boon to Europe’s senescent economies, and also provide a boost to the US, Canada and Australia. Since the projected decline in advanced economies’ working-age population is concentrated among younger workers, and healthy economies need a mix of younger, more dynamic workers and older, more experienced ones, young refugees are particularly complementary.

Young refugees could also help pay for the rising number of elderly people. Europe’s public pensions systems consist mostly of pay-as-you-go schemes, where the current generation of workers pays for the older generation’s pensions. With the number of pensioners set to rise sharply, additional taxpaying refugees can help spread the bill over a larger number of workers. Refugees could also help care for the rapidly rising number of elderly people (as described earlier).

Last but not least, refugees can alleviate concerns that demographic decline will lead to economic stagnation. With a shrinking workforce and a stagnant population, there may be little incentive for businesses to invest because the capital stock per worker tends to rise in any case and consumption growth is likely to be weak. Admitting large numbers of refugees would boost the size of the workforce and the population, stimulating consumption, investment and economic growth.

**DEBT DIVIDEND**

While welcoming refugees generally implies an initial fiscal cost, they also pay taxes once they start working. Over time, their net contribution to public finances tends to become positive, especially since their taxes help service and repay the huge public debts that have been incurred in many countries to provide benefits for the existing population. Moreover, as refugees boost economic growth, that in turn indirectly improves public finances by increasing tax revenues and reducing welfare spending.

OECD research found that migrants in general are typically (small) net contributors to public finances (see Table 4). Remarkably, this is true even though the OECD study was based on data from 2007–9, when budget deficits ballooned because of the financial crisis. Migrants are typically schooled abroad, so the cost of their education is borne by others. They tend to be younger (and so healthier) than locals. Those who remain only temporarily also tend never to claim a pension.

In countries with flexible labour markets where migrants’ employment rates are high, refugees tend to make a more positive fiscal contribution than in countries with insider-outsider labour markets, where unemployment rates are higher. In Germany and France, the OECD estimated that migrants’ net fiscal contribution was negative, largely because migrants tended to be older and so were disproportionately pensioners.

**CHART 3 | DEMOGRAPHIC CHANGE, EU AND US, 2015–2030 (MILLION PEOPLE)**

Source: Eurostat, UN Population Division
The OECD estimates did not include spending on defence and debt service. Yet for countries with high public debts, an influx of newcomers is particularly beneficial because it spreads the burden of servicing debts over a larger number of taxpayers (see Table 5). One study found that an annual net influx of 200,000 migrants to Germany reduced the present value of lifetime taxes on the existing population from $203,200 to $135,000 – that is, by more than $68,000 per person.14

### TABLE 4 | ESTIMATED NET FISCAL IMPACT OF MIGRANTS (% OF GDP, 2007–9 AVERAGE)

<table>
<thead>
<tr>
<th>Country</th>
<th>Impact (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>0.00</td>
</tr>
<tr>
<td>Austria</td>
<td>0.12</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.76</td>
</tr>
<tr>
<td>Canada</td>
<td>-0.06</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.11</td>
</tr>
<tr>
<td>Finland</td>
<td>0.16</td>
</tr>
<tr>
<td>France</td>
<td>-0.52</td>
</tr>
<tr>
<td>Germany</td>
<td>-1.13</td>
</tr>
<tr>
<td>Greece</td>
<td>0.98</td>
</tr>
<tr>
<td>Ireland</td>
<td>-0.23</td>
</tr>
<tr>
<td>Italy</td>
<td>0.98</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.40</td>
</tr>
<tr>
<td>Norway</td>
<td>0.42</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.52</td>
</tr>
<tr>
<td>Spain</td>
<td>0.54</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.20</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1.95</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.46</td>
</tr>
<tr>
<td>United States</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Source: OECD13

### TABLE 5 | GROSS PUBLIC DEBT IN SELECTED ADVANCED ECONOMIES, 2014

<table>
<thead>
<tr>
<th>Country</th>
<th>% of GDP</th>
<th>Per person employed (national currency)</th>
<th>Per person employed (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>88.6</td>
<td>€54,645</td>
<td>$59,017</td>
</tr>
<tr>
<td>Austria</td>
<td>84.2</td>
<td>€65,745</td>
<td>$71,005</td>
</tr>
<tr>
<td>France</td>
<td>95.6</td>
<td>€73,620</td>
<td>$79,501</td>
</tr>
<tr>
<td>Germany</td>
<td>74.9</td>
<td>€51,227</td>
<td>$55,325</td>
</tr>
<tr>
<td>Ireland</td>
<td>107.5</td>
<td>€106,144</td>
<td>$114,636</td>
</tr>
<tr>
<td>Italy</td>
<td>132.3</td>
<td>€90,586</td>
<td>$97,833</td>
</tr>
<tr>
<td>Netherlands</td>
<td>68.2</td>
<td>€52,515</td>
<td>$56,716</td>
</tr>
<tr>
<td>Spain</td>
<td>99.3</td>
<td>€57,390</td>
<td>$61,981</td>
</tr>
<tr>
<td>Britain</td>
<td>88.2</td>
<td>£52,156</td>
<td>$74,583</td>
</tr>
<tr>
<td>Denmark</td>
<td>45.1</td>
<td>DKK 316,813</td>
<td>$45,915</td>
</tr>
<tr>
<td>Sweden</td>
<td>44.9</td>
<td>SEK 371,240</td>
<td>$43,319</td>
</tr>
<tr>
<td>United States</td>
<td>105.2</td>
<td>$122,888</td>
<td>$122,888</td>
</tr>
</tbody>
</table>

Source: Author's calculations from European Commission AMECO database16
Advanced economies also typically have very large contingent liabilities – government promises to pay pensions and provide health and social care to rising elderly populations – and an influx of working-age newcomers helps spread the cost of these too, as mentioned earlier.

Whereas migrants who come to work and start a job as soon as they arrive are immediately net contributors to the economy, refugees typically present a net fiscal cost initially. But so too are children born in that country, who are a net drain on public finances insofar as they receive a state-financed education and their parents receive government grants (such as assistance with childcare). So, refugees may become net contributors sooner than locals. A study by Access Economics found that refugees’ net fiscal contribution to Australia became positive after 12 years and that after 20 years their net contribution per person was A$4,300 (US$3,028) at 2007–8 prices.

On the other hand, a study by Joakim Ruist of the University of Gothenburg suggested that in Sweden refugees imposed a net fiscal cost of 1% of GDP on the rest of the population. The study’s conclusions seem flawed. Its sample was biased: it excluded large numbers of refugees from countries that also sent labour migrants to Sweden, such as Poland and Turkey. More than three-quarters of the presumed fiscal cost was due to “other” costs, which include spending on defence and infrastructure, even though it is not clear that admitting refugees led to increased expenditures in these areas, as well as to the large public-sector surplus in 2007. In several other spending categories, the study assumed that spending on refugees was higher, without justifying why this should be the case or providing evidence to substantiate it.

**DEVELOPMENT DIVIDEND**

Refugees can contribute economically in many ways to the country that welcomes them. They can provide a demand, 4D, deftness, dynamism, diversity, demographic and debt dividend. In addition, they can provide a development dividend to themselves and their country of origin.

The biggest economic benefit of migration tends to go to individual refugees, whose living standards may rise several-fold when they move from a developing country to an advanced one. Refugees also gain the immeasurable benefit of living in a stable, peaceful society with rule of law and the likelihood of a much longer, healthier life.

Refugees also send home money (remittances), which boosts consumption levels and sometimes investment in their country of origin. Overall, migrants sent home some $435 billion in remittances in 2014. Remittances are more than three times larger than overseas aid and, excluding China, significantly exceed foreign direct investment flows to developing countries. Data on refugees’ remittances is scarce, not least because it is often hard to collect data from countries in conflict. Remittances to Lebanon soared to an estimated $77 billion in 2014, around 17% of GDP. Much of this money is likely to be destined for Syrians in Lebanon. Remittances to Liberia, a big refugee-sending country, amounted to 18.5% of GDP in 2013.

Graeme Hugo of the University of Adelaide found that refugees were more likely than other migrants in Australia to send remittances to relatives. In his survey, 70% of respondents had at some point sent money to their homeland, and even those with very low incomes sent substantial sums home.

Research indicates that many refugees maintain strong ties to family and networks in their country of origin. This often includes a wish to contribute to the development of the country that they have fled from. Refugees also contribute on a more collective basis – for instance, through diaspora associations. These promote various aspects of development, help to build up civil society and engage in relief projects in their native country. Many diaspora associations support education, health and infrastructure, such as water supply and electricity.

While these development dividends accrue to the refugees themselves and their country of origin, they are also valuable to the host society insofar as its members place some value on the welfare of non-members. Since all advanced economies provide development aid – and indeed since most are signatories to the UN Convention and Protocol Relating to the Status of Refugees – they implicitly do.
Refugees’ outcomes vary widely, partly due to their characteristics, but also due to the policies and institutions of the welcoming country. Better policies and institutional reforms can enable refugees to progress faster and contribute more economically.

Consider Somali refugees. Their lack of economic success in many European countries is often attributed to perceived and real cultural characteristics, such as laziness, a lack of skills or their adherence to Islam. Yet Benny Carlson of Lund University compared how similar Somalis fare in Sweden and in Minneapolis, which is home to many Americans of Swedish origin. Whereas Somalis in Sweden are typically unemployed and on welfare, those in Minneapolis are mostly employed or small-business owners. This suggests that Somalis’ lack of success in Sweden is due not to their cultural characteristics but to the fact they start off as outsiders in a labour market whose institutions privilege insiders. Official statistics tell a similar story: while only 25% of Somali refugees aged 25–64 in Sweden were employed in 2010, 57% of those in the US were.
In Canada, refugees’ employment rates reach the national average within three years of arriving. Privately sponsored refugees have the highest employment rates, while government-sponsored ones reach the national average within five years.

In Europe, however, refugees are generally less likely to be employed than locals, as Chart 5 shows. Only in Italy were refugees more likely to be working than the population as a whole in 2014. While refugees’ employment rates improved over time, they tended to remain lower than average—except in Italy and Switzerland, where refugees who arrived ten or more years ago had much higher-than-average employment rates in 2014.

In Australia, refugees initially had higher unemployment rates and lower workforce participation rates than other migrants. But over time, refugees’ unemployment and participation rates converged toward those of the Australian-born.

Source: Migration Policy Institute

Source: Eurostat
EARNINGS
Refugees’ earnings tend to rise rapidly over time, although they often remain poorer than the local population. Yet even low-paid refugees contribute to the economy through their labour and taxes, as well as by enabling locals to do better-paid work, as section 2 explains.

In the US, refugees’ median household income soars over time, but in 2009-11 only those who had been in the US more than 20 years earned more than the US-born average in 2009-11 (see Chart 6). 105

WELFARE
In the US, refugees’ use of social assistance declines sharply over time, although it tends to remain higher than among people born in the US (see Chart 7). In Canada, around 80% of refugees rely on government assistance initially. 114 But within four years, 75% of that group stops relying on social assistance. 112

---

**Chart 6** | Refugees’ Median Household Income, 2009-11 ($)

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Median Household Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refugees (5yrs or less)</td>
<td>21,000</td>
</tr>
<tr>
<td>Refugees (5-10 yrs)</td>
<td>33,000</td>
</tr>
<tr>
<td>Refugees (10-20 yrs)</td>
<td>43,500</td>
</tr>
<tr>
<td>Refugees (20+ yrs)</td>
<td>52,000</td>
</tr>
<tr>
<td>US Born</td>
<td>50,000</td>
</tr>
</tbody>
</table>

Source: Author’s calculations from Migration Policy Institute 114

In Canada, refugees’ employment earnings tend to improve steadily over time but typically remain below the national average. 111

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**Chart 7** | Refugees’ Welfare Use in the US, 2009-11 (% Claiming)

<table>
<thead>
<tr>
<th>Type of Assistance</th>
<th>Refugees (5 yrs or less)</th>
<th>Refugees (5-10 yrs)</th>
<th>Refugees (10-20 yrs)</th>
<th>Refugees (20+ yrs)</th>
<th>US Born</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food stamps</td>
<td>42</td>
<td>16</td>
<td>11</td>
<td>7</td>
<td>1.6</td>
</tr>
<tr>
<td>Public Health Insurance</td>
<td>24</td>
<td>13</td>
<td>11</td>
<td>7</td>
<td>2.2</td>
</tr>
<tr>
<td>Cash welfare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.6</td>
</tr>
</tbody>
</table>

Source: Migration Policy Institute 114
POLICY PRIORITIES

All countries could do more to improve refugee outcomes. Policy priorities are highlighted in bold.

The first priority should be to get asylum seekers and refugees into work quickly. This reduces their reliance on public funds, ensures they are contributing to their local economy, and helps them adapt faster to life in their new society and lowers the chance that they will end up marginalised from the labour market and society on a longer-term basis.

To start working quickly, asylum seekers and refugees need three things: the legal right to work, appropriate skills and characteristics, and available jobs. While recognised refugees have the right to work, prospective ones (asylum seekers) generally do not. That is a particularly big problem in Europe, which mostly receives asylum seekers rather than resettled refugees — and which tends to keep them waiting, sometimes for years, to determine their refugee status. It is also a problem in the US and Australia, which mostly receive resettled refugees but also accept significant numbers of asylum seekers.

One reason governments tend to prevent asylum seekers from working is to deter migrants who are moving principally for economic reasons from masquerading as asylum seekers. But this is perverse. There is no evidence that penalising asylum seekers deters other migrants from coming. Instead, it imposes unnecessary suffering on asylum seekers. It may drive them to work illegally. And it entails a significant economic and political cost, because asylum seekers tend to remain reliant on government assistance for longer instead of starting work and paying taxes.

One way to improve refugee outcomes in the EU would be to make it easier for people to claim asylum from outside the EU, be resettled once their claim has been processed and accepted, and thus have the right to work as soon as they arrive. This has been suggested by Peter Sutherland, the Special Representative of the United Nations Secretary General for International Migration and Development, and separately by the author of this paper. (The fragile and flawed March 2016 deal between the EU and Turkey, which involves the return to Turkey of asylum seekers who arrive in Greece and the resettlement from Turkey to the EU of at most 72,000 refugees is scarcely a desirable substitute for our proposals).

All governments should also endeavour to process asylum seekers’ claims more quickly and give them the right to work in the meanwhile. Processing an asylum application takes an average of 5.3 months in Germany and 4.5 months in Sweden (which rose to 7 months in 2015) and often much longer elsewhere. In the US, an initial interview is meant to be held within 45 days of an asylum application, with a decision reached within 180 days later, but as US Citizenship and Immigration Services (USCIS) acknowledges on its website, it can take much longer.

In terms of asylum seekers’ right to work, Sweden has the best policy: those with a proof of identity who have submitted a non-frivolous asylum claim have the right to work immediately. Canada also allows asylum seekers to work if they would otherwise be a burden on the state or their private sponsor. Spain allows asylum seekers to work as soon as their asylum application is submitted. But other countries impose delays of up to 12 months along with other conditions that prevent most asylum seekers from working. Indeed, Ireland does not allow asylum seekers to work at all. In theory, asylum seekers are able to work in the US after six months but in practice hardly any can (see Table 6).

Asylum seekers also ought to have the right to be self-employed and start their own business. Only Sweden, Canada and Norway allow this, as does the US (subject to the same caveats as for employment). Belgium requires asylum seekers to obtain a “professional card” for self-employment. Spain (after 6 months), Slovenia (after 9) and Britain and Slovakia (after 12) allow self-employment too.

As well as having the right to work, prospective and recognised refugees need to be employable. They need basic literacy skills to fill all but the most menial jobs. Speaking the local language opens up a much wider range of opportunities. Apprenticeships and other job training can increase their employability. The speedy recognition of their professional qualifications will enable them to fill appropriate jobs.

Resettled refugees ought to be provided with literacy, language and job-skills training before their relocation. The US State Department has launched pilot programmes in Kenya, Thailand and Nepal to help refugees improve their English before arrival. A third of refugees resettled in the US in fiscal years 2008–13 spoke some English, but only 7% were proficient in English. Asylum seekers ought to have their education level, language and other skills and career aspirations assessed as soon as they arrive in order to identify their training needs and better match them to employment opportunities. For instance, the Swedish Public Employment Service provides a two-year introduction programme for refugees. This involves an interview to establish their competences and needs, together with a plan that maps out a path to work. This includes Swedish language lessons, civic orientation classes and employment preparation activities, such as validation of educational and professional experience.

Language training tailored to refugees’ workplace needs should be offered as part of their job-placement programme. In Sweden, refugees now start job programmes in parallel with state-funded Swedish classes, instead of waiting years to master the language first.

Literacy training should be provided to those who need it. In the US, literacy rates are particularly low among Somali refugees (25%) and Hmongs from Laos (18%). While such refugees may be able to find entry-level jobs, they will find it hard to progress without further education and literacy training.

Job training and skills development are good investments if they enable refugees to find higher-skilled and better-paid work in the long term. While the US resettlement programme successfully achieves its main goal of getting refugees quickly into work, this may come at the expense of better job matching, especially for highly educated refugees.
The recognition of foreign qualifications should be streamlined and training offered, if necessary, to enable refugees to acquire equivalent host-country credentials. This is typically a cost-effective investment. For instance, whereas training a new local British doctor costs over £250,000 ($357,500), the estimated cost of training a refugee doctor to practise in the UK is around £25,000 ($35,750).14 Yet refugees may have difficulty proving their credentials or qualifications if they were forced to flee hastily or if conflict makes their education records hard to obtain.15 In Sweden getting foreign qualifications recognised typically takes 11 months. Officials hope to cut that time as part of a plan to reduce, from six years to two or less, the average time a well-educated newcomer takes to find a suitable job.16 Where unions and employers agree there are labour shortages, rules are being eased to let foreigners start working sooner. Germany’s chambers of commerce want asylum-seekers recruited as apprentices to have an automatic right to stay for two years after completing their apprenticeship because they claim that employers will otherwise be reluctant to take them on.17

Opportunities also need to be available for employable and entrepreneurial refugees.

Refugees should be resettled in areas where there are jobs, not, as is often the case, in areas where cheap housing is available and jobs aren’t. A study by Pieter Bevelander of Malmö University and Ravi Pendskur of the University of Ottawa found that one big reason why refugees who arrived in Sweden as asylum seekers tended to fare better was that they often had resources and could settle where there were more job prospects, whereas government-
assisted refugees were often located in municipalities where housing was available but employment opportunities were scarce.56 Other studies confirm that refugees’ ability to move to cities with greater employment opportunities and larger ethnic networks boosts their employability and income.57 In Sweden, the reception system is being adjusted to designate municipalities to receive refugees based mostly on job opportunities.58

A new organisation called Talent Beyond Boundaries aims to go further and match skilled refugees in camps to prospective employers in destination countries who could obtain work visas in order to recruit them.59 This would make refugees cheaper to assist and more productive upon arrival.

Anti-discrimination laws need to be vigorously enforced.

Countries with rigid, insider-outsider labour markets should open them up to outsiders, making it easier for refugees to find work. Excessive employment protection significantly reduces the likelihood of gaining work, particularly for workers whose productivity is a priori uncertain, such as refugees.60 Economies with flexible labour markets, where entry-level jobs are easy to obtain and job progression is relatively open, enable all labour-market outsiders (notably young people, as well as refugees and other migrants) to gain a foothold in the job market, contribute more to the economy, gain valuable experience and progress in their careers. While the US provides one model of labour-market flexibility, the UK combines flexibility with more of a social safety net, while Denmark combines flexibility with much greater job security.

Governments should cut through red tape that stifles enterprise, enabling refugees to start businesses. In the UK, migrants are nearly twice as likely as locals to start a business, whereas in Germany they are only 30% more likely. One reason is that it is much harder to start a business in Germany, which is 107th globally in the World Bank’s Doing Business rankings.61 A Somali restaurant owner in Minneapolis who visited Stockholm recounts how a fellow countryman there described his situation: “You are like a fly trapped under a glass turned upside down. You can feel that your dreams are being smothered.” In the US, in contrast: “You can become what you want – the lowest of the lowest or the highest of the highest. Nobody tries to crush your dreams.”62

While government investment in refugees ought to be generous, prompt and wide-ranging initially, open-ended welfare provision can have a negative impact, especially when combined with insider-outsider labour-markets. In Sweden, some refugees complain of being “smothered with charity.”63 Reducing taxes and social-security contributions for low-wage workers can boost employment and take-home pay.

Looking to the future, educating refugee children is vital.64 Getting children into school as quickly as possible, ideally as early as pre-school, helps. It is best to avoid concentrating foreign-born children in low-quality schools in poor areas, which tends to harm their education prospects.65 It is also best to avoid streaming children by ability at a young age, which tends to disadvantage refugee children, who may take longer to flourish. Additional resources for language training and meeting refugee children’s other special needs also help.

To sum up, there is a spectrum of models for welcoming refugees. At one extreme, the US model involves giving refugees a burst of initial help but then expecting them to fend for themselves. At the other extreme, the Swedish model has traditionally involved treating refugees like charity cases.

Unsurprisingly, the US model delivers better refugee outcomes. While the focus of the Swedish model has shifted since 2010 towards getting refugees into work, the barriers to success remain high. According to the Swedish Public Employment Service, only 30% of refugees put through its integration programme found jobs or accessed education in the two years to September 2015.66

Arguably, an ideal refugee welcome programme would combine the active assistance of the Swedish model with the job and enterprise opportunities of the US one. This would entail more training and help for refugees in the US, and measures to open up the labour market to outsiders in Sweden.

Other EU countries have a lot to learn from the Swedish and US models. Many provide the worst of both worlds: little help for refugees and high barriers to employment and enterprise. This breeds hardship and failure for refugees, and misplaced resentment towards refugees from locals. Greater investment in refugees together with reforms to open up opportunities for progress, is both economically and politically desirable.

Helping refugees is not a matter just for governments: businesses and the non-profit sector play a crucial role too. The most important way in which businesses can help is by employing refugees, which is likely to be a profitable decision. They can also help in other ways, not least through the Tent Alliance (see Box 11). In Sweden, LinkedIn has launched a pilot programme called “Welcome Talent” that matches qualified refugees with local job and internship opportunities.67 In Germany, McDonald’s is funding 20,000 three-month language courses for refugees.68

The non-profit sector can help in many ways, including with finance, education and social support. The International Rescue Committee (IRC), one of the nine non-profits tasked with resettling refugees in the US, has been trailering providing them with loans to start businesses. By 2020, the IRC hopes to have $4 million worth of outstanding loans, averaging $6,500 each.69 Early success stories include that of Jean Nyرابотие of Rwanda. With $2,500 from the IRC, she bought a new sewing machine to make made-to-order dresses and opened a studio in her Phoenix, Arizona garage, which the agency helped her register as a business. Sales in October 2015 were $890, which supplemented her income from working full-time as a hotel housekeeper. The additional money also helps cover her daughter’s nursing-school tuition. “With this, I can pay bills and buy more fabric from Africa” to expand the business, she says.

Another beneficiary is Falah Yaqoob, who cooked for US troops in Iraq and lost everything before fleeing his homeland and coming to America in 2010 as a refugee.70 A $10,000 loan from the IRC helped him open a small restaurant in Tempe, Arizona, near Arizona State University, where he plans to serve kebabs, falafels and other Middle Eastern fare. His wife and brother will work alongside him, and he plans to hire a few employees. “I am looking for the American dream,” said Mr Yaqoob, who has a nine-year-old son and another child on the way. “I want to do something special with good food, maybe a franchise later.”
In many European countries, refugees-welcome.net helps match refugees to people with spare rooms. In the Netherlands, the Foundation for Refugee Students (UAF) helps refugees finish their studies and get into jobs, for example by getting their paperwork certified and languages up to scratch. One of its star pupils is an Iraqi cardiologist who learnt Dutch in six months and now works as a surgeon.

Social support and social networks are also important, suggesting that there are advantages to refugee communities clustering together, while also seeking to mix with wider society. Both formal and informal support systems can reduce refugees’ level of isolation, enhance their sense of belonging, decrease the stress of discrimination and ease their integration into a new society.

The Tent Foundation (which funded this report), established by Hamdi Ulukaya, the founder and CEO of the yoghurt company Chobani, is convening a group of leading global companies – the Tent Alliance – to focus their resources on addressing and solving the refugee crisis. Among the inaugural partners are Airbnb, the IKEA Foundation, LinkedIn, MasterCard, UPS and Western Union.

Through the Tent Alliance, business leaders commit to improving the lives of refugees and their host communities through one or more of the following activities:

- **DIRECT GIVING OR PROVISION OF GOODS OR SERVICES**
  Companies may make direct donations to refugee relief organisations or provide support through in-kind goods and services.

- **GENERATING EMPLOYMENT OPPORTUNITIES**
  Companies may hire refugees or provide them with skills and language training or employment assistance.

- **SHAPING SUPPLY CHAINS**
  Companies may source products and services from vendors that employ refugees or support refugee relief organisations.

In partnership with governments and humanitarian agencies, the Tent Foundation aims to end the challenges faced by the 60 million people displaced worldwide. By applying an entrepreneurial mindset to the refugee challenge and catalysing cross-sector innovation, Tent is encouraging the private sector to harness and mobilise its ingenuity, resources and enterprising spirit to strengthen the humanitarian response system and help end the refugee crisis.
CONCLUSION

THE KEY MESSAGE OF THIS REPORT IS THAT WELCOMING REFUGEES IS NOT JUST A HUMANITARIAN AND LEGAL OBLIGATION; IT IS AN INVESTMENT THAT CAN YIELD MANY ECONOMIC DIVIDENDS.

Refugees have a lot to contribute as workers, entrepreneurs, innovators, taxpayers, consumers and investors.

Policymakers and practitioners should stop considering refugees as a “burden” to be shared or shirked and instead emphasise that they are an opportunity to be welcomed. With a suitable up-front investment and wise policies, welcoming refugees can yield substantial economic dividends, as this study has shown. Those dividends tend to grow over time, as refugees progress in their new home and, even more so, as their children do.

This study provides a wealth of evidence about how refugees can contribute to the economy. But there is an urgent need for more research into this, as well as for greater policy experimentation to find ways to enhance their contribution.

Refugees have already suffered enough. It is in everyone’s interest to make the most of their talents and energy.
APPENDIX

The assumptions underlying the IMF’s economic simulation are detailed in Annex II of its study on the economic impact of refugees in Europe. Data kindly provided by Shekhar Aiyar and his colleagues at the IMF enabled the following calculations to be made.

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<thead>
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</thead>
<tbody>
<tr>
<td>Baseline real GDP</td>
<td>14,221</td>
<td>14,498</td>
<td>14,783</td>
<td>15,063</td>
<td>15,346</td>
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<tr>
<td>GDP increase relative to baseline (%)</td>
<td>0.05</td>
<td>0.09</td>
<td>0.13</td>
<td>0.14</td>
<td>0.20</td>
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<tr>
<td>Post-refugee real GDP</td>
<td>14,228</td>
<td>14,511</td>
<td>14,802</td>
<td>15,084</td>
<td>15,376</td>
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<tr>
<td>Additional GDP</td>
<td>6.8</td>
<td>13.0</td>
<td>19.3</td>
<td>21.5</td>
<td>30.5</td>
</tr>
<tr>
<td>Net government debt (% of GDP)</td>
<td>67.41</td>
<td>67.15</td>
<td>66.40</td>
<td>65.17</td>
<td>63.32</td>
</tr>
<tr>
<td>Change in government debt (% of GDP)</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.02</td>
<td>0.11</td>
<td>0.19</td>
</tr>
<tr>
<td>Post-refugee government debt (% of GDP)</td>
<td>67.39</td>
<td>67.13</td>
<td>66.42</td>
<td>65.28</td>
<td>63.50</td>
</tr>
<tr>
<td>Net government debt</td>
<td>9,587</td>
<td>9,735</td>
<td>9,817</td>
<td>9,916</td>
<td>9,976</td>
</tr>
<tr>
<td>Post-refugee net government debt</td>
<td>9,588</td>
<td>9,741</td>
<td>9,832</td>
<td>9,946</td>
<td>9,976</td>
</tr>
<tr>
<td>Increase in debt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All figures are in billion 2014 euros, unless otherwise stated. Baseline 2014 GDP is €13,958 billion. The baseline for real GDP growth and net government debt is the forecasts in the IMF’s World Economic Outlook database of October 2015.

An increase in net government debt of €68.8 billion by 2020 to fund investment in refugees yields a total increase in GDP between 2015 and 2020 of €126.6 billion.
REFUGEES WORK: A HUMANITARIAN INVESTMENT THAT YIELDS ECONOMIC DIVIDENDS

NOTES


2 See for example, Robert Winder, Bloody Foreigners: The Story of Immigration to Britain (Little, Brown, 2004)


4 Ibid. As of mid-2015


6 Ibid.

7 Ibid.

8 Ibid.


14 Ibid.


16 Vietnamese refugees had higher employment rates than US-born people in 2009–11, while their median


25 Morton Besser, Strangers at the Gate: The Boat People’s First Ten Years in Canada (University of Toronto, 1999) http://www.uttpublishing.com/Strangers-at-the-Gate-The-Boat-People-s-First-ten-Years-in-Canada.html

26 Vietnamese refugees had higher employment rates than US-born people in 2009–11, while their median
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household income was also slightly higher. Randy Capps and Kathleen Newland et al, “The Integration Outcomes of U.S. Refugees: Successes and Challenges”, Migration Policy Institute, 2015, pages 16 and 21.

27 The study suggests that a 10% increase in the Vietnamese network raises the ratio of exports to Vietnam over GDP by 2%, and the share of total exports going to Vietnam by 1.5%. Christopher Parsons and Pierre-Louis Vézina, "Migrant Network and Trade: The Vietnamese Boat People as a Natural Experiment", Economics Working Paper 705 (Oxford, 2014) http://www.economics.ox.ac.uk/materials/papers/13343/paper705.pdf


34 Ibid, Article 33
35 Ibid, Article 37
36 Ibid, Articles 17–19
37 Ibid, Article 21
38 Ibid, Article 22
39 Ibid, Article 23

40 Ibid; Article 4
41 Ibid; Article 16
42 Ibid; Article 26
43 Ibid, Articles 27–28
44 Ibid; Article 2
45 Ibid; Article 3

47 The State Department Reception and Placement Program provides funding to resettlement agencies for refugees’ reception and accommodation for the first 30 days after arrival, including food, housing, clothing and support for employment guidance and language training. After that, refugees are expected to enroll in mainstream social benefit systems and/or obtain work. Local resettlement agencies, funded by the Office of Refugee Resettlement (ORR), part of the Department of Health and Human Services, provide employment, language classes and other services to refugees for their first five years in the US, although these services are provided mostly in the first few months. Department of State Bureau of Population, Refugees, and Migration, "Refugee Admissions, Reception, and Placement Program" fact sheet, December 2012. http://www.state.gov/j/prm/releases/onepagers/202396.htm

48 Human Rights Watch, "At Least Let Them Work", 12 November 2013 https://www.hrw.org/report/2013/11/12/least-let-them-work/denial-work-authorization-and-assistance-asylum-seekers-united Federal law does not provide any asylum seeker-specific social service benefits. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) categorised asylum seekers as “nonqualified” immigrants, so they are explicitly excluded from eligibility for many social welfare benefits. While there are particular humanitarian or disaster-based circumstances that might qualify an asylum seeker for federal assistance, these are narrow exceptions to the general rule that asylum seekers are precluded from accessing federal benefits. The federal government and the PRWORA give states broad discretion with regard to providing state benefits. Five states – California, Hawaii, Minnesota, New York, and Washington – provide benefits under the Temporary Assistance to Needy Families Program to nonqualified immigrants, as asylum seekers. Sixteen states and the District of Columbia provide some state-only funded healthcare benefits to nonqualified immigrants, such as asylum seekers. These benefits, however, are often limited by status, age, and disability. For example, some states provide benefits to the elderly and children but provide none to other asylum seekers.
"No, Canada doesn’t spend more on refugees than on pensioners", Global News, 16 November 2015 http://globalnews.ca/news/2349786/no-canada-doesnt-spend-more-on-refugees-than-pensioners/

Government-assisted refugees automatically receive Resettlement Assistance Program (RAP) income support from the federal government during their first year in Canada at a rate equivalent to social assistance rates in each province. This is meant to bridge refugees’ entry into Canadian society, help them to pay back transport loans, learn English or French, and gain entry into the labour market. Income assistance from RAP allows refugees to earn up to 50% of their total stipend through outside employment after which earnings are deducted dollar for dollar from their monthly cheque. Jennifer Hyndman, “Refugee Research Synthesis 2009–2013”, CERIS, report prepared for Citizenship and Immigration Canada (CIC), May 2014


Author’s calculation.


Ibid. Assumptions behind estimates vary across country. For example, assumptions about per head spending (both for staying applicants and for immigrants transiting to other destinations), length of stay of and benefits received by rejected applicants, and coverage of benefit-related spending (such as security and education) and local government costs.


Ibid.

Ibid.


Ibid.


Ibid.


In the US, 28% of male refugees aged 25 and older had a graduate degree in 2009–11, almost as many as the 29% of US-born men who do. Some 28% of female refugees had a degree, the same proportion as US-born women. Randy Capps and Kathleen Newland et al, “The Integration Outcomes of U.S. Refugees:...

73 Among male refugees in the US in 2009–11 62% of Russians, 55% of Iranians and 49% of Ukrainians were graduates. Among female refugees, 63% of Russians, 49% of Ukrainians and 46% of Iranians were. Randy Capps and Kathleen Newland et al, “The Integration Outcomes of U.S. Refugees: Successes and Challenges”, Migration Policy Institute (2015) Table 3


77 Ben Kendall, “High education levels among Syrian refugees, Goteborg Daily, 3 June 2015 http://www.goteborgdaily.se/high-education-levels-among-syrian-refugees-


79 Author's email from Swedish Public Employment Service


81 OECD, "Is this humanitarian migration crisis different?", Migration Policy Debates No.7, September 2015 http://www.oecd.org/migration/is-this-refugee-crisis-different.pdf


84 Make it in Germany, “Which occupations are in demand” http://www.make-it-in-germany.com/en/for-qualified-professionals/working/demanded-professions

Asylum seekers could be our next wave of entrepreneurs, The Conversation, 26 October 2015 http://theconversation.com/asylum-seekers-could-be-our-next-wave-of-entrepreneurs-49591

Migrants to the UK had a total entrepreneurial activity rate of 16%, compared to 9% among UK-born people. Centre for Entrepreneurs, “Migrant Entrepreneurs: Building Our Businesses, Creating Our Jobs” (2014)

Jack Torrance, “5 Refugee Entrepreneurs who have thrived in Britain”, Real Business, 16 June 2014 http://realbusiness.co.uk/article/26957-5-refugee-entrepreneurs-who-have-thrived-in-britain

Ibid.

Ibid.


Ibid.

Ibid.


Donald Campbell, "Blind Variation and Selective Retention in Creative Thought as in Other Knowledge Processes", Psychological Review 67, no. 6 (1960): 380–400.

Dean Simonton, Origins of Genius (Oxford, 1999)


Ibid.


Holger Bonin, Bernd Raffelhüschen and Jan Walliser, “Can Immigration Alleviate the Demographic Burden?”,


Joakim Ruust, "Refugee immigration and public finances in Sweden", University of Gothenburg working papers in economics no. 613, February 2015


Graeme Hugo, "Economic, social and civic contributions of first and second generation humanitarian entrants", Report for the Department of Immigration and Citizenship (2011)


The figures are for Somali migrants, who are almost all refugees. Author’s calculations from OECD, "Database on Immigrants in OECD Countries 2010/2011" http://www.oecd.org/els/mig/doc.htm


Migrationsverket, "Working while you are an asylum seeker" http://www.migrationsverket.se/English/Private-individuals/Protection-and-asylum-in-Sweden/Adults-seeking-asylum/Work.html accessed on 4 May 2016


Refugees work: a humanitarian investment that yields economic dividends


154 Arbetsförmedlingen, "Introduction Program factsheet"


157 GAO, "Refugee Resettlement: Greater Consultation with Community Stakeholders"

158 Migrationsverket, "Working while you are an asylum seeker" http://www.migrationsverket.se/English/Private-individuals/Protection-and-asylum-in-Sweden/Adults-seeking-asylum/Work.html accessed on 4 May 2016

159 Settlement.org, "I am a refugee claimant. Can I work?" http://settlement.org/ontario/immigrationcitizenship/refugees/after-you-arrived/immigration-information-can-i-work/ accessed on 4 May 2016


162 UDI, "Have applied. Can you work?" http://www.udi.no/en/have-applied/protection-asylum/can-you-work/#link-8896 accessed on 4 May 2016


164 Asylum Information Database, "Access to the Labour Market: Italy" http://www.asylumineurope.org/reports/country/Italy/reception-conditions/employment-education/access-labour-market accessed on 4 May 2016


166 European Migration Network, "Ad-hoc query on access to the labour market for asylum seekers" http://www.emmbelgium.be/sites/default/files/publications/emm_adhoc_query_at_access_to_the_labour_market_for_asylum_seekers_open_14022013.pdf accessed on 4 May 2016


174 Ibid

175 "Syrian refugees speed into top jobs in Sweden, The Local, 14 June 2015 http://www.thelocal.se/20150614/syrian-refugees-take-sweden-fast-track

176 Pieter Bevelander and Ravi Pendakur, “The employment attachment of resettled refugees, refugees...


179 http://www.talentbeyondboundaries.org/


181 World Bank, Doing Business rankings 2016 http://www.doingbusiness.org/rankings


183 Interviews with author


190 Ibid.


