Migration Scenario Narratives

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FUTURE MIGRATION
SCENARIOS FOR EUROPE

Report

Migration Scenario Narratives

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Report

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Summary of Narratives

Narrative 1: Intensifying global competition

The COVID-19 pandemic comes to an end. Global economic growth, which has slowed down until the mid-2020s, accelerates while all the world regions recover from the pandemic's negative effects. European countries recover faster from COVID-19 due to vast vaccination campaigns and wider remote working and learning possibilities. Developing countries will join the economic growth trend in the second half of the 2020s. From 2030 onward, the world is becoming more inclusive, resilient, and sustainable. The world is shifting toward more clean and modern energy sources. CO_2 emissions decrease globally. There is a marginal increase in the demands for migrants in the EU and a continuation/marginal decrease in pressure to migrate in developing countries. As a result, migration within the EU is marginally increasing and migration from outside the EU continues at previous levels.

Narrative 2: Recovery in Europe and stagnation in developing countries

Countries in Europe and other developed countries recover from the economic impacts of the COVID-19 pandemic while developing countries continue to suffer from economic stagnation until the end of the 2020s. The burden of the crises increases the inequalities both within and between countries. Consequently, conflicts in Africa, the Middle East, and North Africa continue, and some new conflicts arise. CO_2 emissions stay high. The EU continues to be seen as a safe and secure destination for migrants from developing and developed regions. There is pressure to migrate people with all skill levels from conflict zones.

Narrative 3: Rise of the East

Economic stagnation in developing countries end toward 2030. The conflicts in Sub-Saharan Africa and the Middle East and North Africa regions end and lead to improvements in the economy. Economic growth slows down in Europe toward the end of the 2020s, followed by economic stagnation after 2030. Hence, the tolerance and collaboration for migration policies decrease. On the other hand, South and South-East Asia are becoming attractive destinations thanks to the continuation of economic growth. There is a global shift in migration patterns. More restrictive migration policies focus on skilled migration via bilateral agreements with developing countries in the EU.

Narrative 4: Longer economic slowdown in all regions

Economic stagnation due to the COVID-19 pandemic and the Russia-Ukraine war lasts longer than expected in all regions. Europe and other developed regions are experiencing a slowdown while the developing countries are faced with a worse economic crisis. There is a decrease in migratory demand in the EU, and is pressure to migrate people with all skill levels from conflict zones.

Narrative 5: Slowdown until 2030 (COVID-19 and Russia-Ukraine war)

The global economic downturn finishes at the end of the decade. After 2030, with economic improvements in Europe and North America, the support for developing economies, a welfare state and global cooperation increase. There is demand for migrant labour in Europe after 2030, especially in the Western and Northern EU. The world is becoming more tolerant, and the advantages of migration are better understood. Policymakers work together toward better migration management to reduce irregular migration and attract regular migration, especially higher educated migrants.

Narrative 6: Slowdown between 2031-2050 (Disaster)

The negative effects of the COVID-19 pandemic end, and there are economic improvements in all regions while globalization continues until 2030. After 2030, the world faces another global crisis (epidemic/conflicts/war/extreme climate change) leading to an economic decline and a rise in nationalism and inequalities. Demand for migrants continues at previous levels until 2030 and then decreases. Migration is mostly managed with bilateral agreements between countries.

1. Introduction

The Future Migration Scenarios for Europe (FUME) project aims to fill the knowledge gap in existing research concerning determinants for migration by investigating and evaluating the patterns, motivations, and modalities of migration at multiple geographical scales, from international through regional to local, and on imagining possible futures. The population and migration projections, which aim to shed some light on the complex interactions of the drivers of migration and the migration outcomes, lay at the core of the project. While migration projections require assumptions on the size and the characteristics of the future populations as well assumptions on the future development of migration drivers, migration scenario narratives provide the qualitative reasoning behind these assumptions.

A considerable amount of literature has been published on global and migration scenarios in recent decades. Central to the migration scenarios and narratives are the concept of migration drivers and migration dynamics. Demographic, economic, technological, social, political, and environmental developments and complex interrelations between these domains are considered essential in creating plausible future migration developments. Existing research often deals with this complexity by proposing four scenarios along two axes: (1) economic development, ranging from economic convergence to economic divergence; (2) international cooperation, ranging from unilateralism to multilateralism (for an overview, see Deliverable 3.3 (D3.3)). Some authors (de Haas, 2011; Friedrich-Ebert-Stiftung (FES) et al., 2017 in D3.3) argue that these two dimensions are not independent. Furthermore, this approach does not explicitly consider the developments in other domains. One may argue that the changes in other domains implicitly affect future migration through the economic development and the international cooperation domains. Due to this interconnectedness, it is not impossible to have completely new migration scenario narratives that do not present at least a level of resemblance to previous narratives. Accordingly, some of the migration scenario narratives presented in this report also resemble other narratives (e.g., Shared Socio-economic Pathways) in the literature. We refer to D3.3 for a detailed discussion on how the FUME scenario-building approach and narratives differ from previous migration scenarios in the literature.

This report provides a set of internally consistent and evidence-based qualitative scenario narratives generated using the methodology described in Task 3.3. The narratives are built on consistent demographic, socio-economic, environmental and political alternate futures generated for the EU and developing countries based on the qualitative and quantitative evidence gathered in Tasks 3.1 and D3.3. Each narrative describes the future for the EU and developing countries in the short-term until 2030 and in the long-term between 2030 and 2050. These alternative futures are complemented by the potential changes in the future migratory demand and pressure from the expert survey conducted in Task 3.3 and characteristics of future migrants from the Delphi survey conducted in Task 3.2.

The remaining part of the report proceeds as follows: in Chapter 2, we summarize the international migration drivers from Deliverable 3.1 (D3.1) and discuss their role in the migration scenario narratives. Chapter 3 provides two alternate futures for the EU and developing countries based on the outcomes of the expert survey in Task 3.3. Chapter 4 is concerned with the characteristics of future migrants based on the results of the Delphi survey conducted in Task 3.2. Chapter 5 brings the information and evidence collected in previous tasks together and presents six migration scenario narratives. Finally, we conclude in Chapter 6.

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2. Drivers of international migration

A comprehensive overview of the drivers of international migration is presented in the D3.1 report Drivers of International Migration. D3.1 discusses in detail the decision-making process of migrants, micro/meso and meso/macro drivers of migration. In the next subsections, we summarise the drivers of migration.

2.1 Micro/meso levels

Networks are considered important drivers of migration since they are associated with lower risks and costs of migration and therefore influence individual decision-making (Arango, 2000; Flores-Yeffal, 2015; Palloni, Massey, Ceballos, Espinosa & Spitted 2001; Portes, 1998; Schapendonk, 2015 in D3.1). However, as discussed in D3.1, networks maybe less pronounced in the decision-making process of relatively wealthy and highly skilled migrants (D3.1, Thondhlana, Madziva & McGrath 2016 in D3.1). In the context of formulating migration scenario narratives, networks play an important role in the composition of the migrants, namely in their country/region of origin in terms of continuation of the existing routes and return migration, and gender, especially in the case of family reunification.

The relationship between information and communication technologies (ICT) and migration studies are manifold. First, as social media and other new media become widespread, potential migrants can access the necessary information much easier than before, especially relevant to irregular migration to find safe routes. Second, ICTS not only help maintain existing ties but generate online networks and "weak ties " and "latent ties" between origin and destination countries (Mahler, 2001; Engbersen, 2014; Thulin & Vilhelmson, 2014 in D3.1). At a cognitive level, it is argued that ICTs are changing the way people think about borders and creating migratory aspirations (Pries, 2005; Hamel, 2009; Timmerman, De Clerck, Hemmerechts & Willems 2014; Kirwin & Anderson, 2018; Schapendonk & van Moppes, 2007 in D3.1).

In addition to the importance of ICTs in the decision-making process and networks, in this narrative building exercise, we also focus on the technological advancements and work-life nexus and their impacts on the skill levels of the future migrant labour force demand. For example, while automation in certain jobs may reduce the demand for low-skilled migrants and increase the demand for high-skilled migrants, the improvements in the health system may cause faster aging and may result in additional demand for low-skilled jobs in the care services.

At the individual level, education and skill levels are highly correlated with aspirations and capabilities. In addition, to increase agents' capabilities and means to migrate, education or skill gain can be the very causes of migration, or in contrast, they may increase adaptation capabilities in terms of climate migration and decrease the intention to migrate. At the societal level, they are intertwined with other drivers of migration. Education and skill levels lie at the core of migration policies of many countries. Indirectly, brain drain, and brain gain may influence the technological boom and economic growth of a country and affect the migratory demand or pressure. Hence, regarding the future scenario narratives, they are considered both a driver of international migration and an important element of the composition of future migrants.

2.2 Meso/macro levels

Due to its relation to sovereignty, controlling migration has been an important topic for states. However, controlling migration does not necessarily mean preventing or restricting movement entirely (de Haas et al. 2020). Migration policies are usually related to monitoring and filtering movements based on migrants' characteristics, such as their countries of origin, ethnicity, age, education, and skill level. As detailed in D3.1, in addition to states, global governance of migration and compacts may also influence future migration policies. In this report and Deliverable 3.3 (D3.3), migration policies are considered one of the six domains of alternate futures.

At the macro level, economic drivers stem from the economic disparities between origin and destination countries and economic opportunities in destination countries. In origin countries, poverty and economic hardship can create strong motivations to migrate (but also constraints to migration), whereas in destination countries, demand for the immigrant labour force and the availability of economic opportunities are historically considered the main pull factors. Hence, future demands for skilled/low-skilled labour force, unemployment and other economic factors play a key role not only in the size of the future migration flows but also in the characteristics of future migrants.

Violation of human rights, security concerns and socio-economic inequalities can increase the pressure to migrate to a country. On the other hand, racism, discrimination, and lack of proper integration policies in destination countries may reduce the future migration flow. In addition to the inflow of Syrian refugees to Europe, the Russia-Ukraine war that started in February 2022 showed once again that conflicts and wars could cause sudden large flows of migration to the EU, and they should be considered in the migration scenarios. Population size and characteristics, and a country's demographic transition stage have always been considered as one of the main migration drivers (Zelinsky, 1971). In low-income countries with high fertility rates, the large share of the young population entering the labour market may cause high unemployment rates. In this setting, combined with the global developments in education and increased ability to migrate, the aspiration to migrate in the young population could increase. On the other hand, high-income countries are more likely to experience aging as fertility and mortality rates decrease. This may increase the demand for the migrant labour force, especially in low skilled jobs such as the care sector.

Beyond these political, economic, human security, and demographic factors, climate change is increasingly being considered an important driver of migration (e.g., Cattaneo et al., 2019). As outlined in D3.1., there still has not been a consensus on the closeness of the relationship, i.e., how large the effect of climate change on migration is. Most likely, this depends on the context. Hoffman et al. (2020) showed in a recent meta-analysis of country-level studies that climate migration is often "short-distance, regional and temporary". However, this does not preclude substantial climate change effects on longer-distance and longer-term migration, especially since such effects may be indirect and thus difficult to identify. As an example, climate-related environmental changes may, especially in highly agriculture-dependent countries, lead to additional rural-to-urban migration (e.g., Groundswell, 2021), which in turn can put pressure on urban labour markets and thereby enhance emigration to other countries (Marchiori et al., 2012). Global patterns of labour migration may also be affected by both economic opportunities and constraints in origin countries, and the relative attractiveness of destination countries changes due to the spatially uneven macroeconomic impacts of climate change (e.g. Kalkuhl & Wenz, 2020; Rikani et al., under review).

Finally, with respect to the health aspect, the COVID-19 pandemic that started at the end of 2019 had a critical impact on all types of mobility, including international migration. This situation, as well as the massive emigration from Ukraine as a consequence of the war since February 2022, show the need for alternative future migration narratives in addition to the traditional migration scenarios such as the "business as usual" scenarios.

3. Alternate futures

As a part of the FUME project, in Task 3.3, an expert survey has been conducted to investigate the complex nature of the future demand for migrants in receiving countries and the pressure to migrate in sending countries. For this purpose, the receiving countries consisted of member states of the European Union (EU), Iceland, Norway, Switzerland, and the United Kingdom. The sending countries, referred to as less developed countries, included all countries except Canada, the United States, Israel, Australia, New Zealand, Japan, and South Korea. The survey assessed the expected impacts of six drivers (also mentioned as domains) on migration. Demand for migrants in Europe and pressure to migrate to less developed countries were assessed for the period between 2030 and 2050 compared to the pre-COVID-19 period. Additionally, experts were asked to identify the potential interactions between the drivers. The drivers and the alternate futures of each driver are presented in Table 2.1 and are explained in detail in D3.3. We summarize drivers' direct and indirect impacts in the following two subsections. A direct impact refers to the impact of each driver on migratory demand or pressure, whereas an indirect impact refers to the impact of each driver on any of the other five drivers.

Out of 39 scientific researchers invited to the survey who are working in European demographic research centers and university departments and specializing in migration, 18 participated in the survey. D3.3 presents the scenario building approach, details of the questionnaire, characteristics of respondents and the results of the survey.

3.1 Direct impact of change on the drivers

As a part of the scenario building approach, the expert survey first investigated the direct impact of six domains that may influence future migration from less developed countries to European destinations (Table 3.1). Figure 3.1 shows how two alternate futures considered for each domain may affect the future migratory demand in Europe (right panel) and the future migratory pressure in developing countries (left panel). Please note that the quantification of impacts is explained in D3.3 Section 3. The futures "Faster ageing" (future A, Demography) and "Economic growth" (future A, Economy) are expected to cause the largest increases in the demand for migrants in Europe. The future "Decreased stability" (future B, Governance), "Intensification" (future B, Climate change) and "Stalled transition" (future B, Demography) are expected to lead to the largest increases in the pressure to migrate from developing countries.

	European countries		Less developed countries	
Domain	Future A	Future B	Future A	Future B
Demography	Faster ageing	Slower ageing	Accelerated transition	Stalled transition
Society	Increased tolerance	Decreased tolerance	Increased secularism	Increased conservatism
Governance	More cooperation	Less cooperation	Increased stability	Decreased stability
Economy	Economic growth	Economic stagnation	Economic growth	Economic stagnation
Technology	Technological boom	Technological slump	Technological boom	Technological slump
Climate change	Mitigation	Intensification	Mitigation	Intensification

Table 1. Overview of domains and corresponding futures for european and less developed countries
Source: D3.3 Table 4.1
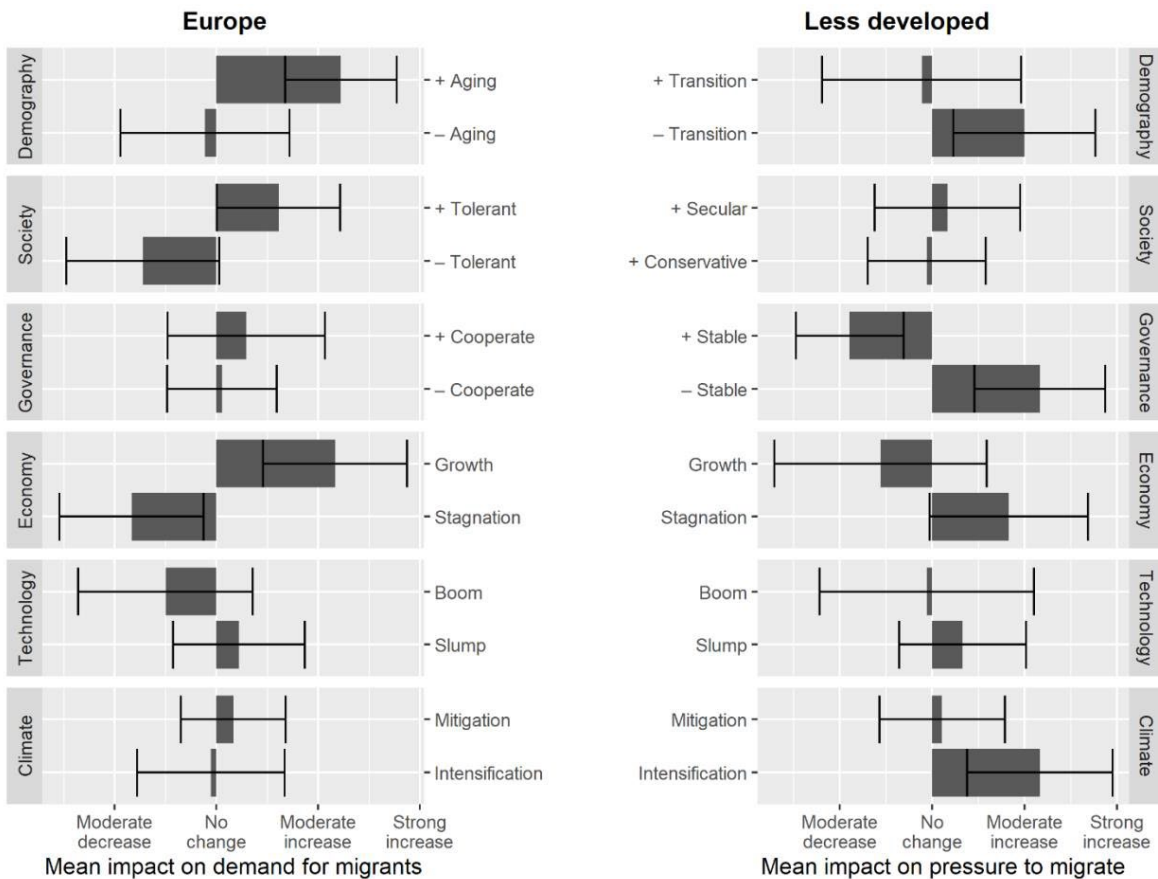
The full bars represent mean assessments among all experts, the error bars the associated standard deviation

Figure 1. Expert's assessment of the impact of change in each driver on migration demand and pressure
Source: D3.3 Figure 4.2.

3.2 Indirect impact of change on the drivers

The expert survey also included a section on how the change in each driver might bring about change in each of the other drivers. The impact of change in each driver on the other drivers was assessed considering one direction at the time to account for the uni-directional or bi-directional impacts.

Figure 3.2 and Figure 3.3 provide an overview of the experts' assessment of how each driver's future might impact the other five drivers. These figures present experts' most frequently selected answer to the question, "Do you expect that future A/B in driver X will lead to future A, future B or no significant change in driver Y?". The degree of agreement among experts regarding the direction of these impacts is also shown in the figure. These figures only show the one future selected the most often, figures A3 and A4 in D3.3 show the full detail of the frequencies with which the experts selected each future.

Figure 3.2 summarizes the results in the European context. Among the most agreed upon impacts, the strongest impacts that suggest a moderate increase in the demand for migrants are between society and economy, and governance and economy. Specifically, a more tolerant society and cooperate governance are both expected to lead to economic growth separately. Whereas a less tolerant society and less cooperate governance are expected to lead to economic stagnation and a moderate decrease in migratory demand. Considering the interconnectedness that may cause a marginal increase in demands for migrants to Europe, many experts also agreed that a slower aging society, economic growth, and a technology boom might result in increased cooperation. Economic growth is also expected to increase the tolerance toward migrants in society. Furthermore, a faster aging society, stagnation in the economy and a slump in the economy may lead to more international cooperation.

The results regarding the pressure to migrate from less developed countries are presented in Figure 3.3. The interconnectedness of the drivers and the level of agreement between expats are more prominent in the developing countries' context. More than 80% of the experts agreed that the pressure to migrate might increase with a more conservative society which is expected to result in a stalled demographic transition, or with a decreased stability in the governance, which is expected to lead to the intensification of the global warming. In addition, they also agreed that stagnation in the economy, which may decrease the level of stability, and intensification of global warming, which is expected to decrease the stability, may also increase the pressure. Most of the experts also agreed that a technological boom could increase governance stability and result in a moderate decrease in the pressure to migrate.

Figure 2. Overview of the impact of alternate futures on other drivers and the resulting impacts on the demand for migrants to Europe, with levels of agreement among experts
Source: D3.3 Figure 4.3.

Rows represent alternate futures (left y-axis) in each driver (right y-axis), columns represent the impacted drivers. The direction of the impact is indicated in boxes that reflect the most commonly chosen answer among experts. Different levels of the darkness of the frame around each box indicate the proportion of respondents who chose the indicated direction of impact. Colors show the size of the impact on migration of each future indicated in the boxes, averaged among all experts.
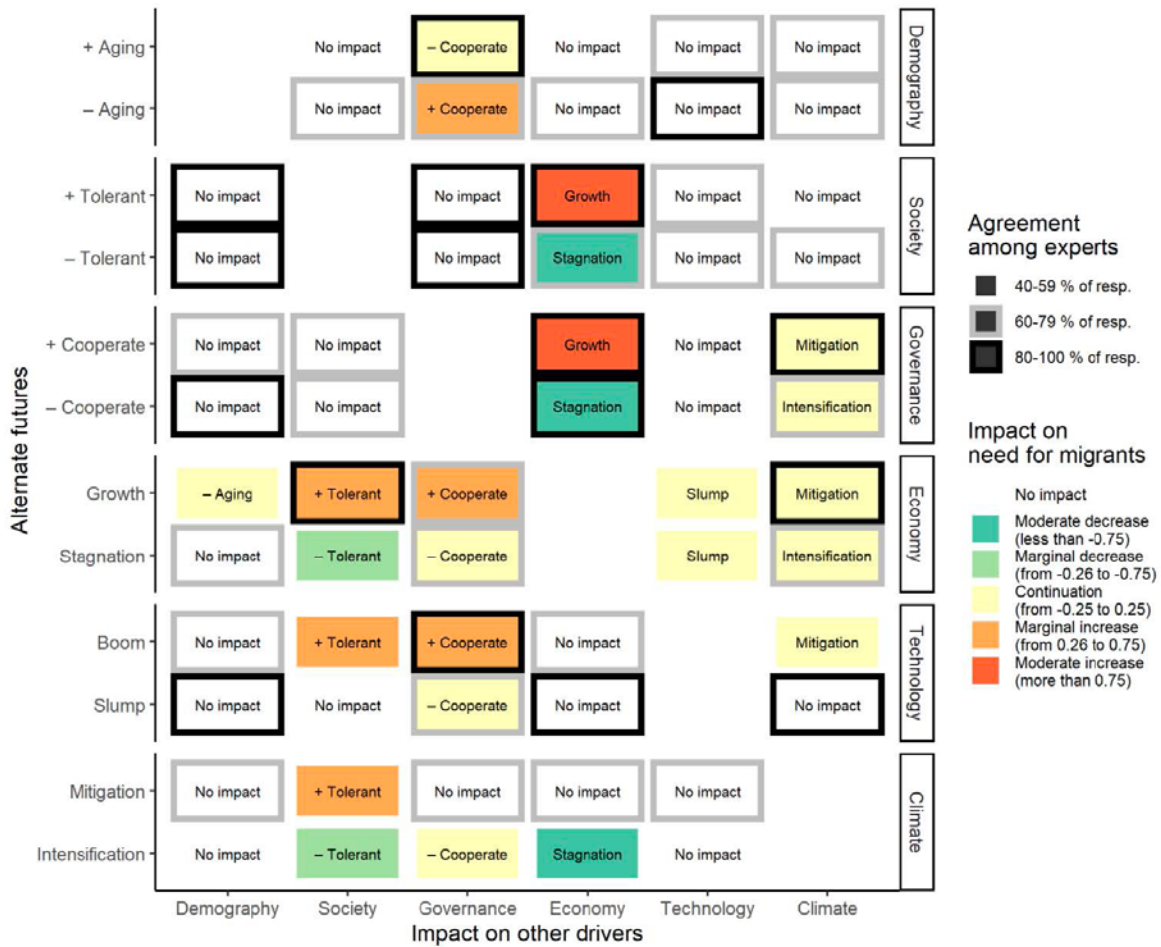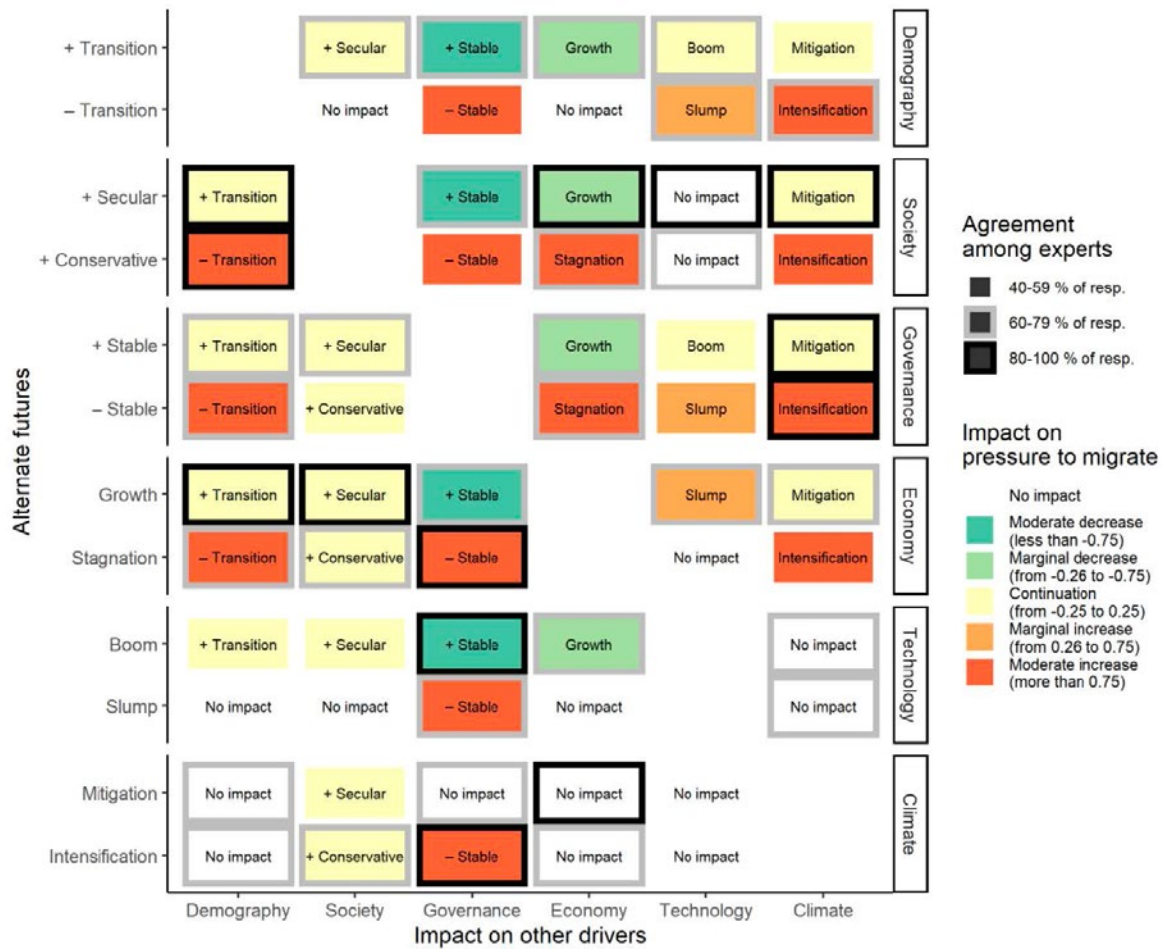
Figure 3. Overview of the impact of alternate futures on other drivers and the resulting impacts on the pressure to migrate from less developed countries to Europe, with levels of agreement among experts
Source: D3.3 Figure 4.4.

Rows represent alternate futures (left y-axis) in each driver (right y-axis), columns represent the impacted drivers. The direction of the impact is indicated in boxes that reflect the most commonly chosen answer among experts. Different levels of the darkness of the frame around each box indicate the proportion of respondents who chose the indicated direction of impact. Colors show the size of the impact on migration of each future indicated in the boxes, averaged among all experts.

3.3 Interactions between drivers

The wealth of the information gathered by the expert survey provides valuable insight for various alternate futures on migratory demand and pressure. Considering the interaction between the drivers, it is possible, to form a set of internally consistent and coherent alternate futures. Figure 3.4 shows the overview of alternate futures on demand for migrants in Europe, and Figure 3.5 shows the overview of alternate futures for developing countries. We only present the relationships on which most of the experts (more than 60% of respondents) agreed. In the next section, we discuss the characteristics of future migrants and present the narratives which combine alternate futures and migrant characteristics in Chapter 5.

Alternate futures for Europe

According to the expert survey, as shown in Figure 3.1, the largest increases in the demand for migrants in Europe stem from economic growth and faster population aging. The largest decrease in the demand for migrants is caused by stagnation in the economy, decreased tolerance in society and a technological boom. Below we outline four internally consistent potential futures based on experts' responses. Figure 3.4 illustrates the overview of these alternate futures with the connections between drivers, which more than 60 % of the experts agreed on.

Faster aging, economic growth and more international cooperation

Europe is experiencing a faster population aging due to a continued decrease in fertility rates. Life expectancy is increasing. Demand for labour due to faster aging leads to a more tolerant society towards migrants, more cooperation between countries, and better migration management. As a result, a moderate increase in the flow of migrants from developing countries to Europe is expected.

Economic stagnation and less international cooperation

The fertility rates gradually increase and converge at two children per woman, just below the population replacement rate. Population aging continues, but dependency ratios become more stable. There is an important economic slowdown in Europe. The increasing unemployment rates lead to a less tolerant society toward migrants and less international cooperation in migration management. The efforts toward cleaner energy resources come to a halt, and global CO_2 emissions increase.
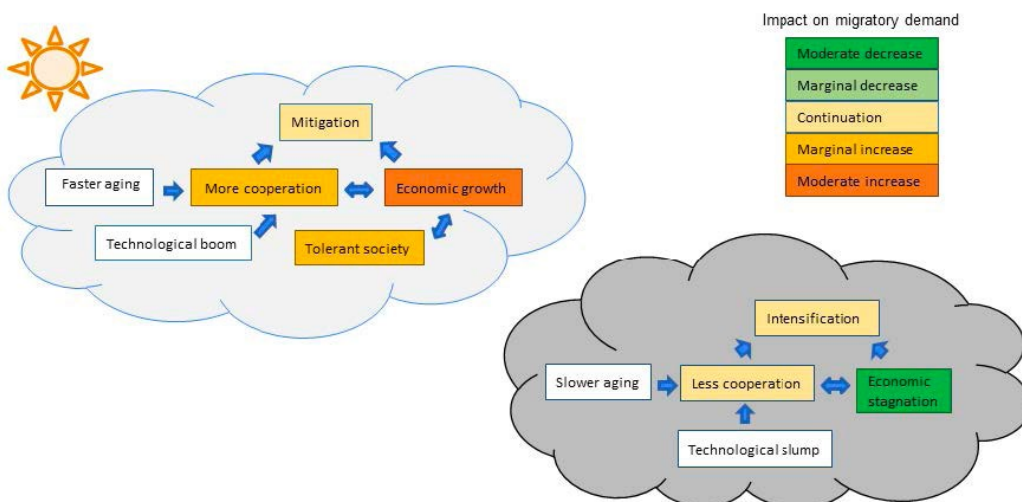

Figure 4. Overview of the alternate futures for Europe (60+ % agreement)
Source: authors

Alternate futures for developing countries

As shown in Figure 3.1, according to the expert survey, the largest decrease in the pressure to migrate from less developed countries to Europe is caused by greater stability and economic growth. The largest increase stems from decreased stability, intensification, and stalled demographic transition and economic stagnation. As mentioned before, the survey showed that experts expect more complex relationships between drivers in the developing countries' context and show more agreement. To draw a clearer picture of the connections, in Figure 3.5 we present the overview of two potential futures with relationships in which more than 80 % of the experts agreed.

Increased stability and economic growth

The Syrian war ends, and the political situation in African and Asian countries is stabilized. Only a few new conflicts arise. Due to increased stability, less developed countries benefit more from globalization and experience economic growth and a technical boom. Society becomes more secular, and demographic transition accelerates. CO_2 emissions decrease globally.

Decreased stability and economic stagnation

New conflicts and uprisings lead to decreased stability in developing countries. The efforts toward cleaner energy resources come to a halt, and global CO_2 emissions increase. The wages stay low due to competition between countries to attract businesses. Governments fail to propose legislation that would provide workers with more security, and the informal sector continues to be the main source of employment in many countries. Fertility rates remain higher than those observed in Europe, and the population structure is young.
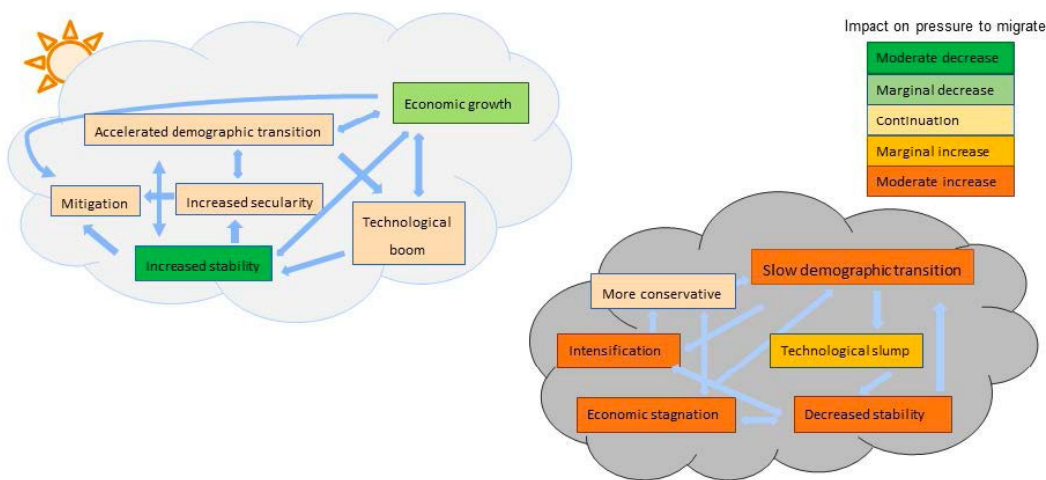

Figure 5. Overview of the alternate futures for Developing Countries (80+ % agreement)
Source: authors

Picture: Aleksands Kadykobv/Unsplash.com

4. Composition of migrants

In addition to the expert survey, a two-round Delphi survey has been used to elicit experts' opinions in policy-making and advising policymakers on future migration drivers, decomposition, and migration policy priorities in the next ten years. Out of 48 invited experts, 12 provided responses. The experts were asked to fill out a survey which was divided into five topic areas: drivers and motivations of immigration to the European Union (EU) member states, the composition of migration by skill levels, the composition of migration by gender, policies on migration, and Impacts of the COVID-19 pandemic. The respondents were asked to provide answers not only for the main route (from developing countries to developed countries) as in the expert survey explained in the previous section but for various migration corridors (or routes) separately. In particular, the participants were asked about both the EU migration corridors and migration corridors from regions of the world to the different parts of the EU. For this study, the EU member states are grouped into Eastern EU, Northern EU, Southern EU and Western EU. The world's regions are defined as Asia, Middle East and North Africa, Sub-Saharan Africa, Latin America and the Caribbean, Northern America, Balkans and Eastern Europe (non-EU) and others. The first round of the survey results are presented in detail in Deliverable 3.2 (D3.2). The second round of the survey gives the experts an opportunity to update and further motivate their answers considering the aggregated answers and feedback from the first round. This section presents a brief summary of the expert opinions and potential characteristics of future migrants.

4.1 Results

Drivers and motivations

The first set of questions (Part I of the survey) is aimed to collect experts' opinions on the most important drivers and motivations of migration to and within the EU in the next ten years. Figure 4.1 presents the distribution of votes on migration drivers aggregated by all origin-destination pairs. They are grouped into six domains: demography/education, economy, environment, governance, and society. The most selected driver for migration to the EU over the next ten years is the demand for low-skilled jobs. The other often selected drivers included the demand for education, then political stability and conflicts, wage differences and the supply of skilled job opportunities. The least selected drivers and motivations were multiculturalism and tolerance vs increased intolerance and gender equality. The most often selected domains were demography and education, followed by governance and economic factors.

These results are in accordance with the expert study summarized in Chapter 3, in which demography, governance, climate change and economy are expected to have a high impact on migratory demand and pressure. The contribution of the Delphi survey in this regard is to further investigate the differences in important drivers and motivations in different migration corridors. For example, as shown in Figure 4.2, while the economy and demography/education domain are expected to be the most important domain within the Western EU region, governance is expected to be the main driver/motivation for Sub-Saharan Africa to the Northern EU corridor.
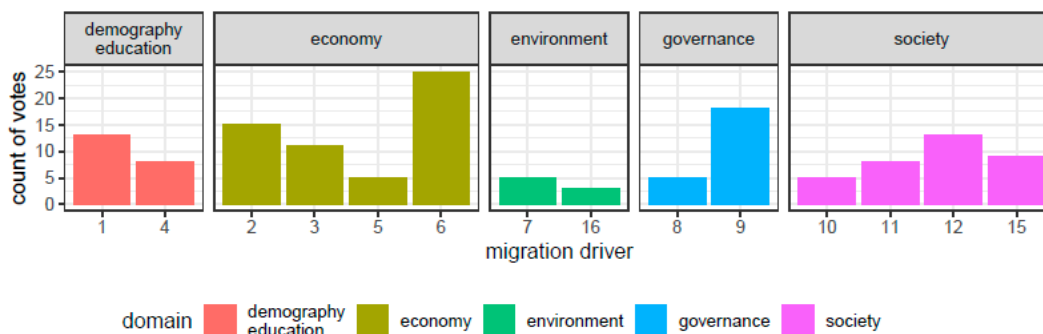
Figure 6. Distribution of votes on migration drivers and motivations
Source: D3.2 Figure 1.

Notes: 1. Population growth (e.g. a large young-age population, accelerated ageing), 2. Supply of skilled job opportunities, 3. Demand for low-skilled jobs, 4. Demand for education, 5. Economic growth differences between origin and destination, 6. Wage differences between origin and destination, 7. Climate change (e.g. slower vs faster global warming), 8. Pro- vs anti-immigration policies (e.g. open vs restrictive to asylum seekers), 9. Political stability and conflicts, 10. Social welfare systems, 11. Family reunification, 12. Social networks, 13. Multiculturalism and tolerance vs increased intolerance, 14. Gender equality.

Composition by skill level and gender

The next two parts (Part II and Part III) of the survey were concerned with the expected skill and gender composition of the future migrants. In detail, the experts were asked which migration corridors (both within EU and outside EU to EU corridors) will provide the highest number of skilled and low-skilled immigrants in Part II and if any change in the gender balance is expected in immigrants in Part III. The results are summarized below and presented in D3.2.

According to the survey, the experts envisage that more than half of the skilled migrants will come from the Balkans and Eastern Europe (non-EU) and Asia, 33% and 24% of all skilled immigrants, respectively. The most voted destination for skilled immigrants is the Western EU region. The possible origins of the low-skilled migrants are more evenly distributed. Asia, Balkans and Eastern Europe (non-EU), Middle East and North Africa, and Sub-Saharan Africa received between 20 and 26 percent of the votes. Two main recipients of the low-skilled immigrants are Southern EU (34%) and Western EU (33%).

The results did not show a clear agreement on the expected gender balance in immigrants. Both maintained a gender gap, and the increased gender gap received 42% of the votes separately.

Policy trends on migration, human capital and gender

The experts were asked about the most important priorities for migration policymakers in the next ten years in the fourth part of the survey. Out of seven priorities, they were supporting *work visas for higher-education international graduates* received about a quarter (24%) of the votes, followed by *providing a shortage occupation list. Extending an immigration quota system, extending the EU Blue Card system and introducing a point-based system*, each received 14% of the votes.

COVID-19 pandemic impacts

Finally, in the last part of the survey, the respondents were asked about the likelihood of possible scenarios related to the COVID-19 pandemic in the next ten years. With a time horizon up to 2031, the majority of the experts assigned the highest likelihood of the slow economic recovery to pre-pandemic growth levels. With

regard to the potential impact of the pandemic on EU migration policies, a fairly equal mix of probabilities was assigned to the various forecasted scenarios, with the pandemic having *no direct effect... on migration policies* receiving a mean probability of 23% whilst policies *selective towards highly skilled migrants* scored 22%, as did policies being *restrictive of all groups of migrants*.
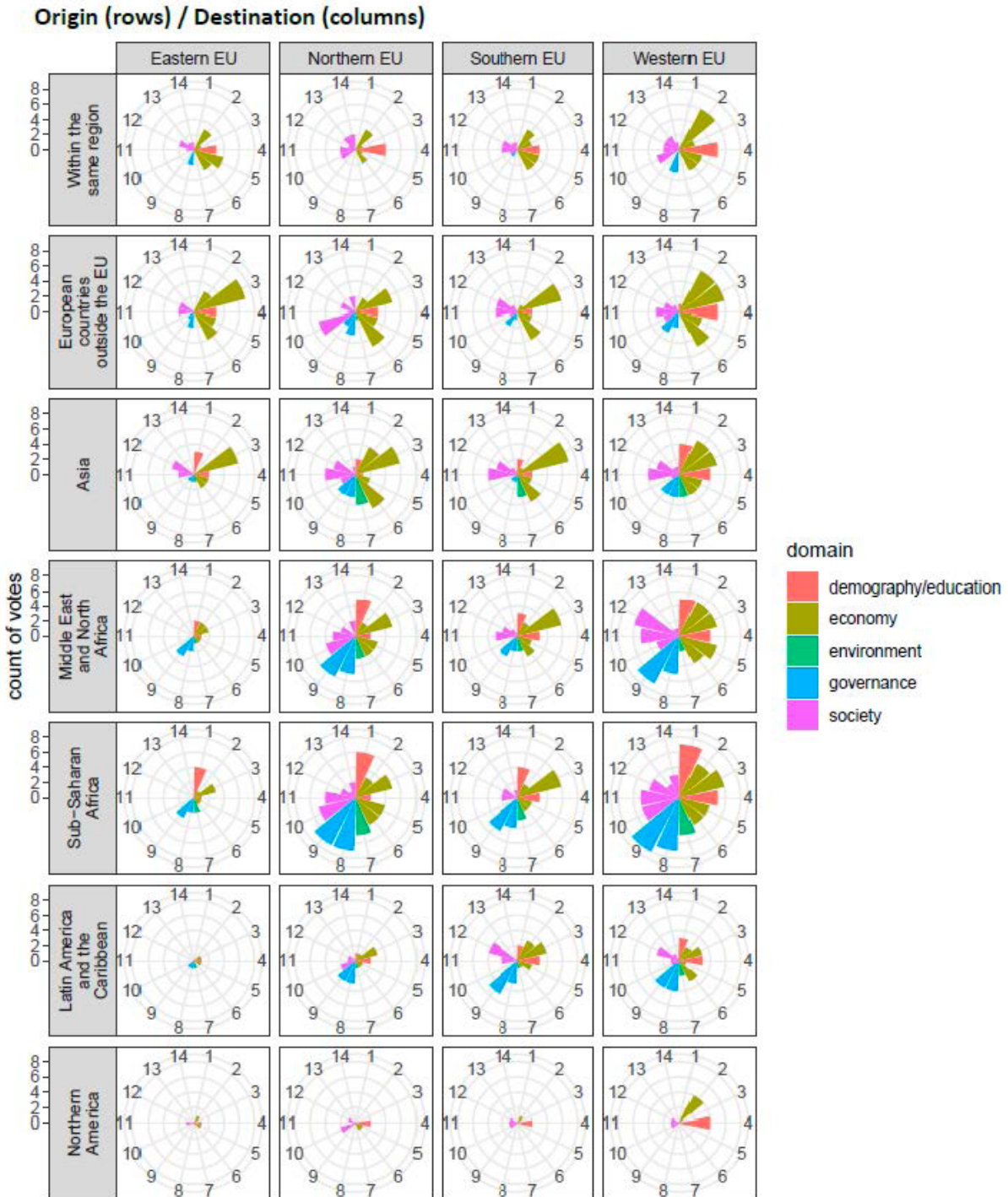

Figure 7. Distribution of votes on migration drivers and motivations between migration corridors within and to the EU in the next ten years.
Source: D3.2 Figure 2.

Picture: Taras Chuiko/Unsplash.com

5. Narratives

In the previous sections of this report, we summarize the drivers of the international migration report and the results of two expert surveys conducted as a part of the FUME project. This section combines the information gathered in these three studies to derive a set of FUME global migration scenario narratives. The first survey, the expert survey, recruited scientific researchers, while the second survey, the Delphi survey, recruited policymakers and advisors to policymakers. The direct and indirect impact of migration drivers and their interconnectedness were detailed in Chapter 2, Chapter 3, D3.1 and D3.3. As agreed by scientific researchers, the outcome of the expert study depicts how the interactions between six domains can be conceptualized. The Delphi survey contributes to the scenario narratives by further elaborating on drivers' impacts and the composition of future immigrants on each specified migration corridor. Furthermore, it gathers experts' opinions on the economic and migration impacts of the COVID-19 pandemic.

Even though it is possible to build a number of narratives based on the methodology described in D3.3 and the information gathered in the surveys, to avoid complexity and provide focus, we outline six selected migration scenario narratives in the rest of this section. In order to be as comprehensive as possible and be consistent with previous deliverables, we consider the general situation in both EU and developing countries in two time periods: 2020-2030 and 2031-2050. The selected narratives are listed in Figure 5.1. For simplicity, the check mark represents the relatively better alternate future in a region in terms of economy, whereas the cross sign presents an alternate future associated with less developments and a worsening of the economic situation.

(Some) narratives include indicative trends of global CO_2 emissions, pointing toward different rates of climate change, especially during 2031-2050 (the 2020s being dominated by climatic changes already committed through past emissions). Global mean temperature projections for the period 2031-2050 differ between high-emissions and low-emissions scenarios by roughly 0.5 to 1.0°C (IPCC, 2021). Therefore, different narratives will be associated with different levels of climate change impacts in both origin and destination countries. Beyond average projections, even more, important may be to what extent very extreme climate events – fuelled by climate change – occur, within the considered time span, in a manner that would cause societal disruption at large scales. Narrative 6 accounts for the possibility of such major disruptions – which may be whole sequences of different types of extreme events, such as multi-breadbasket failures (e.g., Gaupp et al., 2021), deadly heat waves (Im et al., 2017), or tropical cyclones hitting major population centers (Strauss et al., 2021).

There is limited evidence from the surveys as to the extent to which climate change impacts (whether more or less disruptive) will be a relevant driver of change in migration to Europe. The Delphi survey indicates moderate agreement on climate change being an important driver of migration, primarily from African and Asian origin countries. The expert survey indicates that intensifying climate change could cause a moderate, or even strong, increase in migration pressures in developing countries. Most narratives below assume that economic, demographic, and other forces dominate over climate-related factors for the next few decades, but the potential indirect effects, e.g., of climate change on economic development and thereby on migration should be kept in mind.

Figure 8. FUME Migration Scenario Narratives.

5.1 Narrative 1: Intensifying global competition[1]

The COVID-19 pandemic has come to an end. Global economic growth, which has slowed down until the mid-2020s, accelerates while all the world regions recover from the pandemic's negative effects. European countries recover faster from COVID-19 due to vast vaccination campaigns and wider remote working and learning possibilities and experience economic growth already in the first half of the 2020s, while developing countries join the economic growth trend in the second half of 2020s. From 2030 onward, the world is becoming more inclusive, resilient, and sustainable. The world is shifting toward more clean and modern energy sources. CO_2 emissions decrease globally. There is a marginal increase in the demands for migrants in the EU and a continuation/marginal decrease in pressure to migrate in developing countries. As a result, migration within the EU is marginally increasing and migration from outside the EU continues at previous levels.

Developing countries (Increased stability, economic growth, and accelerated demographic transition)

The political situation in developing countries is stabilized. The Syrian war ends, and only a few new conflicts arise. Countries in the less developed regions are starting to benefit more from globalization and an open economy. Rapid economic growth reduces inequalities. The quality of education improves, and higher education becomes more widespread. In consequence, the fertility rates in Asian, Latin-American and Middle East and North African countries continue to decline and reach levels similar to European fertility rates. In Sub-Saharan Africa, fertility rates are approaching replacement levels by 2050. Life expectancy increases in all regions. In general, societies are becoming more secular.

The EU (Economic growth, more international cooperation, and faster aging)

Meanwhile, Europe is experiencing population aging since the fertility rates continue to decline and life expectancies continue to increase. There is a higher demand for labour in Europe, especially in Western-EU and Northern EU, which leads to a more tolerant society, and more cooperation between countries. Hence, the policymakers work together toward better migration management.

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[1] This scenario is based on the Intensifying global competition scenario in Lutz, Butz and KC, 2014.

Composition

Skilled migration: The main origins of skilled migration routes within the EU are Eastern EU and Southern EU, and the main destinations are Western EU and Northern EU. The main origins outside the EU are the Balkans and Eastern Europe (non-EU) and Asia.

Low-skilled migration: The main origins of low-skilled migration routes within the EU are Eastern EU and Southern EU, and the main destinations are Western EU and Northern EU. The main origins outside the EU are Asia, Balkans and Eastern Europe (non-EU), the Middle East and North Africa, and Sub-Saharan Africa.

5.2 Narrative 2: Recovery in Europe and stagnation in developing countries

Countries in Europe and other developed countries recover from the economic impacts of the COVID-19 pandemic, while developing countries continue to suffer from economic stagnation until the end of the 2020s. Mounting impacts of climate change also increase migration pressures both outside and within Europe (the Mediterranean region especially being at higher risk of droughts, heat waves, and forest fires), and CO_2 emissions stay high. The burden of the crises increases the inequalities both within and between countries. Consequently, the conflicts in Africa and the Middle East and North African regions continue, and some new conflicts arise. The population structure remains young, and the EU continues to be seen as a safe and secure destination for migrants from all developing and developed regions. There is pressure to migrate people with all skill levels from conflict zones.

Developing countries (Economic stagnation and decreased stability)

As the COVID-19 pandemic adds another layer of instability, economic crises and increased inequalities lead to new uprisings in Sub-Saharan Africa and the Middle East, and North Africa. The unemployment rates increase while the wages stay low due to the competition to attract business. School attendance rates and the quality of education are negatively affected by the economy and the decreased stability. In like manner, there are no significant improvements in the availability and use of reproductive health services. Consequently, fertility rates in Asian, Latin-American and African countries remain higher than the fertility rates in European countries, and the share of the young population increases toward the mid-century.

The EU (Economic growth, more international cooperation and aging)

The economic slowdown due to the COVID-19 pandemic has come to an end. Businesses go back to pre-pandemic levels. Population aging continues with low fertility rates and increasing life expectancies. There is some demand for labour in Europe, especially in Western-EU and Northern EU. As a result, the tolerance toward migrants increases. Policymakers work together toward better migration management to reduce irregular migration and to attract regular migration, especially higher educated migrants.

Composition

Skilled migration: The main origins of skilled migration routes within the EU are Eastern EU and Southern EU, and the main destinations are Western EU and Northern EU. The main origins outside the EU are Asia and Balkans, and Eastern Europe (non-EU), with some migration from the Americas.

Low-skilled migration: The main origins of low-skilled migration routes within the EU are Eastern EU and Southern EU, and the main destinations are Western EU and Northern EU. The main origins outside the EU are Sub-Saharan Africa, the Middle East and North Africa, followed by Asia and non-EU Balkans and Eastern Europe.

5.3 Narrative 3: Rise of the East[2]

Economic stagnation in developing countries end toward 2030, the conflicts in Sub-Saharan Africa, and the Middle East and North Africa regions come to an end and lead to improvements in the economy. Economic growth slows down in Europe toward the end of the 2020s, followed by economic stagnation after 2030. Hence, the tolerance and collaboration for migration policies decrease. On the other hand, South and Southeast Asia are becoming attractive destinations thanks to the continuation of economic growth. There is a global shift in migration patterns. CO_2 emissions stay high due to the stagnation in clean and modern energy investments in developed countries and increased growth in Asia and developing countries.

Developing countries (Economic stagnation and decreased stability followed by economic growth and stability)

Economic recession due to conflicts and the COVID-19 pandemic ends in Sub-Saharan Africa, and the Middle East and North Africa regions at the end of the decade. Improvements in both qualities of education and school attendance rates lead to the adoption of new technologies and advances in productivity. However, the population structure is still young, and the unemployment rate is still high. There is marginal economic growth in Sub-Saharan Africa and the Middle East, and North Africa, and moderate growth in South and Southeast Asia. Asia is becoming an attractive destination increasingly. Climate change's direct and indirect impact on migration continues at similar levels.

The EU (Economic growth, more international cooperation and aging followed by economic stagnation and decreased international cooperation)

There is an economic downtrend in Europe after the 2020s, which results in less international cooperation. More restrictive migration policies focus on skilled migration via bilateral agreements with developing countries. The immigration flows from Sub-Saharan Africa and the Middle East and North Africa regions decrease while remote working (in EU) becomes more common for employees from the Balkans and Eastern Europe (non-EU).

Composition

Skilled migration: Highly skilled persons, mainly from the Eastern EU, migrate to the other EU regions. The composition of flows from outside of the EU is balanced and depends more on proximity, with more flows from Eastern Europe and the Balkans (even with a rise of remote working), a smaller proportion of flows from Sub-Saharan Africa, Asia and MENA as compared with the previous scenarios, and relatively larger proportion from Americas.

Low-skilled migration: Intra-EU migration origins mainly in Eastern EU countries, with destinations in the other EU regions. The origins from outside of the EU are the Balkans and Eastern Europe (non-EU).

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[2] This scenario is based on the Rise of the East scenario in Lutz, Butz and KC, 2014.

5.4 Narrative 4: Longer economic slowdown in all regions

Economic stagnation due to the COVID-19 pandemic and the Russia-Ukraine war lasts longer than expected in all regions. Europe and other developed regions are experiencing a slowdown while the developing countries are faced with a worse economic crisis. In addition, direct and indirect impacts of climate change also increase migration pressures both outside and within Europe (the Mediterranean region especially being at higher risk of droughts, heat waves, and forest fires), and CO_2 emissions stay high.**Developing countries (Economic stagnation and decreased stability)**

Economic crises, the negative impacts of climate change, increased inequalities, and continued conservatism lead to new uprisings in Africa and the Middle East and North Africa. The unemployment rates increase while the wages stay low due to the competition to attract business. School attendance rates and the quality of education are negatively affected by the economy and the decreased stability. In a similar manner, there are no significant improvements in reproductive health services. Consequently, fertility rates in Asian, Latin-American and African countries remain higher than the fertility rates in European countries. The population structure remains young, and there is pressure to migrate people with all skill levels from conflict zones.

The EU (Economic stagnation, less international cooperation) – marginal decrease

There is an economic downtrend in Europe which results in disruptions in international cooperation for migration policies. More restrictive migration policies focus on skilled migration via bilateral agreements with developing countries. The immigration flows from Africa and the Middle East and North Africa regions decrease while remote working (in the EU) becomes more common for employees from the Balkans and Eastern Europe (non-EU).

Composition

Skilled migration: Highly skilled persons, mainly from the Eastern EU, migrate to the other EU regions. The main origins of flows from outside the EU are Asia and Eastern Europe and the Balkans, followed by Sub-Saharan Africa and the Middle East and North Africa.

Low-skilled migration: Intra-EU migration origins mainly in Eastern EU countries, with destinations in the other EU regions. The composition of migration from outside of the EU is volatile, with proportions driven mainly by proximity (Balkans and Eastern Europe (non-EU), MENA and Sub-Saharan Africa).

5.5 Narrative 5: Slowdown until 2030 (COVID-19 and Russia-Ukraine war)

The global economic downturn due to the COVID-19 pandemic and the Russia-Ukraine war finishes toward the end of the decade. With economic improvements in Europe and North America, the support for developing economies, a welfare state and global cooperation increases. The world becomes more tolerant, and the advantages of migration are better understood. As clean and modern energy investments increase, Co_2 emissions stay relatively low and decline.

Developing countries (Economic stagnation and decreased stability)

The political situation in developing countries is stabilized after 2030. The Syrian war ends, and only a few new conflicts arise. Countries in the less developed regions start to benefit more from globalization and an open economy. Rapid economic growth reduces inequalities. The quality of education improves, and higher education becomes more widespread. In consequence, the fertility rates in less developed Asian, Latin-American and North African countries continue to decline and reach levels similar to European fertility rates. In Sub-Saharan Africa, fertility rates approach replacement levels by 2050. Life expectancy increases in all regions at different rates. In general, societies become more secular.**The EU (Economic growth, more international cooperation and aging)**

The economic slowdown due to the COVID-19 pandemic lasts until the end of the 2020s. Then economic growth rates return to pre-pandemic levels. Population aging continues since the fertility rates stay low and the life expectancies continue to increase. There is some demand for migrant labour in Europe after 2030, especially in Western-EU and Northern EU. As a result, the tolerance toward migrants increases. Policymakers work together toward better migration management to reduce irregular migration and to attract regular migration, especially higher educated migrants.

Composition

Skilled migration: The main origins of skilled migration routes within the EU are Eastern EU and Southern EU, and the main destinations are Western EU and Northern EU. The main origins outside the EU are the Balkans, Eastern Europe (non-EU) and Asia.

Low-skilled migration: The main origins of low-skilled migration routes within the EU are Eastern EU and Southern EU, and the main destinations are Western EU and Northern EU. The main origins outside the EU are Asia, Balkans and Eastern Europe (non-EU), the Middle East and North Africa and Sub-Saharan Africa.

5.6 Narrative 6: Slowdown between 2031-2050 (Disaster)

The negative effects of the COVID-19 pandemic and the Russia-Ukraine war end, and there are economic improvements in all regions while globalization continues until 2030. After 2030, the world faces another global crisis (epidemic/conflicts/war/extreme climate change), leading to an economic decline and a rise in nationalism and inequalities. Migration is mostly managed with bilateral agreements between countries.

Developing countries (Economic stagnation and decreased stability)

The stability in developing countries ends due to new uncertainties. New conflicts arise, especially in regions with significantly large young populations, as the governments become more conservative and the unemployment rates increase. The pressure to migrate continues at pre COVID-19 levels until 2030 and then increases.

The EU (Economic growth, more international cooperation and aging)

Similar to the other regions, Europe also experiences a slowdown after 2030. Large companies transfer their activities to Asia or less developed countries where labour is more abundant and increasingly qualified. Unemployment rates gradually start increasing again. Societies become less tolerant toward migrants, and international migration collaborations are slowly abandoned.

Composition

Skilled migration: Eastern EU is the main origin of intra-EU migration, with Western and Northern EU being the recipients. The main origins of flows from outside the EU are Asia and Eastern Europe and the Balkans, followed by Sub-Saharan Africa and MENA. This composition is heavily affected by bi- and multi-lateral agreements.

Low-skilled migration: Intra-EU migration origins mainly in Eastern EU countries, with destinations in the other EU regions. The composition of migration from outside of the EU is very volatile, dependent on bilateral agreements, and with proportions driven mainly by proximity (Balkans and Eastern Europe (non-EU), MENA and Sub-Saharan Africa).

6. Conclusion

This report presents six internally consistent and evidence-based qualitative migration scenario narratives which provide qualitative reasoning to FUME migration scenarios in Work Package 4. They build on the information and evidence gathered in previous tasks in Work Package 3. Namely, we combine information from the literature on international migration drivers (as well as the D3.3 Drivers of International Migration report), a two-stage Delphi survey conducted in Task 3.2 and an expert survey conducted in Task 3.3 using the methodology presented in D3.3.

First, two consistent demographic, socio-economic, environmental and political alternate futures both for the EU and developing countries are developed based on the expert survey. One alternate future is more optimistic in terms of more rapid economic development, more cooperation between countries, more tolerance toward migrants, better governance, and more stability in developing countries. Whereas the second alternate future paints a less optimistic picture with economic stagnation, less cooperation, less tolerance toward migrants and less stability in developing countries. In line with the FUME objectives, we consider narratives that differentiate the situation in these regions both in the short-term until 2030 and in the long-term between 2030 and 2050.

Second, these alternate futures are complemented with both the potential changes in the future migratory demand and pressure from the expert survey conducted in Task 3.3 and characteristics of future migrants from the Delphi survey conducted in Task 3.2. The characteristics of migrants include the region of origin and skill level. According to Delphi survey results, Eastern EU, Southern EU, Balkans and Eastern Europe are expected to be the main origins of both skilled and low-skilled migrants. From outside Europe, Asia is expected to be the main sending region of skilled migrants, while the Middle East and North Africa and Sub-Saharan Africa are the main sending regions for low-skilled migrants.

As a result of this two-stage approach, six migration scenario narratives are presented. These scenarios present both optimistic and pessimistic demographic, socio-economic, political and environmental futures. While, in most of the scenarios, it is expected that Europe and the EU recover faster from the COVID-19 and Russia-Ukraine war than the developing countries, in order to be comprehensive, we also consider scenarios in which the global recovery is slower than expected, and new crises occur. In one scenario, "Rise of the East", we consider economic growth in Asia and (up to a certain extent) in other developing countries while Europe suffers from economic stagnation.

As a next step, the narratives will be quantified to generate the numeric assumptions of the migration scenarios in Work Package 4. The effects of the continuing Russia-Ukraine war on the economic situation are partially included in all scenarios, as all scenarios initially included the economic impact of the COVID-19 pandemic, except the Intensifying Global Competition scenario, which assumes a fast-economic recovery from the current situation. However, the sudden unexpected inflow of refugees was not included. It is possible to increase the migration flows from Ukraine to the EU in migration scenarios in Work Package 4, especially via narratives 4 and 5. Even though currently, men of certain age groups are not allowed to leave the country, it can be expected that eventually, a proportion of those men would join their families in the EU countries, while some people in the EU would return to Ukraine. Either case, there is a flow of Ukrainian refugees at all skill levels and ages which was not accounted for. Therefore, it would be realistic to assume that this inflow would reduce the demand for labour migrants at all skill levels from other regions in the future.

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