**Making Migration and
Integration Policies
Future Ready**
Ministerial and Forum on Migration

Towards 2035
STRATEGIC FORESIGHT
Making Migration
and Integration Policies
Future Ready

OECD
BETTER POLICIES FOR BETTER LIVES

Introduction

How can countries design policies to manage migration and support integration, when we don't know the future impacts of well-known megatrends and little-known potential game-changers?

No one knows with certainty how migration flows and integration trends will develop in the mid-term or long-term. In today's world, however, the pace of change has accelerated to the point that legislation and regulation often react to novel circumstances, rather than anticipate them. It's very hard to develop 'future ready' policies. What will drive migration flows in the future? What will integration look like? They are unlikely to be identical to the past, but we don't have a crystal ball. Even the most sophisticated modelling cannot capture all the relevant drivers.

This paper provides policy makers with two guides to migration and integration policy making for the future. The first is an inventory of megatrends already underway and which will transform the environment for policy making. The second identifies weak signals of potential transformations and explores what would happen if these were to become major game changers. The scenarios include technological change; a shift in the very way people think about "integration"; the emergence of new stakeholders in migration and integration policy; and rising importance of non-OECD countries as actors in migration and integration.

Each scenario comprises challenges and opportunities, which depend on how well-prepared States are to address them. No one knows whether any of these scenarios will develop as outlined, but each one is plausible and momentous enough for public authorities to take seriously. Some of the potential changes have already been taken into consideration in many OECD countries. Other signals have gone largely unnoticed.

The paper covers what policymakers can start doing immediately, what they need to look out for, and how they can act upon and respond to changes. In other words, how to prepare for the future.

The paper is structured as follows: first, key findings are presented. Second, several consolidated megatrends, of which today's policy makers are well-aware, are reviewed. Third, the four scenarios are presented, along with related opportunities and challenges for migration and integration policy.

The scenarios presented here are the outcome of an exercise involving representatives of many OECD countries and the Secretariat (see the annex for more information on scenario building).

Executive Summary

In a time of rapid change and great uncertainty, responsible migration and integration policy must prepare for the unexpected. While it is impossible to predict the future, it is possible to consider how current megatrends and potential future disruptions might affect policy in the years to come, and draw implications for policies today.

Three powerful and interconnected megatrends will have a significant impact on migration and integration in the coming 10-15 years, although the precise extent and direction of these impacts is unknown.

- **Environmental changes and extreme weather events** are expected to displace millions. Even if much of this migration will occur to adjacent local areas, it could also contribute to broader societal breakdown and conflict that could, in turn, set off unforeseen waves of large-scale longer-distance migration.

- **Geopolitical instability and conflict** have been a traditional cause of out-migration based on drivers such as rising inequality, youth unemployment and political corruption, as well as terrorism and insecurity. A number of these drivers have the potential to continue or accelerate if a combination of preventive measures, reception and integration support, and legal pathways and multilateral cooperation is not adopted.

- Finally, major demographic shifts will occur in the coming decades due to the global trend of **population ageing**, albeit at different rates in different regions. The most rapidly ageing countries may be tempted to use migration as a mitigating factor. However, it is uncertain how much migration these ageing economies will require in a potential context of increasing automation, virtual work, and increased employability of older workers, and it is uncertain that labour supply available in origin countries will match skills demand in destination.

In addition to these main megatrends, a large number of **key uncertainties and potential disruptions** could also significantly affect the future of migration over the coming years. These developments, while unpredictable, could be game-changers, creating both new challenges and opportunities.

Technological Change

Big Data Profiles

What if, in 2035, many countries exploited advances in technology to select immigrants based on accurate and detailed assessments of their potential for successful integration and other desired characteristics? This could lead to better integration outcomes and greater public support for migration. It could also give rise to debate about appropriate selection criteria, security, privacy and human rights concerns.

Transparency and Visibility

What if, by 2035, it became increasingly difficult for migrants to live in a territory without being visible to host governments? This could pressure governments to take greater accountability for migration, rapidly regularising or deporting migrants in an irregular situation; and lead to improved public confidence in the integrity of the migration system. However, this could also coincide with increased societal surveillance, including for non-migrant populations.

Change in the purpose of migration and integration

Homo Non Economicus

What if, by 2035, public opinion on migration were driven primarily by non-economic arguments? Concern for social cohesion, cultural identity, like-mindedness, inequality and other indicators become the most important determinant of migration policy. At the same time, if labour market integration were less of a political priority, it might lead to under-investment in training, skills development and employment support with consequent negative long-term impact on the labour-market integration of immigrants.

Virtual Migrants and Digital Workers

What if, by 2035, the rise of virtual work meant that people no longer migrated for employment? What if automatic translation tools allowed communication without learning foreign languages? For the highly skilled, this could increase the attractiveness of migration to communities offering high quality of life and high digital connectivity relative to traditional economic capitals. For the lower skilled this could lead to more isolation and poorer integration.

New Stakeholders

■ **City Power**

What if, by 2035, metropolitan areas became more powerful actors in migration and integration policy-making? Equipped with smart-city technology, municipalities rather than national governments could possess the best data on selection and integration. This may lead to selection and integration criteria diverging within countries, with smaller communities, rural areas and disadvantaged urban areas receiving a greater share of poorly-rated migrants, exacerbating an increasing geographical divide.

■ **Superstar Firms**

What if, by 2035, corporations became key actors in migration management? Global 'superstar' firms could use their power to acquire global mobility rights for their employees and guarantee their successful integration.

Shifting Migration Directions

■ **New Destinations**

What if, by 2035, non-OECD countries became the primary destinations for mid- and high- skilled migrants? Economic dynamism and technological supremacy combined with improved quality of life could transform formerly 'emerging' economies into the new magnets for long-term migration and citizenship by top global talent.

■ **Oil price shock**

What if, by 2035, the price of oil collapsed and several non-OECD migrant-destination petro-economies no longer recruited migrant workers? There could be a large-scale return migration to major origin countries or, alternatively, onward movement of migrants resulting in a sudden migration supply shock.

The above megatrends and potential disruptions could combine and interact to generate additional consequences. For example, multiple changes could align to create **a perfect storm of global migration imbalances** and high ongoing migration pressures. Alternatively, factors could combine to **lessen or shift global migration pressures**.

These and other conceivable combinations serve to highlight the high level of uncertainty regarding the future of global migration, and the need to learn from a range of alternative plausible scenarios, including ones that may currently seem unlikely or extreme.

Governments can already incorporate a range of policy implications, detailed below, to prepare for the future. These implications draw on the scenarios and enable governments to develop the ability to keep ahead of the curve by detecting emerging trends at an early stage and anticipating future challenges.

Megatrends and scenarios are a torch in the policy marker's toolkit to help identify a path forward when faced with unpredictable migration patterns and integration challenges in the future. By illuminating unexplored potential developments, they can help reframe existing policy choices and reveal others. These new choices include: (i) **better measurement** by building understanding and flexibility into the way governments identify and measure current migration and integration criteria to understand the degree to which they reflect societal values; (ii) **strategic partnerships** which identify and partner with stakeholders to further objectives; (iii) **wiser technological choices** by understanding the dilemmas new technologies may present; and (iv) **better preparedness** by consciously building anticipatory capacity within government.

Policy implications: How can policy makers prepare for the unexpected in the future?

Make policy objectives and key performance indicators more flexible

■ Consider migration and integration policies as a cross-cutting issue in connection with other policy areas, such as education, employment, social protection, trade etc.

■ Recognise the significance and impact of megatrends such as labour market shifts, population ageing, changes in education systems, geopolitics, technology and environmental changes.

■ Avoid basing policy choices primarily on short-term developments, because they might mask more significant long-term trends.

■ Continually reassess what efficient and effective migration and integration policies look like by periodically re-evaluating the markers for success.

■ Pay greater attention in selection and integration policies to the social integration of immigrants and social cohesion rather than just economic integration.

- Be prepared for the main reasons for migration to mix or change over time. Be aware that competition for attracting and retaining skilled migrants might increase.

- Find new ways to identify and develop migrants' potential based on their capacity to acquire new skills and adapt to changing labour market conditions and skills needs, rather than focusing only on formal qualifications.

Form new partnerships

- Ensure that all relevant parts of government are involved in identifying, sharing and addressing emerging migration and integration issues. Develop specific coordination mechanisms between public authorities on all levels.

- Include cities, employers, social partners, civil society organisations, tech entrepreneurs and migrants themselves in the implementation of migration and integration policies.

- Develop new partnerships with countries of origin and emerging economies to favour co-development and facilitate upgrading of skills as well as the creation of genuine "Skills Mobility Partnerships".

- Ensure that changing roles in governing migration of local authorities and non-state actors, such as large companies, are conscious choices, and do not lead to more in-country inequalities or unfair competition, by maintaining standards and common rules. But devolve as much power and resources as possible to the regional and local level, and install control mechanisms at the same time. Make sure that new partnerships are constantly evaluated and adaptable.

- Use periods of low migration flows to strengthen partnerships on migration management, including return and readmission of migrants in an irregular situation.

Seize the potential of big data and technology but avoid being ruled by it

- Rethink existing processes and programmes in light of available new technologies to improve compliance, enforcement and migrant assessment and selection, as well as more coordination across relevant services.

- Build migration systems that are as transparent as possible and easy to explain, understand and justify. Avoid basing migration decisions exclusively on algorithms and Artificial Intelligence, and explain the mechanisms behind each decision. Ensure that a human is always accountable for important decisions.

- Be careful not to depend on external service providers for complex selection mechanisms. Maintain ownership of the data on which public policies are based.

- Carefully consider the protection of personal data and privacy issues, including for people residing abroad who are expressing an interest in migrating.

Build anticipatory capacity

- Conduct, at all levels of government, forward-looking analyses about the future of migration and integration and the significance of different developments for policy development, strategic planning and decision-making.

- Survey people in potential source countries (including OECD) regarding their migration intentions and requirements.

- Prepare for future changes by using intelligence and other anticipatory tools to detect and take into account emerging signals, including early warning systems, modelling and programming tools, as well as foresight methods such as scenario planning.

- Build contingency plans for migration management and integration capacity in case of major disruptions in migration flows.

- Implement innovative and flexible policy design, which incorporates research, responds to rapidly changing circumstances, uses pilots that allow for evaluation and upscaling, and responds to lessons learnt.

- Develop active communication strategies notably to avoid being only reactive to shocks and biased social media discussions. Underline the benefits of well managed migration and integration.

MEGATRENDS

Megatrends are already observable now and are likely to remain significant in the future

Megatrends are broad contextual changes that can have a sizeable influence on policies. These large-scale trends reflect the momentum of multiple concurrent changes in different policy domains. We can already see some of the megatrends which will continue in the future. This chapter covers those which are most recognised:

- Environmental changes and extreme weather events;
- Geopolitical instability;
- Demographic changes and the Future of Work.

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Environmental changes and extreme weather events

Environmental changes are revealed in slow-onset events such as increased temperatures or sea level rise, whose impacts are relatively gradual but predictable. These events have long lasting impacts on livelihoods globally but especially in certain vulnerable regions where significant population movements may result. In parallel, environmental shocks, such as tsunamis, flash floods, hurricanes or severe droughts, with sweeping economic and social consequences, will become more and more frequent and extreme. According to data from the Internal Displacement Monitoring Centre (IDCM), in the first half of 2019, there were already 7 million new people affected by disasters (Figure 1). Most of them are internally displaced but some moved across borders or are susceptible to do so.

Figure 1. **New displacements associated with conflict, violence and disasters (2008-2018)**
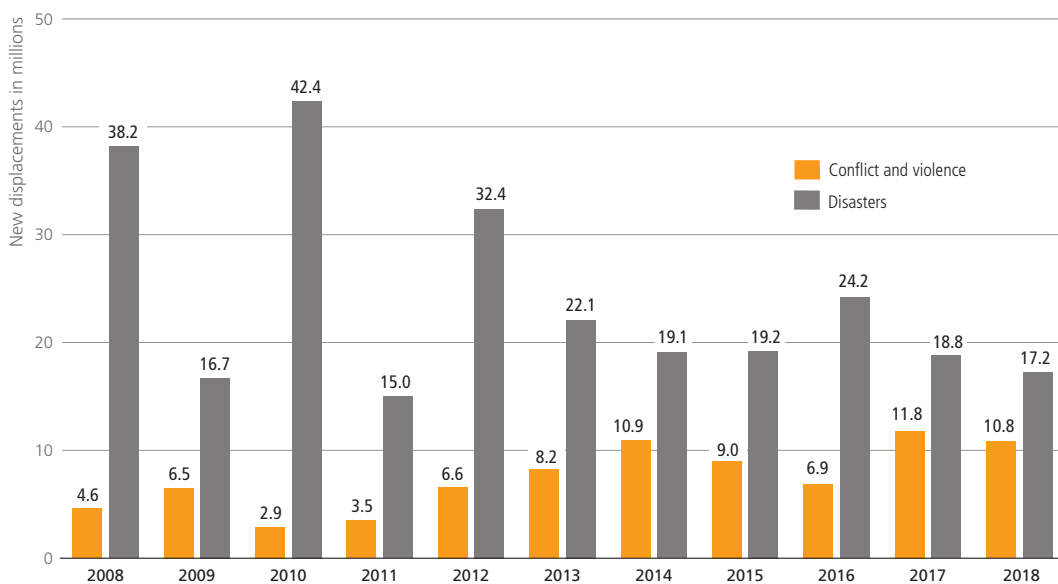
Source: Global Report on Internal Displacement, Internal Displacement Monitoring Centre and Norwegian Refugee Council, 2019.

In the short term, the consensus of research is that most movements caused by sudden environmental shocks will be within countries or regions of origin. Environmental changes are also affecting traditional nomadic peoples, who number several tens of millions worldwide and whose way of life is severely disrupted. In the longer term, the impact of migration will depend on the capacity of medium and larger sized cities to absorb newcomers and provide them with decent living conditions.

Responses to these shifts will depend on the resilience of communities and their ability to prepare and adjust. Of course, no matter how resilient communities are, if the rate of the change is too fast or if they have to face sudden natural disasters, these communities may be pushed to the breaking point.

In the case of extreme weather events, the frequency and severity of which is increasing overall (Figure 2), the impact on international migration is clearer. People from the affected countries of origin might need temporary protection in destination OECD countries.

For example, the Sendai Framework for Disaster Risk Reduction, adopted by the UN General Assembly in 2015, provides a useful tool for government action along four main priorities: (i) understanding disaster risk; (ii) strengthening disaster risk governance to manage disaster risk; (iii) investing in disaster risk reduction for resilience; (iv) enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction. In the same

vein, the Migrants in Countries in Crisis (MICIC) Initiative, a government-led effort co-chaired by the United States and the Philippines, or the Nansen Initiative launched by the governments of Switzerland and Norway in 2012 are useful instruments to support migrants affected by natural disasters.

Figure 2. **Occurrence by disaster type: 2018 compared to 2008-2017 annual average**

	2018	2008-2017
Drought	16	17
Earthquake	20	26
Extreme temperature	26	20
Flood	127	153
Landslide	13	19
Mass movement (dry)	1	1
Storm	95	101
Volcanic activity	7	4
Wildfire	10	9
	315	**350**

Source: CRED, *Natural Disaster Report 2018.* The emergency event database (EM-DAT).

As referenced in OECD International Migration Outlook (2016), to a certain extent OECD countries have found ways to respond to the migration and displacement triggered by extreme weather events, but few OECD countries appear prepared for the potential scale of environment-related shocks in the future. Nor do OECD countries have the legal instruments for a more proactive response; only a handful make explicit reference to natural/environmental disasters in their legislation on protection.

The uncertainties surrounding future climatic events can be tackled through a mixture of prevention, humanitarian support, legal pathways and collective responses. Decisions must, however, be made today based on incomplete information in order to ensure governments are able to respond in time to unpredictable and potentially unprecedented climatic events.

Geopolitical Instability

Recent years have been marked by a series of major geopolitical shocks and conflicts, notably in the Middle East, Northern Africa and Latin America. The nature and scope of forced displacements induced by these conflicts typically depends on the socio-demographic characteristics of the affected population and on the geographical context. Usually people start fleeing to neighbouring cities, regions or countries, but in case of protracted conflicts, if the conditions for a sustainable livelihood in the first region or country of asylum are not met, secondary migration may happen and generate intercontinental movements.

While no one can anticipate where geopolitical tensions and conflicts will unfold, such events are likely in the near future due to multiple centres of potential instability (Figure 3). This calls for increasing investment in peace building and crisis prevention. Looking at recent events, most OECD countries were caught off guard by large inflows of people in need of international protection. Even when adequate early warning systems were in place, their signals went unread or not acted upon promptly.

The multiple drivers for geopolitical shocks and the uncertainty about their duration typically pose problems for policy makers. Their medium term impact is also uncertain, as it depends on the type of protection provided, integration dynamics and family reunification patterns.

Figure 3. **OECD fragility framework, 2018**
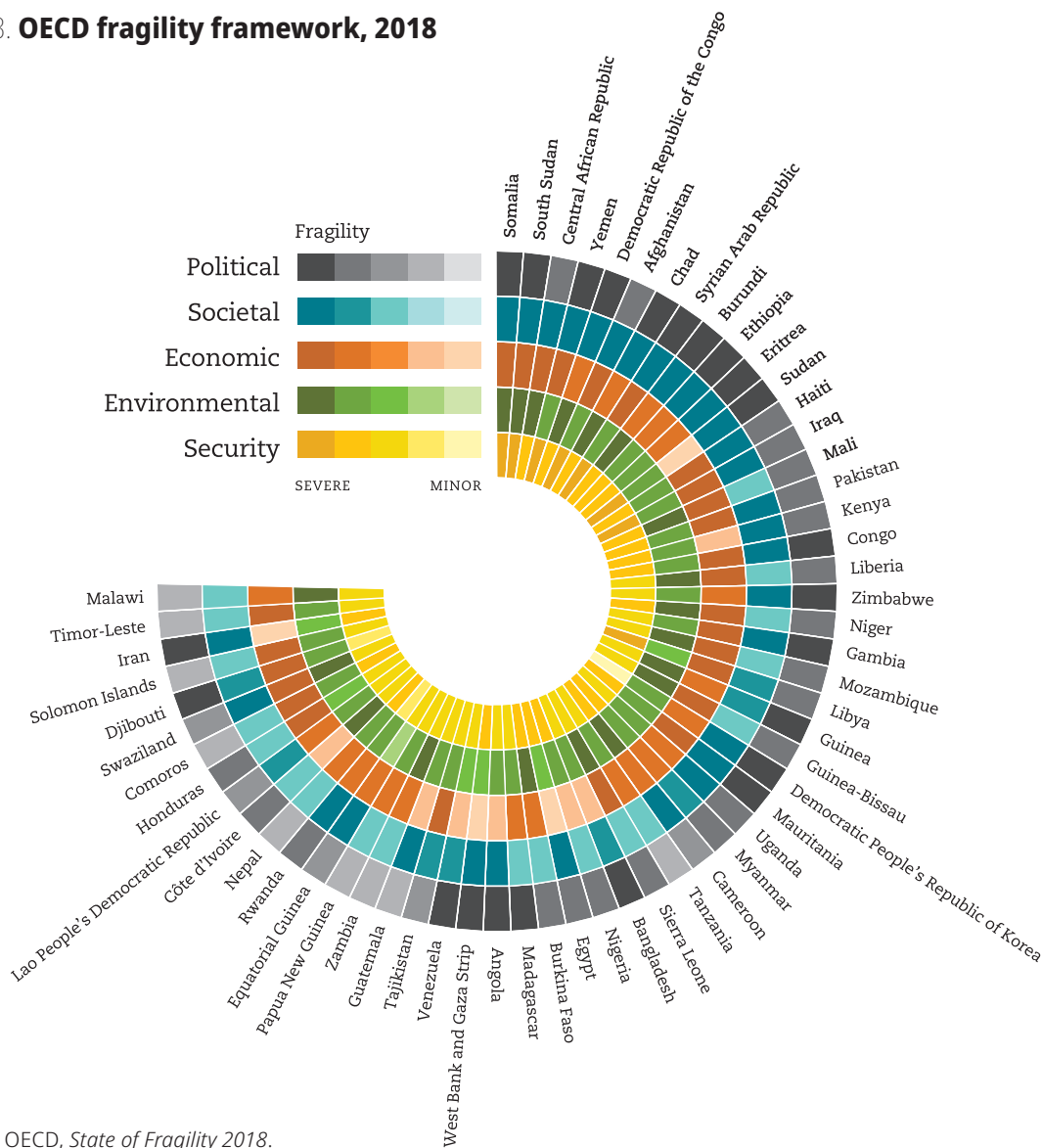
Source: OECD, *State of Fragility 2018*.

The recent OECD report "Ready to Help" (2019) looked at ways to improve the resilience of national systems to deal with the unexpected arrival of large inflows of refugees and other vulnerable migrants. It provides a comprehensive assessment of the transition policies in place to support migrants' livelihood in destination and transit countries, as well as in origin countries upon return. Key messages include:
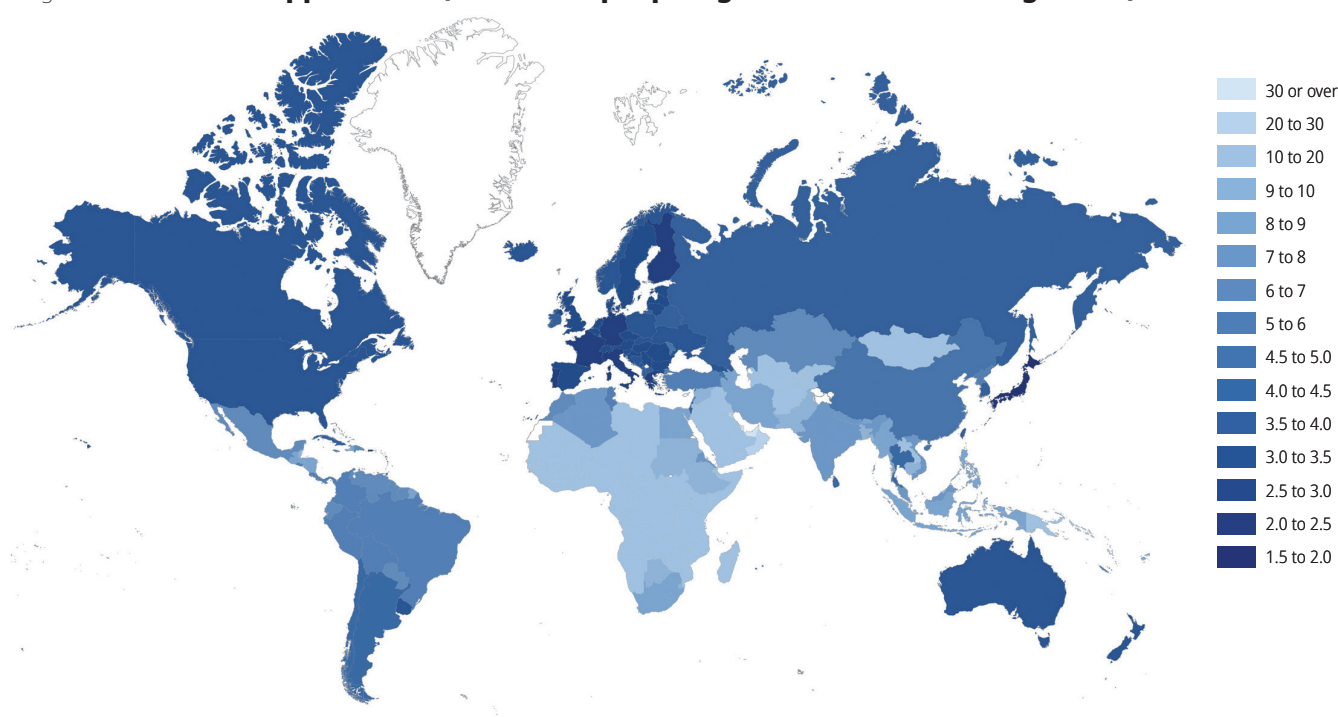
- Support to transit and origin countries needs to be coordinated (notably between development and humanitarian actors), quick, and effective. To reduce pressure in developing host countries, resettlement and humanitarian visas make important contributions. For less vulnerable refugees – generally excluded from resettlement channels – complementary pathways for study or work can provide a valuable alternative.

- Support needs to be offered to recognised refugees to improve their employability and help them realise their full economic potential. This is of utmost importance for the economic impact in host country, but also for acceptance and social inclusion of refugees themselves in local communities.

- Later on, when conditions are met, destination and origin countries have a compelling interest to facilitate the safe and sustainable return of migrants, which requires effective and coordinated return and reintegration programmes.

- At national level, countries may consider developing contingency planning and emergency response plans that identify relevant stakeholders, channels of communication, financing mechanisms and responsibility sharing in the face of large and sudden inflows of displaced people.

- New data sources should be developed and governments should rely on a range of different tools to anticipate future migration flows, whether early warning systems, modelling and programming tools or foresight methods.

Demographic changes and the Future of Work

Globally, the population aged 60 or older is expected to outnumber people aged 10-24 by 2050. Population ageing is a reality in many parts of the world, notably in OECD countries (Figure 4). Fertility rates are low and longevity will likely continue to improve in coming decades in most OECD countries. The rising number of elderly people relative to the number of people of working age may have an impact on labour markets with potential labour shortages emerging in specific regions, sectors or occupations, at different skill levels. The risk of shortages is especially acute in occupations where labour demand is likely to increase because of ageing itself, such as healthcare or domestic services.

Figure 4. **Potential support ratio (number of people aged 25-64 over those aged 65+), 2020**


	30 or over
	20 to 30
	10 to 20
	9 to 10
	8 to 9
	7 to 8
	6 to 7
	5 to 6
	4.5 to 5.0
	4.0 to 4.5
	3.5 to 4.0
	3.0 to 3.5
	2.5 to 3.0
	2.0 to 2.5
	1.5 to 2.0

Source: United Nations, DESA, Population Division, *World Population prospects 2019*, http://population.un.org/wpp/.

While labour migration can help to respond to ageing-related labour shortages, the link between demographic trends and migration is not straightforward. Indeed, new technologies such as robotics and artificial intelligence have the potential to free up workers to do more productive, less routine tasks and to provide consumers with access to better products and services. Technology will likely change many existing jobs, requiring workers and companies to adjust. Recent OECD estimates suggest that over the next two decades, 14% of all jobs across 32 OECD countries have a high risk of automation, while a further 32% of jobs may experience significant changes in how they are carried out (Figure 5).

While there is some evidence that automation is pushing native-born workers to move into more complex and communicative roles, migrants with a lower educational attainment who are concentrated in routine jobs may often find themselves in a more vulnerable position. The 2019 edition of OECD Employment Outlook indicates that in European OECD countries more than 40% of foreign-born workers are in occupations dominated by routine tasks, with this figure appearing to rise. Integration policies will have to make sure that recently arrived immigrants, as well as longstanding foreign-born workers, have full access to lifelong learning and retraining opportunities.

However, in the short and medium term, occupations most at risk of being automatised may appear less attractive, and recruitment difficulties may increase. As a result, international recruitments may increase at least temporarily. Migration policies should be made adaptable to these potential changing conditions, such as by enabling recruitment levels from abroad to vary according to the scope and nature of skills needed.

Figure 5. **Share of jobs which are at a high risk of automation or risk of significant changes in OECD countries (%)**
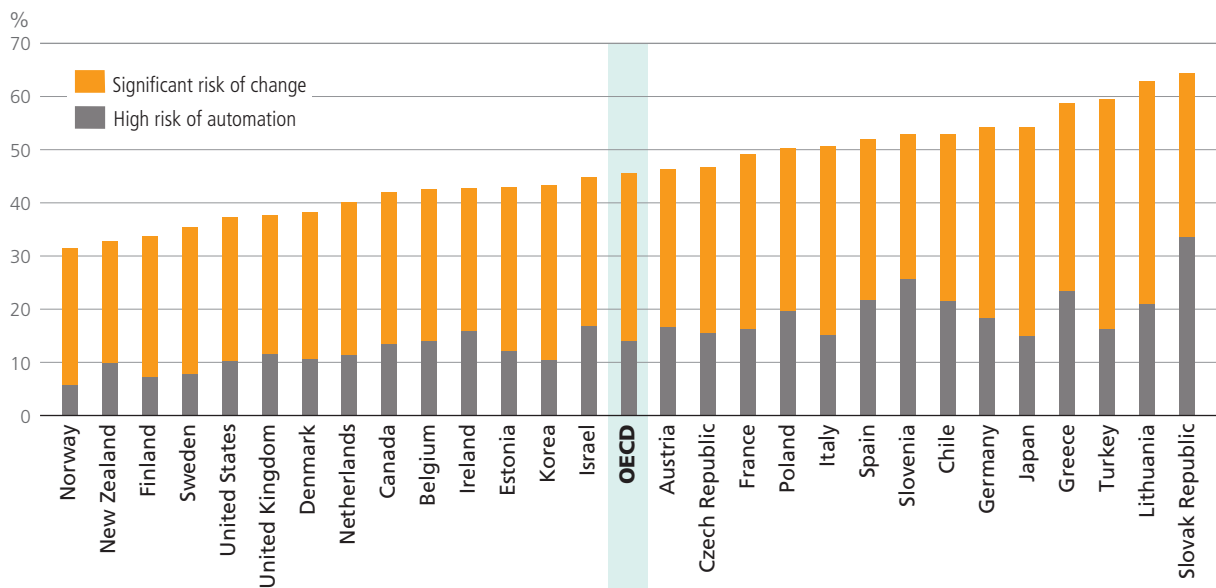
Source: OECD, *Employment Outlook 2019*.

If well managed, migration has the potential to provide countries with the human resources and talent they need for continued economic prosperity, while avoiding social tensions. Migration and integration policies currently in place need to be objectively reassessed in light of changing demographics and the future of work. Challenges to be addressed include: how to ensure labour needs are being met while fostering skills development; how to foster activation and inter-geographical mobility of the resident workforce; and how to build greater flexibility into migration and integration systems so that they are more responsive.

WHAT IF?...

Plausible future disruptions that could impact migration and integration policies

Beyond the main well-known megatrends are a large number of key uncertainties and potential disruptions that could also significantly impact the future of migration and integration over the coming years. While highly unpredictable, these could be game-changers, creating both new challenges and opportunities. The following eight scenarios (grouped into four broad themes) each explore a key plausible future disruption that could substantially change the context for migration and integration policy. These disruptions are not sudden or specific events, but rather processes that could result in an ongoing structural change to the migration or integration system.

Each scenario includes five parts: 1. A brief summary of the scenario; 2. A set of relevant signals of change that can be observed in the present and that, if they grew, could plausibly give rise to this scenario in the future. 3. A hypothetical historical narrative describing how this scenario could come about. 4. A brief description of what the world could look like in the future (approximately in 2035) under this scenario. 5. New opportunities and challenges that the scenario could create for migration and integration policy if it were come about.

The aim is not to establish scenarios that are most likely to occur, but simply those which are sufficiently plausible and disruptive to warrant attention and preparation by policy-makers. These scenarios can help policy-makers to identify areas where they may wish to begin preparations today in order to be better placed to recognise and respond to a new challenge or seize a new opportunity in the future.

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What if...

...big data were readily available to create "migrant profiles" forecasting wide-ranging outcomes such as successful integration?

1.1

Technological Change:
Big Data Profiles

The year is 2035 and migrant selection systems have become highly effective at predicting future integration economic and social outcomes based on the performance of past migrants. Big data is enabling the use of non-observable characteristics to create risk profiles in various domains of life.

Signals: Statistical modelling for migration management and big data in other domains

In a few OECD countries, notably settlement countries, the selection of permanent migrants is based on points allocated for a broad variety of observable characteristics and their interaction. Points systems often rely on elaborate statistical models that predict successful labour market integration based on the outcomes of previous migrants. They do not try to predict the ability of the migrant to adapt to the host society or future individual behaviour.

Conversely, the use of big data and personal data to identify security risks is already being utilised for visa processing. The United Kingdom's Home Office uses a "streaming tool" for all visa requests with applications graded according to their level of risk and then forwarded to caseworkers for further processing. In Canada, automated decision systems are used for national security screening and the United States uses similar tools and also requires social media information from those planning to enter the country.

Technology is also increasingly available to assess asylum seekers' claims by analysing facial expressions during asylum hearings to determine honesty and truthfulness. Switzerland is currently testing a system based on big data and an algorithm using machine learning to improve the match between refugee characteristics and suitable resettlement sites with the aim of improving labour market integration outcomes.

Big data is also used in guiding public decision-making outside of migration. Police worldwide incorporate big data to create predictive crime mapping; predictive analytics is used by the Revenue Agency in Canada to address non-compliance; in the private sector, big data is used in the insurance industry to aid underwriting, rating, marketing, and claim settlement.

How this world could come about

Migration selection and integration systems become far more sophisticated and effective. Outcomes depend on highly complex AI algorithms which no one person or organisation fully understands. Far-reaching requests for information including personal details, social media information and biometric data become the norm for permit and visa requests, whether for work or residence. Similar information on relatives and friends may also be requested. The number of visa-free country corridors diminishes. Meanwhile, there are significant technological improvements, notably in machine learning, that enable systems to make even better behavioural predictions. Despite ethical concerns raised by these new capabilities, several countries embrace these technologies to improve their migrant selection and integration systems, and most other countries follow suit to avoid the risk of falling behind.

What this world looks like

By 2035, governments have access to data far beyond observable characteristics and rate each potential migrant according to their likelihood to adapt and successfully integrate socially and economically in a changing environment. This is used to predict whether the migrant would help or hinder governments in achieving specific policy objectives such as maximising tax revenues, minimising reliance on public benefits and the health system, ensuring social inclusion and cohesion, or identifying individuals with potentially disruptive behaviours. Not all data is publicly available, but given the power imbalance between migrants and host countries, those wishing to migrate feel compelled to provide information. Ethical debates arise about what information should be used, and whether the same rights and protections applicable to domestic residents and their data should be extended to migrants.

Migrants employ the services of private firms to improve their eligibility score. An entire industry emerges with the purpose of gaming migration systems, helping customers achieve the migration status they want. Those unable to navigate this system face a choice between undocumented migration or no migration at all. As social platforms become a means of assessing a migrant's desirability, there is greater awareness and concern around the collection and processing of personal data, resulting in increased demand for secure networks and encryption and disengagement from social media.

FOR MIGRATION AND INTEGRATION POLICY MAKERS

OPPORTUNITIES

Big data profiles allow for real-time monitoring and evaluation, as well as targeted interventions which are cost effective and efficient leading to improved integration outcomes, enhanced economic benefits and social cohesion, as well as lowered security risks associated with migration. This may lead to more open and proactive migration policies, while the use of algorithms and automation of visa and residence permit processing could assist decision makers, reducing processing time and costs.

CHALLENGES

The ability to accurately determine the character and behaviour of potential migrants would raise contested questions about the destination country's identity and influence. For example, the ability to select migrants based on their ideological dispositions could make the choice of migrant selection criteria highly politically contested.

Additionally, which criteria should be privileged in the selection of migrants and potential new citizens: intelligence, initiative, entrepreneurship, generosity, a belief in gender equality, or respect for traditional authority? Such choices would not only shape the future of the destination country's population and political makeup, they could also influence the populations of other countries as potential migrants strive to shape their values to match those of their preferred destination. Additionally, destination countries would likely converge around a selection of individuals with the highest demonstrated capability (and potentially even genetic disposition). This could result in effectively draining source countries of their most talented and capable people in an extreme form of brain drain.

Governments may become dependent on data collection and processing companies, with governments investing heavily to secure personal data, resulting in companies controlling access to big data and building the selection algorithms which largely determine who is admitted. Ethical debates would emerge around what data should be used, as public opinion may oppose algorithm-dependent systems making migration determinations, particularly in humanitarian cases.

Information exchanges between countries on potential migrants may become a source of tension, while diplomatic issues may also arise if algorithms target or refuse applicants from specific countries.

What if...

... it became increasingly difficult for migrants to live in a territory without being visible to host governments?

1.2

Technological Change:
Transparency and Visibility

The year is 2035 and people have become "digitally transparent" to authorities who increasingly rely on digital data, as well as on traditional forms of surveillance, in law enforcement. An expansion of such practices, in spite of concerns around privacy and data protection, has enhanced migration enforcement, while also increasing migrant vulnerability. Simultaneously, access to personal data may enable more targeted and timely public services.

Signals: Digital footprints, surveillance tracking and universal digital identities

"Digital identities" are becoming more and more entrenched in daily life via social media profiles, search histories, GPS location and online purchasing preferences, providing a wealth of data. National governments are starting to rely on these sources in migration management, for instance by monitoring Internet and social media searches to anticipate migratory movements. In Austria, Germany, Denmark, Norway, Sweden and the Netherlands, authorities are authorised to seize electronic devices of asylum seekers who are unable or unwilling to provide documentation to confirm their identity and nationality. Applicants for visas are now required by some countries to provide access to their social media accounts.

In several OECD countries, notably in the United States with the E-Verify system, online tools enable employers to confirm the legal status and eligibility of foreign-born potential employees, with employer use of the system becoming increasingly obligatory. Evidence suggests that the introduction of the E-Verify system has led to better labour market outcomes among workers likely to compete with unauthorised immigrants. Developments in non-OECD countries show that surveillance can go even further. China's 200 million surveillance cameras and advanced facial recognition capabilities enable the government to track the whereabouts and movements of both citizens and visitors in great detail.

How this world could come about

As surveillance becomes more advanced and its use more widespread, OECD countries utilise data to closely monitor citizens and migrants alike. Countries track individuals based on their personal finances, social media activity, health records and online activity. They are able to immediately identify migrants who would do not comply with national regulations, as well as those who are reluctant to integrate, do not learn the language, or do not adopt the host country's mainstream values and beliefs.

What this world looks like

By 2035, migrants must agree to total digital transparency as they integrate into a society that is closely monitored. Breaches of the right to privacy become part of the "new normal" and an unavoidable consequence when individuals enter a desired host country, access labour markets and use social services. Governments track unique digital identities through mobile phones, social media use and identification chips that are needed to access government services

including public transport, hospitals and employment services. The government sees everything and can reprimand, reward, or intervene wherever it sees fit. Facial recognition and biometric technologies are used to closely monitor movements across borders, automatically recognise individuals and alert authorities to any unauthorised presence. With the ability to easily detect irregular migration, migration policy makers are fully accountable for abuses of the migration system.

Migrants, constantly under pressure to prove themselves, join sports clubs, local associations and support domestic charities, making them even better integrated in public life than native-born residents. This promotes greater social cohesion for the most part, but also challenges native-born residents who already feel dissatisfied with rising inequality and globalisation. Some people try to live "off the grid" and avoid institutional systems that collect information including hospitals, schools and other social services. Others try to game the system by sharing false information on social media and creating online versions of themselves that do not reflect reality. Underground channels of communication arise in which tech-savvy individuals offer for-profit services to allocate points to individuals willing and able to pay. Those who can afford to access these services enjoy considerable advantages, while those without access are increasingly marginalised and excluded from society.

FOR MIGRATION AND INTEGRATION POLICY MAKERS

OPPORTUNITIES

Surveillance enables governments to track migrants and citizens at all times, leading to more precise law enforcement outcomes including deportation of irregular migrants, meeting public demand for stricter migration control and prevention of irregular movements. As a result, the public might be more accepting of migrants and the migration system, possibly leading to relaxation of restrictions, notably for lower skilled workers.

Migrants' data can be used to enhance their experience by notifying them when they meet new criteria (e.g. duration of stay), offering more targeted integration services, and ensuring more efficient use of government resources. Migrants' experience can be further enhanced by matching them to jobs that are a better fit, as well as places of residence and communities which value and most benefit from their skills, enabling easier and faster integration, as well as better economic and social integration outcomes. Crimes such as human trafficking are easier to detect and prevent through triangulation of multiple previously unconnected data sources.

CHALLENGES

The erosion of migrants' rights, especially the fundamental right to privacy, may lead to strong pushback from civil society and human rights organisations. Migrants who try to avoid surveillance would be exposed to a high risk of exploitation and poor working conditions. Some activist groups may develop strategies to reduce detectability of undocumented migrants, leading to a new form of digital civil disobedience.

While government surveillance of migrants may be limited at first, it is likely that more pervasive and intrusive surveillance is gradually rolled out. For example, new forms of surveillance may initially be required to detect people (tourists, migrants, and even citizens) working virtually for employers in other countries, or using anonymous cryptocurrencies to conduct undetected transactions in the local economy. In this context, the failure of systems to adapt to the evolving norms, values and ethics of a country becomes of a concern.

What if...

... public opinion on migration is driven by non-economic argument?

2.1

Change in the Purpose of Migration and Integration:
Homo Non Economicus

The year is 2035 and economic arguments for labour migration – including supporting economic growth, securing future labour supply, productivity gains and innovation – are now decreasingly relevant in the migration debate. Instead, the societal impact of migration increasingly influences migration debate and policies, with increasing focus on non-traditional selection factors for long-term or permanent migration.

Signals: Well-being, migrants' characteristics and value tests

Available evidence shows that economic migration, if well managed, is beneficial to the national economy. However, significant groups in OECD countries are willing to accept lower economic growth "as the price to pay" for other social or economic objectives. For example, the overall positive impact of high-skilled labour migration (largely of the free-mobility kind) in the United Kingdom and in Switzerland was not sufficient to build consensus on more open migration regimes. The election of political parties who favour more restrictive migration policies suggests that parts of society do not believe that the economic benefits are real, that past economic benefits will not be replicated by future migration or that other costs outweigh any such benefits.

In an EU-wide opinion survey in 2016, respondents stated that "immigrants [who] are committed to the way of life" of countries of destination should be the most important factor in deciding whether someone born, brought up and living abroad should be able to immigrate. Other factors, including those traditionally used in migrant selection – such as language or occupational skills and educational qualifications – were deemed secondary. In parallel, countries are increasingly focusing on social cohesion. Many countries require newcomers to sign "integration contracts" committing them to adhere to host-country values such as gender equality or acceptance of same-sex relationships, while around half of all OECD countries have civic integration tests for naturalisation. Civic engagement in volunteer activities with local religious and cultural organisations is taken into account in permit procedures in Korea and Italy.

How this world could come about

As public discourse around migration becomes increasingly values-driven, a political dichotomy emerges where one side appeals to humanitarian considerations, while the other fears the demographic impact of migration and is receptive to displacement and substitution theories. Economic arguments become a secondary consideration for both groups. This division leads to political dominance of parties which institute immigration policies based on non-economic factors. These parties are further motivated by polling indicating that individuals are more satisfied when there is less diversity and more immediate social cohesion, even if it means slower economic development. These new priorities drive governments to debate selection criteria for migrants that differ widely from those used currently. Many countries decide to much more rigorously assess the compatibility of migrants' opinions and values with those of the host country, further reducing the role of economic arguments in the migration debate.

What this world looks like

Countries are willing to accept lower growth and increased skill shortages. By 2035, strictly economic arguments carry little weight. Instead other factors such as subjective well-being of the resident population, social and cultural factors, and the population's preferences for qualities in migrants indicate a substantial values shift. Criteria within civic integration tests shift from knowledge of norms and values to signs of genuine adherence to them. Societies consistently debate these tests, as shared values and identities are in constant flux. Individual values, perceived cultural proximity, and ability to adapt to a way of life become lightning rods in national migration debates.

FOR MIGRATION AND INTEGRATION POLICY MAKERS

OPPORTUNITIES

Integration becomes more straightforward for migrants granted entry because it has been predetermined that they will share domestic norms and values. This allows integration policy makers to more easily generate consensus among stakeholders, build social contracts, and engage cities and local governments in policy implementation. Rapid integration, accompanied by increased perceived social cohesion, could lead to increased support for migration, accompanied by faster convergence in social and economic outcomes between immigrants and native-born, as well as access to rights including voting. This generates more support for migration policy than is currently often the case, notably for accepting lower skilled migrants or refugees.

CHALLENGES

As non-economic arguments shape migration policies, changes in political leadership may lead to radical shifts in migration objectives, integration policies and the establishment of a system of indicators for "values" and norms upon which migrant selection would be based. Division in countries may emerge around what these norms and values should be and how to measure them.

If only some migrants are selected on their "values", while others remain authorised on the grounds of labour market needs, there is a risk that these two groups have access to different sets of rights in the host country, which may have a negative impact on the reliability of the immigration system and on social cohesion. In tandem, if labour market integration becomes less politically relevant, employment prospects may decrease due to under-investment in training, with some long-term negative impacts on other integration domains including the development of host country specific social capital.

What if...

... work no longer brought people together and communication no longer depended on a common language?

2.2

Change in the Purpose of Migration and Integration:
Virtual Migrants and Digital Workers

The year is 2035 and smooth and instantaneous interpretation is now possible, relegating language barriers to the past. In parallel, changes in the nature of work have led to more remote work and self-employment notably in the platform economy, leading to fewer physical interactions with co-workers. As a result, having a job and the ability to communicate with others are no longer sufficient signs of successful inclusion into the society. The rise of virtual work means countries largely meet their skills needs by employing virtual workers. As a result, migration flows are increasingly driven to destination communities offering fast digital connectivity, affordable cost of living, high personal security and freedoms, a clean environment, and a welcoming society.

Signals: Real-time interpretation, remote working and social (dis-)integration

The world of work is rapidly changing. Remote working is on the rise powered by ubiquitous mobile communications, in tandem with the spread of the gig economy and use of online platforms to connect freelance workers with employers globally to deliver piecemeal, one-time work in a just-in-time economy. In addition, three out of four European employees have access to at least some work-schedule flexibility. Such working patterns often remove face-to-face contact as the primary method of integration, as well as diminishing the sense of place or locality. In addition, telerobotics (such as the remote control of mining trucks and other light and heavy equipment from different continents and time zones) could break the geographic link to much physical work as well.

In parallel, automated translation and simultaneous interpretation technologies are improving and such services are being increasingly used. The rise in machine translation and AI-powered translation platforms have not only decreased the cost of translation but removed barriers that prevented people from communicating when they did not share the same language, both in the private and working environment.

How this world could come about

As online forms of work become the new normal, the need to learn the language to communicate becomes less critical. Employment and language abilities as markers of integration are challenged. Immigrants use the platform economy intensively, becoming disconnected from the rest of society beyond their local neighbourhood. This comes at a cost for longer term integration, notably for lower skilled immigrants. Highly-skilled workers maximize their earnings by living in digitally connected, affordable communities while working for employers in higher cost regions. Accessing higher quality and/or lower cost employees accelerates the unbundling of work, spreading it over a decentralized global workforce, while companies who fail to do this become uncompetitive.

This leads to a shift in migration patterns whereby migrants move to communities that offer the best quality of life relative to cost of living. For many, this means remaining in their home country to benefit from utilising their own language and culture, while for others it means migrating to countries with better environmental conditions, while avoiding the highest

cost cities that traditionally have been the main employment hubs. While instant-interpretation tools facilitate exchange and understanding between different language groups, this could result in only minimal interaction taking place between foreign and local workers without reliance on technology. More and more people could only learn English as the primary global language, with non-native speakers refraining from learning other host country languages.

What this world looks like

By 2035, many migrants and native-born workers work in remote environments, either at home or in co-working spaces. Most are undertaking non-standard forms of work, including self-employment, independent contracting and platform work, as communication barriers largely disappear. While this can be isolating, it also allows employees to co-work in different ways that suit their needs, thereby increasing productivity and job satisfaction. As work becomes more piecemeal, more dependent on technological reach and less dependent on geography, it becomes difficult for governments to explain why foreign workers have to migrate to contribute to the economy. Integration also becomes more difficult to measure, with migrants who demonstrate lifelong learning or volunteer activity considered well integrated. Paradoxically, while learning the local language loses its immediate relevance for communication and employment, it may be used as an even stronger indicator of social integration.

FOR MIGRATION AND INTEGRATION POLICY MAKERS

OPPORTUNITIES

Virtual work creates an opportunity for countries to meet their skills needs without the need for physical migration. Governments could seek to attract global virtual workers by establishing a country-wide virtual employment platform and providing some forms of social protection and benefits. The key to attracting these desired physical migrants will be providing a high ratio of quality of life to cost of living by offering a multitude of incentives and opportunities and addressing key detriments (e.g. pollution or human rights violations). Simultaneously, government could facilitate opportunities for native-born workers to access high-paying work elsewhere.

Language training would become less relevant, with funding able to be redirected to other services, such as active labour market policies for up-skilling and re-skilling.

The ability to work from anywhere leads to increased short-term migration, which may attenuate negative views about migration in destination countries.

CHALLENGES

Regions and communities that previously relied on employment opportunities to attract and retain residents may face an emigration crisis if unable to offer an attractive and affordable quality of life, provoking significant anger and backlash. Unless these impacts are offset and the transitions adequately managed, there could be a growing hostility not only to foreign virtual workers, but to local migrants alike.

The disconnect between place of residence and "place" of employment raises questions around taxation and access to social protection, requiring increased international cooperation and agreement in these areas. Simultaneously, measuring integration may become difficult, with policy-makers struggling to define social or cultural integration with other criteria needed, while selection tools would need to be adapted to take into account these new criteria.

If interpretation tools are not accessible universally and free of charge, but only available to certain immigrants in specific occupations or with enough resources to purchase them, this may create inequalities between migrants groups. Providing universal, free, high-quality translation technology may become a necessity. Integration of immigrants who do not speak the host country language will be a new challenge, as will be relationships with children of immigrants. More generally, lack of contacts with co-workers and lower ability to communicate may lead to isolation of some groups of migrants.

What if...

...cities/regions dictate not only integration but also migration policy?

3.1
New Stakeholders:
City Power

The year is 2035 and cities and transnational city networks are powerful actors in integration and migration policy making. In some countries, regional entities have an autonomous role in migration decision-making, designing their own selection systems with region-specific permits. Certain cities or regions are extremely popular for highly-skilled newcomers, while lower-skilled migrants concentrate outside metropolitan areas. Integration services are defined at local level, leading to increased fragmentation and wide variations in availability and quality within countries. Frictions grow between cities, regional authorities and national governments as policy objectives do not align.

Signals: Super-diverse cities, transnational city networks and policy divergence

Regional and local authorities are already vocal stakeholders in the field of integration policy as "first responders" and long-term providers of integration services, as migrants in OECD countries tend to live in urban settings. In most OECD countries, integration policy is already quite decentralised. In recent years, transnational city networks have brought together cities to advance "local solutions to global problems". Examples include the Global Parliament of Mayors; the Mayoral Forum on Human Mobility, Migration and Development – where the Mayors Migration Council and Marrakech Mayors Declaration were initiated – and the Charter on Integrating Cities. In a number of OECD countries, divergent local and national agendas on migration have led to an effective "decoupling" of national and local migration and integration policies. Examples of this are the sanctuary cities in the United States, or European cities lobbying for more open migration policies, such as the tri-city area of Gdańsk, Gdynia and Sopot in Poland. In some OECD countries, regional actors have been influential on national migration policies and have even negotiated specific programmes or autonomy.

Finally, a number of OECD countries restrict mobility for certain types of migrants to a locality – often with a view of having a more equal distribution of migrants. For example, refugees in certain German regions are required to stay in their locality, with mobility contingent upon approval of the origin and destination locality. What is more, in many OECD countries a work permit may be restricted to specific employers and/or regions.

How this world could come about

Cities and regions have further developed local integration services to provide services closely tailored to the needs of migrants. Consequently, the "integration landscape" has also become patchier with the availability and quality of integration services differing widely between rural and urban regions, while access to services differs between cities as they implement their own programmes and eligibility criteria. These differences make some cities and regions more desirable destinations for newcomers than others.

Migration and integration issues become central at local, regional and municipal elections, with candidates proposing contrasting visions of migration and integration and also offering different policy packages. Tensions between national and local authorities increase regarding the orientation of migration policies, as well as around funding for migration and integration services.

What this world looks like

By 2035, the influence of metropolitan areas and large municipalities extends to all aspects of integration policies, as well as the development of migration policies. Local authorities have the right to select and admit migrants, issuing their own "city visas" and restricting migrants' right to live and work at the city or regional level. Cities and regions seek to attract the best and brightest, introducing loyalty schemes that promote circulation of wealth within the city, or provide local tax exemptions and specific services.

This could lead to rising competition between cities and regions, and create divides between larger and smaller cities, as well as tensions and inequalities between regions. While seeking to attract highly-skilled migrants, cities find ways to restrict lower skilled migration. Low-skilled workers realise they have a better chance of finding affordable housing and accessible schools in the suburbs and countryside. This fosters division between migrants (high vs. low skilled), but also increases segregation among cities.

All city residents may gain "local citizenship" and the right to vote, with a consequent rise in citizen engagement. Due to the shift in responsibilities, the local political debate is coloured and polarised by issues of migration and integration traditionally debated at the national level. Anti-immigrant alliances of cities or regional entities emerge with a restrictive approach to migration, gaining increasing influence nationally and, in Europe, at the European level.

Social integration is measured via the adoption of regional norms, such as knowledge of regional language and participation in regional cultural activities.

FOR MIGRATION AND INTEGRATION POLICY MAKERS

OPPORTUNITIES

Local authorities may promote a nuanced and pragmatic approach to migration and integration resulting in a well-informed and tempered public debate. As a result of being more directly involved in migration and integration matters, cities are likely to gather more insightful and detailed data to tailor policies. It also enables cities to react faster to any changes they perceive within their territory and ensure services are seamless and efficient. Integration policies in cities and regions may provide pathways for migrants to understand, accept and adopt social norms. Municipalities could seize their chance to redefine inclusion.

Civil society becomes a powerful player in cities, with an increased ability to engage migrants, local citizens and businesses to co-produce policies to create common public goods, improve social wellbeing, minimise environmental impacts, and determine the "optimal size and composition" of cities' populations.

CHALLENGES

Migration selection by cities could create frictions with national authorities. National governments may reduce funding for the local level and cities could reduce the co-operation with national authorities in the area of law enforcement. States may seek to regain their influence in the interest of harmonisation. Tensions could also exist between local authorities if service provisions and intentions vary across the country. Cities may directly negotiate with other foreign cities, if not with countries themselves.

Cities providing greater integration support than rural communities could become more attractive destinations for migrants, further exaggerating existing rural-urban divides, exacerbating ongoing urbanisation tendencies and related policy issues, such as affordable housing.

Because of more direct feedback loops, cities may face greater pressure to act according to the opinion of inhabitants, exacerbating polarisation of society in local elections, and making integration and migration policies more volatile.

3.2

New Stakeholders:
Superstar Firms

The year is 2035 and corporations became key actors in migration management. "Superstar" firms – those which drive productivity growth and contribute a larger share of fiscal contributions – are using their market power to acquire global mobility rights for their employees and dictate the conditions for residence permits.

Signals: Privatisation, "superstar" firms and big data

In many OECD countries, companies are already active stakeholders in migration management. For decades, states have supported mobility between different offices of multinational firms by issuing specific permits. These intra-company transfer permits often require a minimum level of income or skills, and in some cases a test of the national labour market to ensure initial consideration is given to resident candidates. Employees qualifying for such intra-company mobility are often able to move between countries based on multi/bilateral agreements between states.

"Superstar" firms are already larger than the most productive firms were decades ago, with a significant increase in industry concentration in Europe and North America. The economic and political power of a handful of firms is enormous, particularly in the high-tech sector, which often relies on immigration to fill its skill needs. For instance, in Silicon Valley close to 60% of workers in STEM jobs with a bachelor's degree or higher are foreign-born. Among software engineers, the share rises to 70%. The ability to easily bring in foreign workers is one factor that firms consider when deciding office locations, typified by the Amazon HQ2 tender process where Canadian cities competed with American ones on the basis of their ease of bringing foreign workers.

Against this backdrop, globally operating "superstar" firms – whose revenue often exceeds that of many states – are able to exert more influence on migration policy makers than in previous decades. Many OECD countries have introduced accredited employer schemes whereby labour migrants receive accelerated work and residence permit processing based on the "trusted sponsor" status of their employer. This provides these companies with efficiency and planning advantages in the global search for talent.

How this world could come about

Demand-driven selection systems, which require a job offer to obtain a residency permit, remain widespread across the OECD. In many OECD countries, large employers or innovative firms gain "trusted employer" status that streamlines their access to foreign labour and facilitate intra-firm mobility. Business visas, such as those falling under the APEC Business Travel Card, are used intensively by firms. As big corporations become more influential in migration, governments become more trusting in their selection processes. "Superstar" firms have the resources to use big data and technology to craft algorithms that help them find perfect candidates.

Facilitation for family migration is also provided to workers. Although this creates positive advantages for firm productivity, tensions rise with potential public backlash against privileges afforded to big companies' workers. To counterbalance

easier access to foreign labour, firms' employees receive residence permits strictly linked to their job. As employers fix the terms and conditions of the employment contract, they indirectly decide the conditions for residence, including for family members. This may create situations of dependency and risk of exploitation.

What this world looks like

By 2035, the economic success of a country is totally dependent on the fortunes and decisions of large firms. While firms do not set migration policy, governments know that the consequences of not honouring their wishes can be severe. Superstar firms determine their geographic location based on the special conditions they can negotiate for international recruits, instead of taxation arrangements. Consequently, international corporations attract talent from around the world and employees who work for these companies increasingly develop corporation-based identities (Apple-citizen, Google-citizen, Alibaba-citizen) in contrast to an identity bound by geography. Large and innovative firms also negotiate special entry conditions for lower and middle skilled workers to respond to the needs of their staff. Ultimately, they also influence the conditions offered to the children of the workers they sponsor and access to citizenship for the most highly skilled. Implicitly they become an influential actor in countries that offer the best conditions. Due to successful integration outcomes and extensive marketing, public acceptance of worldwide free movement of corporation-citizens and their families is relatively high, although local tension may emerge due to increased cost of living and higher demand for schooling, housing and services.

FOR MIGRATION AND INTEGRATION POLICY MAKERS

OPPORTUNITIES

Countries with good public amenities and strong relations with superstar firms are able to benefit greatly from the high-skilled migration they promote. Pilot projects could be developed to test the success or failure of corporations' selection methods that would be useful for migration policy design more broadly. Migration would become primarily economically driven, with migrants having strong economic outcomes, fostering public acceptance. Countries are using fast track and special conditions for international recruitment by some selected firms as a way to attract FDI and influence the location choices of large firms, resulting in high productivity or employment.

In order to reduce the leverage of "superstar" firm, countries may start to coordinate among themselves to adopt common rules and norms to avoid competing by weakening government control over migration policies.

CHALLENGES

Policy makers may find it increasingly challenging to help small and medium enterprises (SMEs) to recruit and retain talented foreign-born workers, resulting in a competitive disadvantage. This could stimulate irregular work of migrants in the smallest companies which lack sufficient bargaining power to recruit migrants. Countries may also afford preferential treatment to migration cases channelled through firms, while independent migrants would face greater barriers, creating a two-tier migration system.

With their new bargaining power, firms could move to more directly influence policy making, with countries facing a trade-off between giving up part of their sovereignty on migration issues or facing reduced FDI and fewer employment opportunities for local workers.

While firms select immigrants, they may fail to meet the total integration and social costs including language courses, family allowances (child care, education etc.), and unemployment support for spouses. Even where firms cover the full costs and responsibility for the migrants they sponsor, their interests may not always align with those of the host community. This could lead to secondary impacts from migration such as rising housing costs, traffic congestion, employment competition, or cultural changes that host communities view as negative, but which their local and national authorities have little power to control.

What if...

...non-OECD countries become increasingly attractive as destinations for mid- and high- skilled migrants?

4.1
Shifting Migration Directions:
New Destinations

The year is 2035 and flows of highly skilled workers are now mostly directed towards non-OECD economies. OECD countries are losing in the global competition for talent and struggle even to retain their best and brightest nationals.

Signals: Altered migration flows, brain drain and gains

About half of all migrants worldwide are living in OECD countries and a third of them are tertiary educated, with this share increasing rapidly over the past decades. Meanwhile highly skilled migration to non-OECD countries remains marginal. However, some emerging economies and Gulf countries, are transitioning to more knowledge-based economies and adopting skill-selective immigration programmes and policies to complement this transition.

China is actively pursuing a transformation from an export-oriented, low-skilled, and labour-intensive economy to a science, technology and innovation-based economy, a transition that demands highly skilled workers. To this end, the Chinese Government is introducing specific schemes and policies to attract educated and skilled international migrants, as well as Chinese professionals working overseas. In 2018, China introduced a new visa category for foreign talent to support China's proactive research and Development strategy. China's expenditure on R&D dramatically increased from 0.6% in 1997 to 2.2% of GDP in 2017 – a much faster rise than in the OECD (2% in 1997 to 2.4% in 2017). Additionally, China has become a major destination for international students, with the number of international students in degree programmes rising from 24 000 in 2003 to 258 000 in 2018. It has multiplied its scholarships for international students as well.

Singapore is another non-OECD country attracting qualified foreign talent. In addition to creating special work visa categories targeting researchers and scholars, a government agency facilitates outreach to skilled foreigners and potential Singaporean returnees including students, highly skilled professionals and workers, entrepreneurs, and investors. Its Agency for Science, Technology and Research offers top foreign scientific talent benefits such as research funding and support for spouses and children, while a scholarship programme aims to develop high-level scientific and technological talent. Singapore is successfully leveraging assets including a clean environment, world-class education system, comprehensive health care, accessible transportation infrastructure, good cultural amenities, and low taxes on high-income earners. Other emerging economies, such as Argentina, India, Brazil, Russia, South Africa, and Ethiopia, have the potential to develop similar schemes and actively tap into the pool of talent within their regions.

How this world could come about

Incentivised study programmes, increased R&D funding, and advantageous tax regimes combine to make non-OECD countries highly attractive for skilled workers and researchers. Non-OECD countries become leaders in advanced technologies such as 5G mobile connectivity, preventive medicine, artificial farming and genetic engineering. Capital and human talent flows to countries leading in these domains. Within a few years, a new generation of highly educated global

citizens join the labour market, assisted by productivity-enhancing technologies which only they have the skills to access. Some OECD countries make use of these technologies, while others find themselves increasingly disrupted by new business models emerging from non-OECD economies. OECD countries increasingly struggle to compete for the world's top talent, yet remain reliant on immigrants to supplement their labour force in the face of ageing populations, rising government expenditure, and years of restrictive migration policy.

What this world looks like

By 2035, a new organisation for economic development and cooperation is created and counts among its members the richest non-OECD economies. They coordinate a new strategy to facilitate the exchange of top talent needed for their own economies, and restrict migration for all but the most talented OECD nationals. Non-OECD countries have become magnets for top global talent, inducing talent to move, stay and raise families, attracted by the quality of life, better economic prospects and salaries compared to OECD countries.

As the competition to talent gets tougher, and against the background of population ageing, OECD countries find it increasingly difficult to attract or retain skilled workers, resulting in lower GDP and lower capacity to innovate. Some of this is mitigated by a new wave of remittances from non-OECD countries to OECD economies. Regional and national debates on international taxation or reimbursement of tertiary education costs spread across OECD countries. The question of retention and brain drain becomes a major political issue in most OECD countries and public debate on migration moves from protecting domestic markets to making them more attractive to highly-skilled foreign and local workers.

FOR MIGRATION AND INTEGRATION POLICY MAKERS

OPPORTUNITIES

OECD countries could strengthen their partnerships with non-OECD countries, identifying opportunities for cooperation in specific technical areas resulting in mobility schemes being developed. Complex multi-country labour mobility schemes, which involve skills development, could be implemented and include high skilled and lesser skilled workers.

OECD countries could revise conditions for migration and integration for skilled migrants to offer more competitive packages. Dual nationality provisions could be expanded to facilitate cross-country mobility. This would be facilitated by a less polarised public debate on migration.

OECD countries could build upon their world-renowned university and R&D sector to attract and retain foreign students. In addition, greater investment on quality of life, social equality, and social welfare systems could make OECD countries more attractive.

CHALLENGES

OECD countries not only have to increase their efforts in attracting skilled migrants, but also need to start incentivising to retain skilled nationals within their home country. Anti-emigration discourse could rise, centred on messages around "bringing back our people". The private sector in OECD countries could become increasingly desperate for high-skilled workers, and increasingly exploit loopholes or even evade regulations to bring in the migrants they want. As the competition increases between OECD countries and emerging economies, lower income countries struggle even more to retain their skilled nationals. This creates significant tensions between countries, and impacts negatively on inequality trends between countries, with uncertain long-term effects on forced migration.

What if...

...non-OECD destination countries do not need migrants for low skilled jobs anymore?

4.2

Shifting Migration Directions:
Oil Price Shock

The year is 2035 and oil prices have reached an historic low. Major destination countries for low skilled workers in Asia and the Middle East face a major economic slowdown and have limited need for low-skilled foreign workers. Global migration movements are affected.

Signals: Oil price volatility and emerging alternative

More than five million workers relocate every year for work from Asia to countries which are members of the Gulf Cooperation Council – almost equivalent to the total number of migrants, temporary and permanent, that OECD countries receive from third countries every year. Important changes in labour demand in Gulf countries have been observed over the past decade, demonstrating the vulnerability of these economies to oil price fluctuations. Most are actively pursuing policies to replace foreign workers with their own citizens, and to move to new sectors which are less reliant on low skilled labour. Additionally, the region remains subject to political tensions that could affect the regular flow of workers originating from Asia and neighbouring Arab countries. At a regional level, the recent examples of Venezuela and Libya illustrate the impact of targeted disruptions of major oil producing countries, resulting in the flight of very large numbers of foreign workers, followed by significant movements of nationals.

How this world could come about

The Gulf countries are currently among the most important destination countries for labour migration. However, the capacity of these countries to absorb labour migrants from key origin countries, mostly in Asia, would be undermined if oil demand decreased drastically, or if regional tensions and conflicts flared. A large number of relatively low-skilled workers would have to seek other opportunities abroad if several large oil-producing countries face unemployment of their nationals in the context of a conflict or a major global recession. This would not only affect countries of origin and their neighbouring countries, but potentially also OECD destinations, which are already host to large numbers of nationals of the main countries of origin.

What this world looks like

By 2035, concerns about environmental changes and air pollution have driven the successful quest for renewable sources of energy, which are increasingly affordable and widespread. Emerging economies are investing more than anticipated in carbon-saving technologies, and are drastically reducing their oil dependency. Nuclear and solar power plants are developing, and liquid fuel and gas power plants are progressively dismantled. China is supplying its domestic market and global markets with electric cars and R&D has significantly improved battery efficiency and durability. Oil-based technologies become obsolete quicker than anticipated, with low and falling oil prices resulting in economic stagnation in economies reliant on oil exports, notably the GCC countries. This is associated with increased instability in key origin countries such as Algeria, Iran, Kazakhstan, Venezuela or Nigeria and re-routing of migration flows towards

other destination countries, including OECD countries. Significantly lower labour demand and resulting joblessness in oil-producing countries could be coupled with large outflows of now unemployed migrant workers. There could be a large-scale return migration to key origin countries such as India, Indonesia, Pakistan, and Bangladesh or alternatively, onward movement of migrants currently settled in the Gulf to other countries.

FOR MIGRATION AND INTEGRATION POLICY MAKERS

OPPORTUNITIES

This scenario would act as a stress test on new international agreements to better manage international migration, including forced migration and displacement. International cooperation could offer expertise and assistance to origin countries such as India, Venezuela and Bangladesh, to help them reintegrate returning migrants and generate positive spill-overs in their economies.

 In the context of a successful transition to a global lower carbon economy, a large number of semi-skilled workers will be needed for the alternative energy economy or energy saving technologies. Rechannelling the labour supply from origin countries that were previously serving the GCC labour market will require the development of innovative skills mobility partnerships.

CHALLENGES

High and unpredictable waves of forced migrants return from areas of rapid political change and instability to origin countries in Asia, which are not prepared for such large migration flows. Labour markets are unable to absorb returnees.

OECD countries struggle with accommodating predominantly low-skilled male migrants arriving in large numbers from oil-producing countries (both natives and migrant workers), including the increased reliance on public services, while also ensuring societal support. Family reunification streams may come under greater pressure. These inflows place strong pressures on asylum systems in some countries, as pathways for labour migration are limited or do not exist. Alternatively, this results in large numbers of undocumented migrants as the labour market cannot absorb significant numbers through regular channels.

Annex

Strategic foresight and scenario planning doesn't seek to predict the future, but facilitate discussion around the question of "what might happen" in the future and broaden understanding of how different trends develop and interact.

Strategic foresight and scenario building is used in a wide variety of settings and among different stakeholders, including policy makers, the academic community and business world. Many OECD countries have been using strategic foresight as a method for policy planning and have put in place dedicated Foresight Units at a whole-of-government level (e.g. Canada, Finland and Singapore), while in other countries such units exist on ministerial levels (e.g. in the United Kingdom and the Netherlands).

To prepare for the 2020 OECD Ministerial Meeting of Migration and Integration, a Task Force composed of eight member countries (Australia, Canada, France, Japan, Germany, The Netherlands, Sweden and Switzerland) collaborated with the Secretariat over three foresight workshops on a draft set of scenarios that was discussed by the full OECD Working Party on Migration.

These workshops developed eight scenarios, grouped in four broad themes, based on a collective exercise among the range of stakeholders at the workshops, drawing upon data, expertise, knowledge and perceptions on potential future developments and their impacts. While the scenarios may have some common characteristics, this is not intentional, and simply reflects a reading of the megatrends that contribute to them. There are also many critical uncertainties and contradictions about the future. Eight separate scenarios were developed to explore these multiple alternative futures. Each scenario should therefore be considered separate to the others, rather than as a dimension of one putative cohesive picture.

These scenarios are neither predictions nor prescriptions. Rather, they are intended to be plausible but also provocative and somewhat extreme cases that provide adequate contrast with current expectations to serve as a tool for future-proofing policies. For the reader, this may require suspending disbelief about what you think the most likely future is, and setting aside aspirations and fears about what is most desirable. Rather, the reader is encouraged to adopt an open mind and focus their analytical efforts on exploring "what if" the scenario were to come about.

The scenarios are designed to reflect circumstances that could plausibly come about for reasons largely beyond the control of any government. Therefore, the purpose of these scenarios is not whether these scenarios could be brought about or prevented, but rather what policies could be put in place to be prepared for the scenario, if it came about.

...

1 ■ **Technological change**

Scenario	Summary	Signals	This is a world in which...	FOR OECD POLICY MAKERS	
				Opportunities	Challenges
1.1: **Big Data Profiles** *What if big data were readily available to create "migrant profiles" forecasting wide-ranging outcomes such as successful integration?*	• Elaborate migrant selection systems, big data and statistical models create risk profiles which drive the selection process for migrants	• Various countries use points allocated for socio-demographic characteristics and statistical models to predict successful labour market integration • Some countries use big data to identify security risks for visa applications • Face-reading technology is also utilised in asylum claims to determine honesty • Big data and machine learning are trialled to maximise match between refugees and suitable resettlement sites	• Governments can access data on unobservable characteristics and assign migrants a social desirability score used to predict whether migrants would help or hinder government policy objectives • Not all data is publicly available, but migrants must submit it as the price of admission • To improve eligibility score, migrants pay services to game migration systems, but only those with financial means and digital expertise • Greater public awareness of collection and processing of personal data with increasing demand for secure networks and encryption	• Allows for real-time monitoring and evaluation, as well as targeted interventions that are cost-effective and efficient • Better integration outcomes, enhanced economic benefits, social cohesion and lowered security risks • May lead to more open and proactive migration	• Utilisation of these systems may result in increasing demand for data, while information exchanges between countries becomes key source of tension • Companies controlling access to big data and algorithms have increasing influence • Ethical debates around what data should be used, and whether this should include sensitive information • Biases may be perpetuated or introduced • Public opinion may oppose use of algorithms, especially in humanitarian cases
1.2: **Transparency and Visibility** *What if it became increasingly difficult for migrants to live in a territory without being visible to host governments?*	• Migrants become "digitally transparent" to authorities who increasingly rely on data and surveillance, while migrants are provided with more targeted and timely public services	• Digital identities becoming more common and used to monitor migration patterns • Several European countries seize electronic devices of asylum seekers who are unable to confirm their identity/nationality • A number of OECD countries allow employers to confirm online legal status and eligibility of potential employees • China's Social Credit System employs a points-based ranking system for its citizens' behaviour	• Migrants agree to total digital transparency • Governments track unique digital identities through mobile phones, social media, identification chips in public transport and hospitals • Borders are closely monitored with alerts of unauthorised presence • There is total accountability for policy makers since irregular migration is easily detected • Migrants become disproportionately well integrated because of pressure to prove themselves • People who live "off the grid" are marginalised and excluded from society	• More precise enforcement of migration laws and policies, practically eliminating irregular migration and its associated problems • Potential higher acceptance in migration • Data on migrants location can be used to offer targeted assistance • Crimes such as human trafficking are easier to detect and prevent through triangulation of multiple data points	• Erosion of migrants' rights with some groups developing strategies to reduce detectability • The failure of systems to adapt to the norms, values and ethics of a country becomes of a concern

2 ■ Change in the purpose of migration and integration

Scenario	Summary	Signals	This is a world in which...	FOR OECD POLICY MAKERS	
				Opportunities	Challenges
2.1: **Homo Non Economicus** *What if public opinion on migration is driven by non-economic argument?*	• Economic arguments for labour migration become less relevant, while distributional and societal impacts determine migration polices	• Significant sections of OECD populations are ready to accept a decrease in economic growth as the price to pay for other societal objectives • Election of political parties who favour more restrictive migration policies over previous labour migration strategies suggest that parts of societies do not believe in economic benefits of migration • Countries are increasingly focused on social cohesion - migrants who demonstrate lifelong learning or volunteer are considered well integrated	• Countries are willing to accept lower growth and increased skills shortages • Well-being has replaced economic growth as the primary societal goal and progress indicator in most societies • Criteria within civil integration tests shift from knowledge of norms and values to signs of genuine adhesion to them • Measuring integration becomes difficult, with policy-makers wrestling with attempts to define social or cultural integration	• Integration becomes straightforward and allows policy makers to generate consensus • Rapid integration and perceived increased social cohesion could lead to increased support for migration, notably for accepting lower skilled migrants or refugees	• Changes in political leadership may lead to more divided shifts in the objectives of migration and integration policies • Division in countries may emerge around what normal and values should be and how to measure them • If some migrants are selected for their "values" and others for their labour, there is a risk that the two groups have access to different rights • If labour market integration becomes less relevant, employment prospects decrease due to under-investment in training
2.2: **Virtual Migrants and Digital Workers** *What if work no longer brought people together and communication no longer depended on a common language?*	• New ways of working, as well as improvements in interpretation technology mean successful integration is no longer contingent on labour market inclusion or language learning	• World of work is rapidly changing with the rise of remote working, the gig economy, and the use of online platforms to connect freelance workers with employers • Automated real-time interpretation is becoming more widespread and allows people to communicate even when they don't share the same language	• Most migrants (and many locally-born people) work remotely. The country of work is no longer necessarily the country of residence • Migrant employees are able to co-work in different forms and public spaces that better suit their individual work-life schedules, increasing productivity and job satisfaction • Need to learn the language to communicate becomes redundant, challenging employment and language abilities as markers of integration	• Language training would be less relevant, with funding redirected to other services • Governments need to develop policies to retain highly-skilled workers who can work from anywhere • Opportunity to work from anywhere leads to increased short-term migration, which may attenuate negative views about migration	• If interpretation tools are not provided universally, free of charge but only to some migrants in particular occupations, this may create inequalities between migrant groups • The disconnect between place of residence and employment raises questions around taxation, access to government services and citizenship • Integration of immigrants and second-generation migrants who haven't learned the host language will be a new challenge • Lack of contacts with co-workers may lead to isolation of some groups of migrants

3 ■ New stakeholders

Scenario	Summary	Signals	This is a world in which...	FOR OECD POLICY MAKERS	
				Opportunities	**Challenges**
3.1: **City Power** *What if cities/regions dictate not only in integration but also in migration policy?*	• Cities and regions are powerful actors in integration and migration policy	• Migrants are more likely to live in urban settings, therefore cities have direct experience of integrating migrants • Transnational city networks have proliferated • Diverging local and national migration agendas have led to "decoupling"	• Migration and integration issues are hyper-localised, with city areas influence all aspects of integration • Areas exert autonomy via "city visas" • Strong competition between cities to seek highly-skilled – many introduce loyalty schemes, provide local tax exemption, or specific services • Leads to rising competition between cities and regions, divides between larger and smaller cities, and inequalities between regions • Cities restrict lower-skilled migrants who move to suburbs or rural areas • City residents gain local citizenship and right to vote	• With more insightful and detailed data, migration and integration policies can be tailored and cities can react faster to any perceived changes • Integration policies are highly adjusted to local contexts • Civil society becomes a powerful player with increased ability to engage migrants, local citizens and businesses	• If policy directions between national and city governments diverge, this may cause frictions • National governments may reduce funding to local levels and cities could reduce co-operation in law enforcement with national authorities • Cities providing greater integration support than rural communities may exacerbate rural-urban divide • Because of more direct feedback loops, cities may face greater pressure to act according to the opinion of inhabitants
3.2: **Superstar Firms** *What if corporations become key in policy making?*	• Corporations are key actors in migration management, using their market power to acquire global mobility rights for their employees	• Superstar firms are significantly larger than historically • Private companies are active stakeholders in migration • States have supported intra company mobility with special permits • Superstar firms exert influence on migration policy to a larger extent • Many OECD countries have accredited employer scheme where labour migrants get accelerated access to work and residence permits	• Economic success of a country is totally dependent on firms • Superstar firms determine their geographic location based on the special conditions they can negotiate for international recruits, instead of taxation arrangements • Employees develop corporation-based vs. nationality based identities • Employers also influence conditions offered to the children of workers • Public acceptance worldwide of free movement of corporation-citizens and their families is relatively high	• Countries with good amenities and strong firm relations benefit greatly from the high-skilled migration they promote • Pilot projects testing corporations' selection methods could inform wider migration policy • Migration becomes primarily economically driven • To limit corporations' power, countries may coordinate between themselves to adopt common rules and norms	• Becomes increasingly difficult to help SMEs recruit and retain talent • Independent migrants face greater barriers than those affiliated with firms – creating a two-tier system • Countries face a trade-off: ceding migration control or facing reduced FDI and employment opportunities • Countries may be forced to coordinate between themselves to adopt common rules and norms to avoid a weakening of their control over migration policies • The total integration and social costs of corporation-citizens may not be covered by corporations

4 ▪ Shifting Migration Directions

Scenario	Summary	Signals	This is a world in which...	FOR OECD POLICY MAKERS	
				Opportunities	Challenges
4.1: New destinations *What if non-OECD countries become increasingly attractive as destinations for mid- and high-skilled migrants?*	• Traditional South-North migration is altered, with a shift in global competition to both competition among OECD countries and with non-OECD countries	• Emerging economies and Gulf countries are transitioning to knowledge-based economies, adopting immigration policies to complement this transition • China is transforming to science, technology and innovation-based economy, introducing a new visa category and attracting international students via scholarships • Singapore created a special work visa category, government agency that recruits skilled foreigners and Singaporean returnees, and an agency which headhunts top foreign scientific talent	• Non-OECD countries have become magnets for top global talent due to quality of life, better economic prospects and salaries compared to OECD countries • OECD countries find it difficult to attract or retain skilled workers • Question of retention and brain drain becomes a major political issue in OECD countries • OECD countries face considerable labour shortages of highly-skilled workers, resulting in lower GDP and lower capacity to innovate	• OECD countries could move to strengthen their partnerships with non-OECD countries, identifying opportunities for cooperation • OECD countries could revise conditions for migration and integration for skilled migrations to offer more competitive packages • OECD countries could build upon their world-renowned university and research and development sector and invest further in quality of life, social welfare and equality	• OECD countries struggle to improve retention of the best and the brightest • Anti-emigration discourse could rise • Private sector in OECD countries could become increasingly desperate for highly-skilled workers • Low income countries are losing most of their human resources, creating significant tensions between countries.
4.2: Oil price shock *What if non-OECD destination countries do not need migrants for low skilled jobs anymore?*	• Reduction in demand for low skilled labour in main non OECD destination countries due to a reduction in oil price leading to migration pressure towards OECD countries	• Previous episode of economic difficulties or instability in oil producing countries • Political instability in oil-producing regions could affect regular flow of workers originating from Asia and neighbouring Arab countries	• Environmental and air pollution concerns drive renewable energy sector which becomes affordable and widespread energy source • Emerging economies invest in carbon-saving technologies and reduce their dependency on oil • Oil-based technologies become obsolete resulting in economic stagnation, teamed with increased instability in key origin countries • Re-routing migration flows towards other destination countries including OECD countries	• Stress test for international agreements to better manage international migration including forced migration and displacement • Successful transition of formerly oil-producing countries could create new jobs and create new migration opportunities if proper skills development programs are in place	• Origin countries in East Asia are not prepared for the large return migration and labour markets cannot absorb returnees • OECD countries struggle with higher shares of predominantly low-skilled migrants arriving from oil-producing countries, including the increased reliance on public services. • Strong pressures on asylum systems in some countries as pathways for labour migration are limited or do not exit • Increase in undocumented migrants as regular channels cannot absorb all active migrants

References

Akbari, A. and Macdonald, M. (2014), *Immigration policy in Australia, Canada, New Zealand, and the United States: An overview of recent trends,* http://dx.doi.org/10.1111/imre.12128.

Artuc, E., Docquier, F., Ozden, C. and Parsons, C. (2015), "A Global Assessment of Human Capital Mobility: The Role of Non-OECD Destinations", *World Development,* Vol. 65, issue C, 6-26, http://dx.doi.org/10.1016/j.worlddev.2014.04.004.

Baldwin, R. (2018), "Machine learning is tearing down language barriers. What does this mean for trade?", https://www.weforum.org/agenda/2018/09/machine-translators-are-about-to-revolutionize-world-trade/.

Bansak, K., Ferwerda, J., Hainmueller, J., Dillon, A., Hangartner, D., Lawrence, D. and Weinstein, J. (2018), "Improving refugee integration through data-driven algorithmic assignment", *Science,* http://dx.doi.org/10.1126/science.aao4408.

Benton, M. and Ahad, A. (2019), *Breaking New Ground: Ten ideas to revamp integration policy in Europe,* Migration Policy Institute Europe, Brussels.

Benton, M. and Patuzzi, L. (2018), *Jobs in 2028. How Will Changing Labour Markets Affect Immigrant Integration in Europe?* Migration Policy Institute Europe, Brussels.

Bertelsmann Stiftung (2014), *Harnessing European Labour Mobility. Scenario analysis and policy recommendations,* Bertelsmann Stiftung, Gütersloh.

Böckenförde, M. and Braune, E. (2018), *Prospective Migration Policy – Scenario Building on Relations Between West Africa and Europe,* Käte Hamburger Kolleg/Centre for Global Cooperation Research , Duisburg.

Bradfield, R., Wright, G., Burt, G., Cairns, G. and Van Der Heijden, K. (2005), "The origins and evolution of scenario techniques in long range business planning", *Futures,* 37(8), 795-812.

Brayne, S. (2014), "Surveillance and System Avoidance: Criminal Justice Contact and Institutional Attachment", American Sociological Review, http://dx.doi.org/10.1177/0003122414530398.

Crul, M. (2016), "Super-diversity vs. assimilation: how complex diversity in majority–minority cities challenges the assumptions of assimilation", *Journal of Ethnic and Migration Studies, 42*(1), 54-68, http://dx.doi.org/10.1080/1369183x.2015.1061425.

de Haas, H., Vezzoli, S., Szczepanikova, A. and Criekinge, T. (2018), *European Migrations: Dynamics, Drivers, and the Role of Policies,* JRC Science Hub: EU Policy Lab, Luxembourg.

Department of Homeland Security and USCIS (n.d.), *Learn More About E-Verify and myE-Verify*, https://www.e-verify.gov/.

Diaz Ramirez, M., Liebig, T., Thoreau, C. and Veneri, P. (2018), "The integration of migrants in OECD regions: A first assessment", in *OECD Regional Development Working Papers 2018/01.* OECD Publishing, Paris, https://dx.doi.org/10.1787/fb089d9a-en.

EPSC (2017), *10 trends shaping migration,* European Political Strategy Centre, European Union.

ESPAS (2018), "Global Trends to 2030: The Future of Migration and Integration", in *ESPAS Ideas Paper Series,* European Strategy and Policy Analysis System.

European Commission (2017), *White paper on the Future of Europe. Reflections and scenarios for the EU27 by 2025,* COM(2017)2025.

Fainstein, S. and Fainstein, N. (2018), "The spatial dimension of poverty", in Andreotti, A., Benassi, D. and Kazepov, Y. (Eds.), *Western Capitalism in Transition: Global Processes, Local Challenges,* Oxford University Press.

Fay, J. (2018), *E-Verify begins validating driver's license data with National Law Enforcement Tracking System*, https://www.lawlogix.com/e-verify-begins-validating-drivers-license-data-with-national-law-enforcement-tracking-system/.

FRONTEX (2016), *Risk Analysis for 2016,* European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union, Warsaw.

Gill, L. and Molnar, P. (2018), *Bots at the Gate – A Human Rights Analysis of Automated Decision-Making in Canada's Immigration and Refugee System,* https://citizenlab.ca/wp-content/uploads/2018/09/IHRP-Automated-Systems-Report-Web-V2.pdf.

Giordano, A. and Terranova, G. (2012), "The Indian Policy of Skilled Migration: Brain Return Versus Diaspora Benefits", *Journal of Global Policy and Governance*, 17-28.

Goldin, I. and Nabarro, B. (2018), *Losing it: The economics and politics of migration,* https://voxeu.org/article/losing-it-economics-and-politics-migration.

Goldin, I., Pitt, A., Nabarro, B. and Boyle, K. (2018), *Migration and The Economy: Economic Realities, Social Impacts and Political choices.* University of Oxford, Oxford Martin School, https://www.oxfordmartin.ox.ac.uk/downloads/reports/2018_OMS_Citi_Migration_GPS.pdf.

Gupta, V., Kraemer, J., Katz, R., Jha, A., Kerry, V., Sane, J., Ollrger, J., Salminen, M. (2018), "Analysis of results from the Joint External Evaluation: examining its strength and assessing for trends among participating countries", *Journal of Global Health, 8*(2).

Heath, A. and Richards, L. (2016), *How do Europeans differ in their attitudes to immigration?* , https://www.europeansocialsurvey.org/docs/about/conference/HEATH_FORD_how-do-Europeans-differ.pdf.

Holzer, T., Schneider, G. and Widmer, T. (2000), *Discriminating Decentralization. Federalism and the handling of asylum applications in Switzerland, 1988-1996.*

Human Rights Watch (2018), *China: Big Data Fuels Crackdown in Minority Region*, https://www.hrw.org/news/2018/02/26/china-big-data-fuels-crackdown-minority-region.

Hvilsom, F. and Gram, M. (2016), "Politiet tager asylbørns mobiler ved ankomst", https://politiken.dk/udland/fokus_int/Flygtningestroem/art5611338/Politiet-tager-asylb%C3%B8rns-mobiler-ved-ankomst.

Immigration Policy Lab (2018, May 26), *Switzerland Launches Program to Test IPL Algorithm for Refugee Integration*, https://immigrationlab.org/2018/05/26/switzerland-launches-program-test-ai-refugee-integration/.

Integrating Cities (2018), *Eurocities Integrating Cities Charter*, http://www.integratingcities.eu/integrating-cities/charter.

IOM and ILO (2017), *Attracting skilled international migrants to China: A review and comparison of policies and practices,* Geneva: ILO Publications.

Kerr, S., Kerr, W., Özden, Ç. and Parsons, C. (2016), "Global Talent Flows", in *Policy Research Working Paper.*

Landau, L. and Kihato, C. (2018), "The Future of Mobility and Migration Within and From Sub-Saharan Africa", in *ESPAS Foresight Reflection Paper Series,* European Strategy and Policy Analysis System (ESPAS).

Latonero, M., Hiatt, K., Napolitano, A., Clericetti, G. and Penagos, M. (2019), *Digital Identity in the Migration and Refugee Context: Italy Case Study,* https://datasociety.net/output/digital-identity-in-the-migration-refugee-context/.

Linneman, R. and Klein, H. (1983), "The use of multiple scenarios by U.S. industrial companies: A comparison study, 1977-1981", *Long Range Planning, 16*(6), 94-101.

Malaska, P., Malmivirta, M., Meristö, T. and Hansén, S.-O. (1984), "Scenarios in Europe – Who uses them and why?" *Long Range Planning, 17*(5), 45-49.

Mayer, T. and Ottaviano, G. (2008), "The happy few: the internationalisation of European firms. New facts based on firm-level evidence", *Intereconomics, 43*(3), 135-148.

Migali, S., Natale, F., Tintori, G., Kalantaryan, S., Grubanov-Boskovic, S., Scipioni, M., Farinosi, F., Cattaneo, C., Benandi, B., Follador, M., Bidoglio, G., McMahon, S. and Barbas, T., *International Migration Drivers, A quantitative assessment of the structural factors shaping migration,* Publications Office of the European Union, Luxembourg, 2018, https://dx.doi.org/10.2760/63833 (main report online), https://dx.doi.org/10.2760/565135 (main report print), JRC112622.

Mohieldin, M. and Ratha, D. (2019), *Migration can support economic development if we let it. Here's how*, https://www.weforum.org/agenda/2019/03/migration-myths-vs-economic-facts/.

Momo, G. A. (2014), "High-Skilled Workers from Europe move to Brazil for Better Job Opportunities", in Rotschedl, J. and Čermáková, K. (Ed.), *International Institute of Social and Economic Sciences 10th International Academic Conference*, (pp. 71-82). Vienna.

Nansen Initiative (2015), *The Nansen Initiative*, https://www.nanseninitiative.org/.

Nilsson, B. (2019), "Education and migration: insights for policymakers", No. 2019-88, *AFD Research Papers Series*.

OECD (1987), *The Future of Migration,* OECD Publishing, Paris.

OECD (2009), *The Future of International Migration to OECD Countries,* OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264064126-en.

OECD (2016), *Be Flexible! Background brief on how workplace flexibility can help European employees to balance work and family,* OECD Publishing, Paris, https://www.oecd.org/els/family/Be-Flexible-Backgrounder-Workplace-Flexibility.pdf.

OECD (2016), *Working Together: Skills and Labour Market Integration of Immigrants and their Children in Sweden,* OECD Publishing, Paris, http://dx.doi/https://dx.doi.org/10.1787/9789264257382-en.

OECD (2017), *Pensions at a Glance 2017: OECD and G20 Indicators,* OECD Publishing, Paris, https://doi.org/10.1787/pension_glance-2017-en.

OECD (2018), *Job Creation and Local Economic Development 2018: Preparing for the Future of Work*, OECD Publishing, Paris, http://dx.doi.org/https://dx.doi.org/10.1787/9789264305342-en.

OECD (2018), "Can we anticipate future migration flows?", in Migration Policy Debates, No.16, https://www.oecd.org/els/mig/migration-policy-debate-16.pdf.

OECD (2018), "Putting faces to the jobs at risk of automation", in Policy Brief on the Future of Work, http://www.oecd.org/employment/Automation-policy-brief-2018.pdf.

OECD (2018), *Stemming the Superbug Tide: Just A Few Dollars More,* OECD Publishing, Paris, https://doi.org/10.1787/ 9789264307599-en.

OECD (2018), *Working Together for Local Integration of Migrants and Refugees,* OECD Publishing, Paris, http://dx.doi.org/https://dx.doi.org/10.1787/9789264085350-en.

OECD (2019), "Getting Skills Right: Future-Ready Adult Learning Systems", in *Getting Skills Right,* OECD Publishing, Paris, http://dx.doi.org/https://dx.doi.org/10.1787/9789264311756-en.

OECD (2019), *OECD Employment Outlook 2019: The Future of Work,* OECD Publishing, Paris, https://doi.org/10.1787/9ee00155-en.

OECD (2019), *Ready to Help?: Improving Resilience of Integration Systems for Refugees and other Vulnerable Migrants,* OECD Publishing, Paris, http://dx.doi.org/https://dx.doi.org/10.1787/9789264311312-en.

OECD/EASO (2018), "Can we anticipate future migration flows?" in Migration Policy Debates, OECD Publishing, Paris.

OECD/EU (2018), *Settling In 2018: Indicators of Immigrant Integration,* OECD Publishing, Paris/European Union, Brussels, http://dx.doi.org/https://dx.doi.org/10.1787/9789264307216-en.

OECD/ILO (2018), *How Immigrants Contribute to South Africa's Economy,* International Labour Organization, Geneva/OECD Publishing, Paris, http://dx.doi.org/https://dx.doi.org/10.1787/9789264085398-en.

OECD; ILO; IOM; UNHCR (2018), *G20 International Migration and Displacement Trends Report 2018,* http://www.oecd.org/els/mig/G20-international-migration-and-displacement-trends-report-2018.pdf.

Oomen, B. (2019), Naar een lokaal vreemdelingenrecht en -beleid, *Journaal Vreemdelingenrecht, 1*, 17-24.

Orrenius, P. and Zavodny, M. (2015), *The impact of E-Verify mandates on labor market outcomes,* http://dx.doi.org/10.1002/soej.12023.

Paoletti, E., de Haas, H. and Vargas-Silva, C. (2010), *The concept and theory of migration scenarios. Global Migration Futures Project,* International Migration Institute, University of Oxford.

Riedel, L. and Schneider, G. (2017), "Dezentraler Asylvollzug diskriminiert: Anerkennungsquoten von Flüchtlingen im bundesdeutschen Vergleich", 2010-2015, *Politische Vierteljahresschrift, 58*(1), 21-48.

Rowe, M. (2018), *AI profiling: the social and moral hazards of "predictive" policing*, http://theconversation.com/ai-profiling-the-social-and-moral-hazards-of-predictive-policing-92960.

Schlegelmilch, J. and Lysova, E. (2018), "Digital Nomads and the Future of Work", *Academy of Management Proceedings*, http://dx.doi.org/10.5465/ambpp.2018.12824abstract.

Scholten, P. and Penninx, R. (2016), "The Multilevel Governance of Migration and Integration", in Garcés-Mascareñas, B. and Penninx, R. (Eds.), *Integration Processes and Policies in Europe. Contexts, Levels and Actors,* Springer Open. Retrieved 05 14, 2019.

Spielvogel, G. and Meghnagi, M. (2018), "Assessing the role of migration in European labour force growth by 2030", in *OECD Social, Employment and Migration Working Paper,* OECD Publishing, Paris, http://dx.doi.org/10.1787/6953a8ba-en.

Szczepanikova, A. and Van Criekinge, T. (2018), *The future of migration in the European Union: Future scenarios and tools to stimulate forward-looking discussions,* Publications Office of the European Union, Luxembourg.

Tani, M. (2014), "Using a point system for selecting immigrants", *IZA World of Labor*(24), https://wol.iza.org/uploads/articles/24/pdfs/using-a-point-system-for-selecting-immigrants.pdf.

Tannock, S. (2011), "Points of prejudice: Education-based discrimination in Canada's immigration system", *Antipode*, http://dx.doi.org/10.1111/j.1467-8330.2010.00864.x.

Taylor, L. (2014), *No Place to Hide? The Ethics and Analytics of Tracking Mobility Using Mobile Phone Data,* https://www.law.ox.ac.uk/research-subject-groups/centre-criminology/centreborder-criminologies/blog/2014/07/no-place-hide.

Taylor, R., Crichton, N., Moult, B. and Gibson, F. (2015), "A prospective observational study of machine translation software to overcome the challenge of including ethnic diversity in healthcare research", *Nursing Open*, http://dx.doi.org/10.1002/nop2.13.

The Local (2016), "Danish police taking asylum seekers' phones", Danish police taking asylum seekers' phones.

Thompson, B. (2018), "The Digital Nomad Lifestyle: (Remote) Work/Leisure Balance, Privilege, and Constructed Community", *International Journal of the Sociology of Leisure*, http://dx.doi.org/10.1007/s41978-018-00030-y.

Thüer, L., Fanta, A. and Köver, C. (2018), "Asylum Procedure: Cell Phone Search Has No Benefits", https://www.unhcr.org/blogs/asylum-procedure-cell-phone-search-no-benefits/.

Toor, A. (2017), "Germany moves to seize phone and laptop data from people seeking asylum", https://www.theverge.com/2017/3/3/14803852/germany-refugee-phone-data-law-privacy.

UNDP; ODI (2017), *Climate change, migration and displacement,* https://www.odi.org/sites/odi.org.uk/files/resource-documents/11874.pdf.

Unger, C. (2018), *Bamf nach Überforderung bei Flüchtlingskrise neu aufgestellt*, https://www.morgenpost.de/politik/article216038109/Bamf-nach-Ueberforderung-bei-Fluechtlingskrise-neu-aufgestellt.html.

UNHCR (2017), *The Common Cash Facility. Partnering for Better Cash Assistance to Refugees in Jordan,* UNHCR, The UN Refugee Agency.

UNHCR (2018), *Global Trends – Forced Displacements in 2017,* https://www.unhcr.org/statistics/unhcrstats/5b27be547/unhcr-global-trends-2017.html.

United Nations General Assembly (2015), Resolution 69/283. Sendai Framework for Disaster Risk Reduction 2015-2030, https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_69_283.pdf.

Vertovec, S. (2007), "Super-diversity and its implications", *Ethnic and Racial Studies , 30*(6), 1024-1054.

Wagener, V. (2017), *Flüchtlinge: Das Handy als Personalausweis,* https://www.dw.com/de/flüchtlinge-das-handy-als-personalausweis/a-40314367.

Ward, J. (2018), *Microsoft, the ID2020 Alliance, universal digital identification and you,* https://www.windowscentral.com/microsoft-universal-digital-identification-and-you.

Warrell, H. (2019), "Home Office under fire for using secretive visa algorithm", *Financial Times*, https://www.ft.com/content/0206dd56-87b0-11e9-a028-86cea8523dc2.

WEF (2018), *Eight Futures of Work Scenarios and their Implications,* in collaboration with The Boston Consulting Group, World Economic Forum, Switzerland.

World Bank (2018), *Groundswell: Preparing for Internal Climate Migration,* https://openknowledge.worldbank.org/bitstream/handle/10986/29461/WBG_ClimateChange_Final.pdf.

Wright, T. (2018, September 26), "Federal use of A.I. in visa applications could breach human rights", report says, https://www.cbc.ca/news/politics/human-rights-ai-visa-1.4838778.

Towards 2035
STRATEGIC FORESIGHT
Making Migration and Integration Policies Future Ready

No one knows for sure how migration flows and integration trends will develop in the mid-term or long-term. What will drive migration flows in the future? What will integration look like? They are unlikely to be identical to the past, but we don't know in what ways they will be different. There is no crystal ball, and even the most sophisticated modelling cannot fully capture what the future will really be like.

Fortunately, we can still successfully prepare for the future even without correctly predicting it. Strategic foresight provides us with the means to learn from multiple ideas of the future and make better decisions today. That is the contribution of this report – firstly through megatrends, secondly through scenarios. Megatrends are developments already underway at the intersection of multiple policy fields, and likely to be highly impactful in the future. Scenarios are alternative future contexts inspired by what might happen if uncertain, ambiguous, or small-scale developments in the present were to grow into game-changers. Topics covered in this report include technology, social attitudes, stakeholder dynamics, geopolitics, and resource economics.

Strategic foresight does not provide definitive answers about what will happen – even less what policy makers should do about it. To make the most of it, readers must use it to generate dialogue on implications for their own decision making. Effective strategic foresight is a concerted effort. With the content of this report as a starting point, it is hoped that readers will take the opportunity to further their capacity to learn from and prepare for the future.

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Ministerial and Forum on Migration

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