



Michaela Potančoková

# Discussion paper & policy brief: scenario results

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## 1. Introduction

Deliverable 10.1 consists of two publications:

- 1- Potančoková, M., Marois, G. & Bijak, J. (2023) High-Migration Events and Future Labour Force in Europe. Population & Policy Compact 39. Berlin: Max Planck Society/Population Europe.
- 2- Potančoková, M., Marois, G., González-Leonardo, M. (2023) Discussion paper: Demographic and labour force implications of high immigration events scenarios. IIASA Report. International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria.

## 2. Policy Brief and Discussion Paper

Below, the original versions of the Policy Brief and Discussion Paper published as IIASA Report are presented. The publications are available at the websites of QuantMig, Population Europe and IIASA.

**Authors**

Michaela Potančoková

Guillaume Marois

Jakub Bijak

**Editor**

Daniela Vono de Vilhena

International  
Departures



## High-Migration Events and Future Labour Force in Europe

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Although high-migration events cannot be predicted, we can simulate such situations in scenarios and outline their potential impacts to inform greater policy preparedness.

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Even high-migration events with persisting migration cannot substantially boost future labour force size in European countries.

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**POPULATION  
EUROPE**



THE NETWORK OF EUROPE'S LEADING  
DEMOGRAPHIC RESEARCH CENTRES

## Introduction

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Migration is complex, highly uncertain, and marked by unexpected changes. Political crises, economic downturns, and human-made or natural disasters can set large numbers of people on the move, just as we saw in 2015–2016 for migration from Syria and in 2022 from Ukraine. However, some political crises, such as the Taliban’s return to power in Afghanistan in 2021 did not bring unprecedentedly large numbers of refugees into Europe, despite concerns among policymakers at the beginning of the crisis. Migration events are impossible to predict in terms of their onset, scale, duration and in terms of how many people will return or settle in what destinations.

Nonetheless, migration “shocks” – which we prefer to term **high-migration events** – can, to some extent, be nowcast using signal data. The specific dynamics and post-settlement integration trajectories of immigrants can be analyzed by observational or longitudinal studies.

Overall, it is preferable for policymakers not to wait for ex-post evidence of impacts but to have simulations of such high-migration events to hand. Simulations can support policymaking, for example, by offering a better understanding of the realistic implications of high immigration, once newcomers arrive and settle. What would be the actual demographic and labour force implications of a high-migration event if it occurred, for instance, five years from now?

## Simulating long-term demographic and labour force trends in Europe

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Although we cannot predict when and where the next high-migration event will occur, we have simulated such situations in scenarios to inform greater policy preparedness. The impacts will depend not only on the magnitude (how many will come), but also on the migrants’ regions of origin (who will come), as immigrants arriving from different regions will differ in their characteristics, and demographic and economic behaviours. **The QuantMig-mic dynamic microsimulation model** simulates the populations of 31 EU+ countries (EU, UK, EFTA) by 13 characteristics including age, gender, education attainment, and labour force participation, in the horizon of 2060 (Potančoková et al. 2023).

In the modelling, we utilise today’s still-limited migration data and evidence on differential demographic behaviour,

differences in human capital, in labour force participation, and in migration rates between the native-born and immigrants by place of birth. We model international migration from outside the EU+ against the backdrop of the intra-European migration system to better identify the impact of immigration from different world regions.

We simulate the impacts of high-migration events on the future demographic and labour force makeup of European societies. In this policy brief, we focus on what these events would mean for the future labour force size in Europe, assuming a continuation of past demographic, educational, labour force participation trends, and differentials between the native-born and different groups of immigrants in terms of their origin (region of birth).

## Statistical modelling helps build coherent scenarios

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To illustrate the implications of potential high-migration events, we have developed a set of model-based scenarios anchored in statistical modelling and the theory of rare events. As we cannot predict where the next crisis might develop, how long it would last, and what its magnitude would be, we pioneer the use of quantiles from modelled statistical distributions that would correspond to a certain frequency of occurrence of an event, for example, the 98th percentile of heavy-tailed Pareto distribution for annual data corresponding to a twice-in-a-century frequency of occurrence (Potančoková et al. 2023). Statistical estimates are based on past time series of immigration into Europe, and the volumes differ for seven world regions of origin of immigrants – Other Europe, North Africa, sub-Saharan Africa, Latin America, West Asia, South & South-East Asia, and East Asia – and the event occurs in 2027.

In the first set of **short high-migration event scenarios**, we envisage that a high-migration event takes place only in one calendar year, as a one-off occurrence, followed by a fast policy response that would bring the inflows back to the pre-event levels. The second set of **persistent high-migration events scenarios** envisages a persistence of higher immigration levels for a decade after the initial migration event takes place due to family reunifications and the establishment of new migration networks.

All scenarios (14 in total) are modelled as additional immigration flows beyond the baseline scenario, in which immigration from each world region into the EU+ continues with the same intensity as in 2011–2019. All scenarios

recognize that social networks are the strongest pull factors for destinations and that immigrants from specific world regions will be attracted mainly toward destinations based on past flows.

## High-migration events can only slightly alter future labour force size

Working-age population declines can be expected in most EU+ countries. Labour force declines do not, however, need to be as pronounced as working-age population declines, as they can be partially mitigated through improved labour force participation. In the baseline scenario, we project that the working-age population in the current EU27 would shrink to 80% of its 2020 size by 2060. The decline in the working-age population (dotted line) and the rapidly increasing old age-dependency ratios, which are often used to illustrate the challenges of population ageing to European societies and economies, exaggerate those challenges.

The future looks less daunting once we consider cohort trends in labour force participation (resulting in longer working lives and higher participation of women), even with no improvements in integration of immigrants into the labour force (Figure 1). Our results show great variation in the working-age and labour force trends: a stable and potentially increasing labour force in France and the United Kingdom (UK), as compared to moderate declines projected in Germany and significant shrinkages in Italy (and most southern and eastern EU member states).

Keeping all demographic and labour force participation parameters the same as in the baseline scenario, we find that persistent high-migration events would not change future trajectories in labour force size. At the EU27 level, the relative change in the total labour force shows a reduction of -13 percentage points (pp) to -14 pp, as compared to -14 pp in the baseline scenario.

High-migration events can slightly alter the projected labour force size if such events occur in regions of the world with established migration corridors to the destination country, see for example migration from South & South-east Asia to the UK, or from West Asia and Other Europe to Germany. High-migration events would have a very limited effect on population and labour force dynamics in southern and eastern Europe, as shown for Italy in Figure 1.

## Conclusions

Although high-migration events are challenging for integration policies, they are not a major long-term game-changer because of the demographic momentum driving major trends. The scenarios presented above confirm that even large immigration events cannot substantially boost projected labour force size at the national or EU levels. One-off high-migration events of a magnitude similar to that of the

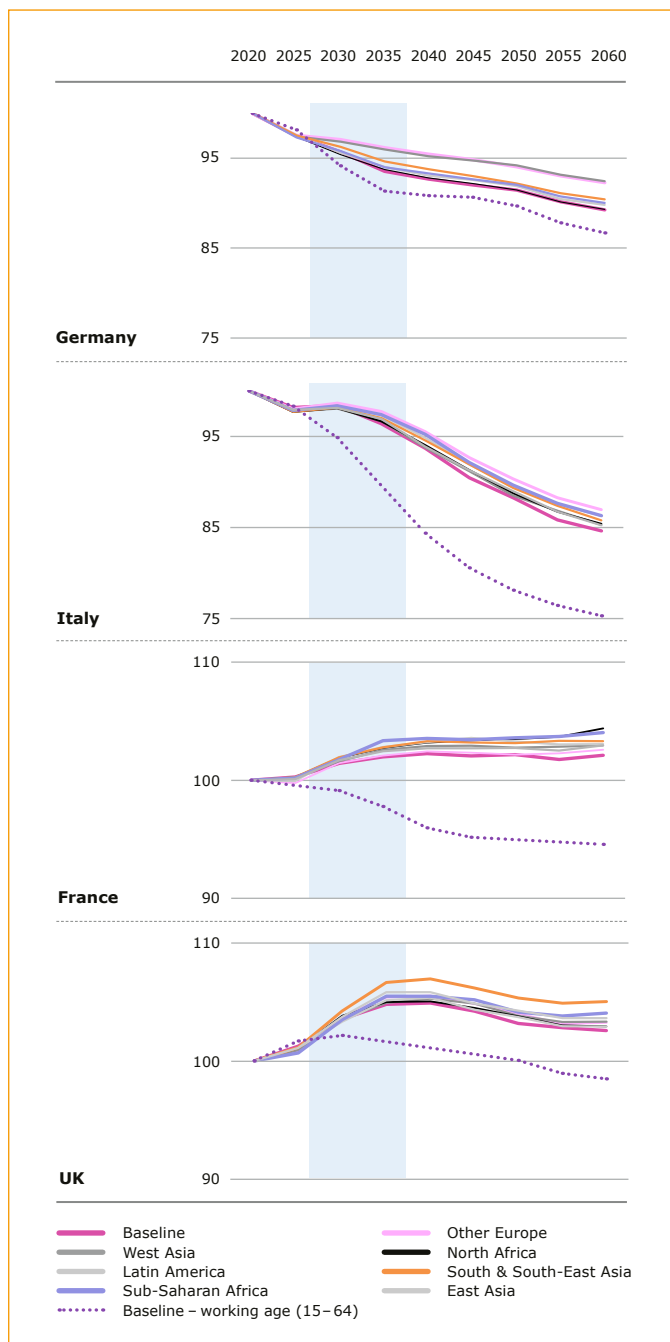


Figure 1: Simulated relative change in total labour force (100 = 2020 labour force size) and working-age population (dotted line) in selected EU+ countries, with the effects of persistent high-migration events shown for different regions of origin.

2015 in Europe leave hardly any trace on projected labour force sizes in the long run. Only persistent immigration can boost the projected labour force to an extent, but the effects on labour force dependency ratios (the ratio of non-workers to workers) are negligible. As we have shown in previous work (Bijak et al. 2008), high immigration would have to be sustained at much higher volumes than those projected in our scenarios (and much higher than it is realistic to assume) to leave a more pronounced impact on the labour force size and the dependency ratios; and that would occur only if it were coupled with better labour force integration of immigrants or selective immigration of those with high human capital (Marois et al. 2019).

It is important to recognize the limitations of the view that immigration could be a tool to address Europe's demographic challenges, especially if it is not paired with inclusive labour market policies. Our results show that immigration cannot prevent or slow down the future labour force decline in many countries and confirm that we can realistically expect only moderate impacts. The simulations do not modify the integration trajectories of immigrants but rely on evidence from past data. In that sense, the past experience of former immigrants from each world region is translated into what we foresee for the future. These results, in combination with our previous work, speak for a stronger focus on inclusive migration and integration policies.

These considerations are particularly important vis-à-vis the predominant policy focus on migration management and border protection. Even in that regard, however, there are lessons to be learned from the policy responses to the arrival of an unprecedented number of people from Ukraine. The triggering of the EU Temporary Protection Directive and the first test of the Migration Preparedness and Crisis Management Blueprint, whereby barriers are removed for new arrivals to enter the labour market as soon as possible, have already shifted the limits of the possible in European migration policy development.

## Policy Recommendations

- Policymakers should not be overly reliant on the potential of high-migration events for altering future labour force trajectories.
- Policies to tackle potential future labour force shortages should focus on fostering longer working lives, increased female labour force participation, and speedier integration of immigrants into the labour market.

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**Contact:** Population Europe Secretariat,  
Markgrafenstraße 37, 10117 Berlin, Germany

**Phone:** +49 (0)30 2061 383 30

**Email:** [office@population-europe.eu](mailto:office@population-europe.eu)

**Web:** [www.population-europe.eu](http://www.population-europe.eu)

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**Report**

# **Discussion paper: Demographic and labour force implications of high migration events scenarios**

Michaela Potančoková [potancok@iiasa.ac.at](mailto:potancok@iiasa.ac.at)

Guillaume Marois [marois@iiasa.ac.at](mailto:marois@iiasa.ac.at)

Miguel González-Leonardo [mgonzalez@iiasa.ac.at](mailto:mgonzalez@iiasa.ac.at)

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## Abstract

This report summarises the main results and findings from the model-based scenarios of high migration events into the EU+ (EU27, the United Kingdom, Iceland, Norway and Switzerland). We have tested the impact of several sets of high-migration events potentially occurring during 2025–29, either as an one off shocks lasting one calendar year, or an initial shock followed by persistently persistence in immigration of person from a given region for a decade, albeit of gradually declining volume in each subsequent year higher immigration for a decade following the initial shock. These events were implemented independently for flows from seven different world regions – Other Europe, North Africa, Sub-Saharan Africa, Latin America, West Asia, South & South-East Asia, and East Asia – into the EU+ countries. The high migration events scenarios are conceived to illustrate and quantify impacts of high migration events into the EU+ countries against the Baseline scenario. As one might expect, the short impact for a duration of a single calendar year does not leave any lasting imprint on future population sizes and structures. Once-in-a-decade events do not generate sufficiently large flows to leave any sizeable imprint on destination populations. High-migration events that persist over time – for example, through family reunifications, migration networks or newly established migration opportunities – can increase the working-age population and labour force sizes in countries with existing diaspora, but mainly when these events arise in the regions of the world with established migration links to the destination country. What our results show, however, is that although population ageing is inevitable the decline in labour force is not. Most, but not all, EU+ countries will face working-age population decline, but the labour force would decline at a lesser pace or may not decline at all once we consider the continuing education expansion and trends in labour force participation.

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## About the authors

**Michaela Potančoková** is Research Scholar in the Multidimensional Demographic Modelling research group within the POPJUS program at IIASA. (Contact: [potancok@iiasa.ac.at](mailto:potancok@iiasa.ac.at))

**Guillaume Marois** is Research Scholar in the Multidimensional Demographic Modelling research group within the POPJUS program at IIASA. (Contact: [marois@iiasa.ac.at](mailto:marois@iiasa.ac.at))

**Miguel González-Leonardo** is Research Scholar in the Multidimensional Demographic Modelling research group within the POPJUS program at IIASA and Assistant Professor at the Center for Demographic, Urban and Environmental Studies (CEDUA) at n El Colegio de México (COLMEX) (Contact: [mgonzalez@iiasa.ac.at](mailto:mgonzalez@iiasa.ac.at))

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## 1. Introduction

This report summarises the main results and findings from the model-based scenarios of high migration events into the EU+ (EU27, the United Kingdom, Iceland, Norway and Switzerland, referred to as EU+ in this report). Migration is a key component of demographic change in low fertility European societies. Microsimulation model enables us to capture and model population heterogeneity by taking into account differentials in demographic behaviors between native-born and immigrants and by socio-economic status (proxied by educational attainment). We can, thus, assess demographic impacts of different migration scenarios. In addition to that, we go beyond demographic implications of future migration and can assess also impacts on future labour force and its composition because the EU-Labour Force Survey (EU-LFS) allowed for the analysis and incorporation of differentials in labour force participation by age, sex, educational attainment and place of birth into the modelling. We, thus, account for cohort trends in educational expansion and labour-force participation among the native-born and foreign-born.

While our previous work only differentiated between the EU-born and non-EU-born (Lutz et al. 2019, Marois et al 2019b), in QuantMig we account for the diversity within the foreign born. Because QuantMig-Mic takes into account differential emigration rates by place of birth, we could model future composition of European populations by place of birth and nativity status. This is important given that the so-called superdiversity (Vertovec 2023) is one of the most prominent transformations happening in European societies. Microsimulation approaches are well suited for modelling such diversity in long-term perspective (Bélanger et al. 2019). In this report we investigate to what extent high-migration events alter the size, proportion and composition of foreign-born.

For the sake of brevity, this report does not include a section on methods and data used in the modelling. A full documentation of the QuantMig-Mic microsimulation population projection model for 31 European countries, its modules, parameters, assumptions and the details of technical implementation of the QuantMig migration scenarios is available from Marois et al. (2023). The model code and all scenarios are publicly available in Zenodo repository under "QuantMig microsimulation population projection model and migration scenarios for 31 European countries" (Potančoková et al. 2023b) as of August 2023, DOI: 10.5281/zenodo.7728049. In addition to Zenodo repository, users can explore granular results of 15 QuantMig scenarios (Baseline and 14 scenarios of high-migration events) in a user-friendly and visually attractive manner through [QuantMig Migration Scenarios Explorer](http://www.quantmig.eu/data_and_estimates/scenarios_explorer) at [http://www.quantmig.eu/data\\_and\\_estimates/scenarios\\_explorer](http://www.quantmig.eu/data_and_estimates/scenarios_explorer).

First, we introduce QuantMig migration scenarios and then present their impacts on total population size (section 3.1), working-age population and total labour force (section 3.2), population age composition and dependency ratios (section 3.3) and on the dynamics of change of foreign-born population in European societies. We conclude with a brief summary and discussion of the main findings.

## 2. High Migration Events Scenarios

The scenarios presented in this report vary in their assumptions on international immigration, predominantly in terms of the numbers of international immigrants (flows) from the rest of the world regions into the EU+ countries. Higher immigration from the rest of the world also means that more persons born outside the EU+ move between the countries in EU+ system (for more details on the mechanism and modelling of emigration see Marois et al. 2023). All scenarios share the same assumptions on fertility, mortality, educational and labour force participation trends at the individual level (again, the details are explained in Marois et al. 2023). Because the place of birth is a source of heterogeneity for demographic behaviours,

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assumptions made on immigration impact aggregated components (total fertility rate, total labour force participation, etc.), hence the variation in the resulting rates and number of events in different migration scenarios.

QuantMig migration scenarios share the same demographic and labour force assumptions, which consider differences between the native-born and different groups of foreign-born. All scenarios share migration assumptions for 2020-2024 and differ in immigration from seven rest of the world regions - East Asia, Latin America, North Africa, Other Europe, Sub-Saharan Africa, South and South-East Asia and West Asia<sup>1</sup> – starting from 2025-2029 period. When conceptualising QuantMig migration scenarios, the COVID-19 pandemic was leaving its trace on international migration (González et al. 2023) and the war against Ukraine erupted in February 2022, immediately profoundly changing migration flows from Eastern Europe into the EU+ countries. The number of displaced Ukrainians who crossed EU borders exceeded by far the number of Syrian and Iraqi refugees who arrived in 2015-2016. The experiences of past high migration events into EU+ have confirmed that we need to set migration assumptions with respect to origin countries and regions rather than for gross immigration flow into the EU+ from the rest of the world.

The **high migration events scenarios** are conceived to illustrate and quantify impacts of high migration events into the EU+ countries against the Baseline scenario. The **Baseline scenario** envisages continuation of the past migration trends from 2011-2019 into future and alternative scenarios of high migration events modify migration assumptions from 2025-2029 onwards. Each high migration event scenario modifies immigration assumption for immigration flow from one specific world region while immigration flows for other world regions into the EU+ countries remain the same as in the Baseline scenario.

In the **Baseline scenario**, immigration from the rest of the world regions into the EU+ countries continues with the same intensity (not in terms of numbers but in terms of rate) as in the second decade of 21<sup>st</sup> century and immigrants from the eight world regions will be attracted mainly towards those EU+ countries where compatriots from that given region have already migrated to in the past, and where the existing migration networks can therefore support them. We also assume that the war against Ukraine will continue beyond 2023 and the combat will cease by 2025, resulting in return of 60% of the refugees back to Ukraine<sup>2</sup>. This baseline inflow (without the additional immigration of refugees from Ukraine) has been derived by applying the average emigration rate into the EU+ country from Other Europe. The estimation of the average emigration rates into the EU+ counties is explained in Marois et al (2023, page 28). The resulting immigration flows of the Baseline scenario (including the migration from Ukraine in 2020-24) are presented in Table 1. The projected immigration flows from Other Europe region for 2020-2024 are triple the than the projected flow derived from the average emigration rate in 2025-2029. The overall immigration into the EU+ from the rest of the world in 2020-24 is thus by 25% higher than the projected values for 2025-2029.

The projected immigration flows into the EU+ are derived using the emigration rate from the world regions because the migration decisions are made in the countries of origin. As young adults normally have the highest propensity to migrate, we wanted to capture the potential impacts of diverging projected demographic dynamics in different world regions on potential number of immigrants into the EU+. This is well captured in rate-based scenario. Table 1 illustrates that projected immigration volumes from demographically growing and

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<sup>1</sup> The world regions are determined by the classification used the EU-LFS 2012-2019 COUNTRYB variable: Europe Outside EU-28 and EFTA (includes Turkey, Russian Federation and other Eastern European countries); North Africa; Other Africa; Near Middle East; East Asia; South South-East Asia; North America & Australia Oceania; Latin America. For the country grouping for each region see the EU-LFS documentation: <https://ec.europa.eu/eurostat/documents/1978984/6037342/Country-codification-from-2012-onwards.pdf>

<sup>2</sup> We apply net inflows of Ukrainian refugees and add them into the immigration flows for Other Europe region for 2020-2024 period only.

young regions increase towards 2060, for example the projected number of immigrants from Sub-Saharan Africa nearly doubles between 2020-24 and 2055-59, followed by 25% increase for immigration from Northern Africa and 14% increase from West Asia. In contrast, immigration volumes from regions with ageing populations, i.e. older age structures in the future as compared to 2020, reflect the declining pool of highly-mobile young adults. East Asia is a good example, with the projected immigration declining by 40% between 2020-24 and 2055-59.

**Table 1: Assumed total immigration flows from the world regions into the EU+ in the Baseline scenario**

| Total immigration from: | 2020-24           | 2025-29           | 2030-34           | 2035-39           | 2040-44           | 2045-49           | 2050-54           | 2055-59           |
|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Other Europe            | 5,140,112         | 1,669,511         | 1,699,076         | 1,805,692         | 1,801,092         | 1,662,969         | 1,483,465         | 1,365,750         |
| North Africa            | 929,664           | 965,206           | 1,053,874         | 1,161,001         | 1,222,826         | 1,218,038         | 1,181,374         | 1,163,108         |
| Sub-Saharan Africa      | 1,659,728         | 1,961,478         | 2,143,433         | 2,402,594         | 2,619,129         | 2,786,751         | 2,926,193         | 3,062,040         |
| West Asia               | 1,465,786         | 1,491,034         | 1,575,084         | 1,674,694         | 1,729,596         | 2,040,755         | 1,700,498         | 1,677,060         |
| South & South-East Asia | 2,074,641         | 2,123,791         | 2,154,011         | 2,159,123         | 2,146,626         | 2,112,087         | 2,070,893         | 2,016,878         |
| East Asia               | 832,160           | 734,951           | 711,126           | 704,760           | 673,467           | 613,848           | 547,250           | 496,276           |
| Latin America           | 1,871,965         | 1,868,969         | 1,845,690         | 1,823,424         | 1,850,264         | 1,818,550         | 1,719,318         | 1,654,183         |
| North America + Oceania | 1,298,363         | 1,035,354         | 1,005,251         | 995,669           | 992,730           | 988,946           | 979,947           | 960,490           |
| <b>Total into EU+</b>   | <b>15,272,419</b> | <b>11,850,294</b> | <b>12,187,544</b> | <b>12,726,958</b> | <b>13,035,730</b> | <b>13,241,945</b> | <b>12,608,937</b> | <b>12,395,784</b> |

High migration events, of the kind of the 2015-2016 migration from Syria or more recently sizeable migration from Ukraine after the Russian invasion, are impossible to foresee in terms of their onset, scale, duration and in terms of how many people will return or settle in what destinations (Bijak and Czaika 2020). This unpredictability of the drivers and their effects on actual migration towards Europe nudges us to take a different approach.

To illustrate the implications of potential high immigration events, we have developed a set of model-based scenarios anchored in statistical modelling and theory of extreme values (Bijak 2023). We can simulate such situations in scenarios to inform greater preparedness and contingency planning by outlining the potential impacts. The impacts will depend not only on the magnitude (how many migrants will come), but also on their regions of origin, which differ in terms of the characteristics of their populations (who will come). Both when and where from are hard to predict even in short-term, but once signal data are available migration events can be nowcast (Barker and Bijak 2022). Our scenarios simulate high migration events that differ in term of origin of the immigration, the magnitude and the duration.

With respect to the magnitude, we pioneer the use of quantiles from Pareto distribution corresponding to once-in-a-decade and twice-in-a century frequency of occurrence of the migration event (Bijak 2023). Bijak's statistical estimates are informed by the past immigration flows from eight world regions into EU+. For the scenario setting we have selected posterior means of the quantiles  $q_{0.9}$  (corresponding to once-in-a-decade frequency of occurrence) and  $q_{0.98}$  (corresponding to twice-in-a-century frequency of occurrence) from the Pareto distributions fitted to the median QuantMig flow estimates for 2009–2019 (Aristotelous et al. 2022). As for the timing of the event, for simulation purposes we choose period of 2025-2029.

With respect to duration of an immigration event we simulate two contrasting situations. First, we suppose a duration of a single year – an one-off influx of immigrants corresponding to “migration event” and “high migration event” in magnitude. After one calendar year the migration from that particular region goes back to projected immigration follows as in the baseline scenario. We term this set of scenarios “short migration events”.

The second situation envisages that higher numbers of immigrants would be arriving during the decade after a high-migration event has taken place as a result of chain migration, family reunifications, established migration networks or prolonged crisis that gave rise to migration event in the first place. After ten years, the additional migration 'wave' vanishes and immigration flows return to levels observed in the baseline scenario. We term this set of scenarios "persistent migration events".

This leaves us with four sets of scenarios to simulate: short once-in-a-decade migration events from 7 world regions, once-in-a-decade events from 7 world regions with persistence, short twice-in-a-century events from 7 world regions, and twice-in-a-century events from 7 world regions with persistence. We model in total 28 scenarios of migration events, as summarized in Table 2.

**Table 2: Assumption setting for the 28 scenarios of migration events into the EU+**

|                                       | <b>short event from:</b> | <b>event followed by persistence from:</b> |
|---------------------------------------|--------------------------|--|
| <b>Once-in-a-decade immigration</b>   | Other Europe             | Other Europe                               |
|                                       | North Africa             | North Africa                               |
|                                       | Sub-Saharan Africa       | Sub-Saharan Africa                         |
|                                       | West Asia                | West Asia                                  |
|                                       | South & South-East Asia  | South & South-East Asia                    |
|                                       | East Asia                | East Asia                                  |
|                                       | Latin America            | Latin America                              |
| <b>Twice-in-a-century immigration</b> | Other Europe             | Other Europe                               |
|                                       | North Africa             | North Africa                               |
|                                       | Sub-Saharan Africa       | Sub-Saharan Africa                         |
|                                       | West Asia                | West Asia                                  |
|                                       | South & South-East Asia  | South & South-East Asia                    |
|                                       | East Asia                | East Asia                                  |
|                                       | Latin America            | Latin America                              |

### **Short high-migration events**

Short high-migration events are immigration events from a given region into the EU+ countries with the *frequency of occurrence twice-in-a-century* (taking the modelled immigration corresponding to 98<sup>th</sup> quantile of Pareto distribution, Bijak 2023). Such events take place for one calendar year within the 5-year period 2025-2029. Immigration from all other world regions follows the baseline scenario. Before and after the extreme event immigration from the given region returns to the levels of the baseline scenario. Such an event can be an outcome of humanitarian or natural disasters with temporary migration and high probabilities of return which can be resulting from a speedy policy reaction to the crisis that provoked high immigration. We modelled seven short high-migration event scenarios corresponding to the seven regions of origin: Other Europe, North Africa, Sub-Saharan Africa, Latin America, West Asia, South & South-East Asia, and East Asia.

### **Short migration events**

A short migration event is an event from a given region with the *frequency of occurrence once-in-a-decade* (taking immigration flows corresponding to the 90<sup>th</sup> quantile from Pareto distribution), and this event takes place for 1 year within the 5-year period 2025-30. After this immigration event, immigration returns to those levels of the baseline scenario. We modelled seven short high-migration event scenarios corresponding to the seven regions of origin: Other Europe, North Africa, Sub-Saharan Africa, Latin America, West Asia, South & South-East Asia, and East Asia.



### *Persistent high migration events*

Persistent high-migration events are those where the initial short high-migration event from a given region, corresponding to the frequency of occurrence twice in a century, is followed by gradually diminishing migration inflows from that region for a decade. We simulate this situation by first imposing a "short high-migration event" from a given region in 2027, and then keeping immigration from that region high for a decade, but with the volume of immigrants declining in each subsequent year until it reaches the same values as in the baseline scenario at the end of the decade. The persistence in migration is envisaged because of the initial event's migration network effects, family reunifications and chain migration, as well as due to persistence of migration drivers stimulating out-migration from the origin countries/areas. Elevated migration flows thus take place between 2027 and 2036. In practice, we use interpolated values between the two time points.

### *Persistent migration events*

Identical to the above, but the initial event from a given region has a once-in-a-decade frequency of occurrence. The persistence is also envisaged for a decade following the initial event in 2027. Migration volumes are lower and in practice obtained by interpolating values between the initial event and baseline scenario 10 years later. We modelled seven persistent high-migration event scenarios corresponding to the seven regions of origin: Other Europe, North Africa, Sub-Saharan Africa, Latin America, West Asia, South & South-East Asia, and East Asia.

**Table 3: Projected immigration into EU+ in the Baseline and migration events scenarios for the periods when migration events are implemented**

| Scenario                                     |                         | Immigration volumes (millions) |             |             |
|--|-------------------------|--------------------------------|-------------|-------------|
|  |                         | 2025-29                        | 2030-34     | 2035-39     |
| <b>BASELINE</b>                              |                         | <b>11.9</b>                    | <b>12.2</b> | <b>12.7</b> |
| <b>Persistent high-migration event from:</b> | Other Europe            | 15.4                           | 15.6        | 13.5        |
|  | North Africa            | 13.3                           | 13.5        | 12.9        |
|  | Sub-Saharan Africa      | 14.3                           | 14.5        | 13.0        |
|  | West Asia               | 15.0                           | 15.1        | 13.1        |
|  | South & South-East Asia | 14.5                           | 14.6        | 13.0        |
|  | East Asia               | 13.0                           | 13.3        | 12.9        |
|  | Latin America           | 14.9                           | 15.0        | 13.1        |
| <b>Persistent migration event from:</b>      | Other Europe            | 13.6                           | 13.9        | 12.9        |
|  | North Africa            | 12.8                           | 13.0        | 12.8        |
|  | Sub-Saharan Africa      | 13.3                           | 13.6        | 12.9        |
|  | West Asia               | 13.2                           | 13.5        | 12.9        |
|  | South & South-East Asia | 13.6                           | 13.8        | 12.9        |
|  | East Asia               | 12.6                           | 12.9        | 12.8        |
|  | Latin America           | 13.6                           | 13.8        | 12.9        |
| <b>Short high-migration event from:</b>      | Other Europe            | 12.8                           | 12.2        | 12.7        |
|  | North Africa            | 12.2                           | 12.2        | 12.7        |
|  | Sub-Saharan Africa      | 12.3                           | 12.2        | 12.7        |
|  | West Asia               | 12.7                           | 12.2        | 12.7        |
|  | South & South-East Asia | 12.4                           | 12.2        | 12.7        |
|  | East Asia               | 12.1                           | 12.2        | 12.7        |
|  | Latin America           | 12.6                           | 12.2        | 12.7        |
| <b>Short migration event from:</b>           | Other Europe            | 12.2                           | 12.2        | 12.7        |
|  | North Africa            | 12.0                           | 12.2        | 12.7        |
|  | Sub-Saharan Africa      | 11.9                           | 12.2        | 12.7        |
|  | West Asia               | 12.1                           | 12.2        | 12.7        |
|  | South & South-East Asia | 12.1                           | 12.2        | 12.7        |
|  | East Asia               | 12.0                           | 12.2        | 12.7        |
|  | Latin America           | 12.1                           | 12.2        | 12.7        |

Projected country-specific immigration flows into the EU+, as well as immigration and emigration between the EU+ countries and emigrations into the rest of the world can be viewed in the Indicators page of the QuantMig Migration Scenarios tool at [http://www.quantmig.eu/data\\_and\\_estimates/scenarios\\_explorer/](http://www.quantmig.eu/data_and_estimates/scenarios_explorer/)

## 3. Results

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### 3.1 Impacts on population size

The Baseline scenario considers continuation of migration volumes into the EU+ which are comparable to those during the 2011-2019 and projects a very moderate decline in the EU+ population from 520 million in 2020 to 512 million in 2060. The projected decline is a bit more pronounced for the EU27 – by 5pp from the estimated 440 million in 2020 to 420 million in 2060. The EU+ decline is reduced because the UK population is projected to increase by 11pp from 81 to 92 million during the same time frame. Sweden would be (besides Luxembourg) the fastest growing population in the current EU27 (Table 4).

The projected population increases are strongest in countries which have experienced pronounced gains from international migration in the past and this trend translates into the future. Baseline scenario results in *projected strong population increase*, which we define as a relative change between 2020 and 2060 that exceeds 10pp, in the following 10 EU+ countries: Austria, Cyprus, Iceland, Ireland, Luxembourg, Malta, Norway, Sweden, Switzerland and the UK (in alphabetic order, for the actual values see Appendix Table A.1). *Moderate population increase*, within +1pp to +10pp relative change, is projected in the Baseline scenario in five countries: Belgium, Denmark, France, Germany and the Netherlands. *Moderate population declines*, within -1 to -10pp between 2020 and 2060 are projected in Czechia, Estonia, Italy and Slovakia; and *strong population declines* are projected in 11 southern and eastern EU27 countries: Bulgaria, Croatia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Romania, Slovenia and Spain. More country-specific projected population stocks are available through the QuantMig Migration Scenarios Explorer at [http://www.quantmig.eu/data\\_and\\_estimates/scenarios\\_explorer/](http://www.quantmig.eu/data_and_estimates/scenarios_explorer/)

Can high migration events alter the trend projected by the Baseline scenario? As Table 4 shows for the EU27 and selected main destination countries of migrants from the rest of the world (and as Appendix table 1 shows for all 31 EU+ countries) *short migration events do not alter this projected trend*. The projected population sizes modelled in the short migration event scenarios are close to the Baseline and within the random noise of the model.<sup>3</sup>

Only Persistent high-migration events (migration events with twice-in-a-century frequency of occurrence and followed by persistence in migration a decade after the initial event) can somewhat alter the projected population decline or increase. For the EU27 three Persistent high-migration event scenarios – from Other Europe, West Asia and from Latin America - almost stabilise future population size (Table 4). The projected decline is reduced from -5pp to -3pp by 2060.

The impacts are more pronounced for the main destination countries and more sizeable only if these persistent events originate from world regions with the existing migration ties with the destination country.

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<sup>3</sup> The random noise is more pronounced in the results for countries with smaller populations, therefore only values that are above the random noise of the short migration event scenario should be considered as reliable enough of indicating an impact of a scenario onto the projected population sizes. There is no single cut off value or random noise for all countries but generally only valued which exceed those from Short migration event scenario should be considered as impactful. Results for very small countries like Luxembourg, Estonia or Iceland vary considerably and should be interpreted with caution.

We can consider as impactful those scenarios that add at least +2pp to the projected population decline as having some impact. Taking all 31 countries into account, the most impactful scenarios overall are Persistent high-migration event from Other Europe, which considerably alters the projected population change in 22 countries, followed by Persistent high-migration event from West Asia (considerable change in 11 countries). This is not surprising given that the extreme values from Pareto 98<sup>th</sup> quantile result in highest volumes for Other Europe, West Asia and Latin America. Persistent high migration event from Latin America makes an impact only for Spain, Portugal and to a very limited extend for Italy. Persistent high-migration event from North Africa and Sub-Saharan Africa makes a difference for France, and the latter also for Italy, Belgium and to lesser extend for Austria, Denmark and Finland. Persistent high-migration event from South and South-East Asia is impactful for the UK, Norway and to a lesser extent for Ireland and Switzerland. The largest overall impact is visible for Persistent high-migration from West Asia to Sweden, where that scenario adds +8.7pp to the already pronounced projected population growth.

Table 1 features some useful examples. In Spain the projected population can change from pronounced to moderate decline in case of migration events from Latin America, however, most scenarios do not result in a change of more than 1pp which is largely within the random noise of the model. Only Persistent high-migration event scenario reduces the projected decline more considerably (by +2.9pp) and alters the population size trend visibly (Figure 1).

In Denmark we see that all Persistent scenarios would have some small impact (we can consider as impactful those scenarios that add at least +2pp to the projected population decline as having some impact) but only Persistent high-migration from West Asia changes the projected population increase from moderate to strong.

As already mentioned, the overall greatest impact is of Persistent high-migration from West Asia to Sweden, where also the Persistent high migration event makes an impact on the projected population change by adding +3.5pp to the population growth projected in the Baseline scenario.

The comparison between the Persistent high-migration and Persistent migration event scenario from the same region also serves as sensitivity analysis of the simulated impacts. Scenarios of high migration events and migration events with persistence show some impact also for migration events from the regions with the strongest impact, i.e. from Other Europe and West Asia in case of Austria and Germany, or in case of Spain persistent events from Latin America. However, in other cases, such as for France or the EU27, the Persistent migration events show very similar results for all regions of origin and have rather small impact. Short-migration events do not have impact on projected total population sizes, which is not surprising given that modeled volumes are in the range of 500 thousand to 1.3 million. Although immigration of additional 1 million persons in a single calendar year is substantial, it is not a volume that change demographic trends even if we consider higher fertility levels of some immigrant groups.

**Table 4: Relative change in total population between 2020 and 2060 (100 = 2020) by scenarios, selected countries**

| Scenario:  | EU27       | Sweden     | Austria    | Germany    | Denmark    | Spain      | UK         | France     | Netherlands | Italy      |
|--|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| <b>Baseline</b>  | <b>95</b>  | <b>139</b> | <b>111</b> | <b>102</b> | <b>107</b> | <b>89</b>  | <b>111</b> | <b>106</b> | <b>102</b>  | <b>92</b>  |
| Persistent high-migration event from East Asia                           | 96         | 140        | 113        | 103        | 108        | 90         | 112        | 107        | 102         | 92         |
| <b>Persistent high-migration event from Latin America</b>                | <b>96</b>  | <b>139</b> | <b>112</b> | <b>103</b> | <b>108</b> | <b>92</b>  | <b>111</b> | <b>107</b> | <b>103</b>  | <b>93</b>  |
| Persistent high-migration event from North Africa                        | 96         | 140        | 112        | 103        | 108        | 91         | 111        | <b>108</b> | 103         | 93         |
| <b>Persistent high-migration event from Other Europe</b>                 | <b>97</b>  | <b>141</b> | <b>117</b> | <b>105</b> | <b>109</b> | <b>90</b>  | <b>111</b> | <b>107</b> | <b>104</b>  | <b>94</b>  |
| Persistent high-migration event from South and South-East Asia           | 96         | 142        | 113        | 103        | 109        | 90         | <b>113</b> | 107        | 103         | 93         |
| Persistent high-migration event from Sub-Saharan Africa                  | <b>97</b>  | <b>142</b> | <b>113</b> | <b>103</b> | <b>109</b> | <b>90</b>  | <b>112</b> | <b>108</b> | <b>103</b>  | <b>94</b>  |
| <b>Persistent high-migration event from West Asia</b>                    | <b>97</b>  | <b>148</b> | <b>115</b> | <b>106</b> | <b>111</b> | <b>90</b>  | <b>112</b> | <b>107</b> | <b>104</b>  | <b>92</b>  |
| Persistent migration event from East Asia                                | 96         | 140        | 111        | 102        | 108        | 90         | 112        | 107        | 103         | 92         |
| Persistent migration event from Latin America                            | 96         | 140        | 112        | 103        | 109        | 91         | 111        | 107        | 103         | 93         |
| Persistent migration event from North Africa                             | 96         | 140        | 112        | 103        | 109        | 90         | 111        | 107        | 102         | 93         |
| Persistent migration event from Other Europe                             | 96         | 140        | 114        | 104        | 108        | 90         | 111        | 107        | 103         | 92         |
| Persistent migration event from South and South-East Asia                | 96         | 141        | 113        | 103        | 109        | 90         | 112        | 107        | 102         | 93         |
| Persistent migration event from Sub-Saharan Africa                       | 96         | 140        | 113        | 103        | 109        | 90         | 112        | 107        | 103         | 93         |
| Persistent migration event from West Asia                                | 96         | 143        | 113        | 104        | 108        | 90         | 111        | 107        | 103         | 92         |
| Short high-migration event from East Asia                                | 95         | 140        | 112        | 102        | 107        | 90         | 111        | 107        | 102         | 92         |
| Short high-migration event from Latin America                            | 96         | 140        | 112        | 102        | 108        | 90         | 111        | 107        | 102         | 92         |
| Short high-migration event from North Africa                             | 96         | 139        | 112        | 102        | 107        | 90         | 111        | 107        | 102         | 92         |
| Short high-migration event from Other Europe                             | 96         | 140        | 112        | 103        | 108        | 90         | 111        | 106        | 102         | 92         |
| Short high-migration event from South and South-East Asia                | 95         | 139        | 111        | 102        | 108        | 89         | 111        | 106        | 102         | 92         |
| Short high-migration event from Sub-Saharan Africa                       | 96         | 139        | 111        | 102        | 107        | 90         | 111        | 107        | 103         | 92         |
| Short high-migration event from West Asia                                | 96         | 140        | 112        | 103        | 109        | 90         | 111        | 106        | 102         | 92         |
| Short migration event from East Asia                                     | 96         | 139        | 113        | 102        | 109        | 90         | 111        | 107        | 102         | 92         |
| Short migration event from Latin America                                 | 95         | 140        | 112        | 102        | 108        | 90         | 111        | 106        | 102         | 92         |
| Short migration event from North Africa                                  | 96         | 139        | 112        | 102        | 108        | 90         | 111        | 106        | 102         | 92         |
| Short migration event from Other Europe                                  | 96         | 140        | 112        | 103        | 108        | 90         | 111        | 106        | 102         | 92         |
| Short migration event from South and South-East Asia                     | 96         | 140        | 112        | 102        | 108        | 90         | 111        | 106        | 103         | 92         |
| Short migration event from Sub-Saharan Africa                            | 96         | 140        | 111        | 102        | 107        | 90         | 111        | 107        | 102         | 92         |
| Short migration event from West Asia                                     | 95         | 139        | 112        | 102        | 108        | 89         | 111        | 107        | 102         | 92         |
| <b>Maximum (Max)</b>   | <b>97</b>  | <b>148</b> | <b>117</b> | <b>106</b> | <b>111</b> | <b>92</b>  | <b>113</b> | <b>108</b> | <b>104</b>  | <b>94</b>  |
| <b>Difference between Max and the Baseline in percentage points (pp)</b> | <b>1.8</b> | <b>8.7</b> | <b>5.3</b> | <b>3.8</b> | <b>3.1</b> | <b>2.9</b> | <b>2.2</b> | <b>2.0</b> | <b>1.8</b>  | <b>1.9</b> |

Note: **Orange**=Strong decline (<90), **Yellow**=Moderate decline (≥90 to <99), **Green**=Moderate increase (>101 to ≤110), **Dark Green**=Strong increase (>110)

Results for all countries are presented in Appendix A Table A.1

Figure 1 illustrates trajectories of population change in Persistent high-migration events and Persistent migration events scenarios for the selected counties and showcases that only immigration events from regions with already established migration links to the selected destination country would have some limited impact on the projected population sizes. Countries in the Figure 1 were selected to illustrate diversity of impacts of persistent migration events from different world regions. In case of Germany, only Persistent high-migration events from West Asia and Other Europe and Persistent migration event from West Asia visibly elevates the projected population sizes, for Spain only Persistent high migration event and Persistent migration event from Latin America temporarily prevents population decline and elevates the projected population size. In some instances, Persistent migration scenario from can have same or greater impacts than Persistent high migration events from the world regions with lesser migration ties. Plots for all counties and including also plots for Short high migration events and Short migration events scenarios are available in Appendix B Figure B.1.

**Figure 1: Relative change in total population size in the Baseline, Persistent high-migration events (PHME) and Persistent migration events (PME) scenarios (2020 = 100), selected countries**

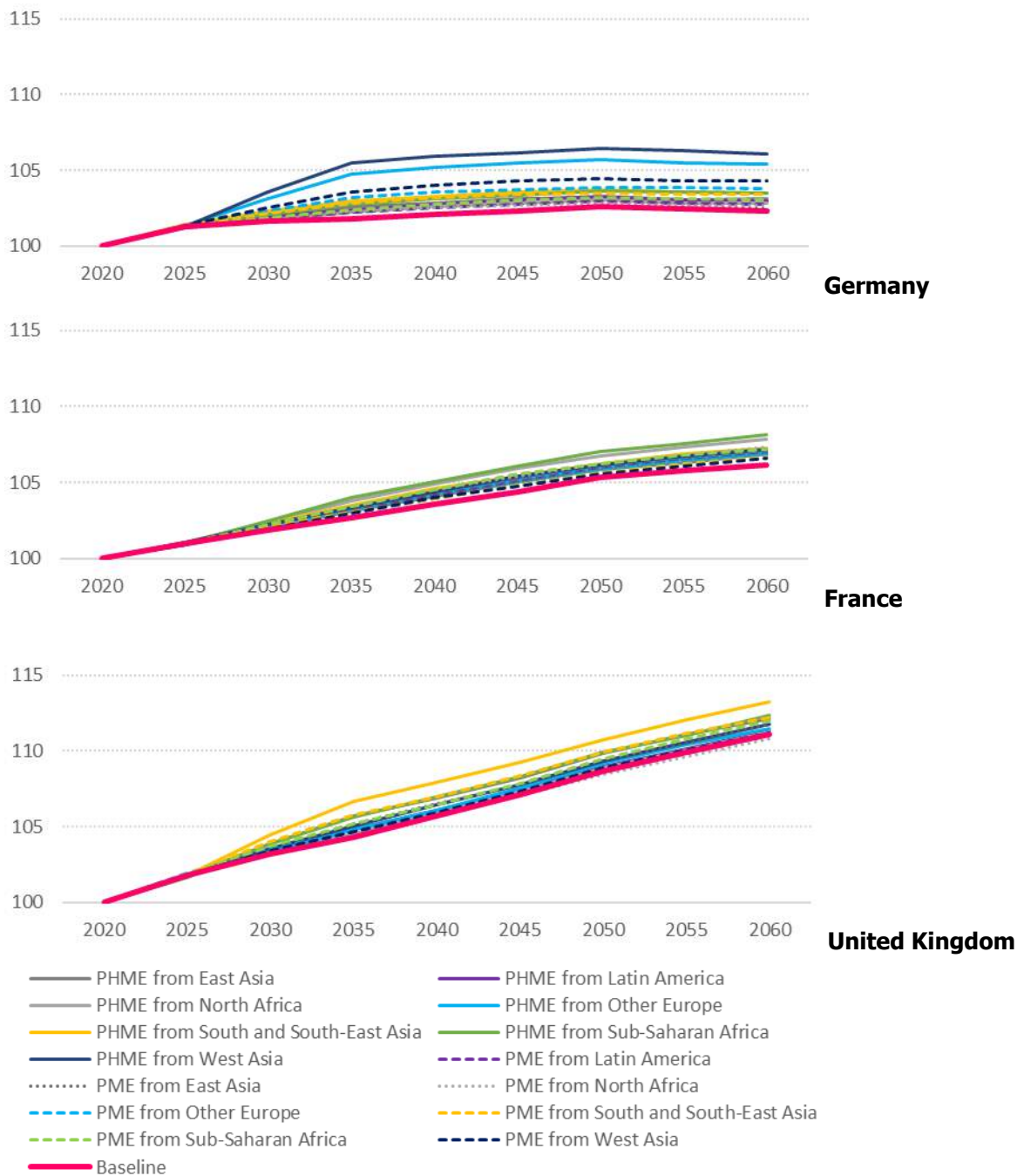
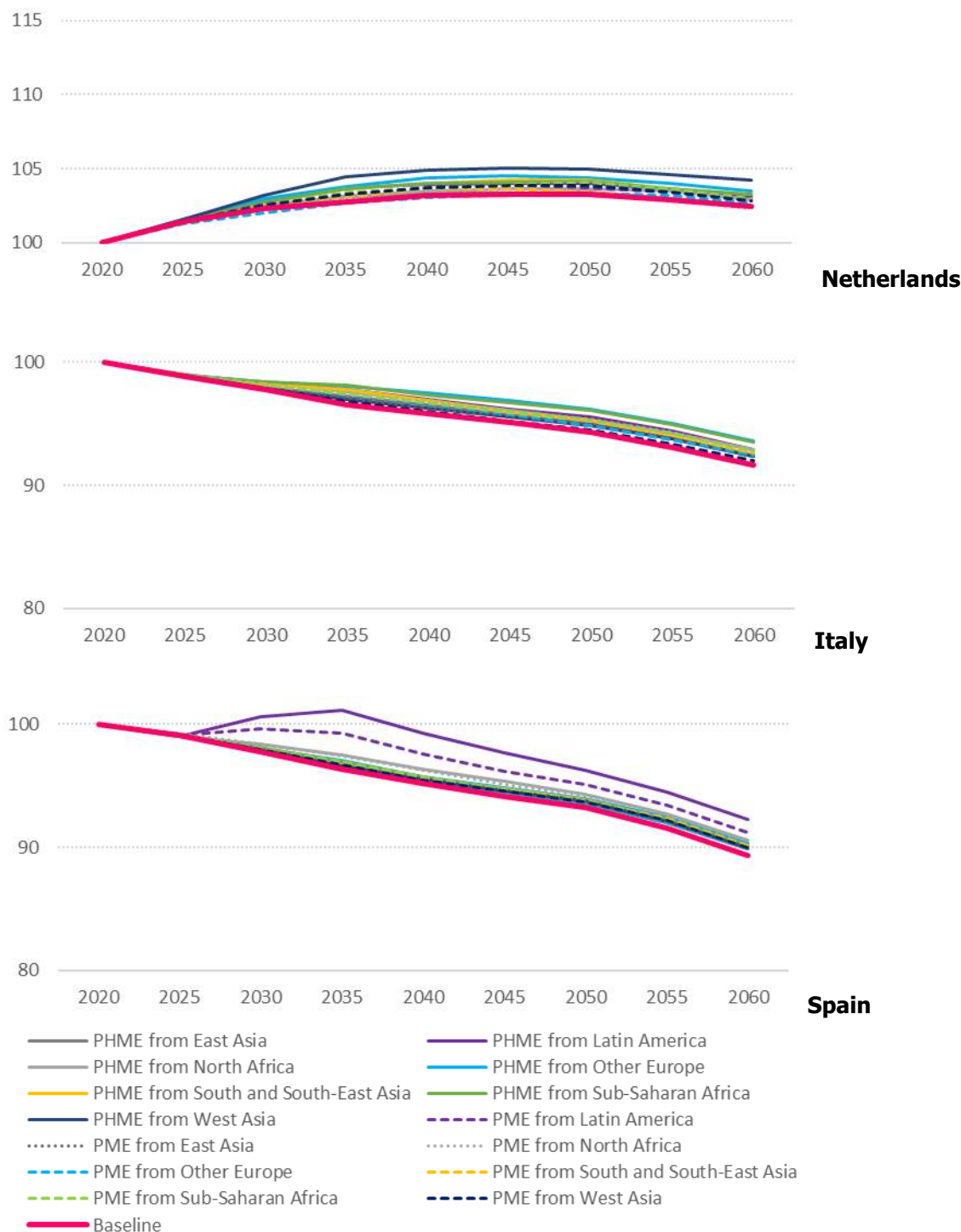


Figure 1 continued



Charts and maps depicting actual population stocks can be accessed in the interactive QuantMig Scenario Explorer at [http://www.quantmig.eu/data\\_and\\_estimates/scenarios\\_explorer/](http://www.quantmig.eu/data_and_estimates/scenarios_explorer/).

### 3.2 Impacts on working-age population and labour force

Working-age population (population age 15-64) shows more pronounced projected declines than the population size in the Baseline scenario. This is because the older population in many countries is still growing because populous cohorts age, while the younger cohorts are less populous as a result of persistently low

fertility levels. The projected working-age population in the EU27 would decline to 80% of its 2020 volume by 2060 (population decline was projected at 95% of the 2020 population size).

The Baseline scenario projects a decline in working-age population in 26 countries, a significant increase in the working-age population in Sweden, Norway and Luxembourg, and a very small increase in Switzerland (Appendix Table A.2). Major destination countries of international migrants would experience only moderate decline in working-age population (reduction within -10pp, but mostly within -5pp) by 2060: Austria, Belgium, Cyprus, Denmark, Finland, France, Ireland, Malta and the UK. Most countries, 17 out of 26, would experience strong declines with reductions between -10 to -43pp between 2020 and 2060, with the most pronounced shrinkages in Bulgaria, Croatia, Latvia and Poland (Appendix Table A.2). Most of the latter are countries with low projected levels of immigration.

Although most immigrants are of working-age<sup>4</sup> (Rogers and Castro 1981, see also QuantMig Migration Estimates Explorer<sup>5</sup>), even high migration events do not profoundly change the projected trajectories and can only mildly alter the projected trends which, as shown in Table 5, vary across the countries. The impacts are of similar magnitude as for the population sizes discussed in the previous section. Only the scenarios envisaging persistence of migration after the initial migration event show some impacts, and again the impacts are differentiated depending on the region of the migration event. The patterns in terms of what regions of migration matter for what destination are also the same as for the population sizes, Persistent high-migration events from Other Europe and West Asia being impactful for the largest number of destinations.

A look at Table 5 illustrates well the variety of impactful scenarios across EU+ countries. In the UK Persistent high-migration event from South and South-East Asia and to a lesser extent from Sub-Saharan Africa or East Asia help stabilise the working-age population. To a lesser extent it also is the case for Denmark in the Persistent high-migration event from West Asia and for Ireland for the Persistent high-migration event from South and South-East Asia or Other Europe (see Appendix Table A.2). Persistent high-migration event from Other Europe nearly prevents working-age population decline in Austria. For Germany and the Netherlands, Persistent high-migration from West Asia scenario changes the projected strong decline to a moderate one.

Table 5 also clearly shows that the shrinkage in total labour force need not be as pronounced as the shrinkage in the working-age population<sup>6</sup>. The labour force does not shrink as dramatically as the working age population if we take cohort trends in labour force participation leading to higher labour force participation rate and the growing share of population with high educational attainment onto account, which both contribute to increase the participation, particularly of women. In countries with projected working-age population decline, the decline in total labour force is consistently less pronounced. In the UK, France and Denmark the simulations result in a slight decline in the working-age population in the Baseline and short migration events scenario but slight increase in projected total labour force size. Again, Persistent high-migration events from different world regions can further increase the labour force growth in respective countries and these are highlighted in Table 2. For Austria, Persistent high-migration from West Asia or Other Europe can switch the

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<sup>4</sup> Migration between the EU+ also has an impact on the projected declines in the eastern countries and less pronounced declines or projected increases in western and northern EU+ countries which receive intra-EU+ migrants. The projected declines in the member states in the east of the EU27 are pronounced although we assume a deceleration of intra-EU East-West migration through a convergence to the same emigration rate of the native-born from the eastern member states to the average of the receiving member states in the west of the EU+ (for more detail see Marois et al. 2023). However,

<sup>5</sup> Accessible at [http://quantmig.eu/data\\_and\\_estimates/estimates\\_explorer/](http://quantmig.eu/data_and_estimates/estimates_explorer/)

<sup>6</sup> Working-age population is only a potential labour force, and we allow persons between age 15 and 74 to be active in the labour force in the simulations (for the details on the modelling of the labour force and educational attainment see Marois et al. 2023).

**Table 5: Relative change in total labour force\* (LF) and in working-age population\* (WA) between 2020 and 2060 (100 = 2020) by scenarios, selected countries**

| Scenario:  | EU27      |           | Sweden     |            | Austria    |           | Germany   |           | Denmark    |           | Spain     |           | UK         |            | France     |           | Netherlands |           | Italy     |           |
|--|-----------|-----------|------------|------------|------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|------------|------------|------------|-----------|-------------|-----------|-----------|-----------|
|  | LF        | WA        | LF         | WA         | LF         | WA        | LF        | WA        | LF         | WA        | LF        | WA        | LF         | WA         | LF         | WA        | LF          | WA        | LF        | WA        |
| <b>Baseline</b>  | <b>86</b> | <b>80</b> | <b>128</b> | <b>128</b> | <b>98</b>  | <b>93</b> | <b>89</b> | <b>87</b> | <b>102</b> | <b>95</b> | <b>69</b> | <b>67</b> | <b>103</b> | <b>98</b>  | <b>102</b> | <b>95</b> | <b>94</b>   | <b>88</b> | <b>85</b> | <b>75</b> |
| Persistent high-migration event from East Asia                           | 86        | 81        | 129        | 129        | 99         | 94        | 90        | 87        | 102        | 96        | 70        | 67        | 104        | 100        | 103        | 95        | 94          | 88        | 85        | 76        |
| Persistent high-migration event from Latin America                       | 87        | 81        | 129        | 128        | 99         | 94        | 90        | 87        | 102        | 96        | 72        | 69        | 103        | 99         | 103        | 96        | 95          | 89        | 86        | 77        |
| Persistent high-migration event from North Africa                        | 87        | 81        | 129        | 128        | 98         | 93        | 89        | 87        | 103        | 96        | 70        | 68        | 103        | 99         | 104        | 97        | 95          | 89        | 85        | 76        |
| Persistent high-migration event from Other Europe                        | <b>88</b> | <b>82</b> | 130        | 130        | 102        | <b>98</b> | <b>92</b> | <b>90</b> | 103        | 98        | 70        | 67        | 103        | <b>99</b>  | 103        | 95        | 95          | 89        | <b>87</b> | <b>78</b> |
| Persistent high-migration event from South and South-East Asia           | 87        | 81        | 132        | 131        | 100        | 94        | 90        | 88        | 102        | 98        | 70        | 67        | <b>105</b> | <b>101</b> | 103        | 96        | 95          | 89        | 86        | 76        |
| Persistent high-migration event from Sub-Saharan Africa                  | 87        | 81        | 131        | 131        | 99         | 94        | 90        | 88        | 102        | 97        | 70        | 67        | 104        | 100        | <b>104</b> | <b>97</b> | 95          | 89        | 86        | 77        |
| Persistent high-migration event from West Asia                           | 87        | <b>82</b> | <b>137</b> | <b>136</b> | <b>103</b> | <b>97</b> | <b>92</b> | <b>90</b> | <b>104</b> | <b>99</b> | 69        | 67        | 103        | 99         | 103        | 96        | <b>96</b>   | <b>90</b> | 85        | 76        |
| Persistent migration event from East Asia                                | 86        | 81        | 129        | 129        | 98         | 93        | 89        | 87        | 102        | 96        | 70        | 67        | 103        | 99         | 103        | 96        | 94          | 88        | 85        | 76        |
| Persistent migration event from Latin America                            | 87        | 81        | 129        | 128        | 99         | 94        | 89        | 87        | 103        | 97        | 71        | 68        | 103        | 98         | 103        | 95        | 95          | 89        | 86        | 76        |
| Persistent migration event from North Africa                             | 86        | 81        | 128        | 128        | 99         | 93        | 89        | 87        | 103        | 98        | 70        | 68        | 102        | 98         | 103        | 96        | 94          | 88        | 86        | 76        |
| Persistent migration event from Other Europe                             | 87        | 81        | 130        | 129        | 100        | 96        | 91        | 88        | 103        | 97        | 70        | 67        | 103        | 99         | 103        | 95        | 95          | 88        | 86        | 76        |
| Persistent migration event from South and South-East Asia                | 87        | 81        | 130        | 129        | 99         | 93        | 90        | 88        | 104        | 99        | 70        | 67        | 104        | 100        | 103        | 95        | 94          | 88        | 86        | 76        |
| Persistent migration event from Sub-Saharan Africa                       | 87        | 81        | 129        | 128        | 98         | 94        | 90        | 87        | 102        | 97        | 70        | 67        | 104        | 100        | 103        | 96        | 95          | 89        | 86        | 76        |
| Persistent migration event from West Asia                                | 87        | 81        | 132        | 132        | 100        | 95        | 91        | 89        | 101        | 96        | 70        | 67        | 102        | 99         | 102        | 95        | 95          | 88        | 85        | 76        |
| Short high-migration event from East Asia                                | 86        | 80        | 129        | 129        | 98         | 93        | 89        | 86        | 101        | 95        | 70        | 67        | 103        | 99         | 102        | 95        | 94          | 88        | 85        | 76        |
| Short high-migration event from Latin America                            | 86        | 80        | 128        | 128        | 98         | 93        | 89        | 86        | 102        | 97        | 70        | 67        | 103        | 99         | 103        | 95        | 94          | 88        | 85        | 76        |
| Short high-migration event from North Africa                             | 86        | 80        | 129        | 128        | 98         | 93        | 89        | 86        | 101        | 96        | 70        | 67        | 102        | 98         | 102        | 95        | 94          | 88        | 85        | 76        |
| Short high-migration event from Other Europe                             | 86        | 80        | 129        | 129        | 99         | 94        | 89        | 86        | 102        | 97        | 69        | 67        | 103        | 99         | 102        | 95        | 94          | 88        | 85        | 76        |
| Short high-migration event from South and South-East Asia                | 86        | 80        | 127        | 127        | 98         | 92        | 89        | 86        | 103        | 97        | 69        | 67        | 102        | 98         | 102        | 95        | 94          | 88        | 85        | 76        |
| Short high-migration event from Sub-Saharan Africa                       | 86        | 80        | 128        | 128        | 98         | 92        | 89        | 86        | 101        | 96        | 69        | 67        | 102        | 98         | 103        | 95        | 94          | 89        | 85        | 76        |
| Short high-migration event from West Asia                                | 86        | 80        | 129        | 129        | 98         | 93        | 90        | 86        | 102        | 97        | 70        | 67        | 103        | 99         | 103        | 95        | 94          | 88        | 85        | 76        |
| Short migration event from East Asia                                     | 86        | 80        | 128        | 127        | 99         | 94        | 89        | 86        | 103        | 98        | 70        | 67        | 102        | 98         | 102        | 95        | 94          | 88        | 85        | 75        |
| Short migration event from Latin America                                 | 86        | 80        | 129        | 129        | 100        | 94        | 89        | 86        | 102        | 97        | 69        | 67        | 102        | 98         | 102        | 95        | 94          | 87        | 85        | 76        |
| Short migration event from North Africa                                  | 86        | 80        | 128        | 128        | 98         | 93        | 89        | 86        | 102        | 97        | 70        | 67        | 103        | 98         | 102        | 95        | 95          | 88        | 85        | 76        |
| Short migration event from Other Europe                                  | 86        | 80        | 129        | 128        | 99         | 94        | 89        | 86        | 102        | 97        | 70        | 67        | 102        | 98         | 102        | 95        | 94          | 88        | 85        | 76        |
| Short migration event from South and South-East Asia                     | 86        | 80        | 128        | 128        | 98         | 94        | 89        | 86        | 101        | 96        | 70        | 67        | 102        | 98         | 102        | 95        | 94          | 88        | 85        | 75        |
| Short migration event from Sub-Saharan Africa                            | 86        | 80        | 129        | 128        | 98         | 93        | 89        | 86        | 101        | 95        | 69        | 67        | 102        | 98         | 103        | 95        | 94          | 88        | 85        | 76        |
| Short migration event from West Asia                                     | 86        | 80        | 128        | 127        | 98         | 93        | 89        | 86        | 102        | 96        | 69        | 67        | 102        | 98         | 102        | 95        | 94          | 88        | 85        | 75        |
| <b>Maximum (Max)</b>   | <b>88</b> | <b>82</b> | <b>137</b> | <b>136</b> | <b>103</b> | <b>98</b> | <b>92</b> | <b>90</b> | <b>104</b> | <b>99</b> | <b>72</b> | <b>69</b> | <b>105</b> | <b>101</b> | <b>104</b> | <b>97</b> | <b>96</b>   | <b>90</b> | <b>87</b> | <b>78</b> |
| <b>Difference between Max and the baseline in percentage points (pp)</b> | 1.7       | 1.9       | 8.7        | 8.9        | 4.3        | 5.1       | 3.2       | 3.3       | 2.6        | 3.9       | 2.2       | 2.2       | 2.4        | 2.5        | 2.3        | 2.2       | 2.2         | 2.2       | 2.3       | 2.2       |

Note: **Orange**=Strong decline (<90), **Yellow**=Moderate decline (≥90 to <99), **White**=No change (≥99 to ≤101), **Green**=Moderate increase (>101 to ≤110), **Dark Green**=Strong increase (>110)

\*Persons age 15-74 can be active in the labour force; working age is defined as 15-64

Results for all countries are presented in Appendix A Table A.2 (working-age population) and Table A.3 (total labour force)

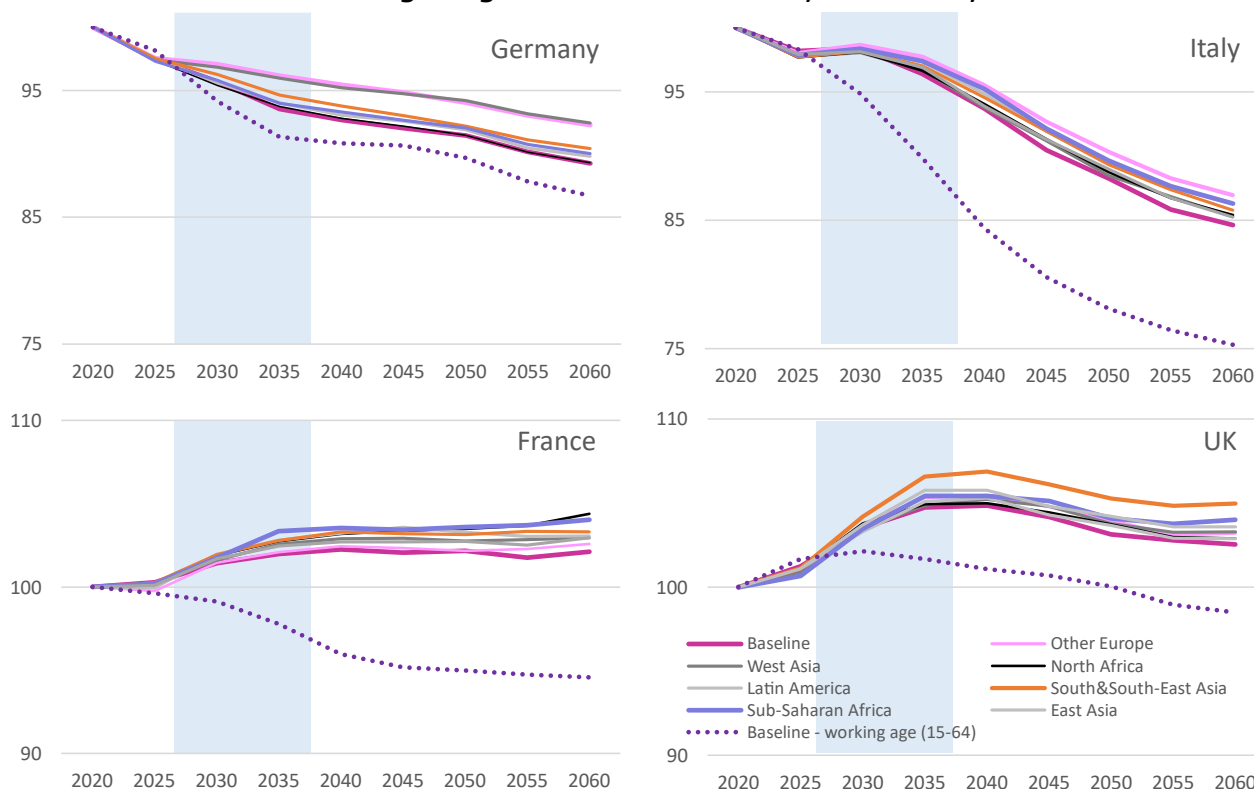


trend in labour force to a slight increase and in Germany the same two scenarios can lessen the projected declines in labour force and the working age population by about 3pp as compared to the trend projected by the Baseline scenario.

Southern European countries will experience pronounced declines in working-age populations but in case of Italy the projected labour force looks much less daunting. This does not hold for Spain where the decline in projected working-age population and total labour force is similarly pronounced and only the Persistent high-migration from Latin America somewhat lessens the labour force decline which, however, remains pronounced. Trajectories of projected change in Baseline working-age population and change in future labour force in scenarios with persistence are shown in Figure 2.

The overall impacts of the most impactful high migration events scenarios as compared to the Baseline are rather slight and cannot change the projected trajectory. Much higher migration volumes or improved labour force integration of immigrants (especially female immigrants) would be needed to more significantly boost labour force sizes (Marois et al. 2020). We do not assume improved economic integration of immigrants through increased labour force participation rates by age, sex and education but assume increasingly high-skilled migration through the cohort trend in educational expansion among immigrants from different world regions. In other words, structural change in immigrant population by educational attainment would influence the projected active population consistently across all scenarios. Further improvements in labour force integration of immigrants can further reduce the projected labour force declines or boost projected labour force growth.

**Figure 2: Projected change in working-age population in the Baseline and in total labour force in the Baseline and Persistent high-migration events scenarios, 2020-2060, selected countries**



Plots for all countries and including also plots for Short high migration events and Short migration events scenarios are available in Appendix B Figure B.2. Charts and maps depicting actual population stocks can be viewed in the interactive QuantMig Scenario Explorer at [http://www.quantmig.eu/data\\_and\\_estimates/scenarios\\_explorer/](http://www.quantmig.eu/data_and_estimates/scenarios_explorer/).

### 3.3 Age composition change and dependency ratios

Previous sections demonstrated the limited impacts of Persistent high-migration events on altering the size of the total population, the working-age population and the labour force as compared to the Baseline scenario. Decline in total and working-age population can be to some extent prevented by migration, but migration cannot change the relative share of age groups. Unsurprisingly, the long-term trends in fertility are more powerful drivers of change than the migration events at modelled magnitudes. When it comes to population ageing, high migration events show no impact even when accounting for the higher fertility of immigrants from some regions of the world. We have investigated the share of population age 65+, the share of working-age population, the age dependency ratio<sup>7</sup> and labour force dependency ratio<sup>8</sup>. The charts below depict these indicators for Sweden, a country where the Persistent high-migration events scenarios altered to the greatest extent the projected Baseline trends in population size, working-age and labour force.

**Figure 3: Projected proportion of population age 65+ in Sweden 2020-2060 in the Baseline and in Persistent high-migration events scenarios**

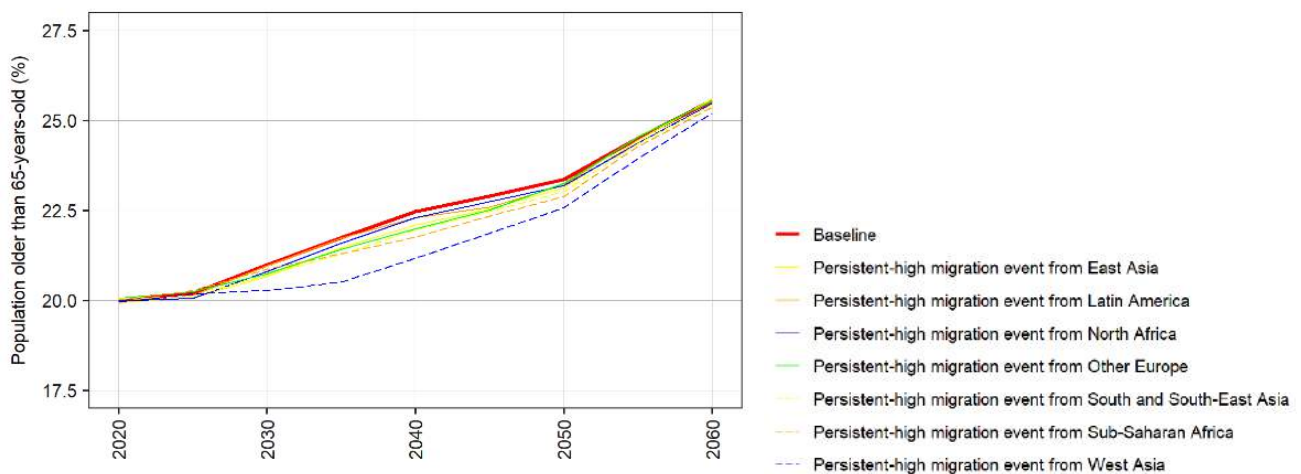


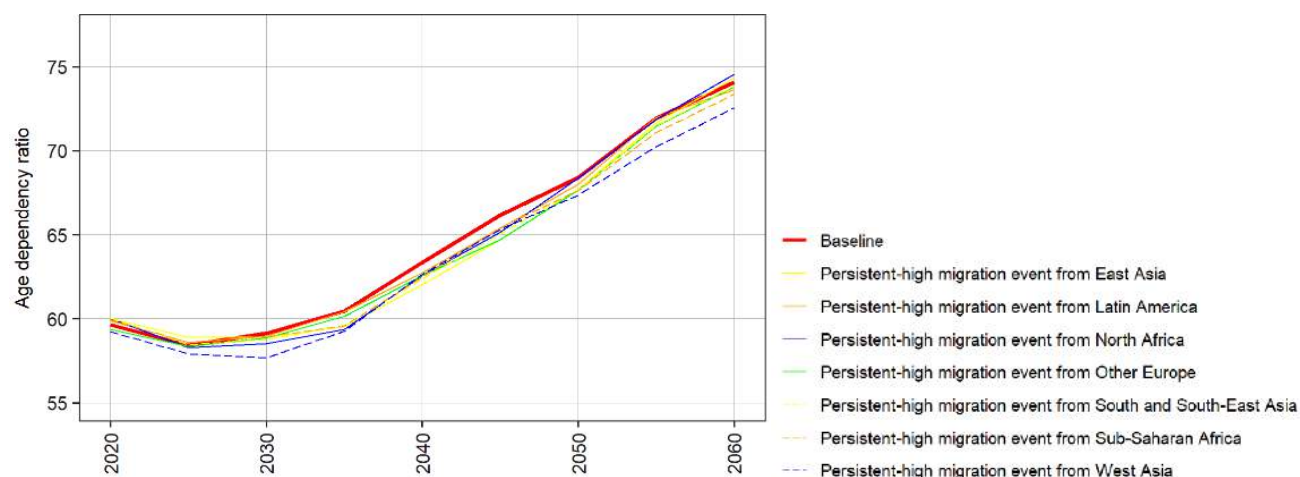
Figure 3 shows that the percentage of population age 65+ is projected to increase from 20% in 2020 to about 25% in 2060. Persistent high-migration event from West Asia slows down this increase during the 2025-2034 when the highest flows are projected, but after the event the share increases at more rapid pace to reach similar levels as other scenarios in 2060. This is because immigrants who arrived around 2025-2034 also age.

The impact on the age dependency ratio (ADR) is even less pronounced, and only small rejuvenation effect of Persistent high-migration from West Asia is visible around 2030 as a result of elevated fertility levels of newly arrived immigrants and in 2060 the impact on ADR is only -2.5pp.

<sup>7</sup> Age dependency ratio = (Population <15 + Population 65+) / Population 15-64

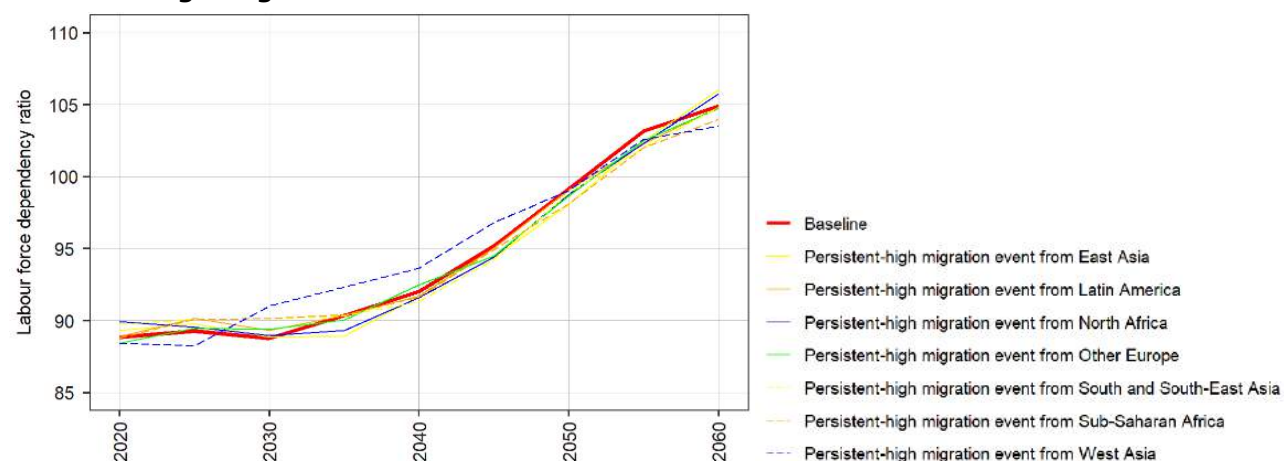
<sup>8</sup> Labour force dependency ratio (LFDR) = Inactive population / Active population; Inactive include children below age 15, person age 15 to 74 not participating the labour force, and persons age 75+; Active = Persons active at the labour force and age 15 to 74. To put it simply, LFDR is a ratio between non-workers and workers in the population.

**Figure 4: Projected age-dependency ratio in Sweden 2020-2060 in the Baseline and in Persistent high-migration events scenarios**



Note: Age dependency ratio = (Population age <15 + Population age 65+) / Population 15-64.

**Figure 5: Projected labour force dependency ratio in Sweden 2020-2060 in the Baseline and in Persistent high-migration events scenarios**



Note: Labour force dependency ratio = (Inactive (non-workers) / Active (workers)); persons can be active in the labour market between age 15 and 74. Small variation in the baseline is due to random Monte-Carlo process in the presimulation.

Impacts on labour force dependency ratio, i.e. a ratio between non-workers and workers, are mostly negligible. However, Figure 5 illustrates well that the labour force can temporarily increase. This is a combined effect of higher fertility of new immigrants in the first years after migration (Potančoková and Marois 2020) and because immigrants integrate into the labour market only gradually and men only reach the same labour force participation rates as native-born after 10-15 years since immigration while for women this gap does not close even after controlling for educational attainment (Marois and Potančoková 2020). Thus, if the high migration event from West Asia to Sweden would not be accompanied by improvements in labour market integration of immigrants (in the scenarios we envisage improvements through the cohort trends in labour market participation of women). This shows that higher volumes of migration need to be accompanied by active integration policies.

In most countries, the impact of persistent high migration event scenarios age-composition indicators related to the age composition and labor force structure is mostly negligible. In other words, migration events, even when followed by persistence in immigration, can to a limited extent alter population sizes but do not modify or rejuvenate population age composition in the long-run. Plots for age dependency ratios for all simulated countries can be viewed in the Indicators page of the QuantMig Migration Scenarios Explorer ([http://www.quantmig.eu/data\\_and\\_estimates/scenarios\\_explorer/](http://www.quantmig.eu/data_and_estimates/scenarios_explorer/)).

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## 3.4 Foreign-born population dynamics

### 3.4.1 Changes in the size and share of population born outside EU+

According to the Baseline scenario, which assumes continued region-specific emigration rates to the EU+ as in 2011-2019, the size of *population born outside the EU+* resident in all 31 EU+ countries would nearly double from the estimated 45.1 million in 2020 to 87.3 million in 2060, and their share in the EU+ total population would increase from 8.7% to 17% between the same years. The trend in the EU27 is practically identical: the share of population born outside EU+ is estimated to increase from 8.2% in 2020 to 16.7% in 2060, i.e. by 33.8 million to 69.9 million in 2060. Using the place of birth definition, we only capture first generation immigrants (G1) and the descendants of immigrants are included among the native-born population.

Naturally, the above presented averages conceal great variation in the size and the proportion of population born outside EU+ across 31 countries. Table 6 provides a glance at this diversity and allows us to assess changes over time and impacts of migration event scenarios in comparison to the Baseline. Sweden is and according to all scenarios will remain a country with the highest proportion of population born outside EU+. According to the Baseline scenario this percentage would nearly double from 14.5% in 2020 to 28.2% in 2060, corresponding to 1.5 million in 2020 and nearly 4.1 million in 2060. Persistent high migration events and Persistent migration events increase the percentage in 2060 above the share projected by the Baseline, but only Persistent high immigration event from West Asia would add more than +1pp to the share projected by the Baseline scenario. In 2060, the projected size of the population born outside the EU+ would be larger by 465 thousand and reach 4.6 million, i.e., in this scenario the share of population born outside EU+ would more than double between 2020 and 2060 (Table 6).

Germany is and will remain the country with the largest population born outside EU+ (in absolute number not a percentage of total population). The Baseline scenario estimates an increase by 9.1 million, up to 17.8 million in 2060 from the estimated 8.7 million in 2020. As a result, the share of population born outside the EU+ would double to 21.4% in 2060, ranking it second after Sweden in 2060 (rank 8 in 2020, Table 7). The share in 2060 would increase by +1pp in case of Persistent high-migration event from West Asia or from Other Europe, bringing the projected population size to 19.4 million foreign-born outside EU+ in case of Persistent high-migration event from West Asia, and to 19.2 million in case of Persistent high-migration event from Other Europe. As can be expected, Short migration events only slightly change the projected shares for 2060 and their impacts remain with 0.01pp, as shown in Table 6.

Spain has become one of the main destinations of immigrants into the EU only in the 21<sup>st</sup> century. Migration ties to Latin America play an important role, and this is clearly visible from the scenarios of migration events. Both the scenarios of Persistent high-migration event from this region (corresponding to twice-in-a-century frequency of occurrence) and Persistent migration event (corresponding to once-in-a-century frequency

of occurrence) bring the projected share of population born outside the EU+ above 19% in 2060 (as compared to 18.4 in the Baseline in 2060, up from the estimated 9.8% in 2020).

**Table 6: Projected shares of population born outside EU+ (in %) in 2020 and 2060, by scenario, selected countries**

|   | EU27         | Sweden       | UK           | Austria      | Germany      | Spain        | France       | Italy        | Poland      |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Estimated % of population born outside EU+ in 2020</b>                         | <b>8.2%</b>  | <b>14.5%</b> | <b>11.1%</b> | <b>11.1%</b> | <b>10.7%</b> | <b>9.8%</b>  | <b>9.0%</b>  | <b>8.2%</b>  | <b>2.0%</b> |
| <b>Baseline, 2060</b>   | <b>16.7%</b> | <b>28.2%</b> | <b>18.6%</b> | <b>19.1%</b> | <b>21.4%</b> | <b>18.4%</b> | <b>13.7%</b> | <b>20.9%</b> | <b>6.6%</b> |
| Persistent high-migration event from East Asia, 2060                              | 16.8%        | 28.3%        | 18.9%        | 19.1%        | 21.6%        | 18.6%        | 13.9%        | 21.0%        | 6.6%        |
| - from Latin America, 2060  | 17.1%        | 28.5%        | 18.9%        | 19.2%        | 21.7%        | <b>19.7%</b> | 13.9%        | <b>21.4%</b> | 6.7%        |
| - from North Africa, 2060   | 16.9%        | 28.3%        | 18.7%        | 19.3%        | 21.6%        | 18.9%        | 14.0%        | 21.2%        | 6.6%        |
| - from Other Europe, 2060   | <b>17.3%</b> | 28.9%        | 18.8%        | <b>20.3%</b> | <b>22.4%</b> | 18.8%        | 13.9%        | 21.5%        | <b>7.2%</b> |
| - South and South-East Asia, 2060   | 17.0%        | 28.7%        | <b>19.2%</b> | 19.3%        | 21.9%        | 18.6%        | 13.9%        | <b>21.4%</b> | 6.7%        |
| - from Sub-Saharan Africa, 2060   | 17.0%        | 28.9%        | 18.9%        | 19.2%        | 21.7%        | 18.7%        | <b>14.1%</b> | 21.3%        | 6.7%        |
| - from West Asia, 2060  | 17.2%        | <b>29.6%</b> | 18.8%        | 19.6%        | <b>22.4%</b> | 18.6%        | 13.8%        | 21.0%        | 6.7%        |
| Persistent migration event from East Asia, 2060                                   | 16.7%        | 28.3%        | 18.9%        | 19.1%        | 21.5%        | 18.3%        | 13.8%        | 20.9%        | 6.6%        |
| - from Latin America, 2060  | 17.0%        | 28.3%        | 18.6%        | 19.5%        | 21.6%        | <b>19.4%</b> | 13.8%        | 21.2%        | 6.7%        |
| - from North Africa, 2060   | 16.8%        | 28.3%        | 18.7%        | 19.1%        | 21.6%        | 18.6%        | 13.9%        | 21.1%        | 6.6%        |
| - from Other Europe, 2060   | 17.0%        | 28.6%        | 18.8%        | 19.7%        | 22.0%        | 18.5%        | 13.8%        | 21.2%        | 6.8%        |
| - from South and South-East Asia, 2060  | 16.9%        | 28.6%        | 19.0%        | 19.4%        | 21.7%        | 18.5%        | 13.8%        | 21.2%        | 6.7%        |
| - from Sub-Saharan Africa, 2060   | 16.8%        | 28.6%        | 18.8%        | 19.2%        | 21.6%        | 18.5%        | 13.9%        | 21.1%        | 6.6%        |
| - from West Asia, 2060  | 16.9%        | 28.9%        | 18.7%        | 19.5%        | 21.8%        | 18.4%        | 13.8%        | 20.9%        | 6.6%        |
| Short high-migration event from East Asia, 2060                                   | 16.7%        | 28.2%        | 18.7%        | 19.1%        | 21.5%        | 18.4%        | 13.7%        | 20.9%        | 6.6%        |
| - from Latin America, 2060  | 16.7%        | 28.2%        | 18.8%        | 19.1%        | 21.4%        | 18.6%        | 13.7%        | 20.9%        | 6.5%        |
| - from North Africa, 2060   | 16.7%        | 28.3%        | 18.6%        | 19.1%        | 21.5%        | 18.4%        | 13.7%        | 20.8%        | 6.5%        |
| - from Other Europe, 2060   | 16.7%        | 28.2%        | 18.7%        | 19.3%        | 21.6%        | 18.5%        | 13.7%        | 20.9%        | 6.6%        |
| - South and South-East Asia, 2060   | 16.6%        | 28.3%        | 18.6%        | 18.9%        | 21.4%        | 18.4%        | 13.7%        | 20.8%        | 6.2%        |
| - from Sub-Saharan Africa, 2060   | 16.7%        | 28.4%        | 18.6%        | 19.2%        | 21.6%        | 18.5%        | 13.7%        | 20.8%        | 6.6%        |
| - from West Asia, 2060  | 16.7%        | 28.4%        | 18.7%        | 19.3%        | 21.6%        | 18.4%        | 13.7%        | 20.8%        | 6.5%        |
| Short migration event from East Asia, 2060  | 16.7%        | 28.3%        | 18.6%        | 18.9%        | 21.4%        | 18.5%        | 13.6%        | 20.8%        | 6.6%        |
| - from Latin America, 2060  | 16.7%        | 28.2%        | 18.7%        | 19.1%        | 21.5%        | 18.6%        | 13.6%        | 20.8%        | 6.6%        |
| - from North Africa, 2060   | 16.7%        | 28.2%        | 18.7%        | 19.1%        | 21.4%        | 18.5%        | 13.7%        | 20.8%        | 6.5%        |
| - from Other Europe, 2060   | 16.7%        | 28.1%        | 18.7%        | 19.2%        | 21.5%        | 18.4%        | 13.6%        | 20.8%        | 6.6%        |
| - South and South-East Asia, 2060   | 16.7%        | 28.2%        | 18.7%        | 19.0%        | 21.4%        | 18.5%        | 13.7%        | 20.8%        | 6.5%        |
| - from Sub-Saharan Africa, 2060   | 16.6%        | 28.1%        | 18.6%        | 19.0%        | 21.5%        | 18.5%        | 13.7%        | 20.8%        | 6.5%        |
| - from West Asia, 2060  | 16.7%        | 28.3%        | 18.7%        | 19.1%        | 21.5%        | 18.4%        | 13.6%        | 20.8%        | 6.6%        |
| <b>% increase 2020 to 2060, Baseline</b>  | 103          | 94           | 68           | 73           | 100          | 87           | 52           | 156          | 224         |
| <b>% increase 2020 to maximum scenario in 2060</b>                                | 111          | 104          | 74           | 83           | 109          | 101          | 56           | 163          | 254         |
| <b>Difference between the max.2060 and Baseline2060 in percentage points (pp)</b> | 0.6pp        | 1.4pp        | 0.6pp        | 1.1pp        | 1.0pp        | 1.4pp        | 0.4pp        | 0.6pp        | 0.6pp       |

Note: Results for all countries shown in Appendix Table A.4

Persistent high-migration event from Other Europe is most impactful for Austria and results in 20.3% born outside EU+ in 2060, up from the estimated 11.1% in 2020 and +1.2pp compared to the Baseline in 2060. , in the UK In UK, the population born outside the EU+ is projected to nearly double between 2020 and 2060 according to the Baseline scenario (from 7.4 million to 13.8 million) and would reach 14.5 million in

Persistent high-migration event from South & South-East Asia. The share of population born outside the EU+ from this scenario reaches 19.2% in 2060, up from the estimated 11.1% in 2020.

Much less pronounced growth of population born outside EU+ is projected for France. The projected increase in the Baseline scenario is from 9.0% in 2020 to 13.7% in 2060, up from 6.1 million in 2020 to 9.8 million in 2060. The increase would be a bit more pronounced in Persistent high-migration event from Sub-Saharan Africa which would add 467 thousand to the 2060 Baseline projection.

In contrast to France, strong growth in population born outside EU+ is projected for Italy. In 2020, the share of population born outside EU+ lower in Italy was lower than in other typical destination countries for migrants from outside EU+. However, the pace of change will be faster and by 2060 will exceed the projected share in France, the Netherlands or Belgium. This is clearly visible from Table 7, with Italy ranked with third or 4<sup>th</sup> highest proportion in 2060 depending on scenario and the projected share around 21%, up from the estimated 8.2% in 2020. Thus, in 2060 Italy may host the third largest population of persons born outside the EU+ (after Germany and the UK), counting 11.4 million according to the Baseline scenario in 2060. The simulations of Persistent high-migration event from Other Europe results in 12.0 million, and of Persistent high-migration event from West Asia in 11.9 million in 2060.

**Table 7: Top 10 countries with largest % of population born outside EU+ in 2020 and 2060 in the Baseline and in Persistent high-migration event (PHME) scenarios**

| Baseline, 2020 |       | Baseline, 2060                     |       | PHME from Other Europe, 2060    |       | PHME from West Asia, 2060    |       | PHME from Latin America, 2060 |       |
|----------------|-------|------------------------------------|-------|---------------------------------|-------|------------------------------|-------|-------------------------------|-------|
| Sweden         | 14.5% | Sweden                             | 28.2% | Sweden                          | 28.9% | Sweden                       | 29.6% | Sweden                        | 28.5% |
| Estonia        | 13.6% | Germany                            | 21.4% | Germany                         | 22.4% | Germany                      | 22.4% | Germany                       | 21.7% |
| Latvia         | 13.1% | Italy                              | 20.9% | Italy                           | 21.5% | Norway                       | 21.8% | Italy                         | 21.4% |
| Switzerland    | 12.5% | Norway                             | 20.7% | Norway                          | 21.4% | Italy                        | 21.0% | Norway                        | 21.2% |
| Croatia        | 11.5% | Switzerland                        | 19.8% | Switzerland                     | 20.6% | Switzerland                  | 20.4% | Switzerland                   | 20.4% |
| UK             | 11.1% | Austria                            | 19.2% | Austria                         | 20.3% | Austria                      | 19.6% | Spain                         | 19.7% |
| Austria        | 11.1% | UK                                 | 18.6% | Spain                           | 18.8% | UK                           | 18.8% | Austria                       | 19.2% |
| Germany        | 10.7% | Spain                              | 18.4% | UK                              | 18.8% | Spain                        | 18.6% | UK                            | 18.9% |
| Slovenia       | 10.6% | Belgium                            | 17.3% | Slovenia                        | 17.8% | Belgium                      | 17.7% | Portugal                      | 17.8% |
| Norway         | 10.1% | Portugal                           | 16.6% | Belgium                         | 17.7% | Portugal                     | 17.1% | Belgium                       | 17.7% |
|                |       | PHME from Sub-Saharan Africa, 2060 |       | PHME from South & S-E Asia 2060 |       | PHME from North Africa, 2060 |       | PHME from East Asia, 2060     |       |
|                |       | Sweden                             | 28.9% | Sweden                          | 28.7% | Sweden                       | 28.3% | Sweden                        | 28.3% |
|                |       | Germany                            | 21.7% | Germany                         | 21.9% | Germany                      | 21.6% | Germany                       | 21.6% |
|                |       | Norway                             | 21.5% | Norway                          | 21.5% | Italy                        | 21.2% | Italy                         | 21.0% |
|                |       | Italy                              | 21.3% | Italy                           | 21.4% | Norway                       | 20.9% | Norway                        | 21.0% |
|                |       | Switzerland                        | 20.2% | Switzerland                     | 20.0% | Switzerland                  | 20.1% | Switzerland                   | 20.1% |
|                |       | Austria                            | 19.2% | Austria                         | 19.3% | Austria                      | 19.3% | Austria                       | 19.1% |
|                |       | UK                                 | 18.9% | UK                              | 19.2% | Spain                        | 18.9% | UK                            | 18.9% |
|                |       | Spain                              | 18.7% | Spain                           | 18.6% | UK                           | 18.7% | Spain                         | 18.6% |
|                |       | Belgium                            | 17.7% | Belgium                         | 17.7% | Belgium                      | 17.5% | Belgium                       | 17.4% |
|                |       | Portugal                           | 17.0% | Portugal                        | 17.0% | Portugal                     | 16.8% | Portugal                      | 16.8% |

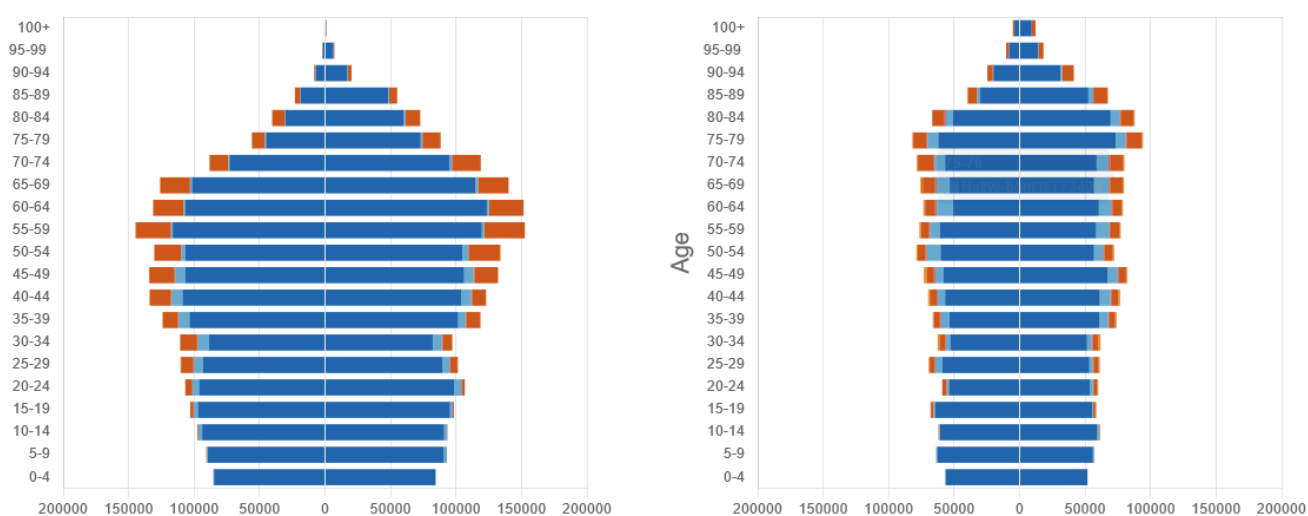
Note: Table shows ranking of countries with total population of at least 1 million in 2020

Perhaps a bit counter-intuitively, the greatest relative change in the percentage of the foreign-born from outside the EU+ of total population is not projected in the main destination countries in the west of Europe but in the countries in the east of the EU27, albeit from very low levels. The share of population born outside the EU+ is projected to nearly quadruple in Romania (from 2.3% in 2020 to 9.7% in 2060 in Baseline and

10.6% in Persistent high migration from Latin America), and more than triple in Poland (from 2.0% in 2020 to 6.6% in 2060 in Baseline and 11.6% in Persistent high migration from Other Europe, see also Table 6) and Bulgaria (from 3.1% in 2020 to 10.4% in 2060 in Baseline and 11.6% in Persistent high migration from Other Europe). These proportions around 10% are close to those seen in some of the main destination countries in 2020. According to the simulations, Slovakia will remain the country with the lowest share of population born outside EU+ in 2060 projected at 5.5% in the Baseline scenario (5.9% in Persistent high-migration event from Other Europe), up from the estimated 1.4% in 2020.

Not all EU+ countries will experience growth of the size and the share of population born outside EU+. Estonia, Latvia and Croatia are exceptions to the general trend although they ranked in 2020 among the countries with largest share of population born outside the EU+. This was due to high proportion of population born in the former USSR in case of Latvia and Estonia and in case of Croatia from former Yugoslav countries which have not yet accessed the EU. These foreign-born populations were mostly in older age groups in 2020 (see Figure 6 for Croatia)<sup>9</sup>, therefore the projected share will drop from the estimated 11.5% in 2020 to 10.6% in the Baseline scenario in 2060. Only the scenario of Persistent high immigration from Other Europe can reverse the declining trend to a growth to 13.1% in 2020 in Latvia, to 12.1% in Croatia and in case of Estonia it would stabilize the share at 13.6%. Because of the projected population decline in all three countries, the size of the population born outside the EU+ would decline in all countries and in all scenarios.

**Figure 6: Croatia's population in 2020 (left) and in 2060 (right, Baseline scenario) by age and place of birth: native-born (dark blue), born in another EU+ country (light blue) and born in Other Europe (Orange)**



Source: QuantMig Migration Scenarios Explorer

To conclude, the impacts of Persistent high migration events can increase the projected shares and sizes of population born outside the EU+, however, and speed up the growth of these population but the impacts are within a range of a few percentage points and do not change the country rankings.

<sup>9</sup> The age and place of birth compositions of the population can be explored using the Pyramids page of the QuantMig Migration Scenarios Explorer accessible at [http://quantmig.eu/data\\_and\\_estimates/scenarios\\_explorer/](http://quantmig.eu/data_and_estimates/scenarios_explorer/).

### 3.4.2 Changes in composition of the foreign-born by region of birth

The previous section demonstrated that Persistent high-migration scenarios have larger, although limited, impacts on the size and proportion of population born outside EU+ than Persistent migration events or Short migration events scenarios. This section investigates implications of Persistent high-migration events scenarios<sup>10</sup> (PHME) for the diversity of the foreign-born population (including the population born in another EU+ country than the country of residence).

The proportion of population born outside EU+ within the Foreign-born population is projected to increase between 2020 and 2060 in all countries except for Latvia, Croatia, Lithuania, Estonia and to a much lesser extent in Portugal and Greece (Table 8). As already mentioned in the previous section, this is because

**Table 8: The proportion of population born outside EU+ among the foreign-born in 2020, 2060 Baseline and in a scenario resulting in the highest proportion**

| % born outside EU+ within Foreign-born |       |         |               |         |   |
|--|-------|---------|---------------|---------|---|
| Country                                | 2020  | Country | Baseline 2060 | Country | Highest scenario in 2060                  |
| LV                                     | 80.0% | SE      | 81.1%         | SE      | 82.3% PHME from Other Europe              |
| HR                                     | 78.8% | IT      | 79.6%         | IT      | 80.4% PHME from Sub-Saharan Africa        |
| EE                                     | 77.3% | FR      | 79.6%         | FR      | 80.2% PHME from Other Europe              |
| PT                                     | 75.4% | DE      | 75.4%         | DE      | 76.8% PHME from Other Europe              |
| GR                                     | 73.9% | FI      | 74.9%         | FI      | 75.6% PHME from Other Europe              |
| FR                                     | 71.3% | ES      | 73.0%         | ES      | 75.2% PHME from Other Europe              |
| SI                                     | 68.2% | GR      | 71.2%         | GR      | 74.6% PHME from West Asia                 |
| NL                                     | 67.7% | PT      | 70.4%         | SI      | 72.4% PHME from West Asia                 |
| SE                                     | 67.6% | SI      | 68.9%         | PT      | 72.1% PHME from Other Europe              |
| IT                                     | 67.1% | UK      | 68.4%         | UK      | 69.8% PHME from Latin America             |
| FI                                     | 67.0% | NL      | 67.5%         | NL      | 68.7% PHME from West Asia                 |
| ES                                     | 66.8% | NO      | 63.8%         | PL      | 66.3% PHME from Sub-Saharan Africa        |
| LT                                     | 66.4% | PL      | 63.3%         | NO      | 65.1% PHME from Other Europe              |
| UK                                     | 63.5% | BE      | 61.4%         | HR      | 63.1% PHME from Other Europe              |
| PL                                     | 60.2% | HR      | 58.9%         | BE      | 62.3% PHME from Other Europe              |
| DE                                     | 59.8% | DK      | 58.1%         | LV      | 61.7% PHME from West Asia                 |
| BG                                     | 56.1% | LV      | 58.0%         | BG      | 59.7% PHME from Other Europe              |
| DK                                     | 55.5% | CY      | 56.7%         | DK      | 59.1% PHME from Other Europe              |
| NO                                     | 52.3% | BG      | 56.3%         | EE      | 58.7% PHME from Other Europe              |
| BE                                     | 51.2% | AT      | 54.9%         | MT      | 57.9% PHME from East Asia                 |
| AT                                     | 48.5% | MT      | 54.7%         | LT      | 57.3% PHME from Sub-Saharan Africa        |
| RO                                     | 47.1% | EE      | 54.4%         | AT      | 56.6% PHME from West Asia                 |
| CY                                     | 46.6% | LT      | 54.2%         | CY      | 56.0% PHME from Sub-Saharan Africa        |
| MT                                     | 43.7% | RO      | 52.8%         | RO      | 54.5% PHME from Other Europe              |
| CZ                                     | 40.8% | CZ      | 51.1%         | CZ      | 54.0% PHME from Latin America             |
| CH                                     | 40.2% | CH      | 49.7%         | CH      | 51.1% PHME from Latin America             |
| IE                                     | 33.7% | IE      | 43.4%         | IE      | 44.4% PHME from West Asia                 |
| HU                                     | 28.9% | HU      | 36.8%         | HU      | 38.4% PHME from Other Europe              |
| LU                                     | 20.9% | LU      | 35.6%         | LU      | 37.1% PHME from West Asia                 |
| SK                                     | 18.2% | SK      | 31.1%         | SK      | 31.8% PHME from South and South-East Asia |

<sup>10</sup> As can be expected, the impact of the Persistent migration event scenarios would go in the same direction but their impacts would be more limited and negligible for Short high-migration and Short migration events scenarios.



Latvia, Lithuania and Estonia have a significant proportion of foreign-born from the USSR and Croatia from other, non-EU ex-Yugoslav countries. This is visible from Table 9 which shows ranking of countries according to the proportion of non-European<sup>11</sup> among the foreign-born, where Croatia ranks last (also visible in Figure 7).

Countries with largest share of foreign population born in another EU+ country are ranked at the bottom of Table 8. These are, unsurprisingly, mostly countries located in east of the EU27, which generally host small foreign-born population in 2020, but also Switzerland, Austria and Ireland in 2020 (Turkish-born are included in Other Europe region). The number of countries where the majority of their foreign-born population is born in another EU+ country is projected to decline from 10 in 2020 to 5 in 2060 baseline and less than 5 if we consider PHME scenarios. According to Baseline scenario the share of EU+born would still be over 50% in Ireland and Switzerland but would decline to 45% in Austria. In Switzerland, the share of EU+born would drop below 50% in some of the PHME scenarios, and it would be the lowest in PHME from Latin America in 2060.

Some of the greatest increases in the proportion of population born outside the EU+ within the foreign-born are projected for Germany, Sweden and Italy. In Germany, the size of the foreign-born from another EU+ country remains very similar in all scenarios, but due to growth in populations from other world regions, the proportion declines from the estimated 40% in 2020 to 25% in the Baseline and 23% in the PHME from Other Europe scenario (Figure 7). Sweden is projected to have the highest proportion of foreign-born from outside the EU+ in 2060, followed by Italy, France Germany (Table 8), this ranking does not change if we consider Baseline scenario or scenario which results in the highest proportion of foreign-born outside EU+.

Table 8 also shows that the PHME scenarios generally diversify foreign-born populations, which is not surprising. In most countries, PHME from Other Europe or PHME from West Asia results in the highest projected proportion of foreign-born from outside the EU+ among the foreign-born population.

If we consider the share of non-European born, countries from the east of the EU27, as well as Austria and Luxemburg had less than 20% of their foreign-born from other world regions (note than Turkish-born are included in Other Europe region) in 2020. According to our scenarios, all these countries will experience diversification of their foreign-born populations and increasing proportion and the size of non-European foreign-born. Table 6 also helps identify a scenario resulting in the highest share of non-European foreign-born in each country in 2060. In most instances it is PHME from West Asia, followed by PHME from Sub-Saharan Africa. Unsurprisingly, in case of Spain and Portugal it is PHME from Latin America.

PHME scenarios increase a share of a particular non-European foreign-born group and contribute to diversification of foreign-born populations. Figure 3 shows a few examples taking a selection of countries with contrasting composition of foreign-born and projected trends. It also helps to visually assess the contributions of PHME scenarios to the growth of foreign-born population. Results for all countries and also sensitivity analysis using Persistent migration event scenarios, which results in lower volumes immigrants, are available in Appendix B Table B.3. Country-specific plots and maps for comparisons across all 31 countries are accessible at Indicators and Paps pages of the QuantMig Migration scenarios explorer ([http://www.quantmig.eu/data\\_and\\_estimates/scenarios\\_explorer/](http://www.quantmig.eu/data_and_estimates/scenarios_explorer/)).

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<sup>11</sup> Born in another EU+ country or in Other Europe region. Turkish are included as European-born.

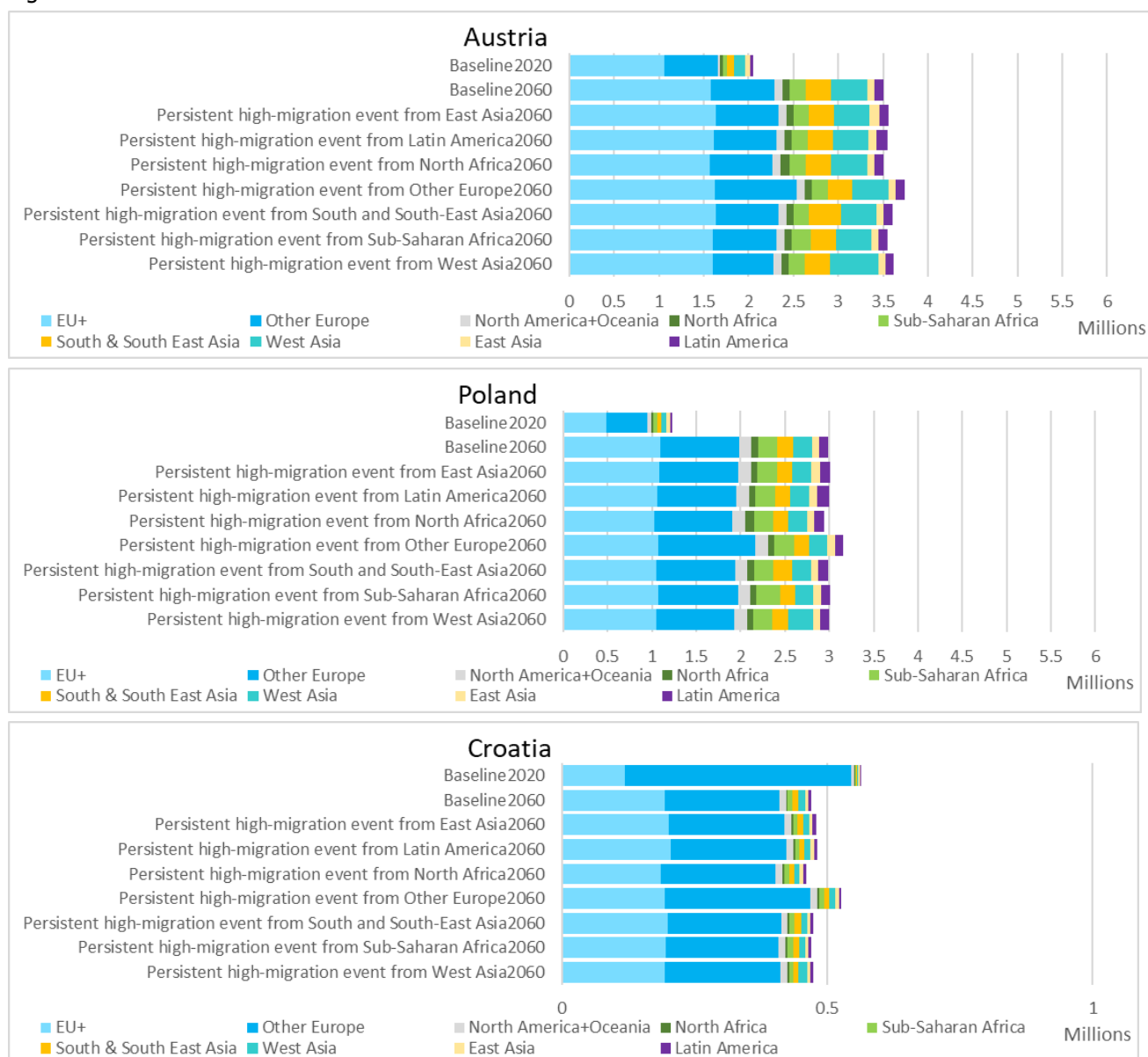
**Table 9: The proportion of population born outside Europe\* among the foreign-born in 2020, 2060 Baseline and in a scenario resulting in the highest proportion**

| % born outside Europe within Foreign-born |       |         |               |         |   |
|---|-------|---------|---------------|---------|---|
| Country                                   | 2020  | Country | Baseline 2060 | Country | Highest scenario in 2060                  |
| PT  | 69.3% | FR      | 72.6%         | SE      | 74.5% PHME from West Asia                 |
| FR  | 64.5% | SE      | 72.5%         | FR      | 73.6% PHME from Sub-Saharan Africa        |
| ES  | 63.0% | ES      | 68.7%         | ES      | 71.4% PHME from Latin America             |
| UK  | 59.9% | IT      | 66.0%         | PT      | 67.5% PHME from Latin America             |
| SE  | 56.9% | PT      | 65.6%         | IT      | 67.2% PHME from South and South-East Asia |
| NL  | 54.2% | UK      | 64.3%         | UK      | 65.8% PHME from South and South-East Asia |
| IT  | 49.3% | FI      | 58.1%         | FI      | 59.9% PHME from West Asia                 |
| FI  | 43.6% | NL      | 57.9%         | NL      | 59.3% PHME from West Asia                 |
| NO  | 43.4% | NO      | 55.4%         | DE      | 57.7% PHME from West Asia                 |
| BE  | 43.3% | DE      | 55.0%         | NO      | 57.1% PHME from Sub-Saharan Africa        |
| DK  | 42.9% | BE      | 53.8%         | BE      | 55.1% PHME from Sub-Saharan Africa        |
| MT  | 37.7% | DK      | 49.5%         | MT      | 52.6% PHME from Sub-Saharan Africa        |
| CY  | 35.8% | MT      | 49.0%         | DK      | 51.1% PHME from West Asia                 |
| GR  | 33.9% | GR      | 47.8%         | GR      | 51.0% PHME from West Asia                 |
| RO  | 33.5% | CY      | 45.1%         | RO      | 44.5% PHME from Latin America             |
| DE  | 32.7% | RO      | 42.4%         | CY      | 42.6% PHME from West Asia                 |
| IE  | 30.9% | IE      | 39.7%         | IE      | 40.7% PHME from West Asia                 |
| CH  | 26.7% | CH      | 38.6%         | CH      | 40.0% PHME from West Asia                 |
| PL  | 23.2% | AT      | 34.8%         | AT      | 37.0% PHME from West Asia                 |
| BG  | 21.8% | PL      | 33.7%         | PL      | 35.8% PHME from West Asia                 |
| AT  | 19.6% | LU      | 29.3%         | BG      | 30.6% PHME from West Asia                 |
| CZ  | 17.8% | BG      | 29.0%         | LU      | 30.1% PHME from Latin America             |
| HU  | 16.1% | LT      | 27.7%         | LT      | 29.3% PHME from West Asia                 |
| LU  | 15.1% | HU      | 27.5%         | CZ      | 28.2% PHME from Sub-Saharan Africa        |
| LT  | 15.1% | CZ      | 26.7%         | HU      | 28.1% PHME from West Asia                 |
| LV  | 10.6% | LV      | 25.3%         | LV      | 26.4% PHME from East Asia                 |
| EE  | 10.2% | EE      | 23.8%         | EE      | 25.5% PHME from West Asia                 |
| SK  | 9.6%  | SK      | 19.1%         | SK      | 20.3% PHME from West Asia                 |
| SI  | 3.8%  | HR      | 13.0%         | HR      | 13.2% PHME from West Asia                 |
| HR  | 3.3%  | SI      | 9.8%          | SI      | 10.4% PHME from West Asia                 |

Note: \* EU-born and born in Other Europe region are considered European. This includes Turkish-born.



Figure 7 continued



### 3.4.3 Shifts in the age composition

The proportion of foreign-born in the population varies across age groups. This variation reflects the past historical migration trends which formed the 2020 migrant stocks in the destination countries. We have already illustrated this for Croatia's old and ageing foreign-born population in Figure 6. In most EU+ countries, however, the situation is the opposite, and older age groups are more homogeneous and dominated by the native-born, in contrast to more diverse populations around age 30. The unprecedented migration from Syria and Ukraine is reflected in all scenarios and migration assumptions on immigration from the world regions after 2025 and differential outmigration rates modify future migration stocks by age. In the modelling we assume standard age pattern of immigration with a peak at young adulthood (see Marois et al. 2023 for more detail).

The main shifts in the presence of foreign-born are well illustrated when comparing two age groups about one generation apart – persons age 30-34 and persons age 65-69 in 2020 and in 2060 in the Baseline

scenario (Figure 8). The diversity gap is very apparent in 2020, with over 80% of native-born among persons age 60-64 in all selected countries (and Poland and many other eastern European countries reaching 99%). The share of native-born ranges from 66% in the UK to 95% in Poland among 30-34 year-olds in 2020. Thus, in 2020 many European countries still have more homogenous older population, with high share of native-born and European-born and already much more diversified populations at younger ages.

In the UK, 87% were native-born 3% born in another EU+ country and 9.5% were born in non-European region among the 60-64 year-olds in 2020, as compared to 66% native-born, 13% born in another EU+ country and 20% born in a non-European region among 30-34 years old in 2020. In Spain is the intergenerational diversity gaps even more pronounced (88% native born and only 7% born in a non-European region at age 60-64 as compared to 76% native-born and 17% born in non-European region at age 30-34 in 2020), and the foreign-born population is predominantly of Latin American origin, i.e. more homogeneous than in case of UK or Germany (Figure 8).

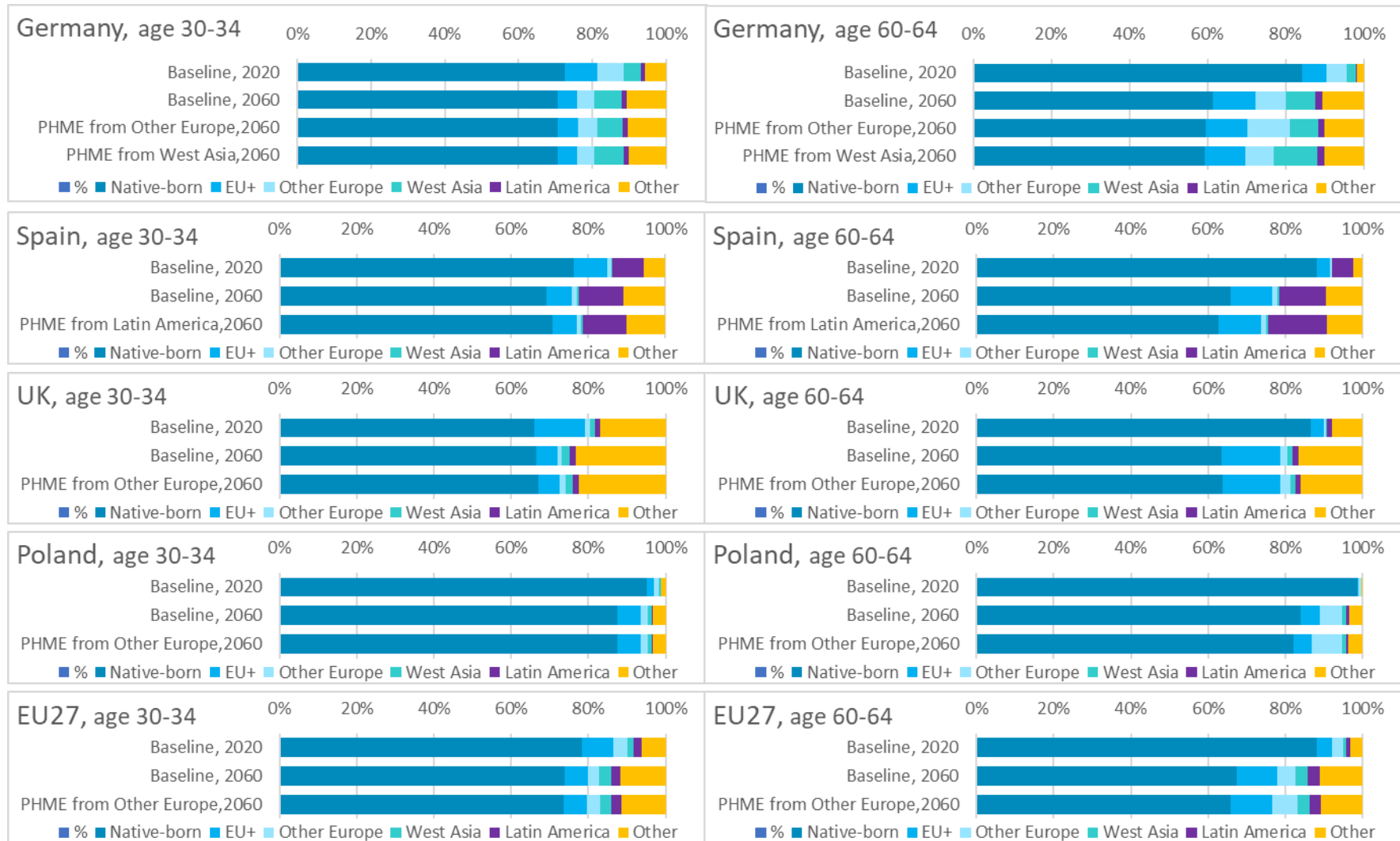
Population at age 20-24 in 2020 will be 60-64 years old in 2060 and if immigration trends continue as in the past and if our assumptions on emigration (which indirectly reflect return migration and onward migration of foreigners to other EU+ countries) we will see this generational gap closing. Figure 8 shows that the share of native-born may in fact be higher among 60-64 year-olds than among 30-34 year-olds in 2060 according to the Baseline scenario. In addition, the proportion of persons born outside EU+ and non-European will be higher in both age groups in 2060 as compared to 2020.

Charts in Figure 8 plot ethnic compositions in the Baseline and the Persistent high-migration scenario with highest influx in each of the selected countries. The plots illustrate well that what matters for future change is the Baseline trajectory and that persistent high-migration event scenarios only slightly modify the proportions of persons born outside EU+ among the 60-64 year-olds (who were at ages of peak immigration during the high-migration event). For example, in Germany the Persistent high-migration event from West Asia increases the proportion of population 60-64 and born in West Asia by +3pp, and Persistent high-migration event from Other Europe inflates the proportion of population from Other Europe region among 60-64 year olds also by +3pp (Figure 8). Similarly in Spain, the Persistent high-migration event from Latin America results in 15% Latin-American born among the 60-64 years olds in 2060 as compared to projected 12% in the Baseline scenario.

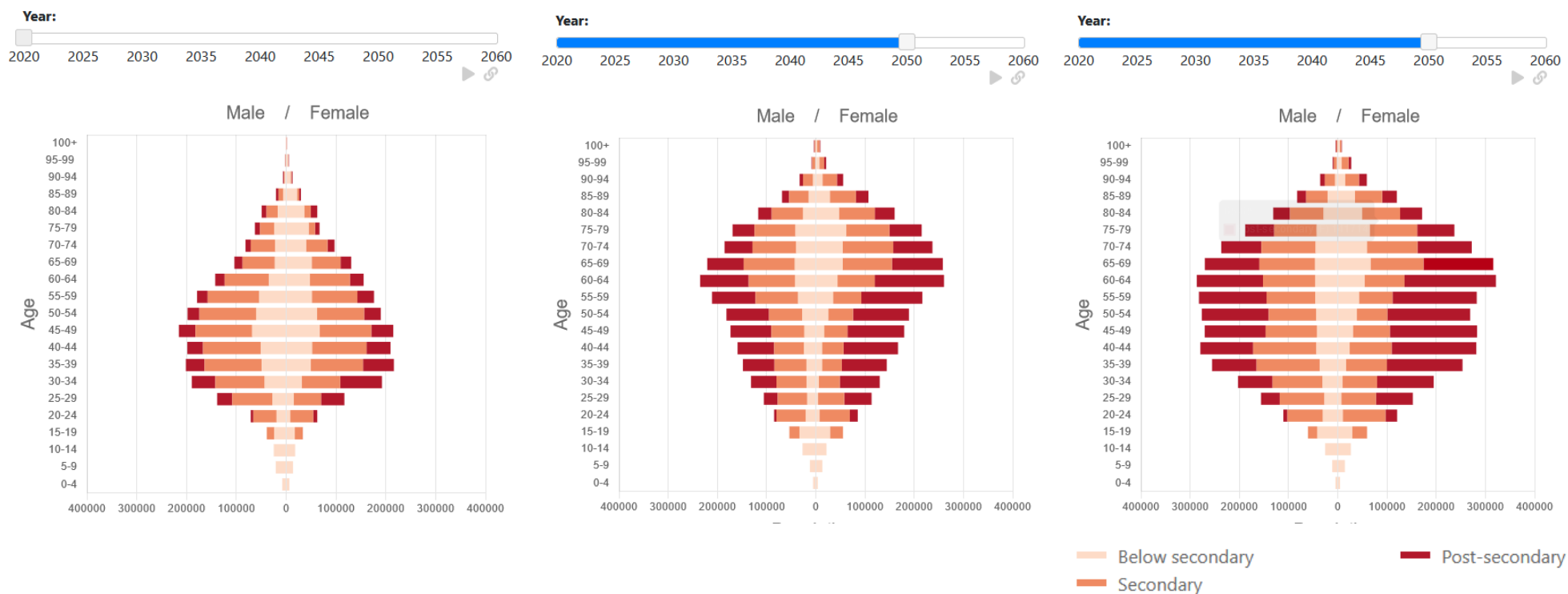
Population ageing is a not a trend restricted to native-born - immigrant populations will also be ageing. This is illustrated for immigrants from Other Europe in Germany in Figure 9. In 2020 the population of persons born in Other Europe (includes Turkish-born and persons born in ex-Yugoslav countries outside the EU27) is smaller and younger, with largest population between age 35 – 49. In 2050 the largest age groups would be at age 60-69 according to the Baseline scenario. Persistent high-migration event from Other Europe results in older population than in 2020 but with a larger share at age 35-59. Figure 9 also illustrates the projected educational expansion among the immigrants from Other Europe region. The share of foreign-brn is very small among children, because most immigrants and children born to immigrants in the destination country are in the native-born category. Unfortunately, EU-LFS data are insufficient to estimate and model second generation (G2).

Similar pyramids as the one in Figure 9 can be generated in the Pyramids page of the QuantMig Migration scenarios Explorer ([http://www.quantmig.eu/data\\_and\\_estimates/scenarios\\_explorer/](http://www.quantmig.eu/data_and_estimates/scenarios_explorer/)).

**Figure 8: Change in diversity of population age 30-34 and 60-64 by place of birth between 2020 and 2060 according to the Baseline scenario and selected Persistent high-migration event scenario**



**Figure 9: Projected population born in Other Europe\* region resident in Germany in 2020 and in 2020, Baseline and in the Persistent high-migration event from Other Europe scenario**



Note: \* Turkish-born are included in among persons born in Other Europe region.

Source: QuantMig Migration Scenarios Explorer ([http://quantmig.eu/data\\_and\\_estimates/scenarios\\_explorer/](http://quantmig.eu/data_and_estimates/scenarios_explorer/))

## 4. Summary and conclusions

For longer horizons, migration cannot be reasonably accurately predicted (Barker and Bijak 2021), but long-term outlook is needed, given the strong and long-lasting momentum of demographic processes. We have tested the impact of several sets of high-migration events potentially occurring during 2025–29, either as an one off shocks lasting one calendar year, or an initial shock followed by persistently persistence in immigration of person from a given region for a decade, albeit of gradually declining volume in each subsequent year higher immigration for a decade following the initial shock. These events were implemented independently for flows from seven different world regions – Other Europe, North Africa, Sub-Saharan Africa, Latin America, West Asia, South & South-East Asia, and East Asia —, thus resulting in 28 scenarios (14 with once-in-a-decade, and 14 with twice-in-a-century events, both short and persistent). All scenarios are modelled as additional immigration flows beyond the Baseline scenario, in which immigration from each world region into EU+ continues with the same intensity as in 2011–19. Contrasting different scenarios allows us to understand the differentiated impacts of various inflows on destination countries' working-age population and labour force.

As one might expect, the short impact for a duration of a single calendar year does not leave any lasting imprint on future population sizes and structures. Once-in-a-decade events do not generate sufficiently large flows to leave any sizeable imprint on destination populations. High-migration events that persist over time – for example, through family reunifications, migration networks or newly established migration opportunities – can increase the working-age population and labour force sizes in countries with existing diaspora, but mainly when these events arise in the regions of the world with established migration links to the destination country (e.g. Other Europe or West Asia for migration to Germany, or South and South-East Asia for the UK, see Figure 2). In absolute terms, even such impacts are relatively small: would only raise the labour force by a few percentage points.

Although high-migration events are challenging for integration policies, they are not a major long-term game-changer because of the demographic momentum driving major trends. The scenarios of high-migration events presented above confirm that even large immigration events cannot substantially boost the projected labour force size at the national or EU levels. Short (one-off) high-migration events of a magnitude similar to that of the 2015 in Europe leave hardly any trace on projected labour force sizes in the long-run. Only persistent immigration can boost the projected labour force to an extent, but the effects on labour force dependency ratios (the ratio of non-workers to workers) are negligible. Confirming earlier findings, the proclaimed positive demographic consequences of immigration would necessitate large and sustained immigration in the long term to slow down population ageing and stabilise labour force dependency ratios in European countries, and these immigration flows would need to be significantly higher than can be reasonably envisaged (Bijak et al. 2008).

What our results show, however, is that although population ageing is inevitable the decline in labour force is not. Most, but not all, EU+ countries will face working-age population decline, but the labour force would decline at a lesser pace or may not decline at all once we consider the continuing education expansion and trends in labour force participation. High immigration would have to be sustained at much higher volumes than those projected in our scenarios (and much higher than it is realistic to assume) to leave a more pronounced impact on the labour force size and the dependency ratios; and that would occur only if it were coupled with better labour force integration of immigrants or selective immigration of those with high human capital (Marois et al. 2019a and 2019b).

It is important to recognize the limitations of the view that immigration could be a tool to address Europe's demographic challenges, especially if it is not paired with inclusive labour market policies (Lutz et al. 2019, pp. 37-44). Our results show that immigration cannot prevent or slow down the future labour force



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decline in many countries and confirm that we can realistically expect only moderate impacts. QuantMig simulations do not modify the integration trajectories of immigrants but rely on evidence from past data. In that sense, the past experience of former immigrants from each world region is translated into what we foresee for the future. Other studies have demonstrated that the educational background of immigrants and their integration into the labor force have a more significant impact on the labor force size and labor force dependency ratio than the absolute number of immigrants received. An example of this research comes from the CEPAM project, where Marois et al. (2020) showed that doubling migration in the EU could result in either a substantial improvement of the labor force dependency ratio if the incoming migrants are highly educated and well-integrated into the workforce or a negative impact if their socioeconomic situation worsens. These results, in combination with our previous work, speak for a stronger focus on inclusive migration and integration policies.

It's worth noting that while assuming a rise in the educational attainment of immigrants based on ongoing trends, the scenarios presented in this report do not account for any changes in the integration of these individuals into the labor force based on their education and region of birth. Consequently, our findings, which indicate that high-migration events would have minimal effects on the demographic and labor force composition of EU+ countries, are valid only under the assumption that there will be no major shifts in labor force behaviors among immigrants. The simulations presented above do not modify the labour force integration trajectories of immigrants, and rely on evidence from the past labour force participation rates. In this sense, the past experience of former immigrants is translated into what we expect for future immigrants from each world region. These results, in combination with our previous work where we considered improved (or worsened) economic integration of immigrants speak for stronger focus on inclusive migration and integration policies (see also Lutz et al. 2019, Marois et al. 2019, Marois and Potančoková 2020).

Despite of the progress in harmonisation and modelling of origin-destination migration flows, data on differences in migration rates and patterns of native-born and foreign-born groups and their return migration are lacking. In addition, the available data are of limited value for macro-level comparative studies. This impedes more nuanced modelling of diversity of European populations, and points out to the priority areas for future data collection and harmonisation. For example, immigration data are not published by country of previous residence and country of birth, making it hard to estimate the rates of onward mobility of foreign-born. Emigration data by duration of residence are largely unavailable and data for estimation of emigration rates by place of birth and country of destination are only available from handful European statistical offices and are not harmonised in terms of definition of immigrants. Migration data by place of birth, duration of stay and destination would help reduce the uncertainty in the estimates of EU+ born and nationals in QuantMig-Mic model. With the current data we probably underestimate the return migration of native-born and possibly over-estimate the size and proportion of population born in another EU+ country (because, for example, Polish-born returning from the UK to Poland would be among the EU+born on the flow from the UK to Poland). Emigration data by duration of stay would improve the life-course modelling in the microsimulation model and would potentially return more realistic migration stocks by age than the model age patterns we use in the current model.

Last but not least, more refined analysis of population diversity would benefit from incorporation of the second generation, i.e. the descendants of immigrants into the model and estimates. This was not possible due to limitations of the EU-LFS data, therefore, our estimates only pertain to the first generation immigrants.

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## Appendix A

Tables present relative change between 2020 and 2060 for all 31 simulated countries. We include these results in the appendix to the report because indicators indexed on 2020 are not included in the QuantMig Migration Scenarios Explorer.

Table A.1 Relative change in total population between 2020 and 2060 (2020 = 100), all countries and all scenarios

Table A.2 Relative change in working-age population (age 15-64) between 2020 and 2060 (2020 = 100), all countries and all scenarios

Table A.3 Relative change in total labour force\* between 2020 and 2060 (2020 = 100), all countries and all scenarios

Table A.4 Projected proportions of the population born outside EU+ in 2020 and 2060, all scenarios, all countries

### Legend to table A.1, A.2 and A4.3:

**Orange** = Strong decline (below -10pp)

**Yellow** = Moderate decline (-1 to -10pp)

**White** = No change (within +1 to -1pp)

**Green** = Moderate increase (+1 to +10pp)

**Dark Green** = Strong increase (more than +10pp)

Table A.1: Relative change in total population between 2020 and 2060 (2020 = 100), all countries and all scenarios

| Scenario:                                      | EU+        | EU27      | Austria    | Belgium    | Bulgaria  | Croatia   | Cyprus     | Czechia   | Denmark    | Estonia   | Finland    | France     | Germany    | Greece    | Hungary   | Iceland    | Ireland    |
|--|------------|-----------|------------|------------|-----------|-----------|------------|-----------|------------|-----------|------------|------------|------------|-----------|-----------|------------|------------|
| <b>Baseline</b>                                | <b>98</b>  | <b>95</b> | <b>111</b> | <b>110</b> | <b>67</b> | <b>68</b> | <b>114</b> | <b>91</b> | <b>107</b> | <b>93</b> | <b>100</b> | <b>106</b> | <b>102</b> | <b>85</b> | <b>76</b> | <b>152</b> | <b>111</b> |
| Persistent high-migration event from East Asia | 99         | 96        | 113        | 110        | 67        | 69        | 114        | 91        | 108        | 91        | 100        | 107        | 103        | 84        | 76        | 144        | 112        |
| - from Latin America                           | 99         | 96        | 112        | 111        | 67        | 69        | 115        | 91        | 108        | 89        | 101        | 107        | 103        | 85        | 76        | 146        | 112        |
| - from North Africa                            | 99         | 96        | 112        | 111        | 67        | 68        | 115        | 92        | 108        | 93        | 100        | 108        | 103        | 84        | 76        | 150        | 112        |
| - from Other Europe                            | 100        | 97        | 117        | 112        | 69        | 71        | 119        | 92        | 109        | 94        | 103        | 107        | 105        | 85        | 77        | 150        | 113        |
| - from South and South-East Asia               | 99         | 96        | 113        | 111        | 67        | 68        | 114        | 92        | 109        | 91        | 101        | 107        | 103        | 85        | 76        | 148        | 113        |
| - from Sub-Saharan Africa                      | 99         | 97        | 113        | 112        | 67        | 68        | 118        | 91        | 109        | 91        | 102        | 108        | 103        | 85        | 75        | 142        | 113        |
| - from West Asia                               | 100        | 97        | 115        | 112        | 68        | 68        | 115        | 92        | 111        | 92        | 103        | 107        | 106        | 85        | 76        | 151        | 111        |
| Persistent migration event from East Asia      | 99         | 96        | 111        | 110        | 67        | 67        | 111        | 92        | 108        | 93        | 99         | 107        | 102        | 84        | 76        | 150        | 112        |
| - from Latin America                           | 99         | 96        | 112        | 110        | 67        | 68        | 117        | 91        | 109        | 94        | 100        | 107        | 103        | 84        | 76        | 147        | 113        |
| - from North Africa                            | 99         | 96        | 112        | 110        | 67        | 69        | 112        | 91        | 109        | 93        | 100        | 107        | 103        | 84        | 76        | 147        | 112        |
| - from Other Europe                            | 99         | 96        | 114        | 111        | 67        | 70        | 118        | 92        | 108        | 94        | 102        | 107        | 104        | 85        | 76        | 150        | 112        |
| - from South and South-East Asia               | 99         | 96        | 113        | 110        | 67        | 67        | 117        | 91        | 109        | 94        | 101        | 107        | 103        | 84        | 76        | 150        | 113        |
| - from Sub-Saharan Africa                      | 99         | 96        | 113        | 111        | 67        | 68        | 114        | 91        | 109        | 92        | 101        | 107        | 103        | 85        | 76        | 150        | 112        |
| - from West Asia                               | 99         | 96        | 113        | 111        | 67        | 68        | 112        | 91        | 108        | 92        | 101        | 107        | 104        | 84        | 76        | 148        | 111        |
| Short high-migration event from East Asia      | 98         | 95        | 112        | 110        | 67        | 68        | 114        | 91        | 107        | 92        | 102        | 107        | 102        | 84        | 77        | 149        | 111        |
| - from Latin America                           | 98         | 96        | 112        | 110        | 66        | 67        | 113        | 91        | 108        | 94        | 99         | 107        | 102        | 84        | 76        | 149        | 110        |
| - from North Africa                            | 98         | 96        | 112        | 110        | 67        | 69        | 116        | 91        | 107        | 91        | 101        | 107        | 102        | 84        | 76        | 151        | 113        |
| - from Other Europe                            | 98         | 96        | 112        | 110        | 67        | 69        | 117        | 92        | 108        | 91        | 101        | 106        | 103        | 84        | 76        | 144        | 112        |
| - from South and South-East Asia               | 98         | 95        | 111        | 110        | 67        | 67        | 114        | 90        | 108        | 90        | 101        | 106        | 102        | 84        | 76        | 145        | 110        |
| - from Sub-Saharan Africa                      | 98         | 96        | 111        | 111        | 66        | 67        | 114        | 91        | 107        | 92        | 101        | 107        | 102        | 84        | 75        | 146        | 112        |
| - from West Asia                               | 98         | 96        | 112        | 110        | 67        | 68        | 115        | 91        | 109        | 94        | 100        | 106        | 103        | 84        | 76        | 148        | 111        |
| Short migration event from East Asia           | 98         | 96        | 113        | 109        | 67        | 68        | 114        | 92        | 109        | 95        | 101        | 107        | 102        | 85        | 76        | 149        | 112        |
| - from Latin America                           | 98         | 95        | 112        | 110        | 67        | 68        | 114        | 91        | 108        | 92        | 101        | 106        | 102        | 84        | 75        | 145        | 110        |
| - from North Africa                            | 98         | 96        | 112        | 110        | 67        | 68        | 113        | 91        | 108        | 91        | 100        | 106        | 102        | 85        | 76        | 144        | 111        |
| - from Other Europe                            | 98         | 96        | 112        | 110        | 67        | 69        | 112        | 91        | 108        | 93        | 100        | 106        | 103        | 84        | 77        | 145        | 111        |
| - from South and South-East Asia               | 98         | 96        | 112        | 109        | 68        | 67        | 117        | 92        | 108        | 92        | 100        | 106        | 102        | 84        | 76        | 145        | 112        |
| - from Sub-Saharan Africa                      | 98         | 96        | 111        | 110        | 67        | 69        | 114        | 92        | 107        | 92        | 101        | 107        | 102        | 84        | 77        | 149        | 111        |
| - from West Asia                               | 98         | 95        | 112        | 110        | 66        | 68        | 114        | 91        | 108        | 91        | 100        | 107        | 102        | 84        | 76        | 144        | 111        |
| <b>Max</b>                                     | <b>100</b> | <b>97</b> | <b>117</b> | <b>112</b> | <b>69</b> | <b>71</b> | <b>119</b> | <b>92</b> | <b>111</b> | <b>95</b> | <b>103</b> | <b>108</b> | <b>106</b> | <b>85</b> | <b>77</b> | <b>151</b> | <b>113</b> |
| Difference in percentage points                | 1.6        | 1.8       | 5.3        | 2.0        | 1.7       | 2.7       | 5.1        | 1.0       | 3.1        | 2.2       | 2.5        | 2.0        | 3.8        | 0.7       | 0.6       | -1.3       | 1.5        |

Table A.1 continued

| Scenario:                                      | Italy     | Latvia    | Lithuania | Luxemb.    | Malta      | Netherlands | Norway     | Poland    | Portugal  | Romania   | Slovakia  | Slovenia  | Spain     | Sweden     | Switzerland | UK         |
|--|-----------|-----------|-----------|------------|------------|-------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-------------|------------|
| <b>Baseline</b>                                | <b>92</b> | <b>72</b> | <b>72</b> | <b>152</b> | <b>112</b> | <b>102</b>  | <b>133</b> | <b>79</b> | <b>86</b> | <b>72</b> | <b>91</b> | <b>90</b> | <b>89</b> | <b>139</b> | <b>121</b>  | <b>111</b> |
| Persistent high-migration event from East Asia | 92        | 74        | 72        | 147        | 110        | 102         | 131        | 79        | 87        | 71        | 93        | 90        | 90        | 140        | 121         | 112        |
| - from Latin America                           | 93        | 72        | 72        | 155        | 113        | 103         | 133        | 79        | <b>89</b> | 72        | 92        | 88        | <b>92</b> | 139        | 122         | 111        |
| - from North Africa                            | 93        | 72        | 72        | 159        | 110        | 103         | 134        | 79        | 87        | 72        | 92        | 88        | 91        | 140        | 121         | 111        |
| - from Other Europe                            | <b>94</b> | <b>76</b> | <b>75</b> | 158        | 117        | <b>104</b>  | 135        | <b>80</b> | 88        | 72        | <b>95</b> | <b>96</b> | 90        | 141        | <b>123</b>  | 111        |
| - South and South-East Asia                    | 93        | 74        | 73        | 157        | 111        | 103         | <b>136</b> | 79        | 87        | 72        | 93        | 90        | 90        | 142        | <b>123</b>  | <b>113</b> |
| - from Sub-Saharan Africa                      | <b>94</b> | 74        | 74        | 155        | 112        | 103         | 135        | 79        | 87        | 72        | 92        | 88        | 90        | 142        | 122         | 112        |
| - from West Asia                               | 92        | 75        | 73        | 155        | 116        | <b>104</b>  | 135        | 79        | 87        | <b>73</b> | 92        | 90        | <b>90</b> | <b>148</b> | 122         | 112        |
| Persistent migration event from East Asia      | 92        | 74        | 72        | 148        | 112        | 103         | 129        | 78        | 87        | 72        | 92        | 88        | 90        | 140        | 121         | 112        |
| - from Latin America                           | 93        | 71        | 72        | 159        | 111        | 103         | 133        | 79        | 88        | 72        | 94        | 88        | 91        | 140        | 122         | 111        |
| - from North Africa                            | 93        | 74        | 72        | 151        | 111        | 102         | 133        | 79        | 86        | 71        | 92        | 90        | 90        | 140        | 121         | 111        |
| - from Other Europe                            | 92        | 75        | 73        | 156        | 111        | 103         | 133        | 79        | 86        | 71        | 92        | 92        | <b>90</b> | 140        | 121         | 111        |
| - from South and South-East Asia               | 93        | 73        | 73        | 155        | 112        | 102         | 134        | 79        | 87        | 71        | 92        | 89        | <b>90</b> | 141        | 121         | 112        |
| - from Sub-Saharan Africa                      | 93        | 73        | 71        | 155        | 114        | 103         | 135        | 79        | 87        | 72        | 91        | 88        | <b>90</b> | 140        | 121         | 112        |
| - from West Asia                               | 92        | 74        | 72        | 158        | 115        | 103         | 133        | 79        | 86        | 72        | 92        | 89        | <b>90</b> | 143        | 121         | 111        |
| Short high-migration event from East Asia      | 92        | 72        | 71        | 150        | 112        | 102         | 133        | 79        | 86        | 71        | 92        | 89        | <b>90</b> | 140        | 121         | 111        |
| - from Latin America                           | 92        | 72        | 71        | 156        | 111        | 102         | 134        | 79        | 87        | 71        | 92        | 89        | <b>90</b> | 140        | 121         | 111        |
| - from North Africa                            | 92        | 73        | 73        | 157        | 115        | 102         | 133        | 79        | 87        | 71        | 92        | 88        | <b>90</b> | 139        | 120         | 111        |
| - from Other Europe                            | 92        | 73        | 71        | 156        | 113        | 102         | 134        | 79        | 86        | 72        | 93        | 90        | <b>90</b> | 140        | 121         | 111        |
| - from South and South-East Asia               | 92        | 71        | 71        | 157        | 109        | 102         | 132        | 78        | 86        | 71        | 91        | 88        | 89        | 139        | 121         | 111        |
| - from Sub-Saharan Africa                      | 92        | 71        | 72        | 157        | 110        | 103         | 133        | 79        | 86        | 72        | 92        | 89        | <b>90</b> | 139        | 120         | 111        |
| - from West Asia                               | 92        | 72        | 71        | 154        | 111        | 102         | 133        | 79        | 86        | 71        | 92        | 89        | <b>90</b> | 140        | 121         | 111        |
| Short migration event from East Asia           | 92        | 73        | 72        | 155        | 111        | 102         | 133        | 79        | 86        | 71        | 91        | 89        | <b>90</b> | 139        | 120         | 111        |
| - from Latin America                           | 92        | 72        | 72        | 151        | 111        | 102         | 131        | 79        | 86        | 71        | 92        | 88        | <b>90</b> | 140        | 121         | 111        |
| - from North Africa                            | 92        | 72        | 72        | 154        | 114        | 102         | 132        | 79        | 86        | 71        | 91        | 89        | <b>90</b> | 139        | 120         | 111        |
| - from Other Europe                            | 92        | 72        | 72        | 153        | 114        | 102         | 133        | 79        | 86        | 71        | 92        | 87        | <b>90</b> | 140        | 121         | 111        |
| - from South and South-East Asia               | 92        | 73        | 72        | 155        | 109        | 103         | 132        | 79        | 86        | 71        | 92        | 90        | <b>90</b> | 140        | 121         | 111        |
| - from Sub-Saharan Africa                      | 92        | 73        | 71        | 151        | 110        | 102         | 132        | 79        | 87        | 72        | 92        | 88        | <b>90</b> | 140        | 121         | 111        |
| - from West Asia                               | 92        | 72        | 72        | 153        | 111        | 102         | 133        | 79        | 86        | 71        | 94        | 89        | <b>89</b> | 139        | 121         | 111        |
| <b>Max</b>                                     | <b>94</b> | <b>76</b> | <b>75</b> | <b>159</b> | <b>117</b> | <b>104</b>  | <b>136</b> | <b>80</b> | <b>89</b> | <b>73</b> | <b>95</b> | <b>96</b> | <b>92</b> | <b>148</b> | <b>123</b>  | <b>113</b> |
| Difference in percentage points                | 1.9       | 3.4       | 3.0       | 6.9        | 4.7        | 1.8         | 3.0        | 1.0       | 3.2       | 1.3       | 3.6       | 6.2       | 2.9       | 8.7        | 2.0         | 2.2        |

Table A.2: Relative change in working-age population (age 15-64) between 2020 and 2060 (2020 = 100), all countries and all scenarios

| Scenario:                                      | EU+       | EU27      | Austria   | Belgium   | Bulgaria  | Croatia   | Cyprus    | Czechia   | Denmark   | Estonia   | Finland   | France    | Germany   | Greece    | Hungary   | Iceland    | Ireland    | Italy     |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|-----------|
| <b>Baseline</b>                                | <b>83</b> | <b>80</b> | <b>93</b> | <b>96</b> | <b>57</b> | <b>57</b> | <b>94</b> | <b>76</b> | <b>95</b> | <b>84</b> | <b>90</b> | <b>95</b> | <b>87</b> | <b>69</b> | <b>65</b> | <b>136</b> | <b>97</b>  | <b>75</b> |
| Persistent high-migration event from East Asia | 84        | 81        | 94        | 96        | 58        | 57        | 90        | 76        | 96        | 81        | 89        | 95        | 87        | 68        | 65        | 132        | 97         | 76        |
| - from Latin America                           | 84        | 81        | 94        | 96        | 58        | 59        | 92        | 76        | 96        | 79        | 90        | 96        | 87        | 69        | 65        | 127        | 98         | 77        |
| - from North Africa                            | 84        | 81        | 93        | 97        | 58        | 57        | 95        | 76        | 96        | 82        | 90        | 97        | 87        | 69        | 66        | 133        | 97         | 76        |
| - from Other Europe                            | 85        | 82        | 98        | 99        | 60        | 61        | 97        | 77        | 98        | 84        | 92        | 95        | 90        | 70        | 66        | 139        | 99         | 78        |
| - South and South-East Asia                    | 85        | 81        | 94        | 97        | 57        | 57        | 93        | 77        | 98        | 80        | 91        | 96        | 88        | 70        | 65        | 132        | 100        | 76        |
| - from Sub-Saharan Africa                      | 85        | 81        | 94        | 98        | 58        | 59        | 97        | 76        | 97        | 80        | 91        | 97        | 88        | 69        | 64        | 130        | 99         | 77        |
| - from West Asia                               | 85        | 82        | 97        | 98        | 59        | 58        | 94        | 77        | 99        | 81        | 92        | 96        | 90        | 70        | 65        | 137        | 97         | 76        |
| Persistent migration event from East Asia      | 84        | 81        | 93        | 96        | 57        | 57        | 91        | 77        | 96        | 82        | 89        | 96        | 87        | 68        | 65        | 133        | 98         | 76        |
| - from Latin America                           | 84        | 81        | 94        | 96        | 58        | 57        | 94        | 76        | 97        | 84        | 90        | 95        | 87        | 69        | 65        | 134        | 99         | 76        |
| - from North Africa                            | 84        | 81        | 93        | 97        | 57        | 58        | 92        | 76        | 98        | 83        | 89        | 96        | 87        | 69        | 65        | 136        | 98         | 76        |
| - from Other Europe                            | 84        | 81        | 96        | 96        | 58        | 59        | 96        | 76        | 97        | 82        | 91        | 95        | 88        | 70        | 66        | 136        | 98         | 76        |
| - from South and South-East Asia               | 84        | 81        | 93        | 96        | 58        | 56        | 94        | 76        | 99        | 82        | 90        | 95        | 88        | 68        | 65        | 132        | 98         | 76        |
| - from Sub-Saharan Africa                      | 84        | 81        | 94        | 97        | 57        | 57        | 93        | 76        | 97        | 82        | 90        | 96        | 87        | 69        | 65        | 136        | 97         | 76        |
| - from West Asia                               | 84        | 81        | 95        | 97        | 57        | 58        | 90        | 76        | 96        | 82        | 90        | 95        | 89        | 69        | 66        | 127        | 98         | 76        |
| Short high-migration event from East Asia      | 83        | 80        | 93        | 96        | 58        | 58        | 93        | 76        | 95        | 81        | 91        | 95        | 86        | 69        | 65        | 134        | 97         | 76        |
| - from Latin America                           | 83        | 80        | 93        | 95        | 57        | 57        | 92        | 76        | 97        | 82        | 89        | 95        | 87        | 68        | 65        | 132        | 97         | 76        |
| - from North Africa                            | 83        | 80        | 93        | 96        | 58        | 58        | 94        | 76        | 96        | 80        | 90        | 95        | 87        | 68        | 65        | 137        | 98         | 76        |
| - from Other Europe                            | 84        | 80        | 94        | 96        | 57        | 58        | 94        | 77        | 97        | 79        | 91        | 95        | 87        | 69        | 64        | 130        | 97         | 76        |
| - from South and South-East Asia               | 83        | 80        | 92        | 96        | 56        | 57        | 91        | 75        | 97        | 80        | 90        | 95        | 86        | 69        | 65        | 133        | 96         | 76        |
| - from Sub-Saharan Africa                      | 83        | 80        | 92        | 97        | 57        | 57        | 93        | 76        | 96        | 82        | 90        | 95        | 87        | 68        | 65        | 130        | 99         | 76        |
| - from West Asia                               | 84        | 80        | 93        | 97        | 57        | 57        | 92        | 76        | 97        | 82        | 89        | 95        | 87        | 69        | 65        | 134        | 97         | 76        |
| Short migration event from East Asia           | 83        | 80        | 94        | 96        | 57        | 57        | 93        | 76        | 98        | 84        | 90        | 95        | 87        | 69        | 66        | 136        | 97         | 75        |
| - from Latin America                           | 83        | 80        | 94        | 95        | 58        | 57        | 92        | 76        | 97        | 81        | 90        | 95        | 87        | 68        | 64        | 129        | 96         | 76        |
| - from North Africa                            | 83        | 80        | 93        | 96        | 58        | 58        | 92        | 76        | 97        | 81        | 89        | 95        | 87        | 70        | 66        | 128        | 97         | 76        |
| - from Other Europe                            | 83        | 80        | 94        | 96        | 57        | 58        | 91        | 76        | 97        | 82        | 89        | 95        | 87        | 69        | 65        | 127        | 97         | 76        |
| - from South and South-East Asia               | 83        | 80        | 94        | 96        | 58        | 57        | 95        | 77        | 96        | 81        | 89        | 95        | 87        | 68        | 65        | 133        | 98         | 75        |
| - from Sub-Saharan Africa                      | 83        | 80        | 93        | 96        | 57        | 58        | 93        | 76        | 95        | 81        | 90        | 95        | 87        | 68        | 65        | 137        | 98         | 76        |
| - from West Asia                               | 83        | 80        | 93        | 96        | 56        | 58        | 92        | 76        | 96        | 80        | 90        | 95        | 87        | 68        | 65        | 130        | 97         | 75        |
| <b>Max</b>                                     | <b>85</b> | <b>82</b> | <b>98</b> | <b>99</b> | <b>60</b> | <b>61</b> | <b>97</b> | <b>77</b> | <b>99</b> | <b>84</b> | <b>92</b> | <b>97</b> | <b>90</b> | <b>70</b> | <b>66</b> | <b>139</b> | <b>100</b> | <b>78</b> |
| Difference in percentage points                | 1.7       | 1.9       | 5.0       | 2.4       | 2.4       | 3.4       | 3.6       | 1.6       | 3.9       | 0.6       | 2.0       | 2.2       | 3.8       | 1.0       | 1.0       | 3.0        | 2.8        | 2.2       |

Table A.2 continued

| Scenario:                                 | Latvia    | Lithuania | Luxemb.    | Malta     | Netherlands | Norway     | Poland    | Portugal  | Romania   | Slovakia  | Slovenia  | Spain     | Sweden     | Switzerl.  | UK         |
|---|-----------|-----------|------------|-----------|-------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| <b>Baseline</b>                           | <b>61</b> | <b>63</b> | <b>128</b> | <b>95</b> | <b>88</b>   | <b>118</b> | <b>62</b> | <b>71</b> | <b>64</b> | <b>73</b> | <b>72</b> | <b>67</b> | <b>128</b> | <b>101</b> | <b>98</b>  |
| Persistent high-migration event from East | 62        | 62        | 124        | 93        | 88          | 114        | 62        | 71        | 64        | 75        | 72        | 67        | 129        | 102        | 100        |
| - from Latin America                      | 61        | 62        | 132        | 97        | 89          | 117        | 62        | <b>73</b> | 65        | 75        | 70        | <b>69</b> | 128        | 103        | 99         |
| - from North Africa                       | 62        | 63        | 134        | 95        | 89          | 117        | 62        | 72        | 64        | 75        | 71        | 68        | 128        | 102        | 99         |
| - from Other Europe                       | <b>64</b> | <b>66</b> | <b>138</b> | <b>99</b> | 89          | 119        | <b>63</b> | 72        | <b>65</b> | <b>77</b> | <b>77</b> | 67        | 130        | <b>104</b> | 99         |
| - South and South-East Asia               | 63        | 64        | 134        | 93        | 89          | <b>120</b> | 62        | 71        | 64        | 76        | 72        | 67        | 131        | <b>104</b> | <b>101</b> |
| - from Sub-Saharan Africa                 | <b>64</b> | 65        | 131        | 96        | 89          | 119        | 62        | 72        | 64        | 74        | 71        | 67        | 131        | 102        | 100        |
| - from West Asia                          | 63        | 63        | 130        | 97        | <b>90</b>   | <b>120</b> | <b>63</b> | 71        | <b>65</b> | 75        | 72        | 67        | <b>136</b> | 103        | 99         |
| Persistent migration event from East Asia | 62        | 62        | 125        | 92        | 88          | 113        | 62        | 71        | 64        | 75        | 72        | 67        | 129        | 102        | 99         |
| - from Latin America                      | 59        | 62        | 135        | 94        | 89          | 117        | 62        | 73        | 64        | 75        | 71        | 68        | 128        | 103        | 98         |
| - from North Africa                       | 64        | 62        | 129        | 94        | 88          | 117        | 62        | 71        | 63        | 75        | 72        | 68        | 128        | 102        | 98         |
| - from Other Europe                       | 63        | 63        | 134        | 94        | 88          | 118        | 62        | 71        | 64        | 74        | 74        | 67        | 129        | 103        | 99         |
| - from South and South-East Asia          | 61        | 63        | 132        | 95        | 88          | 118        | 62        | 71        | 64        | 75        | 72        | 67        | 129        | 102        | 100        |
| - from Sub-Saharan Africa                 | 62        | 62        | 136        | 99        | 89          | 119        | 62        | 71        | 64        | 73        | 70        | 67        | 128        | 102        | 100        |
| - from West Asia                          | 62        | 62        | 137        | 98        | 88          | 118        | 62        | 70        | 63        | 74        | 72        | 67        | 132        | 103        | 99         |
| Short high-migration event from East Asia | 62        | 60        | 126        | 98        | 88          | 116        | 62        | 71        | 64        | 75        | 71        | 67        | 129        | 102        | 99         |
| - from Latin America                      | 61        | 62        | 131        | 91        | 88          | 117        | 62        | 71        | 63        | 75        | 72        | 67        | 128        | 102        | 99         |
| - from North Africa                       | 61        | 63        | 135        | 98        | 88          | 117        | 62        | 72        | 63        | 74        | 69        | 67        | 128        | 101        | 98         |
| - from Other Europe                       | 60        | 62        | 135        | 98        | 88          | 118        | 62        | 71        | 64        | 76        | 72        | 67        | 129        | 102        | 99         |
| - from South and South-East Asia          | 60        | 61        | 131        | 90        | 88          | 116        | 61        | 71        | 63        | 73        | 71        | 67        | 127        | 103        | 98         |
| - from Sub-Saharan Africa                 | 59        | 63        | 134        | 93        | 89          | 117        | 62        | 71        | 64        | 74        | 71        | 67        | 128        | 101        | 98         |
| - from West Asia                          | 61        | 61        | 131        | 95        | 88          | 116        | 62        | 71        | 63        | 75        | 71        | 67        | 129        | 102        | 99         |
| Short migration event from East Asia      | 61        | 62        | 133        | 94        | 88          | 118        | 62        | 71        | 63        | 75        | 72        | 67        | 127        | 100        | 98         |
| - from Latin America                      | 61        | 62        | 126        | 95        | 87          | 115        | 62        | 71        | 64        | 75        | 71        | 67        | 129        | 102        | 98         |
| - from North Africa                       | 61        | 62        | 132        | 94        | 88          | 116        | 62        | 71        | 63        | 73        | 71        | 67        | 128        | 102        | 98         |
| - from Other Europe                       | 61        | 63        | 130        | 98        | 88          | 117        | 62        | 70        | 64        | 73        | 70        | 67        | 128        | 103        | 98         |
| - from South and South-East Asia          | 62        | 62        | 133        | 93        | 88          | 115        | 62        | 71        | 64        | 74        | 72        | 67        | 128        | 102        | 98         |
| - from Sub-Saharan Africa                 | 62        | 61        | 128        | 94        | 88          | 116        | 62        | 71        | 63        | 75        | 72        | 67        | 128        | 102        | 98         |
| - from West Asia                          | 61        | 63        | 129        | 94        | 88          | 118        | 62        | 71        | 64        | 76        | 69        | 67        | 127        | 102        | 98         |
| <b>Max</b>                                | <b>64</b> | <b>66</b> | <b>138</b> | <b>99</b> | <b>90</b>   | <b>120</b> | <b>63</b> | <b>73</b> | <b>65</b> | <b>77</b> | <b>77</b> | <b>69</b> | <b>136</b> | <b>104</b> | <b>101</b> |
| Difference in percentage points           | 3.2       | 2.4       | 9.4        | 3.8       | 2.2         | 2.8        | 0.9       | 2.8       | 1.2       | 3.9       | 4.9       | 2.2       | 8.9        | 2.5        | 2.5        |

**Table A.3: Relative change in total labour force\* between 2020 and 2060 (2020 = 100), all countries and all scenarios**

| Scenario                                       | EU+       | EU27      | Austria    | Belgium    | Bulgaria  | Croatia   | Cyprus     | Czechia   | Denmark    | Estonia   | Finland   | France     | Germany   | Greece    |
|--|-----------|-----------|------------|------------|-----------|-----------|------------|-----------|------------|-----------|-----------|------------|-----------|-----------|
| Baseline                                       | 89        | 86        | 98         | 104        | 62        | 63        | 101        | 78        | 102        | 88        | 94        | 102        | 89        | 76        |
| Persistent high-migration event from East Asia | 90        | 86        | 99         | 105        | 62        | 63        | 97         | 78        | 102        | 86        | 92        | 103        | 90        | 75        |
| - from Latin America                           | 90        | 87        | 99         | 105        | 61        | 65        | 101        | 78        | 102        | 84        | 94        | 103        | 90        | 76        |
| - from North Africa                            | 90        | 87        | 98         | 105        | 61        | 62        | 104        | 79        | 103        | 86        | 94        | 104        | 89        | 75        |
| - from Other Europe                            | 91        | 88        | 102        | 106        | 63        | 67        | 105        | 79        | 103        | 91        | 96        | 103        | 92        | 77        |
| - South and South-East Asia                    | 90        | 87        | 100        | 106        | 61        | 64        | 101        | 79        | 102        | 85        | 95        | 103        | 90        | 77        |
| - from Sub-Saharan Africa                      | 90        | 87        | 99         | 106        | 62        | 65        | 106        | 78        | 102        | 84        | 94        | 104        | 90        | 76        |
| - from West Asia                               | 90        | 87        | 103        | 107        | 61        | 63        | 102        | 78        | 104        | 87        | 95        | 103        | 92        | 76        |
| Persistent migration event from East Asia      | 89        | 86        | 98         | 104        | 61        | 63        | 100        | 78        | 102        | 87        | 93        | 103        | 89        | 76        |
| - from Latin America                           | 90        | 87        | 99         | 105        | 62        | 63        | 103        | 78        | 103        | 89        | 92        | 103        | 89        | 76        |
| - from North Africa                            | 89        | 86        | 99         | 105        | 60        | 63        | 102        | 77        | 103        | 89        | 92        | 103        | 89        | 76        |
| - from Other Europe                            | 90        | 87        | 100        | 104        | 62        | 64        | 102        | 77        | 103        | 88        | 95        | 103        | 91        | 77        |
| - from South and South-East Asia               | 90        | 87        | 99         | 104        | 61        | 63        | 101        | 78        | 104        | 87        | 93        | 103        | 90        | 75        |
| - from Sub-Saharan Africa                      | 90        | 87        | 98         | 106        | 62        | 63        | 100        | 77        | 102        | 88        | 93        | 103        | 90        | 76        |
| - from West Asia                               | 90        | 87        | 100        | 105        | 61        | 64        | 97         | 77        | 101        | 86        | 94        | 102        | 91        | 75        |
| Short high-migration event from East Asia      | 89        | 86        | 98         | 105        | 62        | 65        | 100        | 78        | 101        | 87        | 94        | 102        | 89        | 76        |
| - from Latin America                           | 89        | 86        | 98         | 104        | 60        | 63        | 98         | 78        | 102        | 85        | 92        | 103        | 89        | 74        |
| - from North Africa                            | 89        | 86        | 98         | 104        | 61        | 63        | 102        | 78        | 101        | 87        | 94        | 102        | 89        | 75        |
| - from Other Europe                            | 89        | 86        | 99         | 104        | 61        | 64        | 100        | 78        | 102        | 84        | 94        | 102        | 89        | 75        |
| - from South and South-East Asia               | 89        | 86        | 98         | 104        | 60        | 63        | 99         | 76        | 103        | 87        | 93        | 102        | 89        | 76        |
| - from Sub-Saharan Africa                      | 89        | 86        | 98         | 105        | 61        | 62        | 102        | 77        | 101        | 89        | 94        | 103        | 89        | 75        |
| - from West Asia                               | 89        | 86        | 98         | 105        | 61        | 63        | 101        | 77        | 102        | 89        | 93        | 103        | 90        | 76        |
| Short migration event from East Asia           | 89        | 86        | 99         | 104        | 61        | 64        | 102        | 78        | 103        | 89        | 93        | 102        | 89        | 76        |
| - from Latin America                           | 89        | 86        | 100        | 104        | 62        | 63        | 99         | 77        | 102        | 87        | 94        | 102        | 89        | 75        |
| - from North Africa                            | 89        | 86        | 98         | 104        | 61        | 63        | 99         | 78        | 102        | 86        | 93        | 102        | 89        | 76        |
| - from Other Europe                            | 89        | 86        | 99         | 104        | 61        | 65        | 98         | 78        | 102        | 86        | 92        | 102        | 89        | 75        |
| - from South and South-East Asia               | 89        | 86        | 98         | 103        | 62        | 62        | 104        | 78        | 101        | 86        | 93        | 102        | 89        | 74        |
| - from Sub-Saharan Africa                      | 89        | 86        | 98         | 105        | 62        | 64        | 99         | 78        | 101        | 84        | 94        | 103        | 89        | 76        |
| - from West Asia                               | 89        | 86        | 98         | 104        | 60        | 64        | 99         | 78        | 102        | 86        | 94        | 102        | 89        | 75        |
| <b>Max</b>                                     | <b>91</b> | <b>88</b> | <b>103</b> | <b>107</b> | <b>63</b> | <b>67</b> | <b>106</b> | <b>79</b> | <b>104</b> | <b>91</b> | <b>96</b> | <b>104</b> | <b>92</b> | <b>77</b> |
| Difference in percentage points (pp)           | 1.6       | 1.7       | 4.3        | 2.6        | 1.8       | 4.3       | 5.0        | 1.6       | 2.6        | 2.7       | 2.0       | 2.3        | 3.2       | 1.0       |



Table A.3 continued

| Scenario                                       | Hungary   | Iceland    | Ireland    | Italy     | Latvia    | Lithuania | Luxemburg  | Malta      | Netherlands | Norway     | Poland    | Portugal  | Romania   |
|--|-----------|------------|------------|-----------|-----------|-----------|------------|------------|-------------|------------|-----------|-----------|-----------|
| Baseline                                       | <b>71</b> | <b>141</b> | <b>103</b> | <b>85</b> | <b>65</b> | <b>67</b> | <b>132</b> | <b>104</b> | <b>94</b>   | <b>120</b> | <b>68</b> | <b>80</b> | <b>69</b> |
| Persistent high-migration event from East Asia | 71        | 135        | 105        | 85        | 65        | 68        | 128        | 106        | 94          | 118        | 68        | 80        | 69        |
| - from Latin America                           | 71        | 132        | 107        | 86        | 66        | 67        | 137        | 108        | 95          | 120        | 68        | <b>83</b> | 70        |
| - from North Africa                            | 71        | 135        | 104        | 85        | 66        | 67        | 135        | 104        | 95          | 121        | 67        | 81        | 69        |
| - from Other Europe                            | <b>71</b> | <b>143</b> | <b>107</b> | <b>87</b> | <b>69</b> | <b>69</b> | <b>141</b> | <b>110</b> | <b>95</b>   | <b>123</b> | <b>69</b> | 82        | 70        |
| - South and South-East Asia                    | 71        | 136        | <b>107</b> | 86        | 66        | 69        | 138        | 103        | 95          | <b>123</b> | 68        | 80        | 69        |
| - from Sub-Saharan Africa                      | 70        | 132        | <b>106</b> | <b>86</b> | 69        | 68        | 132        | 105        | 95          | 122        | 67        | 82        | 69        |
| - from West Asia                               | 71        | <b>141</b> | 104        | 85        | 69        | 66        | 133        | 108        | <b>96</b>   | 123        | 68        | 80        | <b>70</b> |
| Persistent migration event from East Asia      | 71        | 137        | 104        | 85        | 66        | 66        | 130        | 103        | 94          | 117        | 68        | 80        | 69        |
| - from Latin America                           | 71        | 138        | 106        | 86        | 64        | 66        | 137        | 104        | 95          | 119        | 68        | 82        | 70        |
| - from North Africa                            | 71        | 139        | 105        | 86        | 68        | 67        | 128        | 107        | 94          | 121        | 68        | 80        | 68        |
| - from Other Europe                            | 71        | 141        | 106        | 86        | 67        | 68        | 135        | 108        | 95          | 122        | 68        | 79        | 68        |
| - from South and South-East Asia               | 71        | 139        | 105        | 86        | 66        | 66        | 133        | 103        | 94          | 121        | 67        | 80        | 69        |
| - from Sub-Saharan Africa                      | 71        | 141        | 106        | 86        | 66        | 66        | 138        | 108        | 95          | 122        | 68        | 80        | 69        |
| - from West Asia                               | 71        | 134        | 105        | 85        | 66        | 66        | 137        | 108        | 95          | 122        | 68        | 79        | 68        |
| Short high-migration event from East Asia      | 70        | 143        | 103        | 85        | 66        | 64        | 128        | 111        | 94          | 120        | 68        | 79        | 69        |
| - from Latin America                           | 70        | 137        | 106        | 85        | 66        | 66        | 133        | 103        | 94          | 120        | 68        | 80        | 68        |
| - from North Africa                            | 70        | 139        | 106        | 85        | 65        | 67        | 138        | 109        | 94          | 120        | 68        | 80        | 68        |
| - from Other Europe                            | 69        | 139        | 106        | 85        | 64        | 67        | 138        | 108        | 94          | 121        | 68        | 80        | 69        |
| - from South and South-East Asia               | 71        | 137        | 104        | 85        | 66        | 64        | 133        | 99         | 94          | 119        | 67        | 80        | 67        |
| - from Sub-Saharan Africa                      | 70        | 135        | 107        | 85        | 63        | 68        | 140        | 103        | 94          | 120        | 68        | 80        | 69        |
| - from West Asia                               | 70        | 139        | 104        | 85        | 65        | 65        | 135        | 107        | 94          | 120        | 68        | 81        | 68        |
| Short migration event from East Asia           | 71        | 144        | 106        | 85        | 66        | 65        | 135        | 107        | 94          | 122        | 68        | 80        | 68        |
| - from Latin America                           | 70        | 134        | 104        | 85        | 65        | 67        | 132        | 105        | 94          | 119        | 68        | 80        | 70        |
| - from North Africa                            | 71        | 133        | 105        | 85        | 67        | 67        | 131        | 100        | 95          | 119        | 67        | 80        | 68        |
| - from Other Europe                            | 71        | 132        | 104        | 85        | 64        | 67        | 131        | 110        | 94          | 121        | 68        | 79        | 69        |
| - from South and South-East Asia               | 71        | 136        | 106        | 85        | 66        | 66        | 136        | 104        | 94          | 120        | 68        | 79        | 69        |
| - from Sub-Saharan Africa                      | 71        | 142        | 105        | 85        | 65        | 64        | 132        | 104        | 94          | 119        | 68        | 81        | 68        |
| - from West Asia                               | 70        | 138        | 104        | 85        | 65        | 68        | 133        | 106        | 94          | 121        | 67        | 80        | 69        |
| <b>Max</b>                                     | <b>71</b> | <b>144</b> | <b>107</b> | <b>87</b> | <b>69</b> | <b>69</b> | <b>141</b> | <b>111</b> | <b>96</b>   | <b>123</b> | <b>69</b> | <b>83</b> | <b>70</b> |
| Difference in percentage points                | 0.6       | 2.8        | 3.9        | 2.3       | 3.9       | 2.0       | 9.3        | 6.5        | 2.2         | 3.4        | 0.7       | 2.5       | 1.6       |

Table A.3 continued

| Scenario                                       | Slovakia  | Slovenia  | Spain     | Sweden     | Switzerland | UK         |
|--|-----------|-----------|-----------|------------|-------------|------------|
| Baseline                                       | <b>78</b> | <b>78</b> | <b>69</b> | <b>128</b> | <b>106</b>  | <b>103</b> |
| Persistent high-migration event from East Asia | 79        | 78        | 70        | 129        | 106         | 104        |
| - from Latin America                           | 80        | 76        | <b>72</b> | 129        | 107         | 103        |
| - from North Africa                            | 79        | 76        | 70        | 129        | 106         | 103        |
| - from Other Europe                            | <b>82</b> | <b>82</b> | 70        | 130        | <b>108</b>  | 103        |
| - South and South-East Asia                    | 80        | 78        | 70        | 132        | <b>108</b>  | <b>105</b> |
| - from Sub-Saharan Africa                      | 79        | 77        | 70        | 131        | 106         | 104        |
| - from West Asia                               | 79        | 79        | 69        | <b>137</b> | 107         | 103        |
| Persistent migration event from East Asia      | 80        | 77        | 70        | 129        | 107         | 103        |
| - from Latin America                           | 79        | 77        | 71        | 129        | 107         | 103        |
| - from North Africa                            | 80        | 75        | 70        | 128        | 106         | 102        |
| - from Other Europe                            | 79        | 79        | 70        | 130        | 107         | 103        |
| - from South and South-East Asia               | 80        | 78        | 70        | 130        | 106         | 104        |
| - from Sub-Saharan Africa                      | 78        | 75        | 70        | 129        | 107         | 104        |
| - from West Asia                               | 78        | 76        | 70        | 132        | 108         | 102        |
| Short high-migration event from East Asia      | 80        | 77        | 70        | 129        | 106         | 103        |
| - from Latin America                           | 80        | 76        | 70        | 128        | 106         | 103        |
| - from North Africa                            | 79        | 74        | 70        | 129        | 105         | 102        |
| - from Other Europe                            | 80        | 76        | 69        | 129        | 106         | 103        |
| - from South and South-East Asia               | 78        | 76        | 69        | 127        | 107         | 102        |
| - from Sub-Saharan Africa                      | 79        | 76        | 69        | 128        | 106         | 102        |
| - from West Asia                               | 80        | 77        | 70        | 129        | 106         | 103        |
| Short migration event from East Asia           | 80        | 76        | 70        | 128        | 105         | 102        |
| - from Latin America                           | 80        | 76        | 69        | 129        | 106         | 102        |
| - from North Africa                            | 78        | 77        | 70        | 128        | 106         | 103        |
| - from Other Europe                            | 78        | 77        | 70        | 129        | 107         | 102        |
| - from South and South-East Asia               | 79        | 77        | 70        | 128        | 107         | 102        |
| - from Sub-Saharan Africa                      | 79        | 78        | 69        | 129        | 106         | 102        |
| - from West Asia                               | 80        | 74        | 69        | 128        | 106         | 102        |
| <b>Max</b>                                     | <b>82</b> | <b>82</b> | <b>72</b> | <b>137</b> | <b>108</b>  | <b>105</b> |
| Difference in percentage points                | 3.7       | 3.5       | 2.2       | 8.7        | 2.4         | 2.4        |

**Table A4: Projected proportions of the population born outside EU+ in 2020 and 2060, all scenarios, all countries**

|   | EU+          | EU27         | Austria      | Belgium      | Bulgaria     | Croatia      | Cyprus       | Czechia     | Denmark      | Estonia      | Finland      | France       | Germany      | Greece       | Hungary     |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <b>Estimated % of pop. born outside EU+, 2020</b>           | <b>8.7%</b>  | <b>8.2%</b>  | <b>11.1%</b> | <b>9.5%</b>  | <b>3.1%</b>  | <b>11.5%</b> | <b>12.8%</b> | <b>3.8%</b> | <b>7.6%</b>  | <b>13.6%</b> | <b>5.4%</b>  | <b>9.0%</b>  | <b>10.7%</b> | <b>9.7%</b>  | <b>2.1%</b> |
| <b>Baseline, 2060</b>                                       | <b>17.0%</b> | <b>16.7%</b> | <b>19.1%</b> | <b>17.3%</b> | <b>10.4%</b> | <b>10.6%</b> | <b>22.6%</b> | <b>8.6%</b> | <b>13.9%</b> | <b>11.9%</b> | <b>15.3%</b> | <b>13.7%</b> | <b>21.4%</b> | <b>16.3%</b> | <b>5.8%</b> |
| Persistent high-migration event from East Asia, 2060        | 17.2%        | 16.8%        | 19.1%        | 17.4%        | 10.5%        | 10.5%        | 22.1%        | 8.8%        | 13.7%        | 12.0%        | 15.4%        | 13.9%        | 21.6%        | 16.3%        | 5.8%        |
| - from Latin America, 2060                                  | 17.5%        | 17.1%        | 19.2%        | 17.7%        | 10.6%        | 10.3%        | 22.7%        | 8.8%        | 14.0%        | 12.7%        | 15.4%        | 13.9%        | 21.7%        | 16.7%        | 5.9%        |
| - from North Africa, 2060                                   | 17.3%        | 16.9%        | 19.3%        | 17.5%        | 10.3%        | 10.5%        | 21.8%        | 8.7%        | 14.0%        | 12.0%        | 15.4%        | 14.0%        | 21.6%        | 16.5%        | 5.9%        |
| - from Other Europe, 2060                                   | <b>17.6%</b> | <b>17.3%</b> | <b>20.3%</b> | 17.7%        | <b>11.6%</b> | <b>12.1%</b> | 22.2%        | <b>9.4%</b> | 14.2%        | <b>13.6%</b> | 15.8%        | 13.9%        | <b>22.4%</b> | <b>17.3%</b> | <b>6.1%</b> |
| - South and South-East Asia, 2060                           | 17.4%        | 17.0%        | 19.3%        | 17.7%        | 10.3%        | 10.5%        | 22.3%        | 8.6%        | 14.2%        | 12.6%        | <b>15.9%</b> | 13.9%        | 21.9%        | 16.7%        | 5.8%        |
| - from Sub-Saharan Africa, 2060                             | 17.4%        | 17.0%        | 19.2%        | 17.7%        | 10.5%        | 10.4%        | 23.0%        | 8.9%        | 14.1%        | 12.1%        | 15.6%        | <b>14.1%</b> | 21.7%        | 16.6%        | 5.9%        |
| - from West Asia, 2060                                      | 17.5%        | 17.2%        | 19.6%        | 17.7%        | 10.7%        | 10.6%        | <b>23.3%</b> | 8.9%        | 14.2%        | 12.8%        | <b>15.9%</b> | 13.8%        | <b>22.4%</b> | 16.9%        | 6.0%        |
| Persistent migration event from East Asia, 2060             | 17.1%        | 16.7%        | 19.1%        | 17.1%        | 10.4%        | 10.6%        | 21.6%        | 8.7%        | 13.5%        | 12.0%        | 15.2%        | 13.8%        | 21.5%        | 16.4%        | 5.7%        |
| - from Latin America, 2060                                  | 17.3%        | 17.0%        | 19.5%        | 17.5%        | 10.6%        | 10.8%        | 22.9%        | 8.5%        | 14.2%        | 12.2%        | 15.6%        | 13.8%        | 21.6%        | 16.4%        | 5.7%        |
| - from North Africa, 2060                                   | 17.2%        | 16.8%        | 19.1%        | 17.5%        | 10.6%        | 10.5%        | 23.1%        | 8.7%        | 13.7%        | 12.0%        | 15.2%        | 13.9%        | 21.6%        | 16.5%        | 5.7%        |
| - from Other Europe, 2060                                   | 17.4%        | 17.0%        | 19.7%        | 17.5%        | 10.8%        | 11.1%        | 22.2%        | 9.0%        | 14.2%        | 12.7%        | 15.6%        | 13.8%        | 22.0%        | 16.9%        | 5.8%        |
| - from South and South-East Asia, 2060                      | 17.3%        | 16.9%        | 19.4%        | 17.6%        | 10.4%        | 10.9%        | 22.2%        | 8.7%        | 14.0%        | 11.8%        | 15.6%        | 13.8%        | 21.7%        | 16.7%        | 5.9%        |
| - from Sub-Saharan Africa, 2060                             | 17.3%        | 16.8%        | 19.2%        | 17.6%        | 10.4%        | 10.6%        | 22.4%        | 8.6%        | 14.0%        | 12.4%        | 15.5%        | 13.9%        | 21.6%        | 16.6%        | 5.7%        |
| - from West Asia, 2060                                      | 17.3%        | 16.9%        | 19.5%        | 17.5%        | 10.6%        | 10.6%        | 22.6%        | 8.6%        | 14.0%        | 12.7%        | 15.6%        | 13.8%        | 21.8%        | 16.6%        | 5.7%        |
| Short high-migration event from East Asia, 2060             | 17.1%        | 16.7%        | 19.1%        | 17.2%        | 10.3%        | 10.6%        | 22.9%        | 8.7%        | 13.9%        | 12.2%        | 15.1%        | 13.7%        | 21.5%        | 16.3%        | 5.7%        |
| - from Latin America, 2060                                  | 17.1%        | 16.7%        | 19.1%        | 17.3%        | 10.4%        | 10.7%        | 22.1%        | 8.7%        | 13.8%        | 12.1%        | 15.4%        | 13.7%        | 21.4%        | 16.5%        | 5.8%        |
| - from North Africa, 2060                                   | 17.1%        | 16.7%        | 19.1%        | 17.3%        | 10.3%        | 10.4%        | 22.6%        | 8.6%        | 13.9%        | 12.2%        | 15.3%        | 13.7%        | 21.5%        | 16.6%        | 5.7%        |
| - from Other Europe, 2060                                   | 17.1%        | 16.7%        | 19.3%        | 17.2%        | 10.3%        | 10.5%        | 21.9%        | 8.7%        | 13.9%        | 12.7%        | 15.4%        | 13.7%        | 21.6%        | 16.5%        | 5.7%        |
| - South and South-East Asia, 2060                           | 17.0%        | 16.6%        | 18.9%        | 17.3%        | 10.3%        | 10.6%        | 22.1%        | 8.3%        | 13.9%        | 11.8%        | 15.0%        | 13.7%        | 21.4%        | 16.4%        | 5.6%        |
| - from Sub-Saharan Africa, 2060                             | 17.1%        | 16.7%        | 19.2%        | 17.3%        | 10.4%        | 10.5%        | 22.5%        | 8.6%        | 14.1%        | 12.1%        | 15.2%        | 13.7%        | 21.6%        | 16.6%        | 5.8%        |
| - from West Asia, 2060                                      | 17.1%        | 16.7%        | 19.3%        | 17.4%        | 10.2%        | 10.5%        | 21.8%        | 8.6%        | 13.8%        | 11.7%        | 15.5%        | 13.7%        | 21.6%        | 16.5%        | 5.7%        |
| Short migration event from East Asia, 2060                  | 17.1%        | 16.7%        | 18.9%        | 17.4%        | 10.4%        | 10.3%        | 22.6%        | 8.6%        | 13.8%        | 11.8%        | 15.3%        | 13.6%        | 21.4%        | 16.5%        | 5.7%        |
| - from Latin America, 2060                                  | 17.1%        | 16.7%        | 19.1%        | 17.4%        | 10.0%        | 10.5%        | 22.5%        | 8.7%        | 13.8%        | 11.6%        | 15.2%        | 13.6%        | 21.5%        | 16.6%        | 5.8%        |
| - from North Africa, 2060                                   | 17.1%        | 16.7%        | 19.1%        | 17.2%        | 10.5%        | 10.6%        | 22.3%        | 8.6%        | 13.7%        | 12.4%        | 15.5%        | 13.7%        | 21.4%        | 16.2%        | 5.8%        |
| - from Other Europe, 2060                                   | 17.1%        | 16.7%        | 19.2%        | 17.3%        | 10.4%        | 10.8%        | 22.3%        | 8.7%        | 13.7%        | 12.2%        | 15.5%        | 13.6%        | 21.5%        | 16.3%        | 5.6%        |
| - South and South-East Asia, 2060                           | 17.1%        | 16.7%        | 19.0%        | 17.4%        | 10.1%        | 10.7%        | 21.8%        | 8.6%        | 13.8%        | 12.3%        | 15.4%        | 13.7%        | 21.4%        | 16.5%        | 5.6%        |
| - from Sub-Saharan Africa, 2060                             | 17.0%        | 16.6%        | 19.0%        | 17.2%        | 10.4%        | 10.5%        | 22.5%        | 8.6%        | 14.0%        | 12.3%        | 15.2%        | 13.7%        | 21.5%        | 16.6%        | 5.7%        |
| - from West Asia, 2060                                      | 17.1%        | 16.7%        | 19.1%        | 17.2%        | 10.5%        | 10.8%        | 22.5%        | 8.7%        | 13.9%        | 12.2%        | 15.2%        | 13.6%        | 21.5%        | 16.4%        | 5.7%        |
| % increase between 2020 and 2060, Baseline                  | 0.97         | 1.03         | 0.73         | 0.83         | 2.35         | -0.09        | 0.77         | 1.26        | 0.82         | -0.12        | 1.82         | 0.52         | 1.00         | 0.67         | 1.73        |
| % increase max. scenario 2060 to 2020                       | 1.04         | 1.11         | 0.83         | 0.87         | 2.73         | 0.05         | 0.81         | 1.47        | 0.86         | 0.00         | 1.94         | 0.56         | 1.09         | 0.78         | 1.87        |
| Difference between the maximum and Baseline in 2060 (in pp) | 0.6%         | 0.6%         | 1.2%         | 0.5%         | 1.2%         | 1.5%         | 0.6%         | 0.8%        | 0.3%         | 1.7%         | 0.6%         | 0.4%         | 1.0%         | 1.0%         | 0.3%        |

Table A.4 continued

|   | Iceland      | Ireland      | Italy        | Latvia       | Lithuania    | Luxemb.      | Malta        | Netherlands  | Norway       | Poland      | Portugal     | Romania      | Slovakia    | Slovenia     | Spain        |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|
| <b>Estimated % of pop. born outside EU+, 2020</b>           | <b>6.7%</b>  | <b>7.6%</b>  | <b>8.2%</b>  | <b>13.1%</b> | <b>7.4%</b>  | <b>10.2%</b> | <b>6.8%</b>  | <b>10.0%</b> | <b>10.1%</b> | <b>2.0%</b> | <b>8.2%</b>  | <b>2.3%</b>  | <b>1.4%</b> | <b>10.6%</b> | <b>9.8%</b>  |
| <b>Baseline, 2060</b>                                       | <b>15.2%</b> | <b>14.6%</b> | <b>20.9%</b> | <b>12.3%</b> | <b>14.0%</b> | <b>19.0%</b> | <b>17.1%</b> | <b>16.3%</b> | <b>20.7%</b> | <b>6.6%</b> | <b>16.6%</b> | <b>9.7%</b>  | <b>5.5%</b> | <b>14.9%</b> | <b>18.4%</b> |
| Persistent high-migration event from East Asia, 2060        | 15.4%        | 14.5%        | 21.0%        | 12.3%        | 14.3%        | 18.1%        | 17.5%        | 16.6%        | 21.0%        | 6.6%        | 16.8%        | 10.2%        | 5.7%        | 14.8%        | 18.6%        |
| - from Latin America, 2060                                  | 15.9%        | 14.7%        | <b>21.4%</b> | 12.4%        | 14.0%        | <b>19.9%</b> | 17.4%        | 16.6%        | 21.2%        | 6.7%        | <b>17.8%</b> | <b>10.6%</b> | 5.5%        | 15.2%        | <b>19.7%</b> |
| - from North Africa, 2060                                   | 15.5%        | 14.1%        | 21.2%        | 12.3%        | 14.4%        | 17.9%        | 18.1%        | 16.4%        | 20.9%        | 6.6%        | 16.8%        | 10.1%        | 5.7%        | 15.0%        | 18.9%        |
| - from Other Europe, 2060                                   | 16.1%        | 14.6%        | 21.5%        | <b>13.3%</b> | <b>15.4%</b> | 19.6%        | 17.2%        | <b>16.8%</b> | 21.4%        | <b>7.2%</b> | 16.6%        | 10.5%        | <b>5.9%</b> | <b>17.8%</b> | 18.8%        |
| - South and South-East Asia, 2060                           | 16.4%        | <b>14.8%</b> | <b>21.4%</b> | 12.2%        | 14.2%        | 18.8%        | 18.1%        | 16.6%        | 21.5%        | 6.7%        | 17.0%        | 10.1%        | 5.6%        | 14.9%        | 18.6%        |
| - from Sub-Saharan Africa, 2060                             | <b>16.9%</b> | 14.6%        | 21.3%        | 12.1%        | 14.2%        | 18.7%        | <b>18.6%</b> | 16.6%        | 21.5%        | 6.7%        | 17.0%        | 10.1%        | 5.7%        | 15.2%        | 18.7%        |
| - from West Asia, 2060                                      | 16.5%        | <b>14.8%</b> | 21.0%        | 12.0%        | 14.8%        | 19.2%        | 17.2%        | <b>16.8%</b> | <b>21.8%</b> | 6.7%        | 17.1%        | 10.1%        | 5.8%        | 15.1%        | 18.6%        |
| Persistent migration event from East Asia, 2060             | 15.7%        | 14.1%        | 20.9%        | 12.4%        | 13.9%        | 16.8%        | 15.9%        | 16.3%        | 20.2%        | 6.6%        | 16.5%        | 9.8%         | 5.3%        | 15.1%        | 18.3%        |
| - from Latin America, 2060                                  | 14.9%        | 14.5%        | 21.2%        | 11.7%        | 14.0%        | 19.9%        | 17.5%        | 16.6%        | 21.6%        | 6.7%        | 17.7%        | 10.3%        | 5.5%        | 15.1%        | 19.4%        |
| - from North Africa, 2060                                   | 15.3%        | 14.5%        | 21.1%        | 12.2%        | 13.7%        | 18.7%        | 18.0%        | 16.5%        | 20.8%        | 6.6%        | 16.7%        | 10.1%        | 5.6%        | 14.9%        | 18.6%        |
| - from Other Europe, 2060                                   | 15.6%        | 14.3%        | 21.2%        | 12.7%        | 14.7%        | 18.5%        | 16.4%        | 16.5%        | 21.2%        | 6.8%        | 16.9%        | 10.0%        | 5.8%        | 16.0%        | 18.5%        |
| - from South and South-East Asia, 2060                      | 15.2%        | 14.4%        | 21.2%        | 12.6%        | 14.6%        | 19.0%        | 17.0%        | 16.5%        | 21.2%        | 6.7%        | 16.8%        | 10.0%        | 5.6%        | 14.9%        | 18.5%        |
| - from Sub-Saharan Africa, 2060                             | 15.4%        | 14.3%        | 21.1%        | 12.1%        | 14.2%        | 19.5%        | 17.5%        | 16.5%        | 21.0%        | 6.6%        | 16.9%        | 9.9%         | 5.7%        | 14.8%        | 18.5%        |
| - from West Asia, 2060                                      | 15.6%        | 14.6%        | 20.9%        | 12.3%        | 14.5%        | 19.3%        | 17.2%        | 16.5%        | 21.3%        | 6.6%        | 16.7%        | 9.9%         | 5.5%        | 15.2%        | 18.4%        |
| Short high-migration event from East Asia, 2060             | 15.6%        | 14.4%        | 20.9%        | 12.0%        | 14.0%        | 19.6%        | 18.1%        | 16.1%        | 20.9%        | 6.6%        | 16.8%        | 10.0%        | 5.6%        | 15.1%        | 18.4%        |
| - from Latin America, 2060                                  | 14.9%        | 14.4%        | 20.9%        | 12.3%        | 14.4%        | 18.5%        | 17.6%        | 16.3%        | 20.7%        | 6.5%        | 16.7%        | 10.0%        | 5.5%        | 14.9%        | 18.6%        |
| - from North Africa, 2060                                   | 14.5%        | 14.5%        | 20.8%        | 12.1%        | 14.1%        | 18.4%        | 17.5%        | 16.3%        | 20.8%        | 6.5%        | 16.7%        | 9.9%         | 5.7%        | 15.1%        | 18.4%        |
| - from Other Europe, 2060                                   | 15.4%        | 14.3%        | 20.9%        | 12.9%        | 14.1%        | 19.0%        | 17.8%        | 16.3%        | 20.9%        | 6.6%        | 16.6%        | 10.0%        | 5.5%        | 15.4%        | 18.5%        |
| - South and South-East Asia, 2060                           | 16.0%        | 14.3%        | 20.8%        | 12.2%        | 14.2%        | 18.3%        | 16.9%        | 16.2%        | 20.8%        | 6.2%        | 16.7%        | 9.8%         | 5.5%        | 14.8%        | 18.4%        |
| - from Sub-Saharan Africa, 2060                             | 15.4%        | 14.2%        | 20.8%        | 12.3%        | 14.2%        | 19.0%        | 16.8%        | 16.3%        | 20.8%        | 6.6%        | 16.7%        | 9.8%         | 5.5%        | 15.0%        | 18.5%        |
| - from West Asia, 2060                                      | 15.3%        | 14.1%        | 20.8%        | 11.9%        | 14.3%        | 18.2%        | 17.2%        | 16.3%        | 20.7%        | 6.5%        | 16.6%        | 10.0%        | 5.3%        | 14.9%        | 18.4%        |
| Short migration event from East Asia, 2060                  | 14.7%        | 14.4%        | 20.8%        | 12.2%        | 13.9%        | 19.3%        | 17.5%        | 16.4%        | 20.8%        | 6.6%        | 16.7%        | 9.8%         | 5.4%        | 14.7%        | 18.5%        |
| - from Latin America, 2060                                  | 15.7%        | 14.4%        | 20.8%        | 11.9%        | 13.5%        | 18.5%        | 16.9%        | 16.4%        | 20.9%        | 6.6%        | 16.6%        | 9.8%         | 5.7%        | 15.1%        | 18.6%        |
| - from North Africa, 2060                                   | 15.9%        | 14.5%        | 20.8%        | 12.2%        | 13.8%        | 18.4%        | 16.3%        | 16.2%        | 21.1%        | 6.5%        | 16.7%        | 9.9%         | 5.4%        | 15.1%        | 18.5%        |
| - from Other Europe, 2060                                   | 15.1%        | 14.2%        | 20.8%        | 12.4%        | 14.3%        | 18.0%        | 16.6%        | 16.3%        | 20.8%        | 6.6%        | 17.0%        | 10.1%        | 5.5%        | 15.5%        | 18.4%        |
| - South and South-East Asia, 2060                           | 15.7%        | 14.3%        | 20.8%        | 12.4%        | 14.2%        | 18.3%        | 17.2%        | 16.3%        | 21.0%        | 6.5%        | 16.7%        | 10.0%        | 5.5%        | 14.8%        | 18.5%        |
| - from Sub-Saharan Africa, 2060                             | 16.4%        | 14.2%        | 20.8%        | 12.2%        | 14.5%        | 19.1%        | 17.3%        | 16.2%        | 21.0%        | 6.5%        | 16.5%        | 9.9%         | 5.5%        | 15.1%        | 18.5%        |
| - from West Asia, 2060                                      | 15.4%        | 14.4%        | 20.8%        | 12.2%        | 14.1%        | 18.9%        | 16.6%        | 16.3%        | 20.9%        | 6.6%        | 16.9%        | 10.0%        | 5.3%        | 15.1%        | 18.4%        |
| % increase between 2020 and 2060, Baseline                  | 1.27         | 0.92         | 1.56         | -0.06        | 0.89         | 0.87         | 1.53         | 0.63         | 1.05         | 2.24        | 1.02         | 3.19         | 2.83        | 0.41         | 0.87         |
| % increase max. scenario 2060 to 2020                       | 1.52         | 0.95         | 1.63         | 0.01         | 1.08         | 0.95         | 1.75         | 0.68         | 1.16         | 2.54        | 1.17         | 3.61         | 3.10        | 0.68         | 1.01         |
| Difference between the maximum and Baseline in 2060 (in pp) | 1.7%         | 0.2%         | 0.6%         | 0.9%         | 1.4%         | 0.8%         | 1.5%         | 0.5%         | 1.1%         | 0.6%        | 1.2%         | 1.0%         | 0.4%        | 2.9%         | 1.4%         |

Table A.4 continued

|   | Sweden       | Switzerland  | UK           |
|---|--------------|--------------|--------------|
| <b>Estimated % of pop. born outside EU+, 2020</b>           | <b>14.5%</b> | <b>12.5%</b> | <b>11.1%</b> |
| <b>Baseline, 2060</b>                                       | <b>28.2%</b> | <b>19.8%</b> | <b>18.6%</b> |
| Persistent high-migration event from East Asia, 2060        | 28.3%        | 20.1%        | 18.9%        |
| - from Latin America, 2060                                  | 28.5%        | 20.4%        | 18.9%        |
| - from North Africa, 2060                                   | 28.3%        | 20.1%        | 18.7%        |
| - from Other Europe, 2060                                   | 28.9%        | <b>20.6%</b> | 18.8%        |
| - South and South-East Asia, 2060                           | 28.7%        | 20.0%        | <b>19.2%</b> |
| - from Sub-Saharan Africa, 2060                             | 28.9%        | 20.2%        | 18.9%        |
| - from West Asia, 2060                                      | <b>29.6%</b> | 20.4%        | 18.8%        |
| Persistent migration event from East Asia, 2060             | 28.3%        | 19.9%        | 18.9%        |
| - from Latin America, 2060                                  | 28.3%        | 20.2%        | 18.6%        |
| - from North Africa, 2060                                   | 28.3%        | 20.0%        | 18.7%        |
| - from Other Europe, 2060                                   | 28.6%        | 20.4%        | 18.8%        |
| - from South and South-East Asia, 2060                      | 28.6%        | 20.2%        | 19.0%        |
| - from Sub-Saharan Africa, 2060                             | 28.6%        | 20.0%        | 18.8%        |
| - from West Asia, 2060                                      | 28.9%        | 20.2%        | 18.7%        |
| Short high-migration event from East Asia, 2060             | 28.2%        | 19.9%        | 18.7%        |
| - from Latin America, 2060                                  | 28.2%        | 20.1%        | 18.8%        |
| - from North Africa, 2060                                   | 28.3%        | 19.9%        | 18.6%        |
| - from Other Europe, 2060                                   | 28.2%        | 19.9%        | 18.7%        |
| - South and South-East Asia, 2060                           | 28.3%        | 20.0%        | 18.6%        |
| - from Sub-Saharan Africa, 2060                             | 28.4%        | 20.0%        | 18.6%        |
| - from West Asia, 2060                                      | 28.4%        | 19.9%        | 18.7%        |
| Short migration event from East Asia, 2060                  | 28.3%        | 20.0%        | 18.6%        |
| - from Latin America, 2060                                  | 28.2%        | 19.9%        | 18.7%        |
| - from North Africa, 2060                                   | 28.2%        | 20.1%        | 18.7%        |
| - from Other Europe, 2060                                   | 28.1%        | 19.9%        | 18.7%        |
| - South and South-East Asia, 2060                           | 28.2%        | 19.9%        | 18.7%        |
| - from Sub-Saharan Africa, 2060                             | 28.1%        | 19.7%        | 18.6%        |
| - from West Asia, 2060                                      | 28.3%        | 20.0%        | 18.7%        |
| % increase between 2020 and 2060, Baseline                  | 0.94         | 0.58         | 0.68         |
| % increase max. scenario 2060 to 2020                       | 1.04         | 0.65         | 0.74         |
| Difference between the maximum and Baseline in 2060 (in pp) | 1.4%         | 0.9%         | 0.6%         |

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## Appendix B

**Figure B.1 Relative change in total population size (2020 = 100), by country, all scenarios**

**Figure B.2 Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline, (2020 = 100)**

**Figure B.3 Composition of foreign-born populations in selected countries in 2020 and in 2060 in Baseline and Persistent high-migration events scenarios**



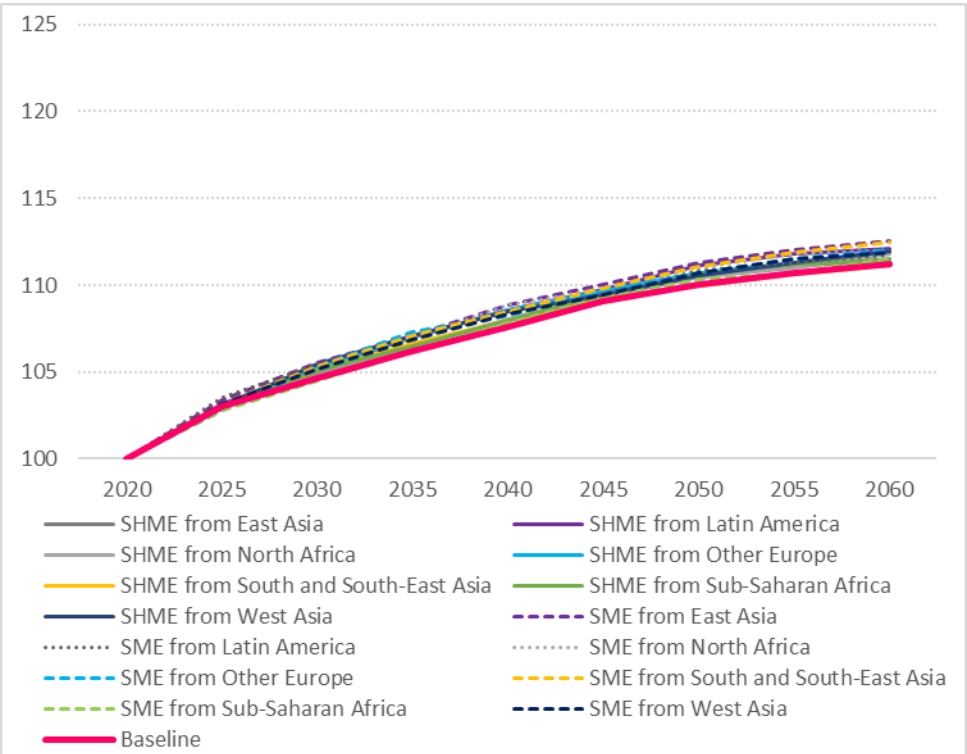
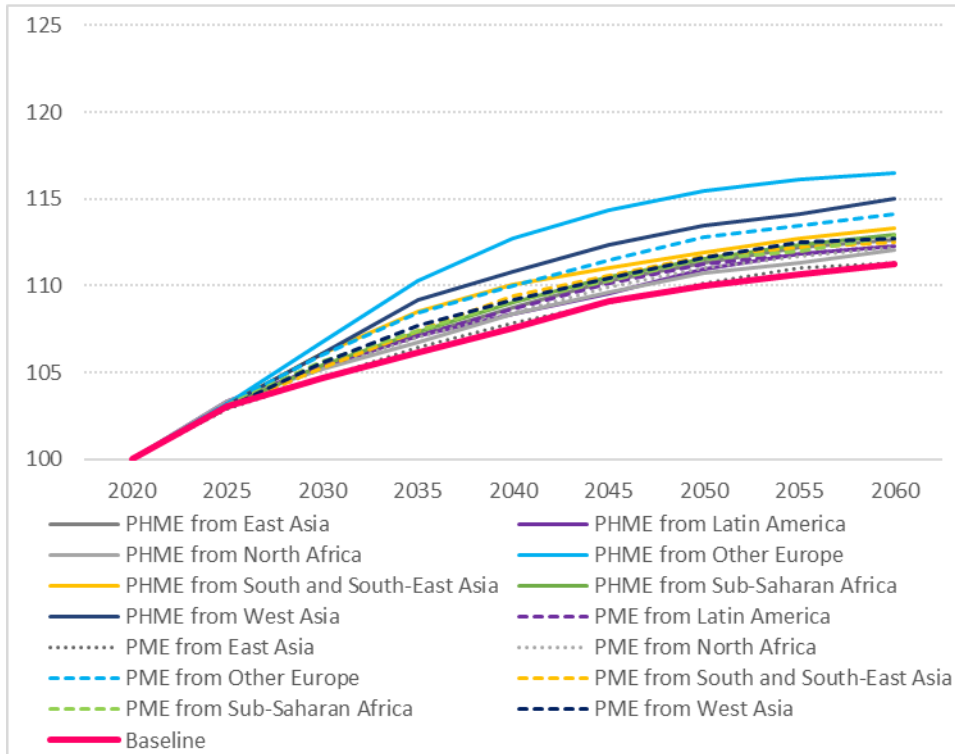




# AUSTRIA

## Relative change in total population size (2020 = 100)

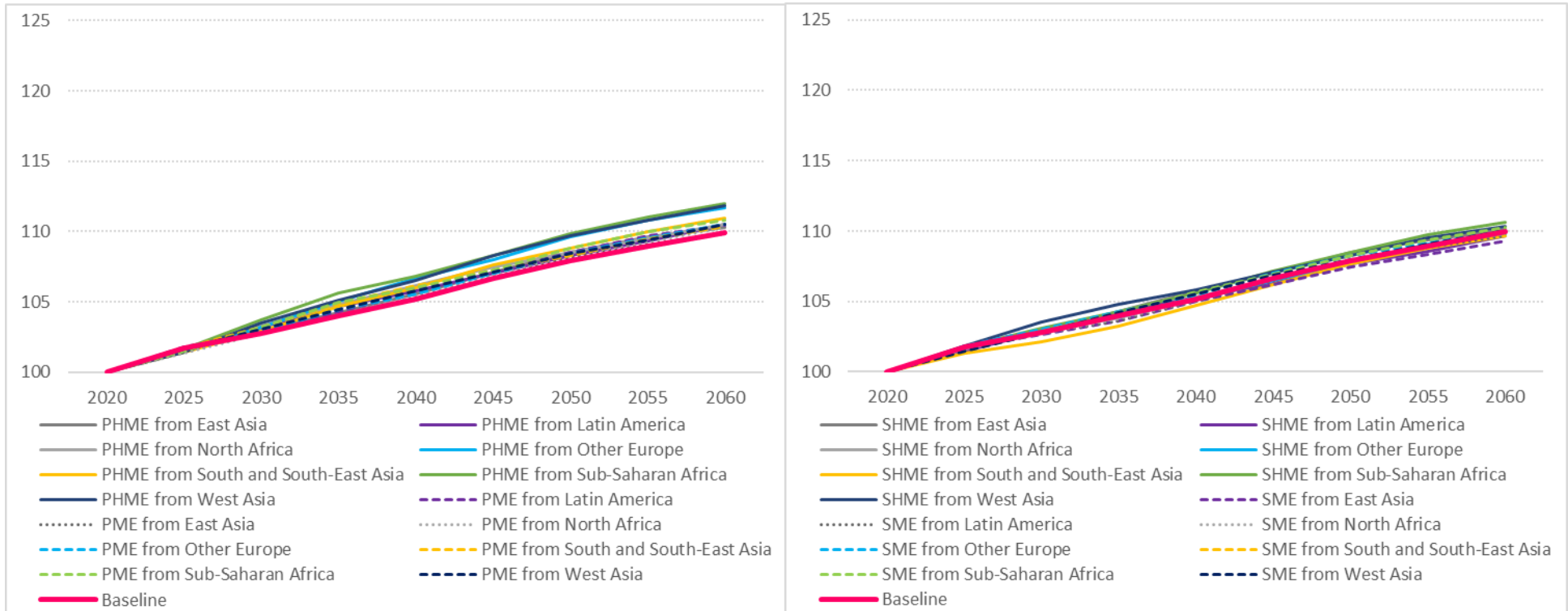
Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)



# BELGIUM

## Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



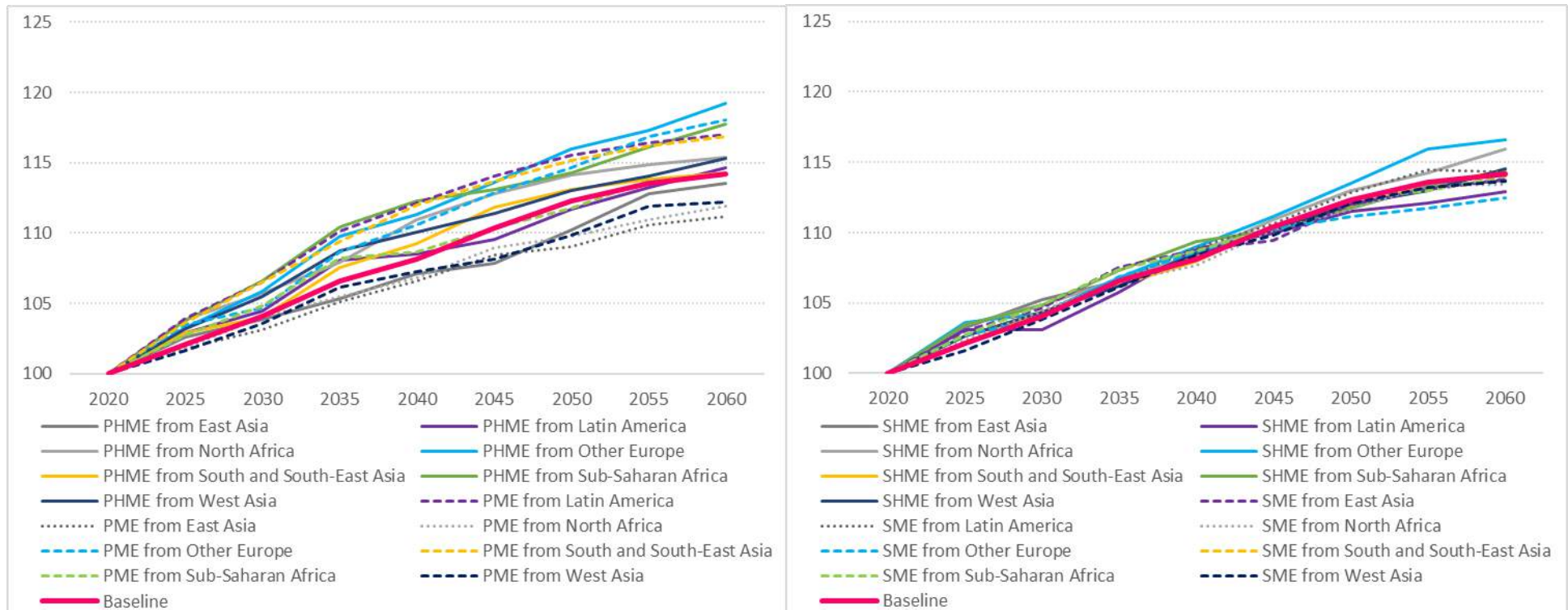




# CYPRUS

## Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



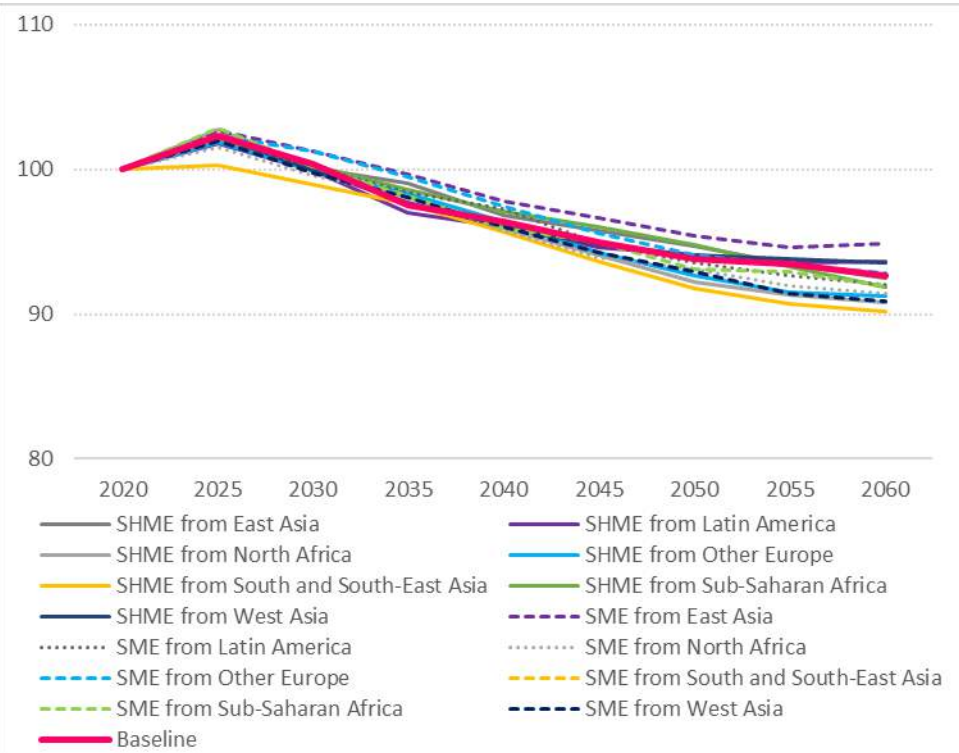
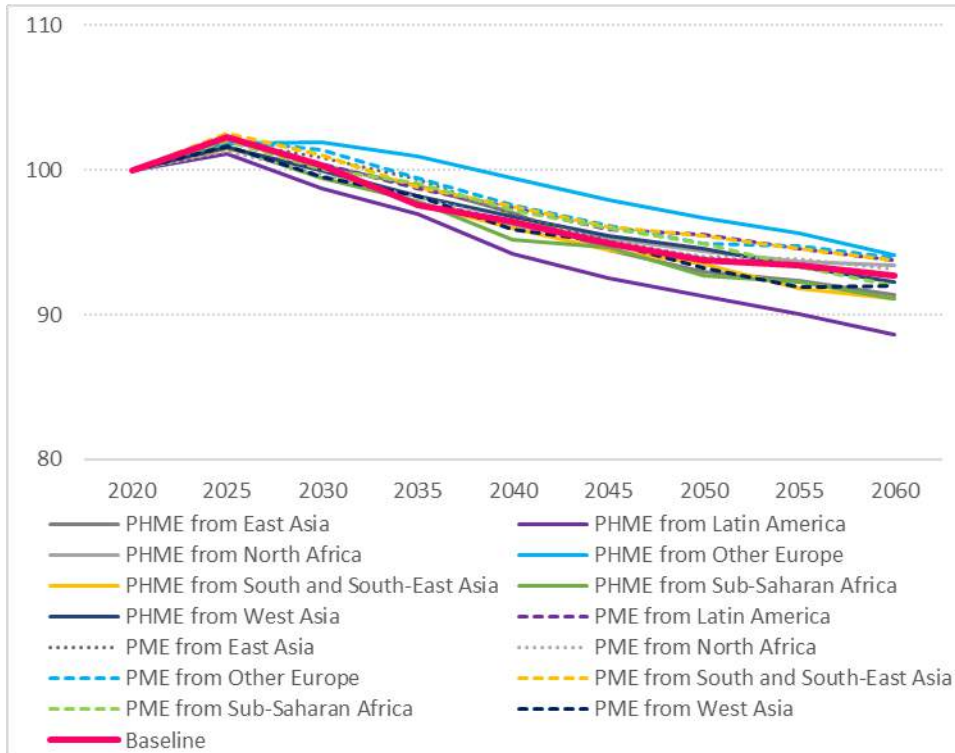




# ESTONIA

## Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

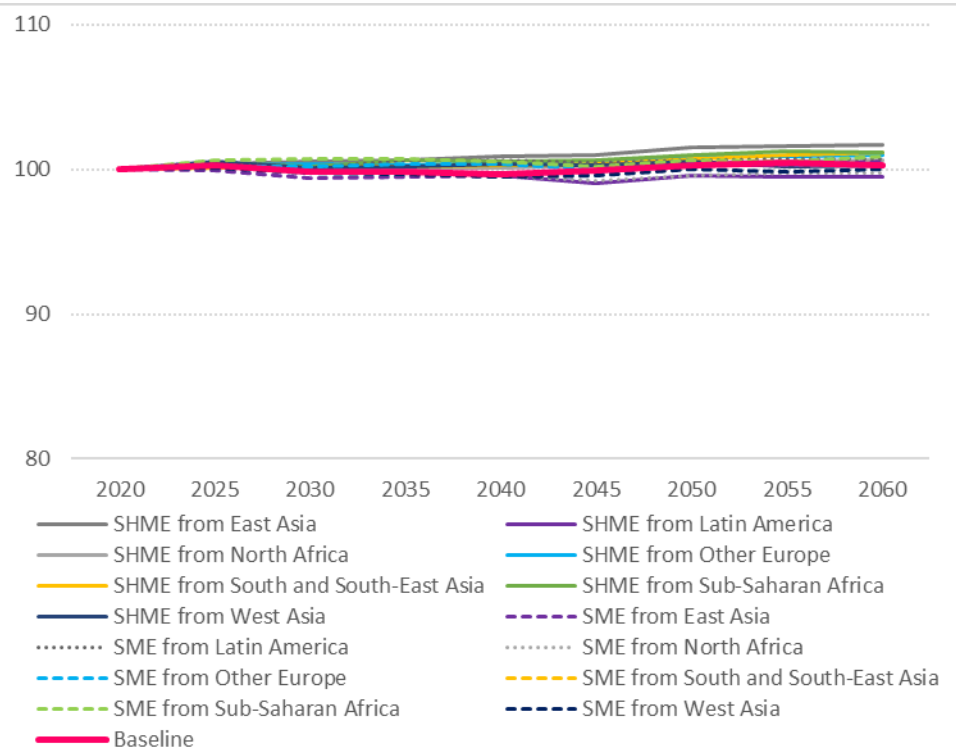
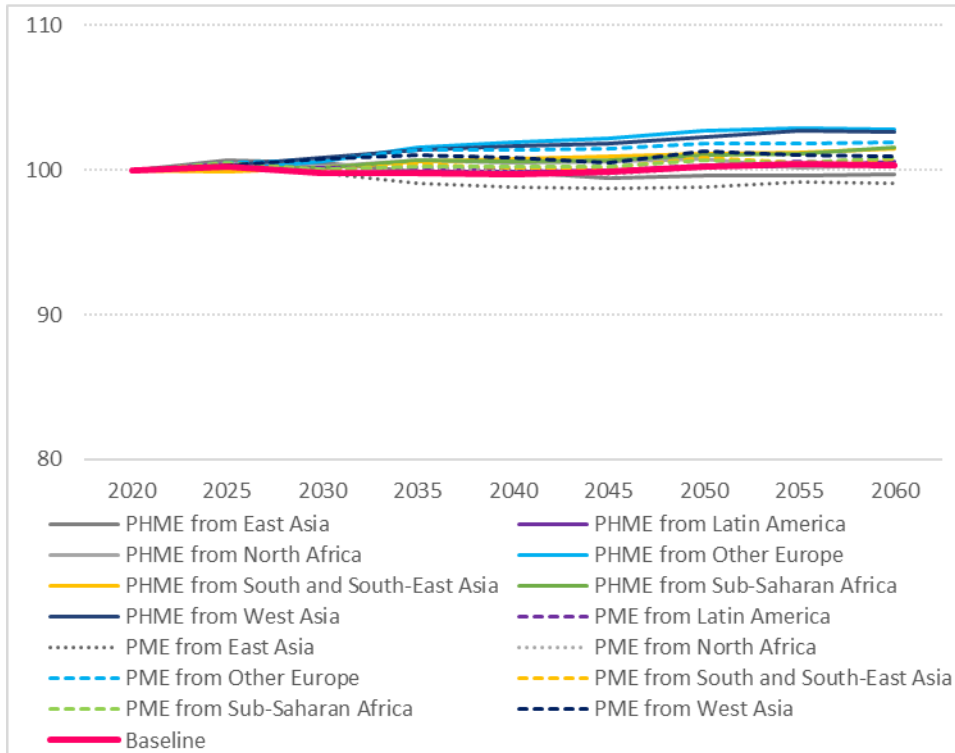




# FINLAND

## Relative change in total population size (2020 = 100)

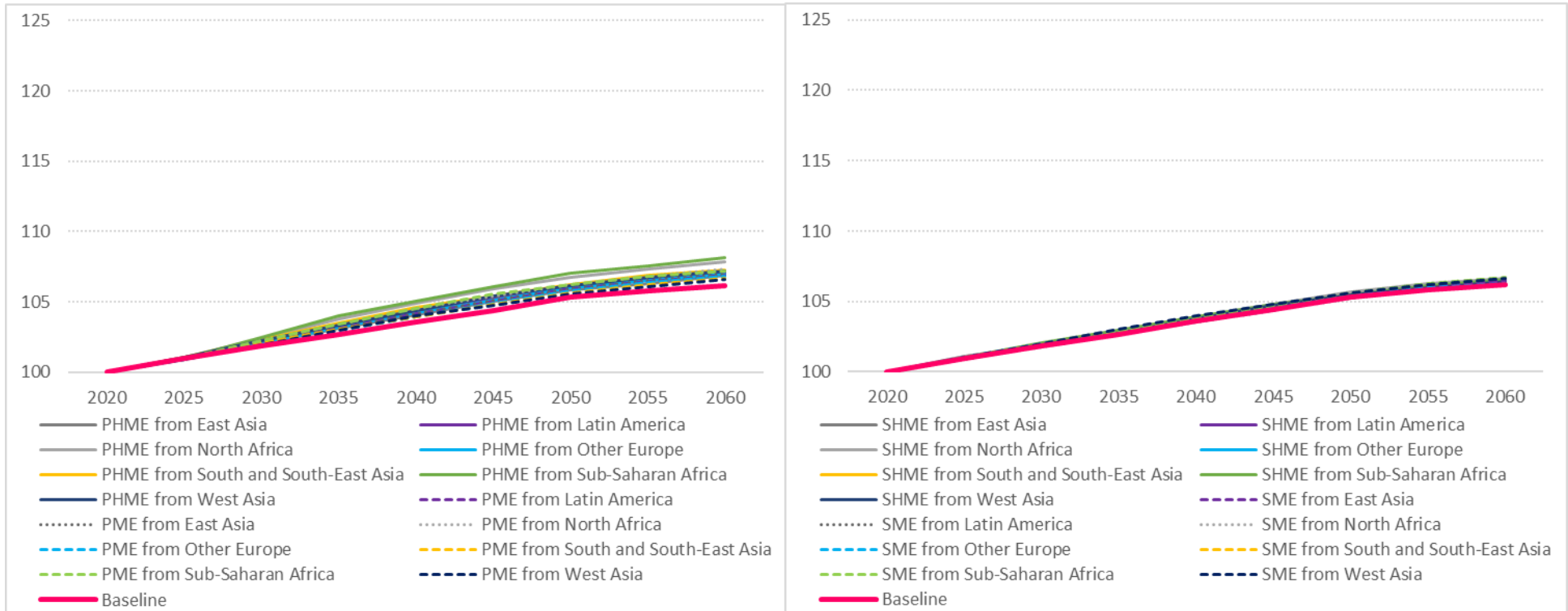
Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



# FRANCE

## Relative change in total population size (2020 = 100)

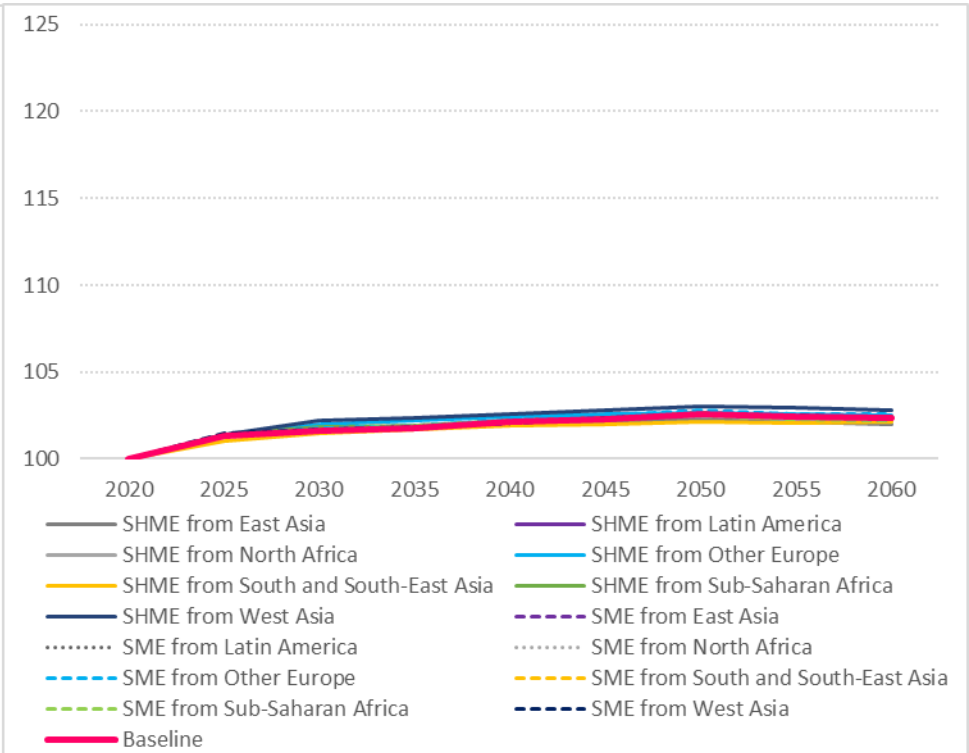
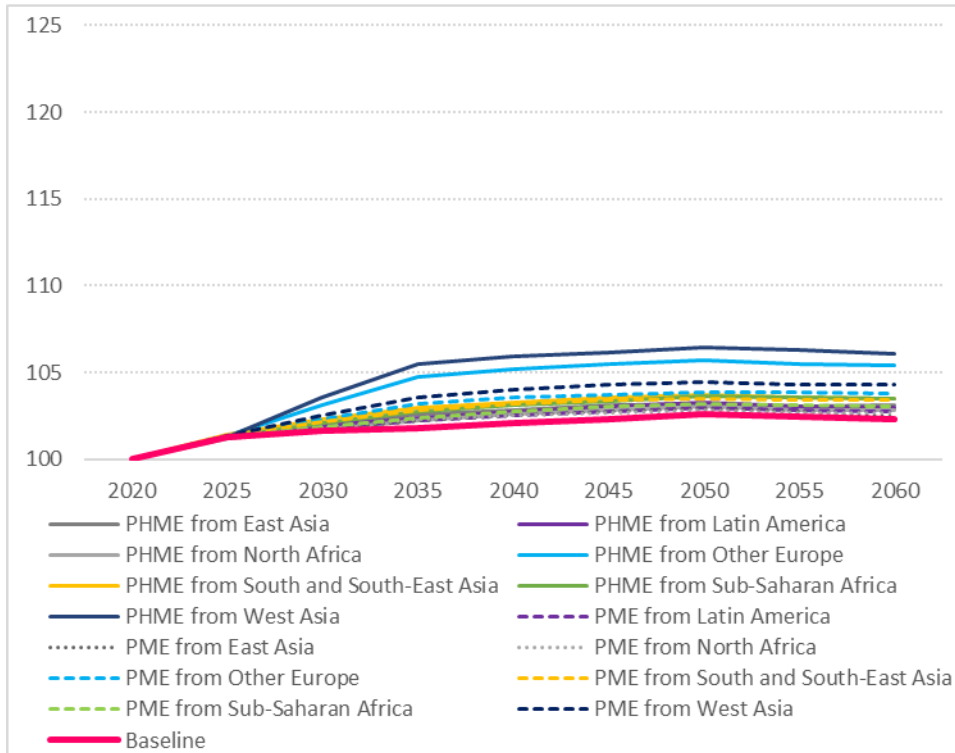
Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)



# GERMANY

## Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



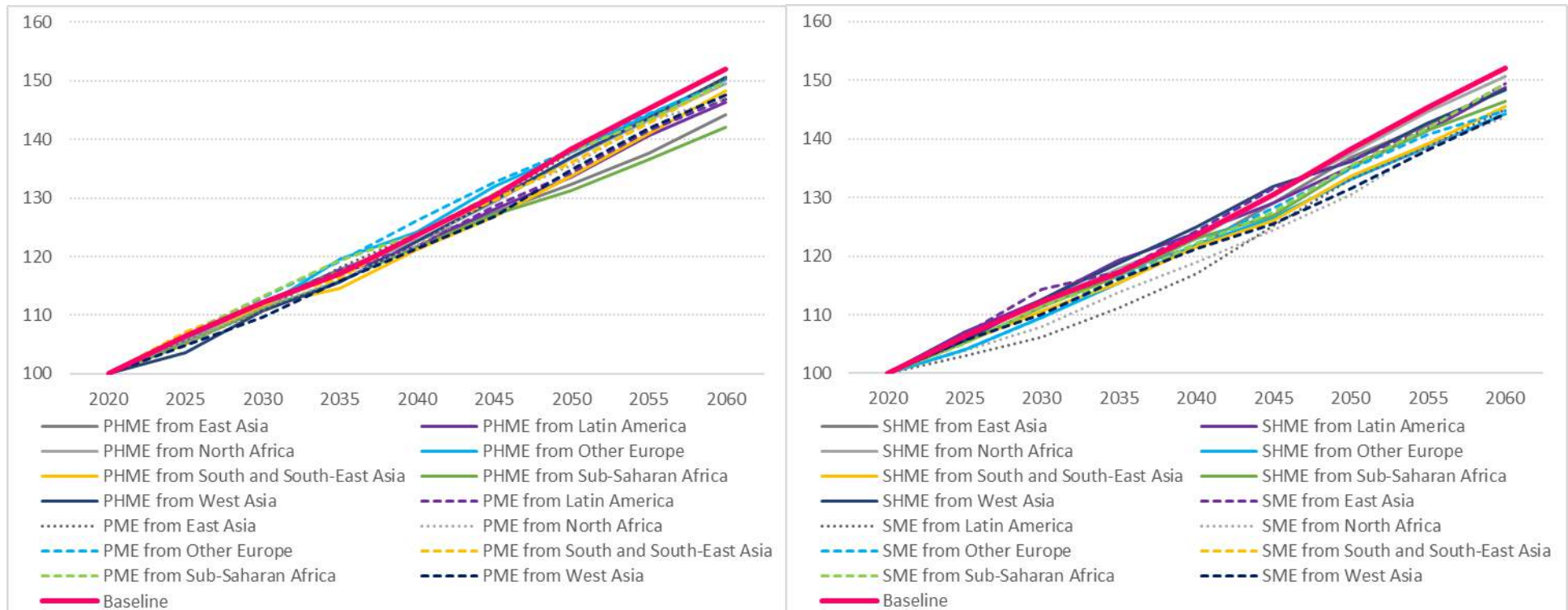




# ICELAND

## Relative change in total population size (2020 = 100)

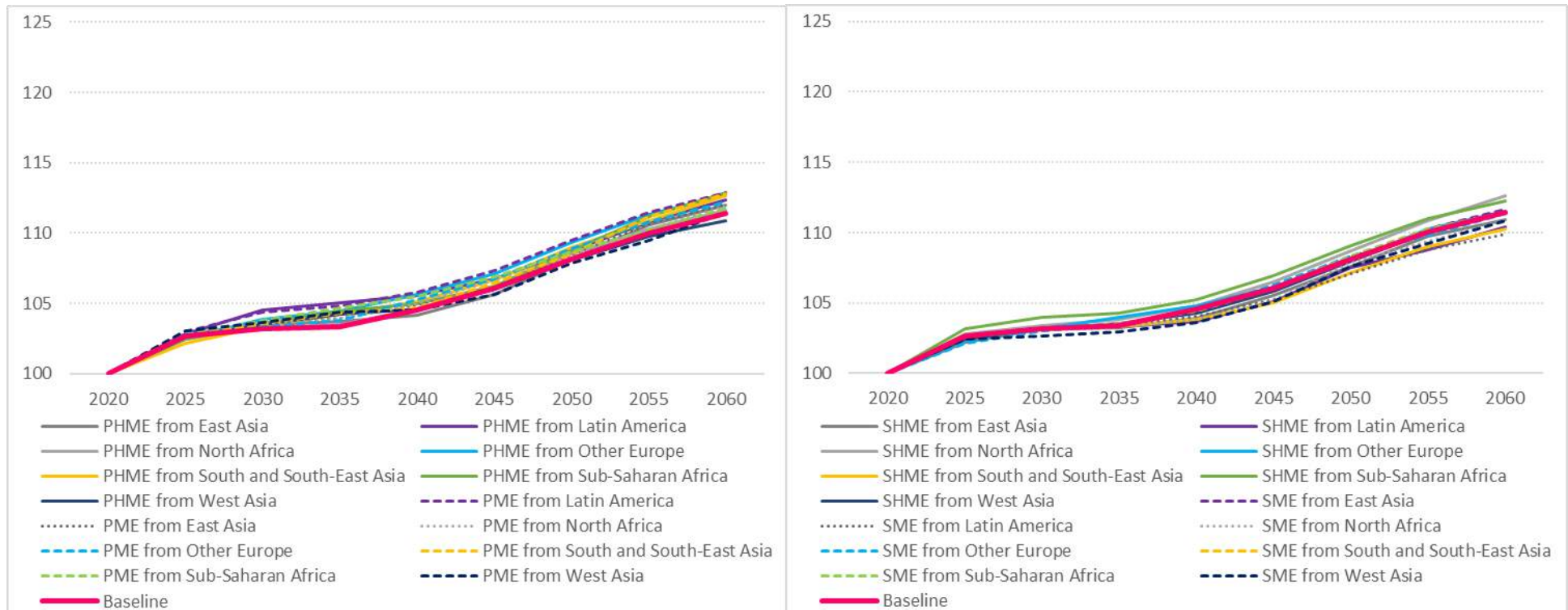
Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



## IRELAND

### Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)





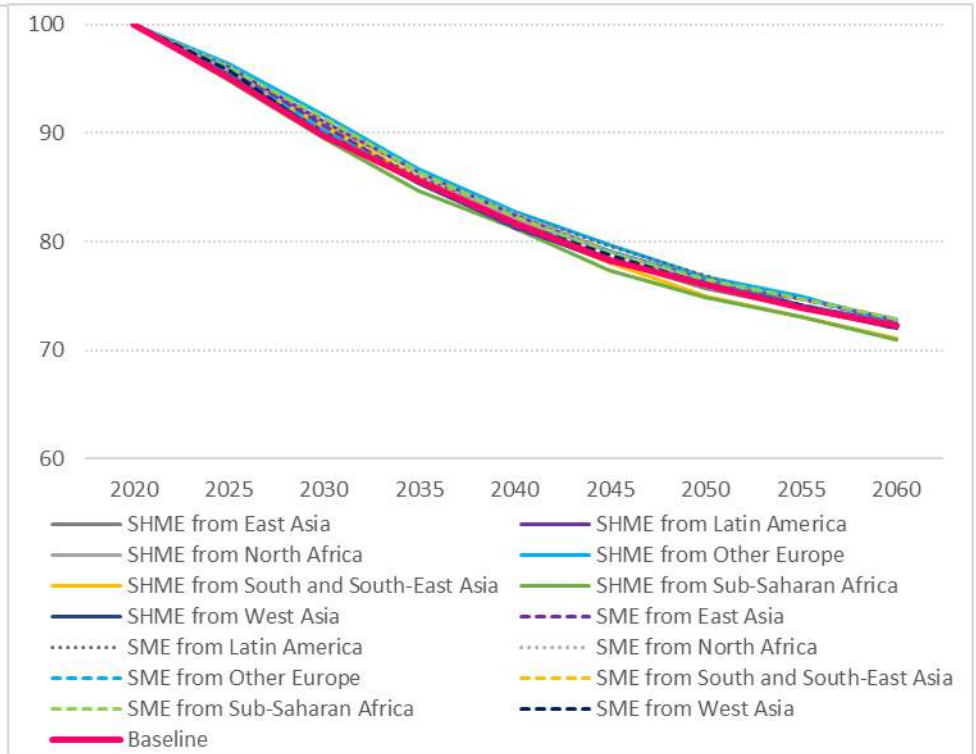
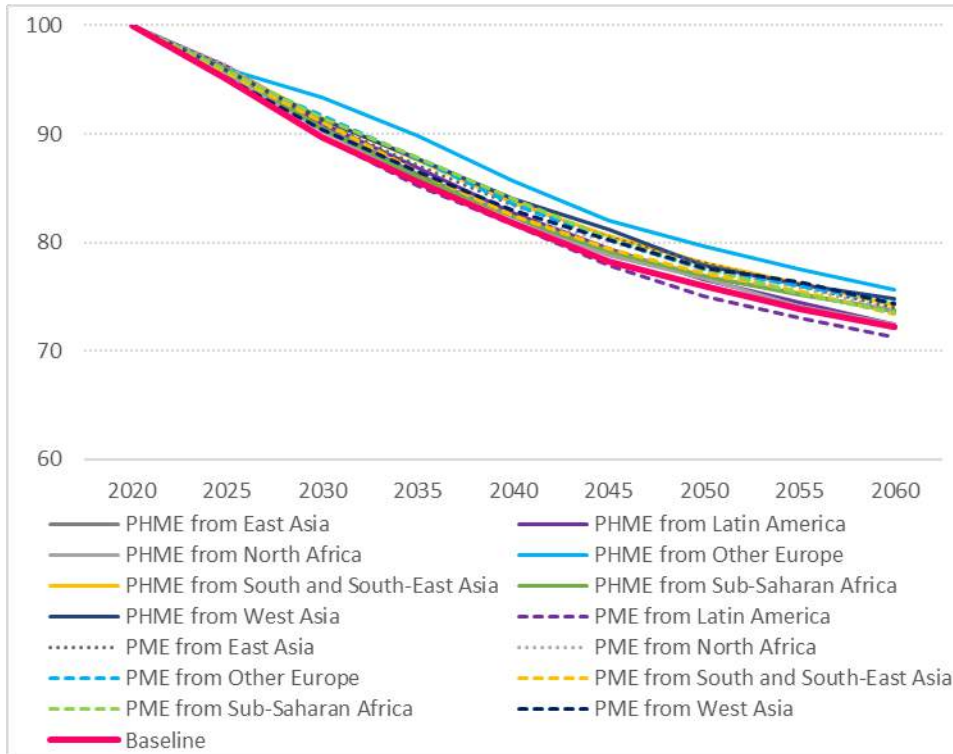


# LATVIA

## Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)

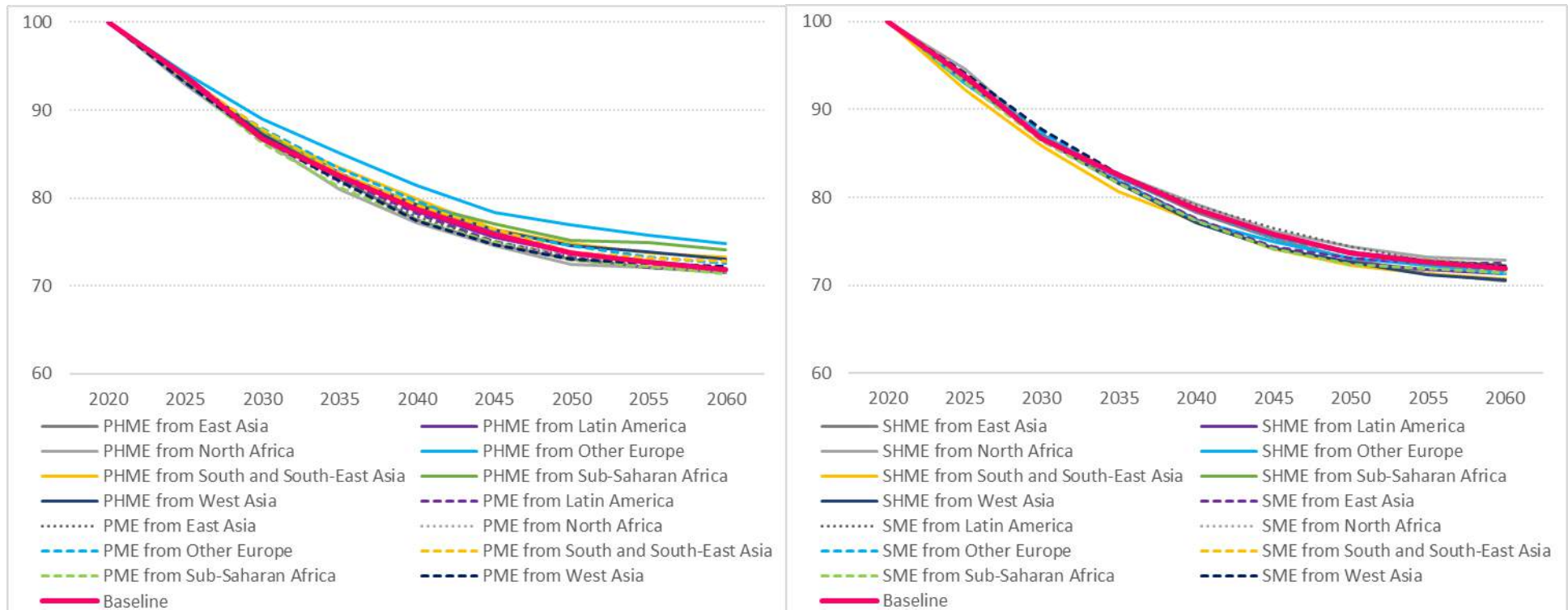
Short high-migration events (SHME) and Short migration events (SME)



# LITHUANIA

## Relative change in total population size (2020 = 100)

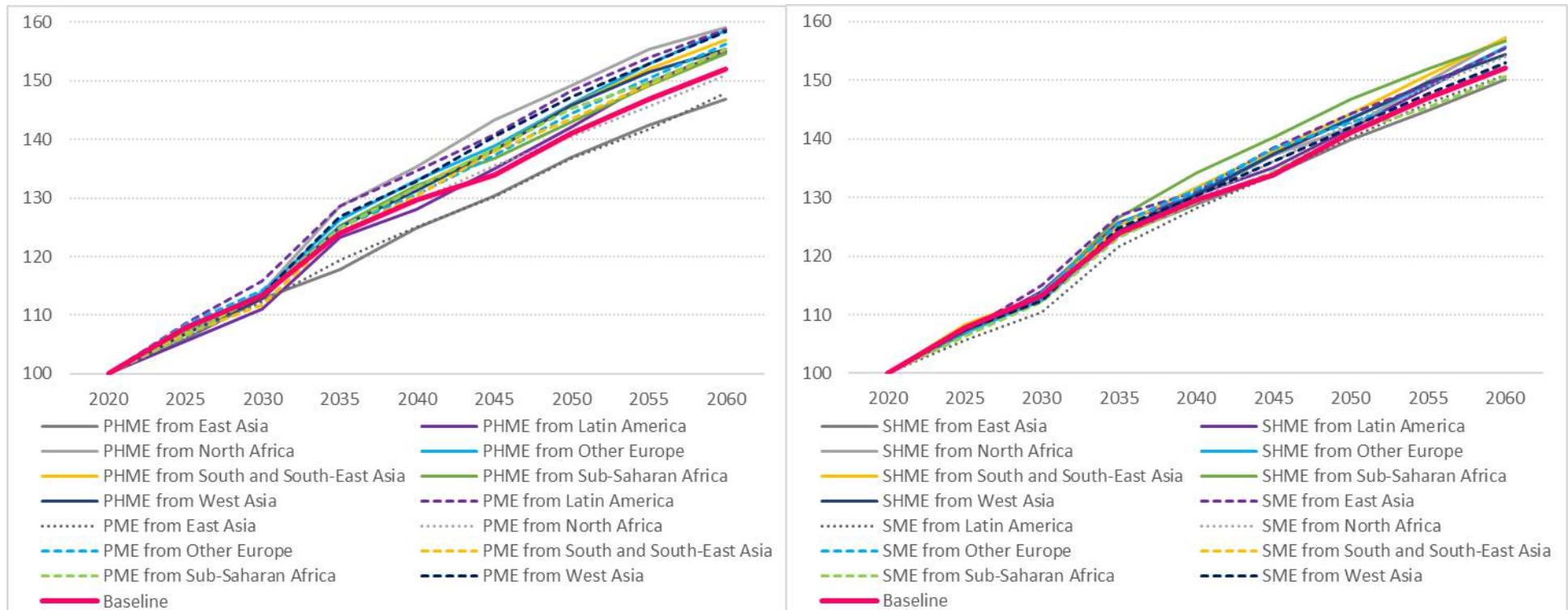
Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



# LUXEMBURG

## Relative change in total population size (2020 = 100)

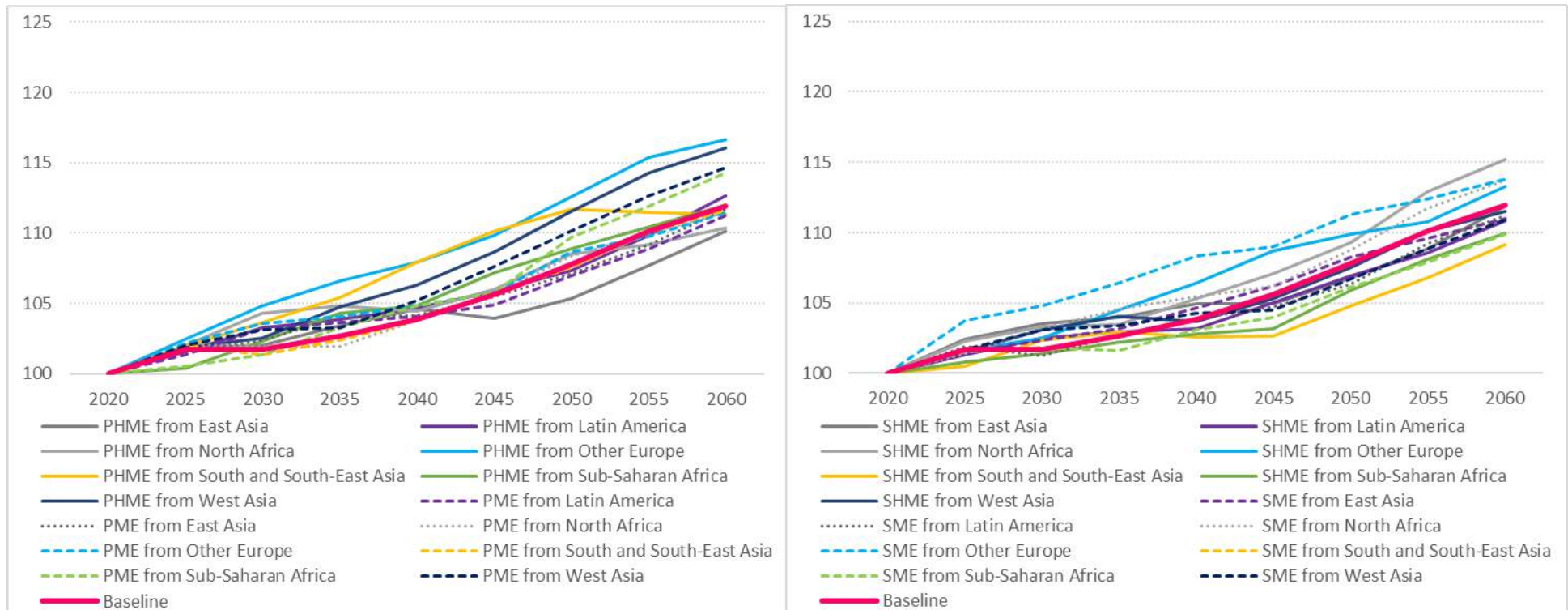
Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



# MALTA

## Relative change in total population size (2020 = 100)

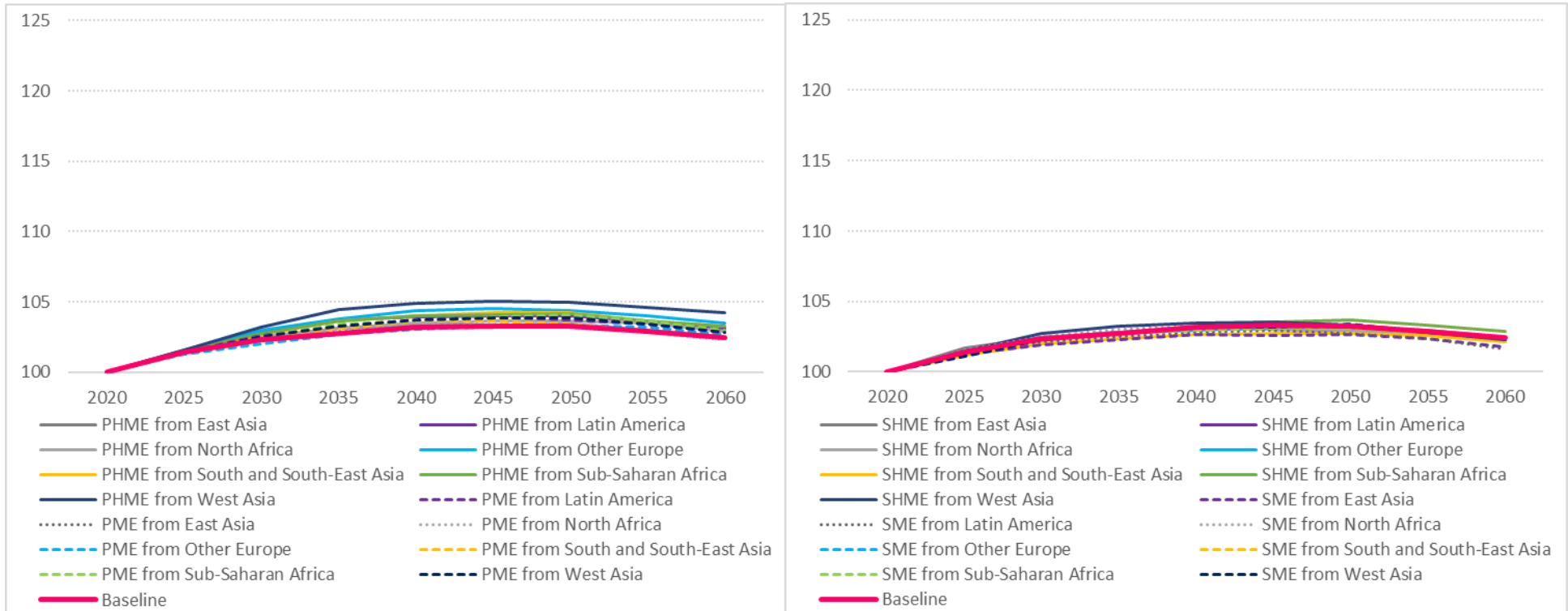
Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)



# NETHERLANDS

## Relative change in total population size (2020 = 100)

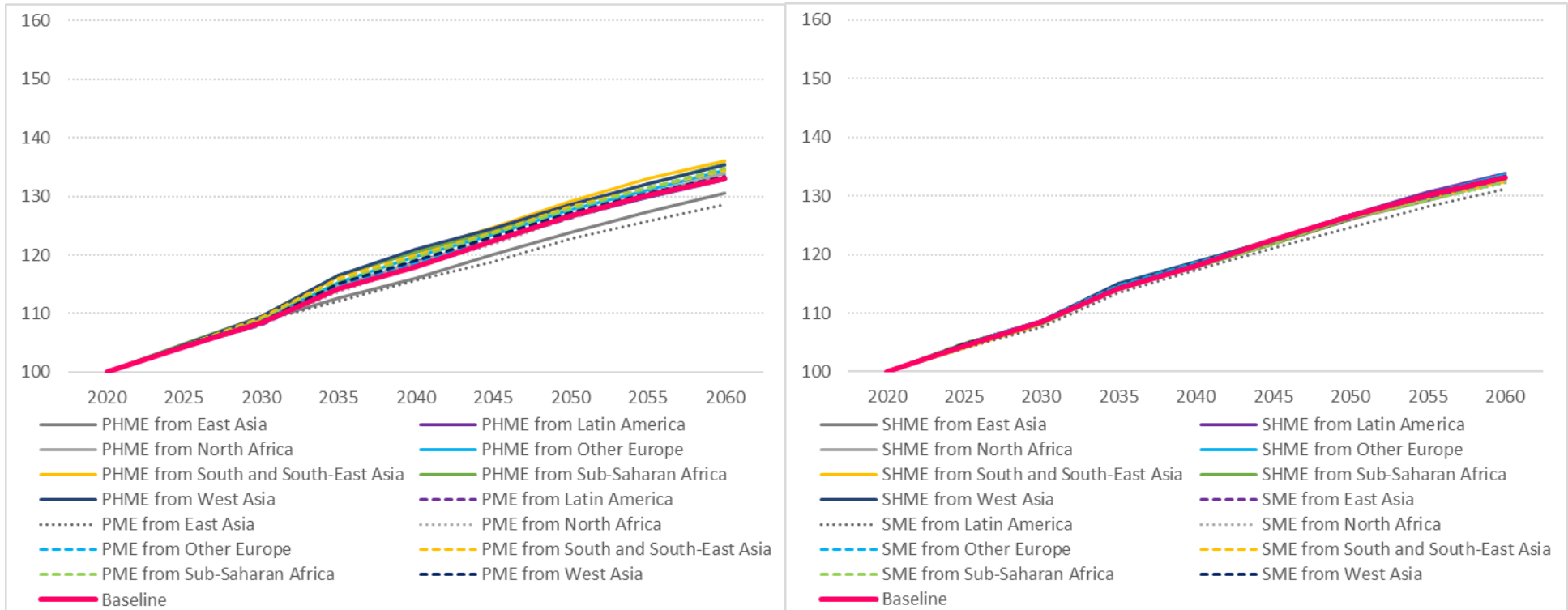
Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)



# NORWAY

## Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

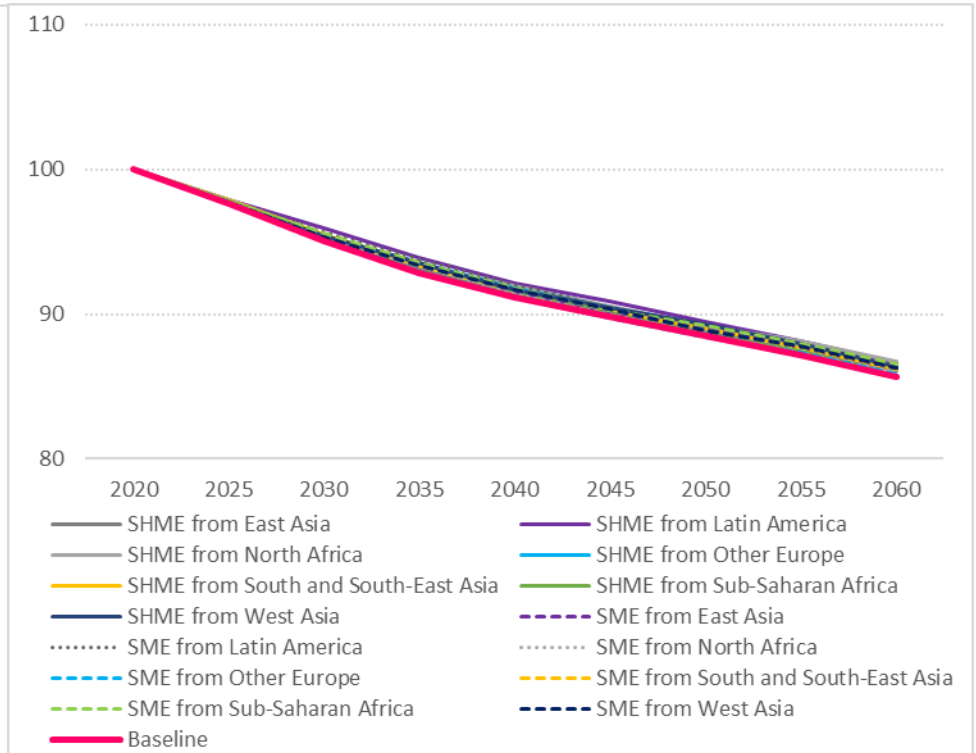
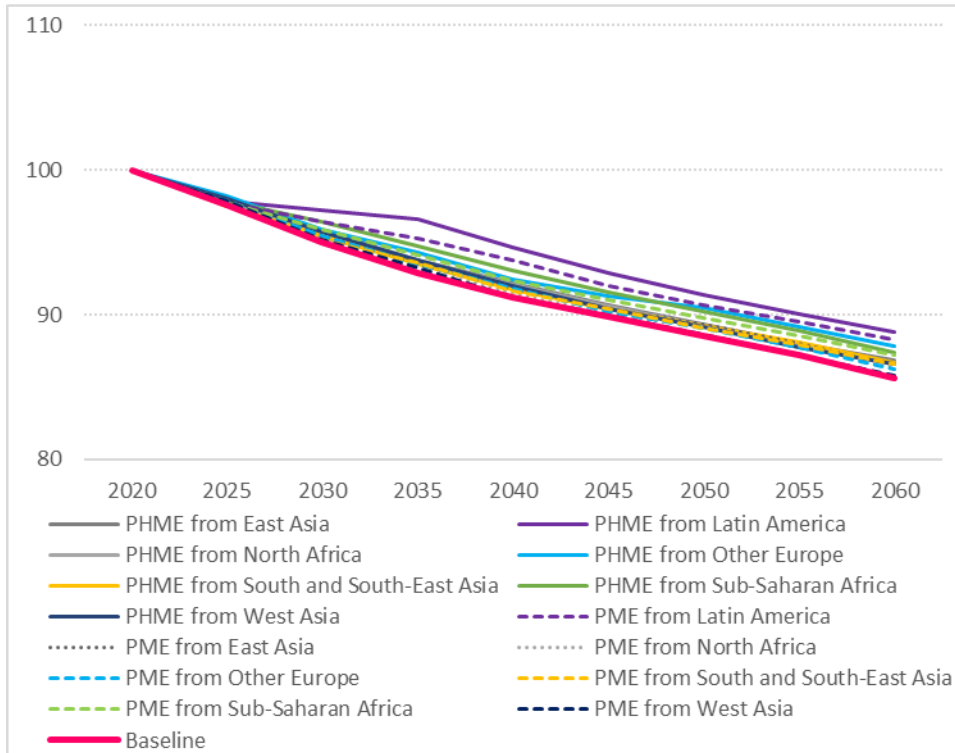




# PORTUGAL

## Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)





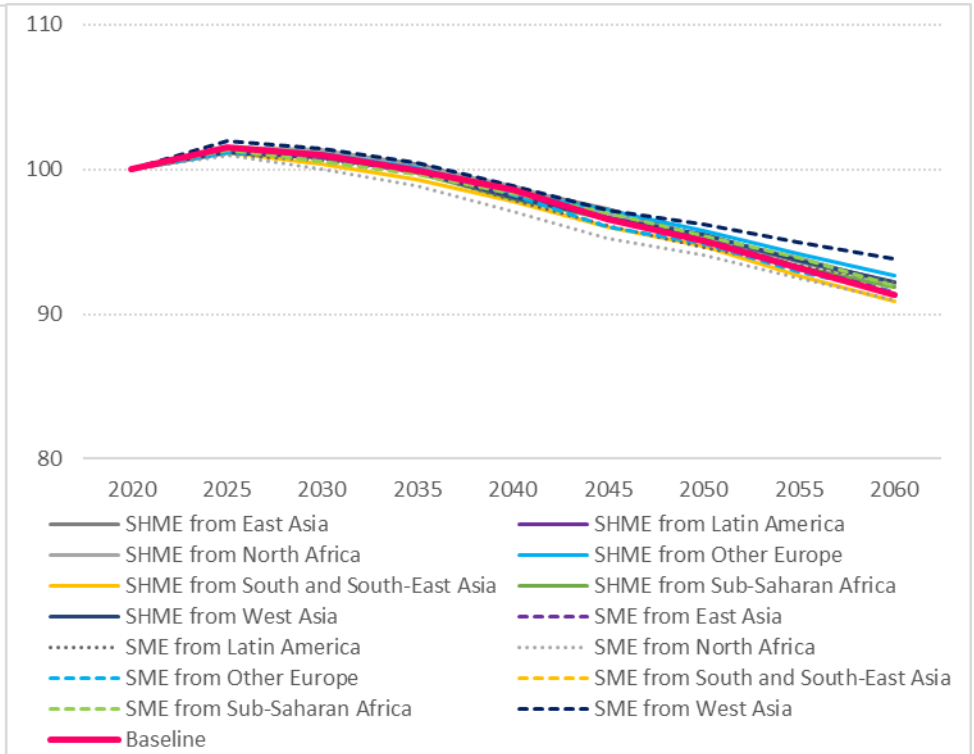
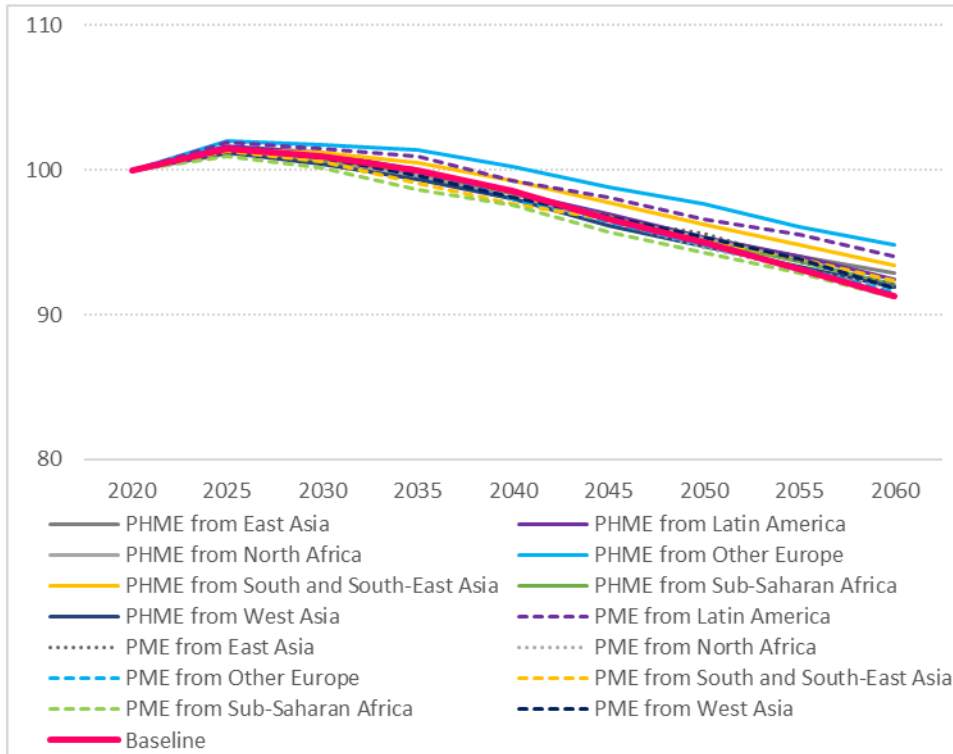


# SLOVAKIA

## Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)

Short high-migration events (SHME) and Short migration events (SME)



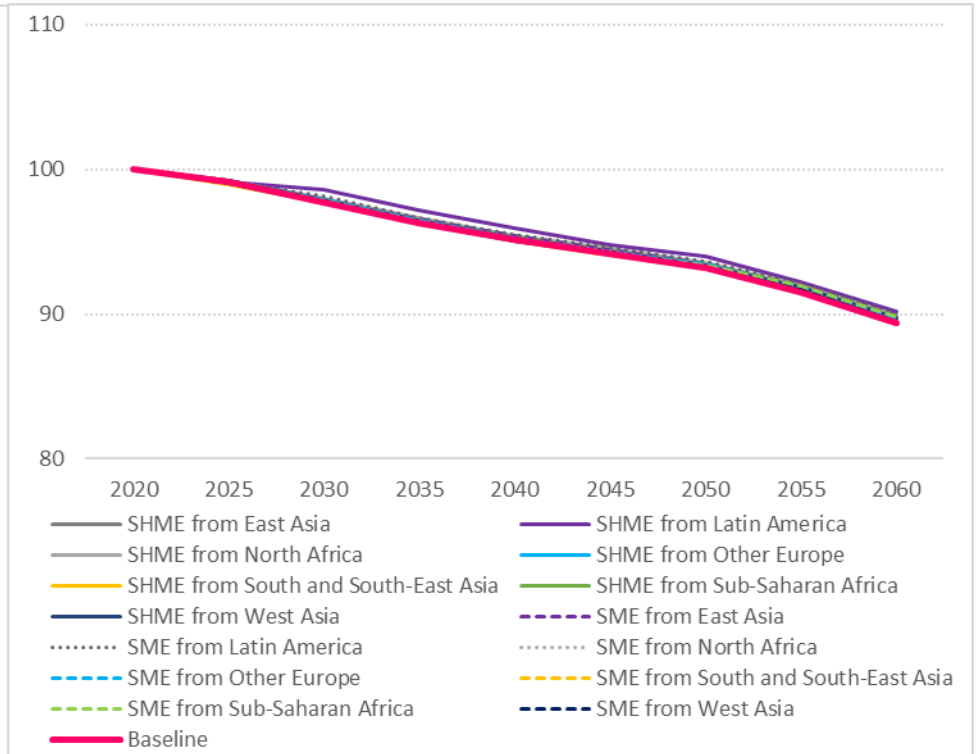
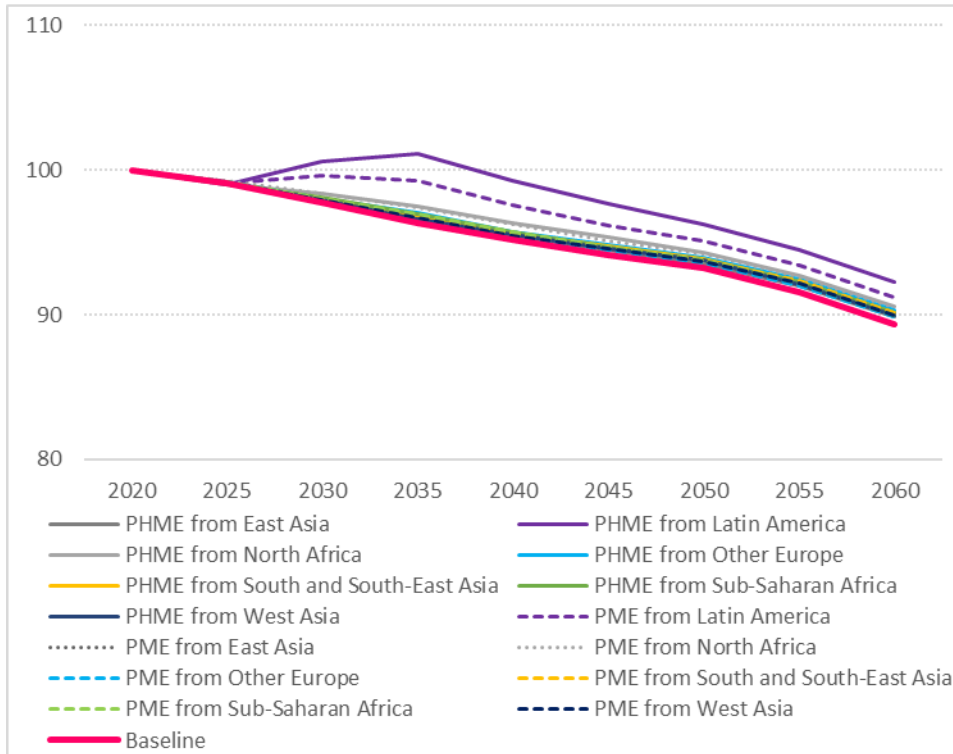


# SPAIN

## Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)

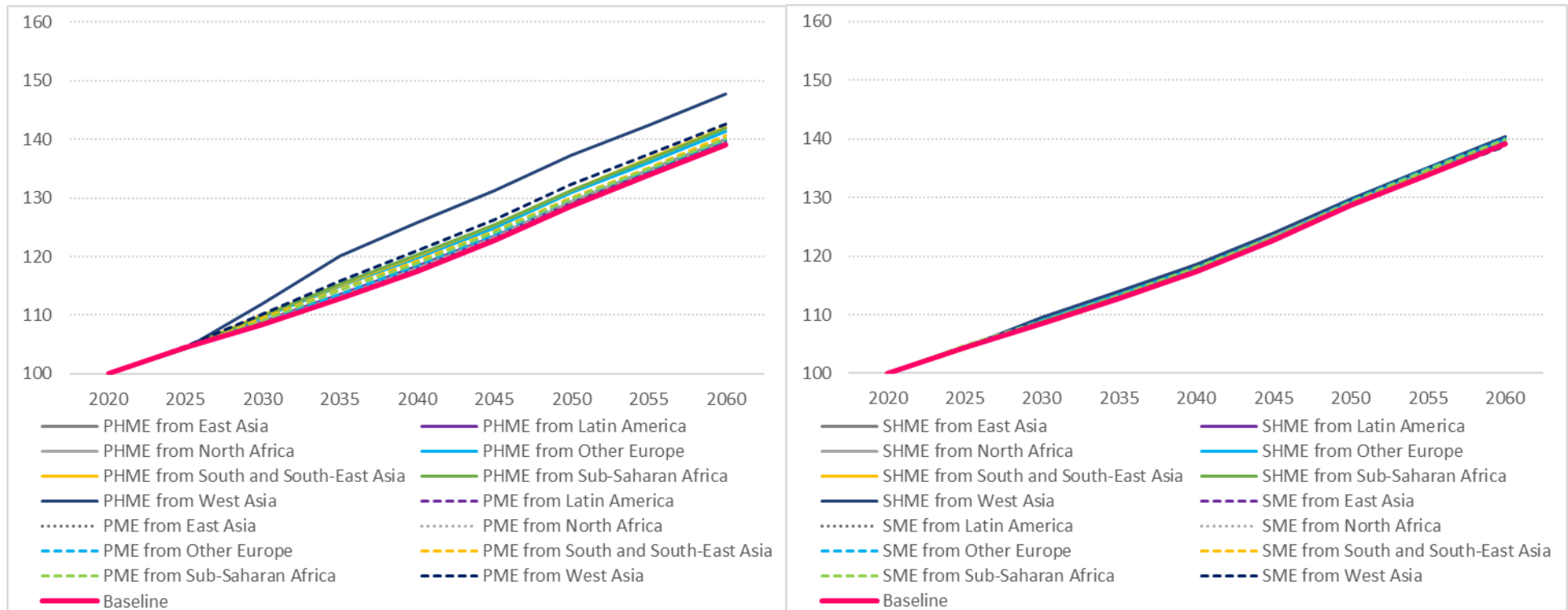
Short high-migration events (SHME) and Short migration events (SME)



# SWEDEN

## Relative change in total population size (2020 = 100)

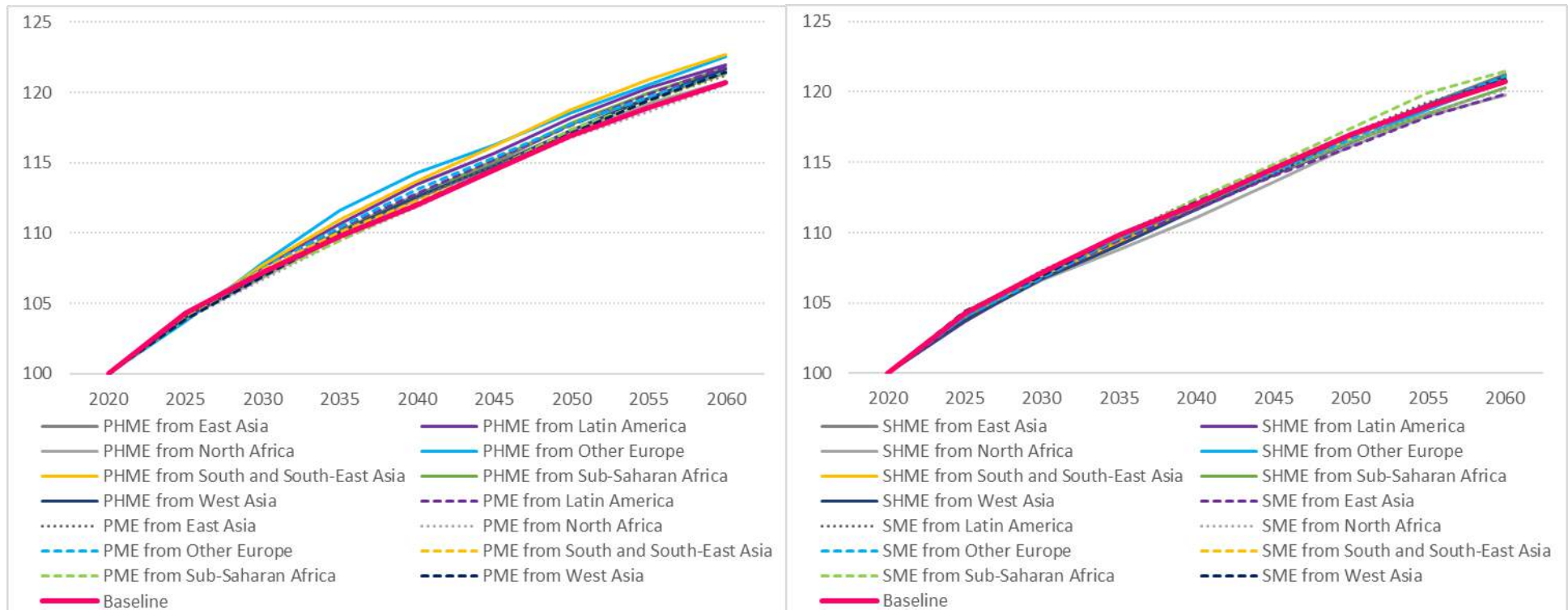
Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



## SWITZERLAND

### Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

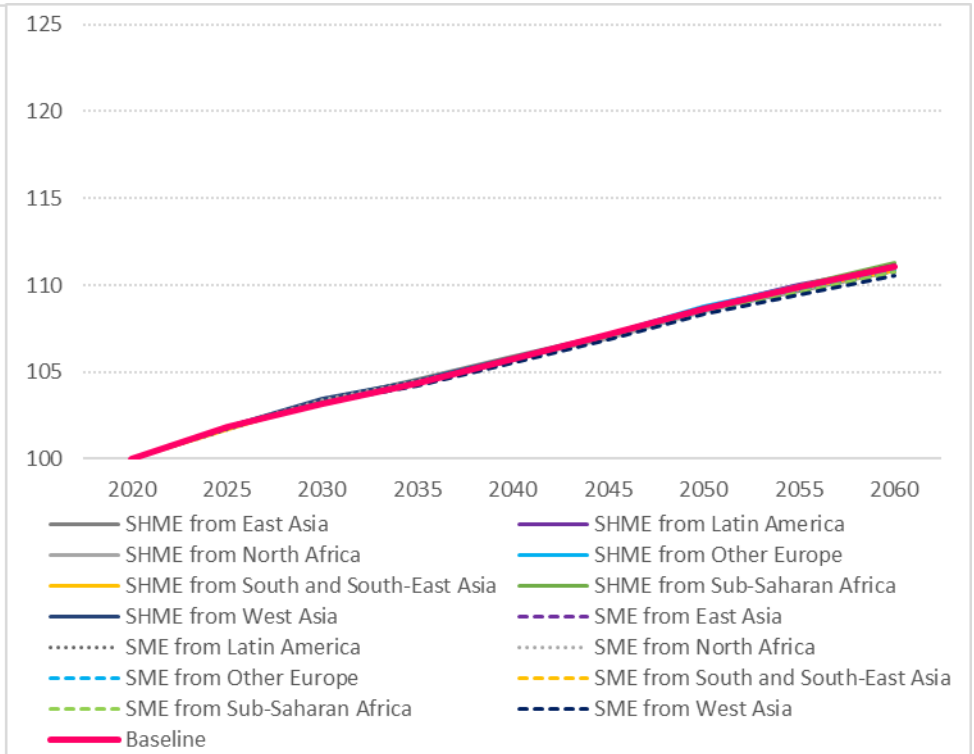
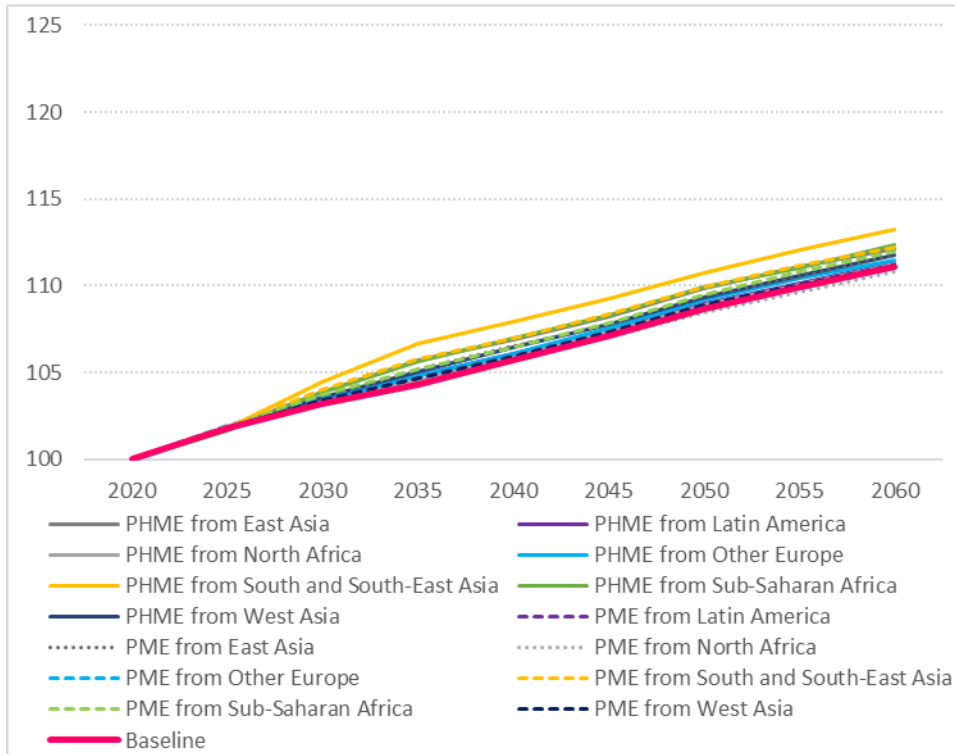


# UNITED KINGDOM

Relative change in total population size (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)

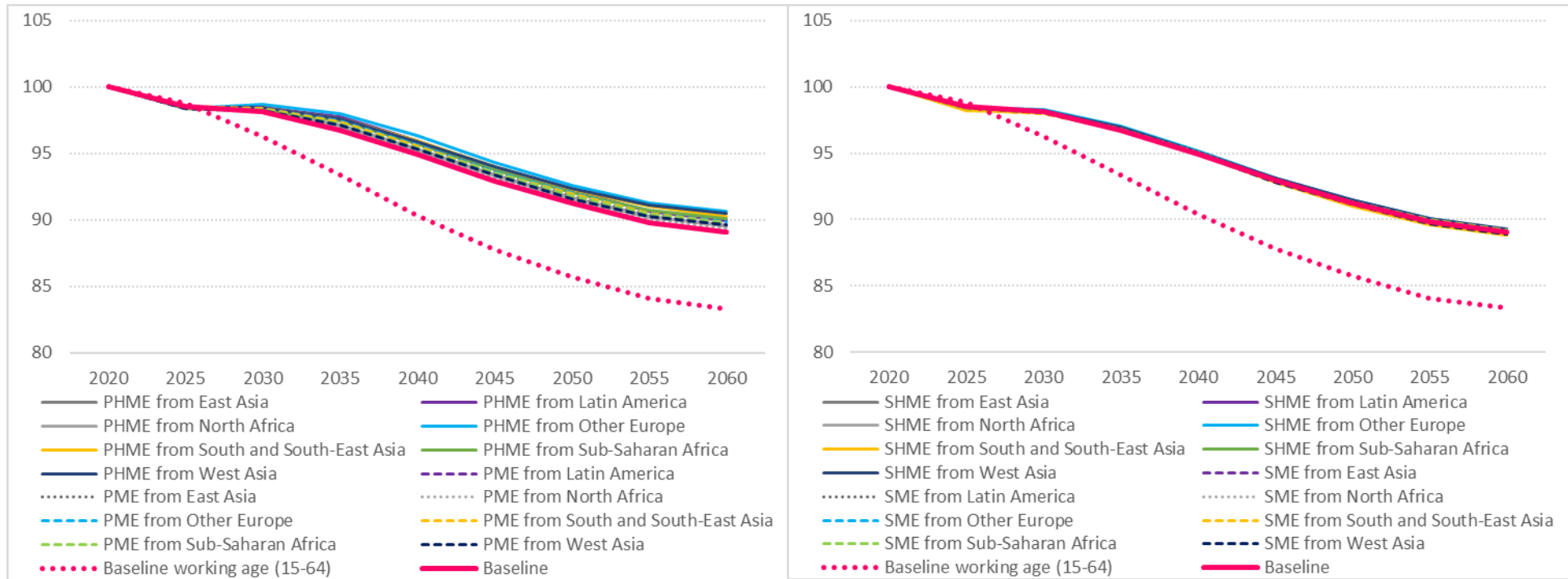
Short high-migration events (SHME) and Short migration events (SME)



## EU+

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)



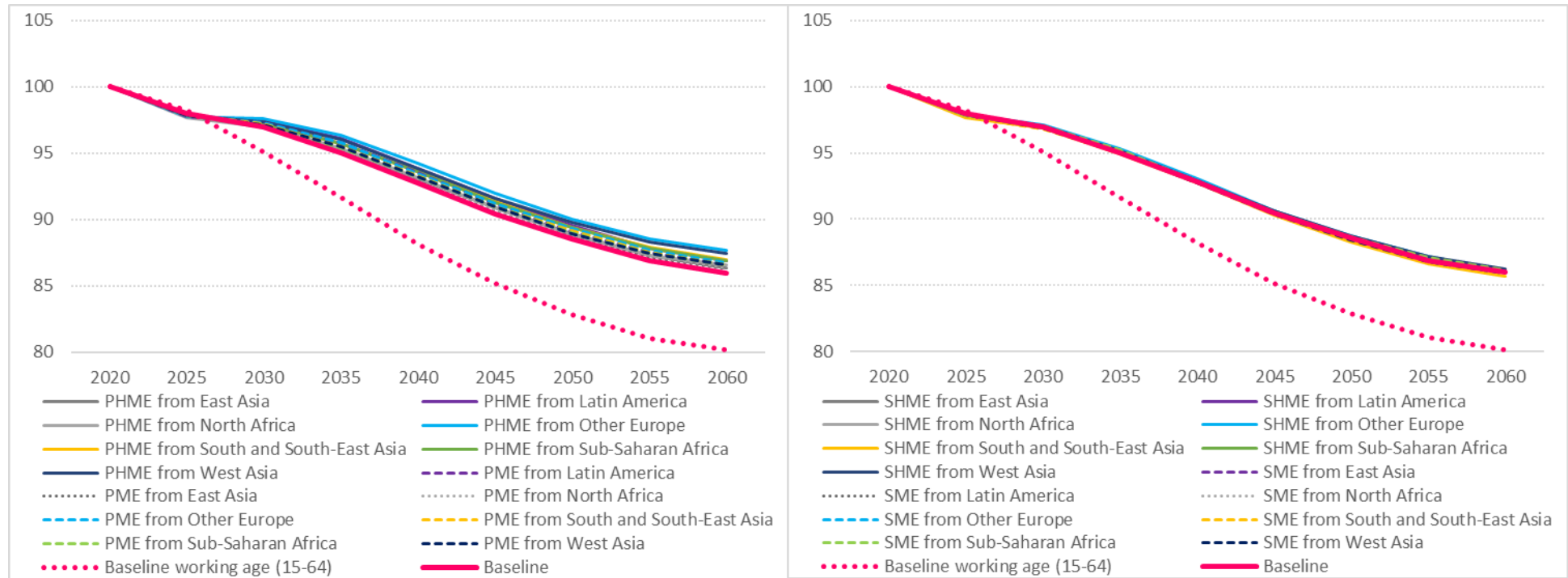
Note: \* persons can be active in the labour force between age 15 and 74



# EU27

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

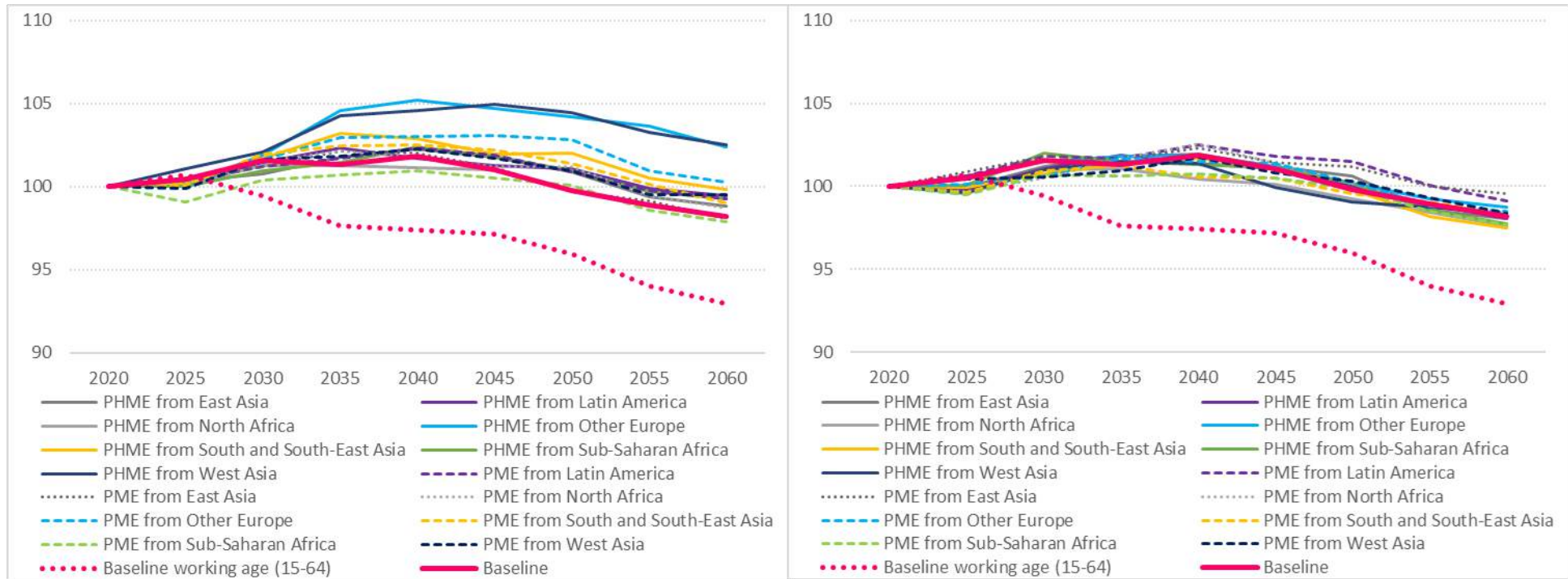


Note: \* persons can be active in the labour force between age 15 and 74

## AUSTRIA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

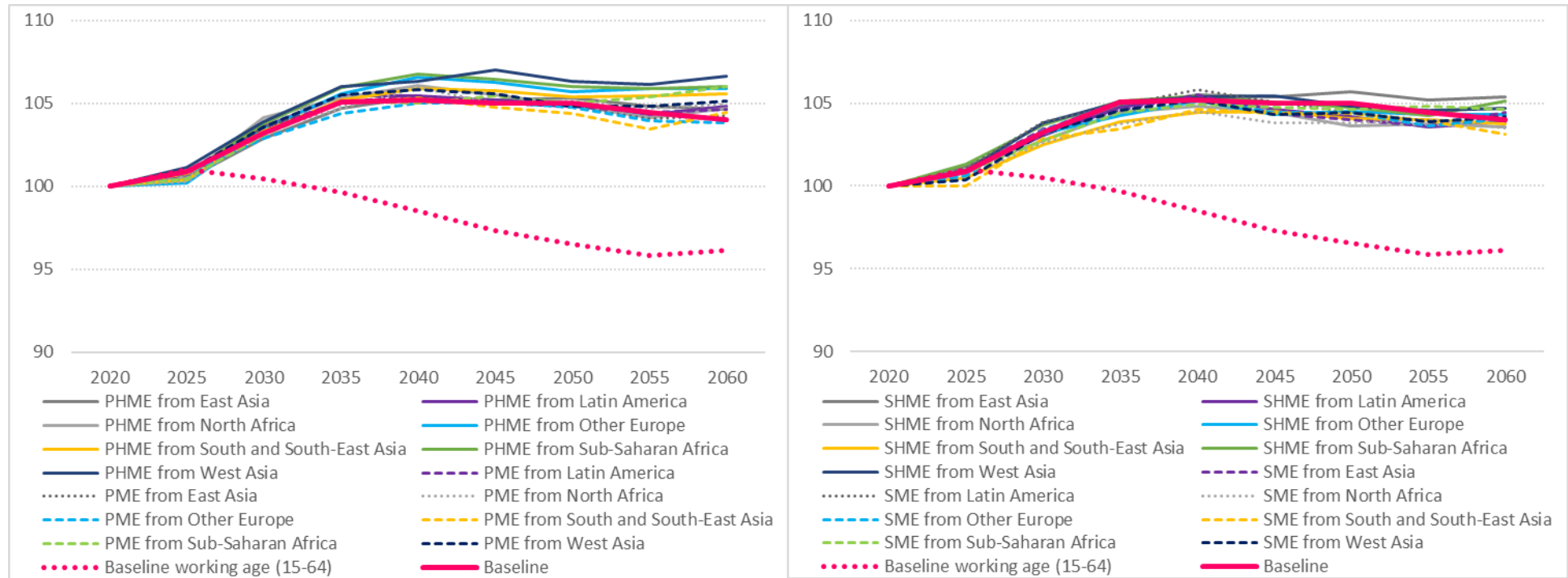


Note: \* persons can be active in the labour force between age 15 and 74

# BELGIUM

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

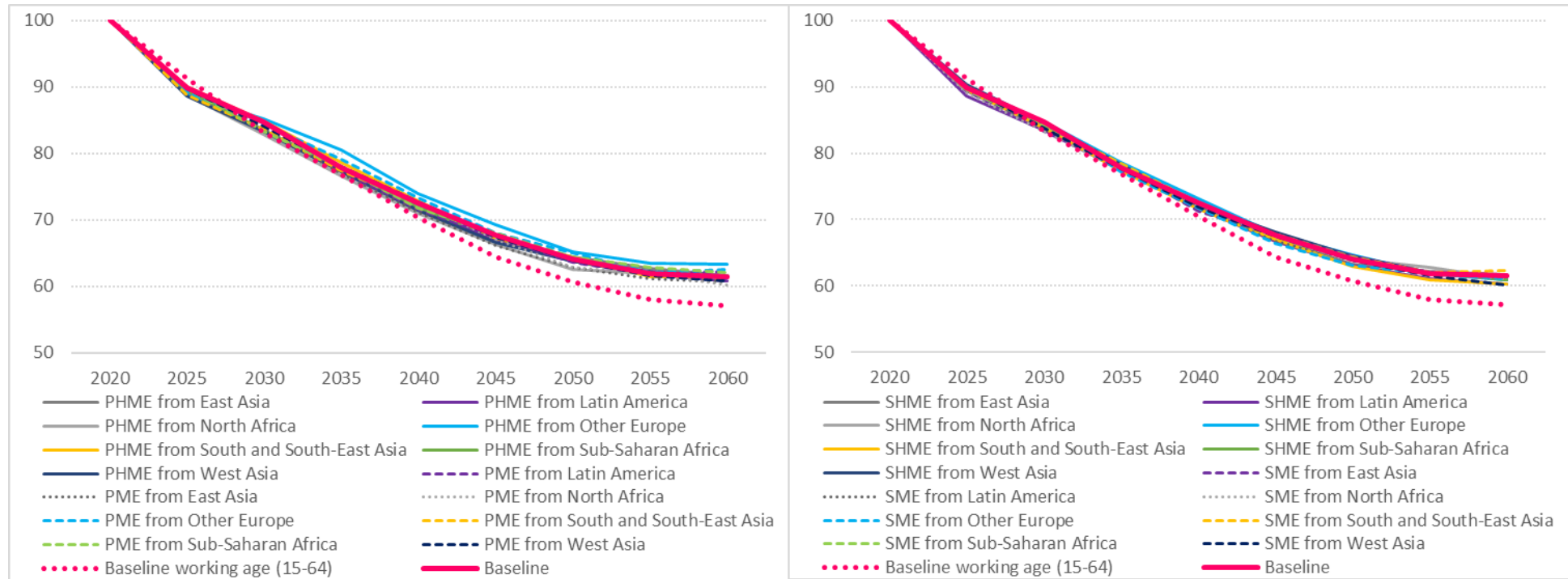


Note: \* persons can be active in the labour force between age 15 and 74

## BULGARIA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

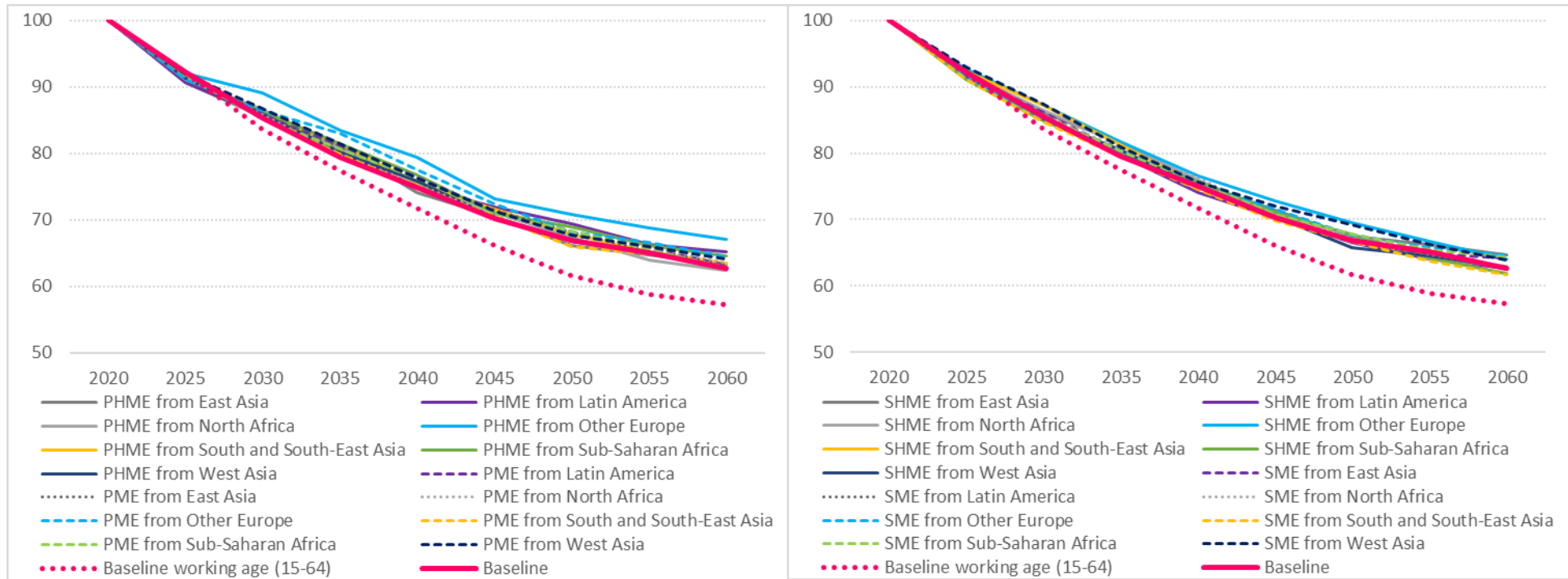


Note: \* persons can be active in the labour force between age 15 and 74

## CROATIA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

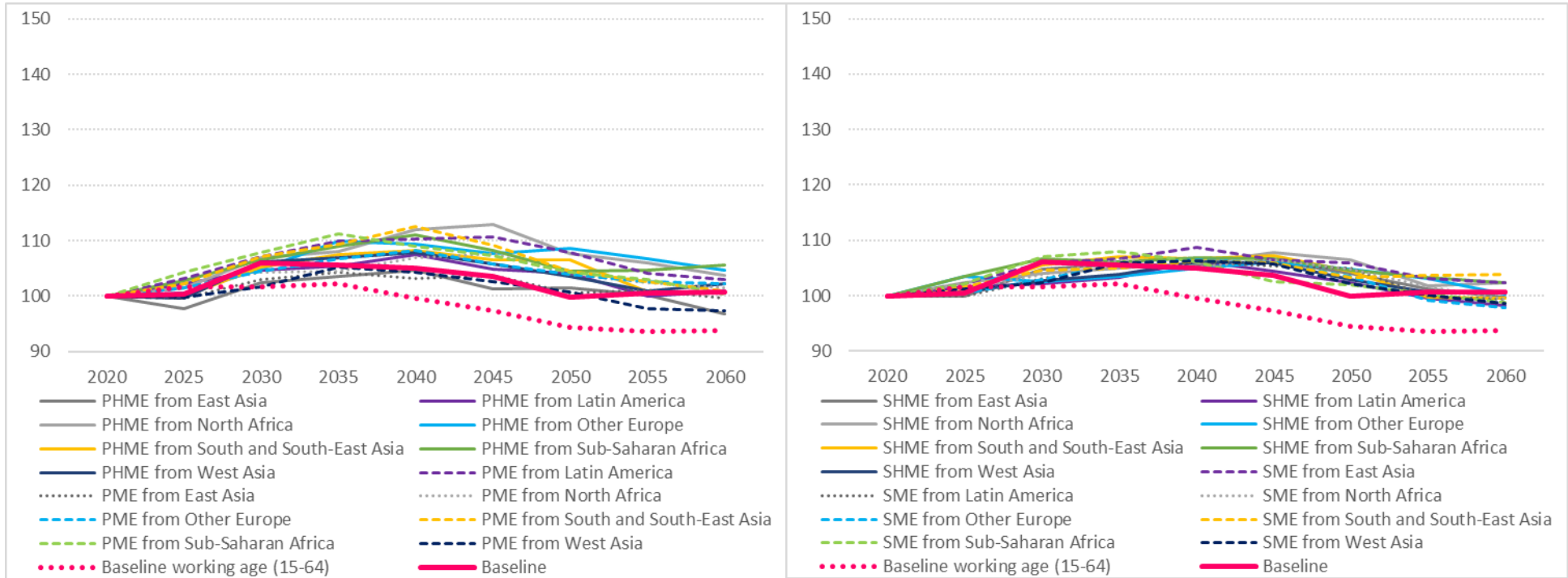


Note: \* persons can be active in the labour force between age 15 and 74

# CYPRUS

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

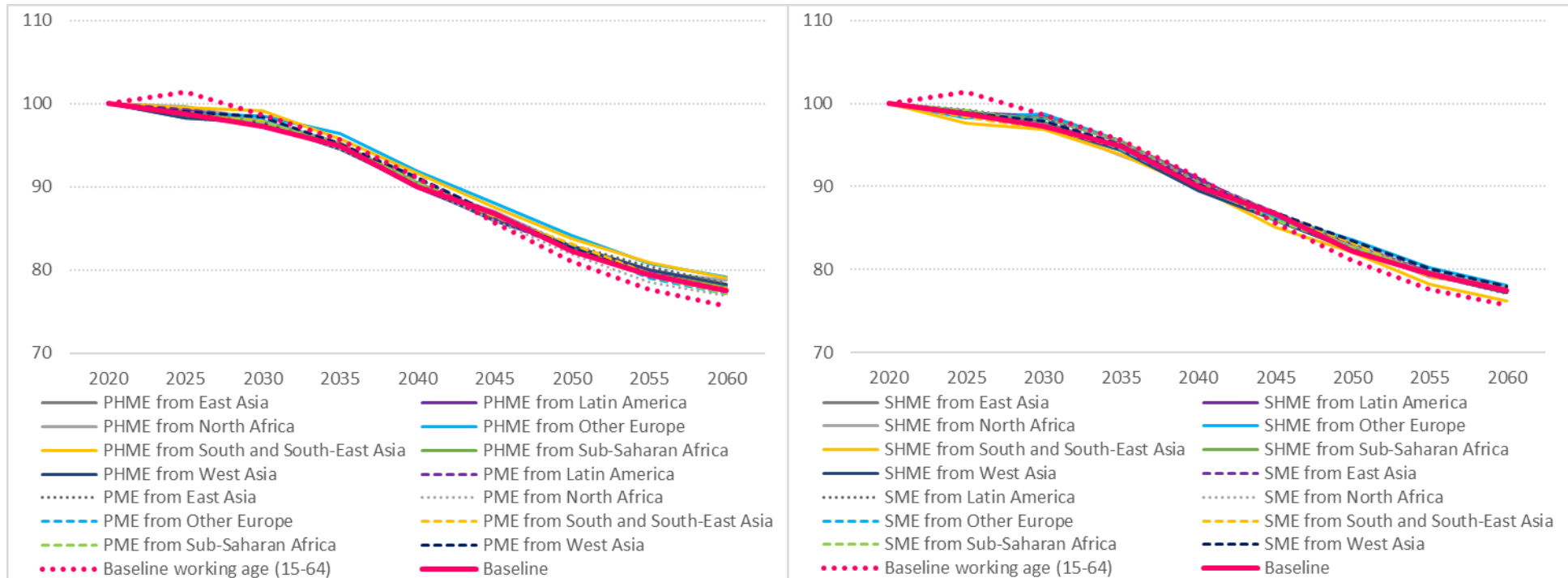


Note: \* persons can be active in the labour force between age 15 and 74

## CZECHIA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

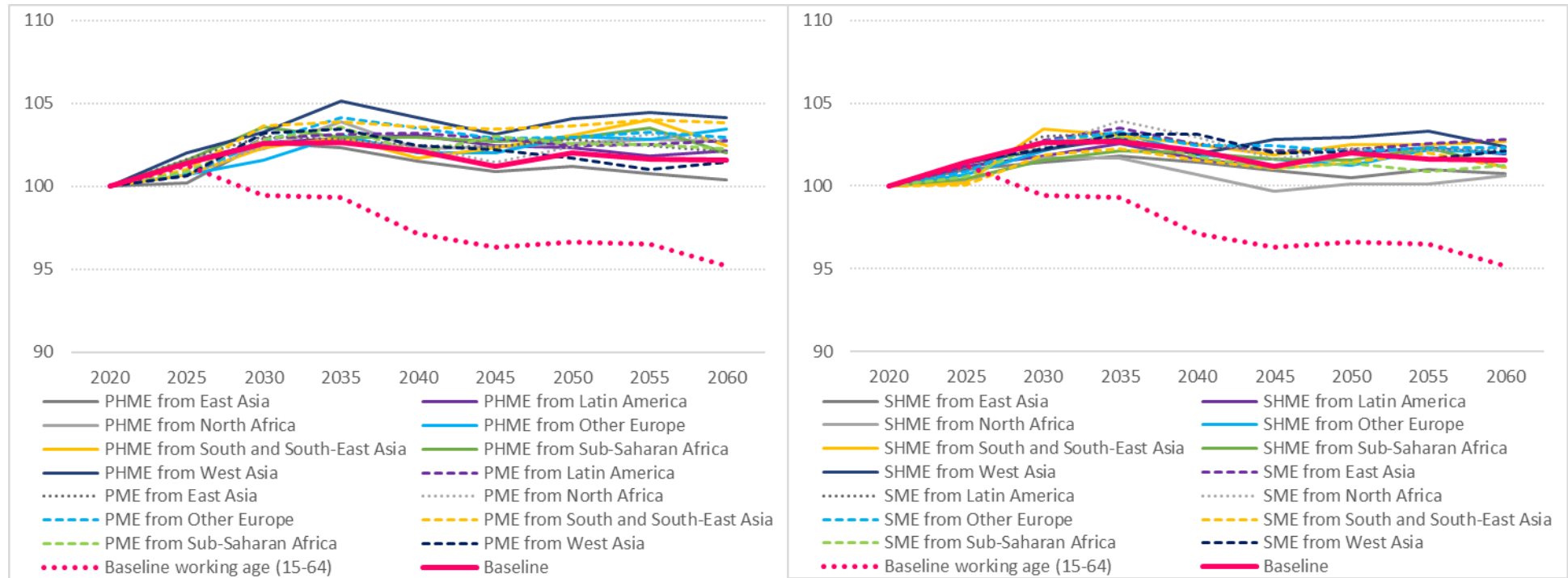


Note: \* persons can be active in the labour force between age 15 and 74

# DENMARK

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



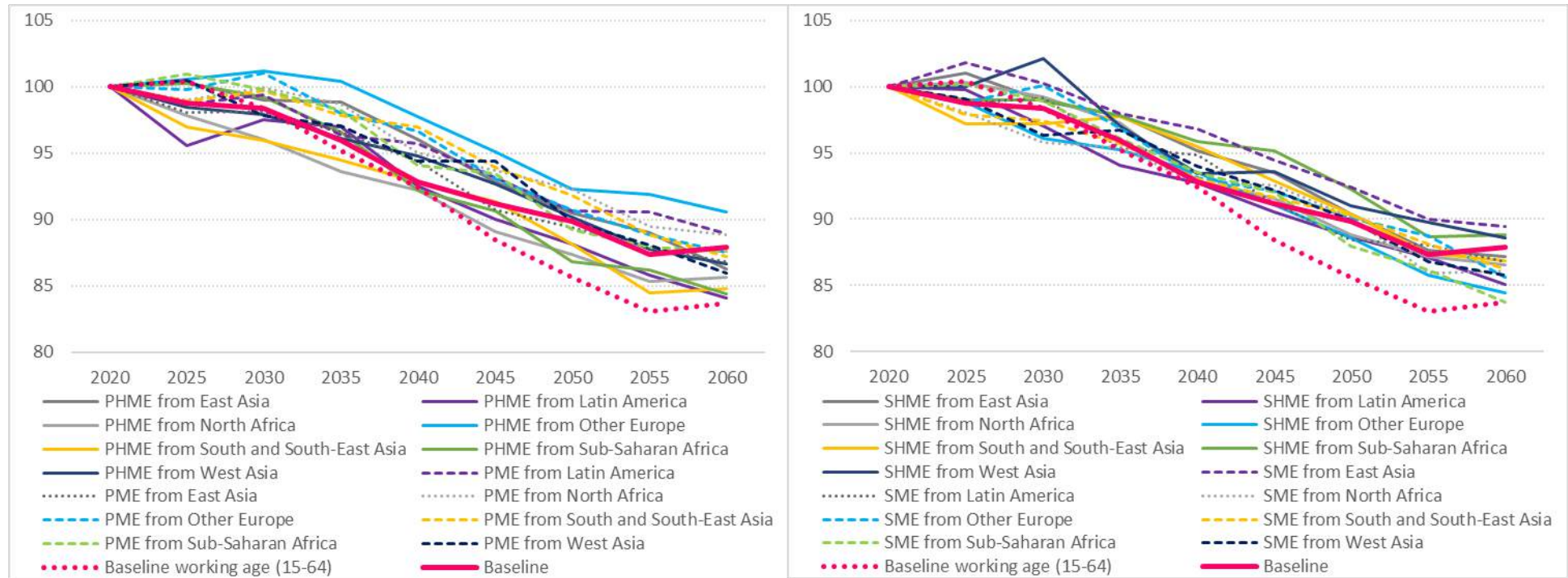
Note: \* persons can be active in the labour force between age 15 and 74



# ESTONIA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

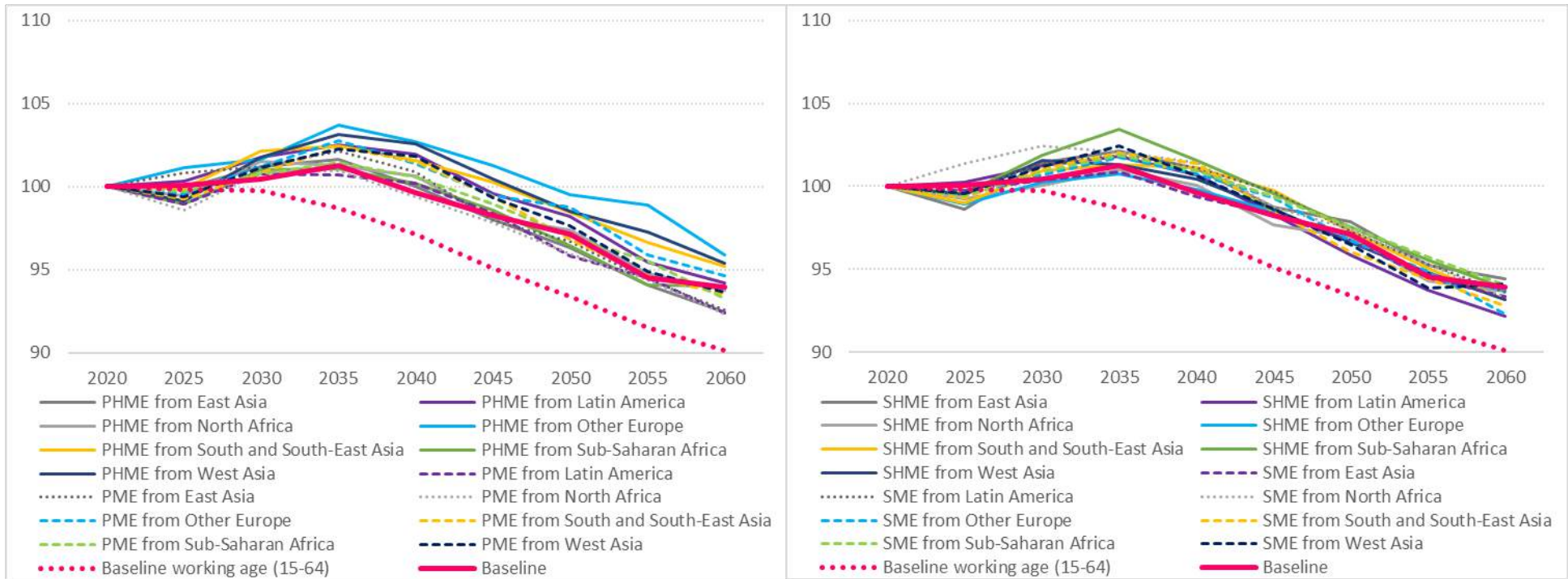


Note: \* persons can be active in the labour force between age 15 and 74

# FINLAND

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

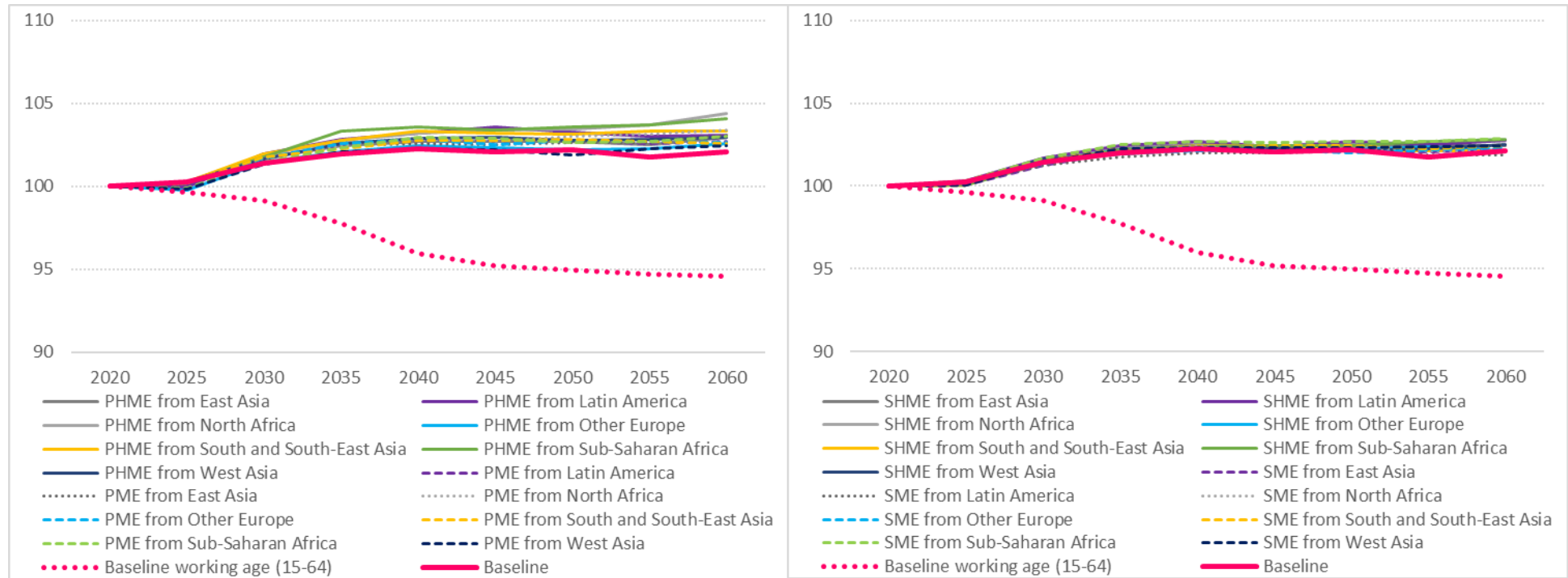


Note: \* persons can be active in the labour force between age 15 and 74

# FRANCE

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

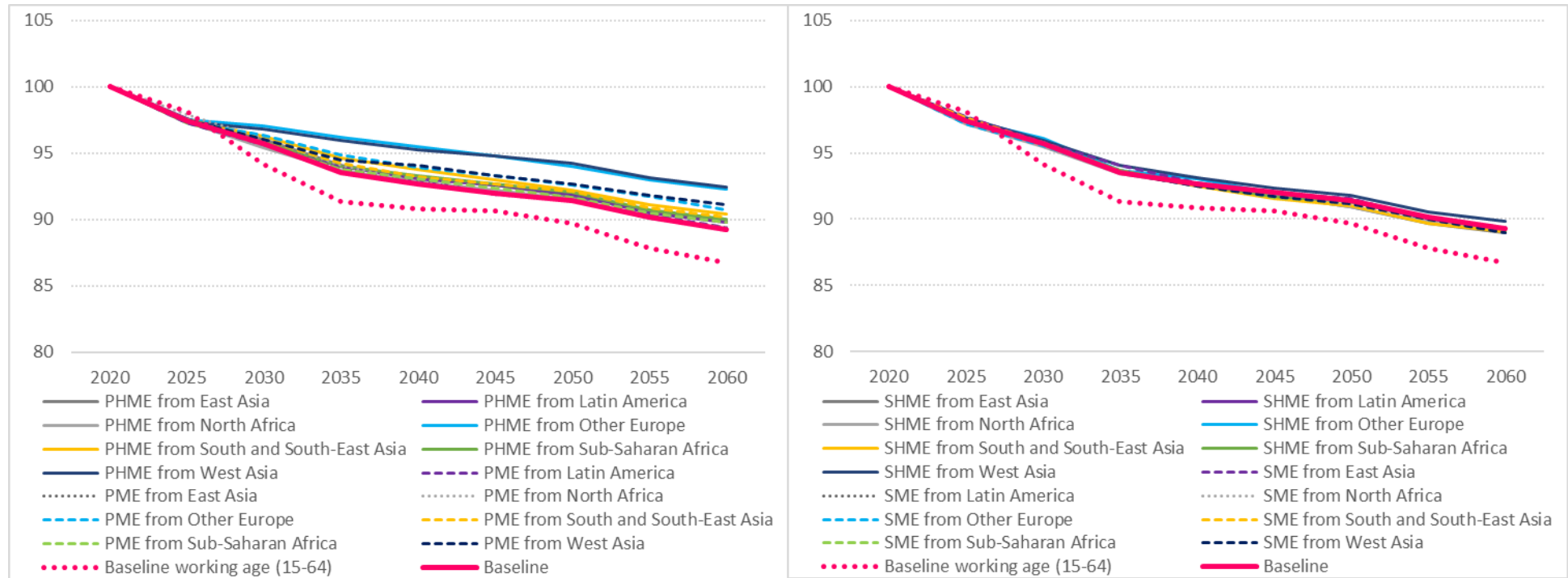


Note: \* persons can be active in the labour force between age 15 and 74

# GERMANY

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

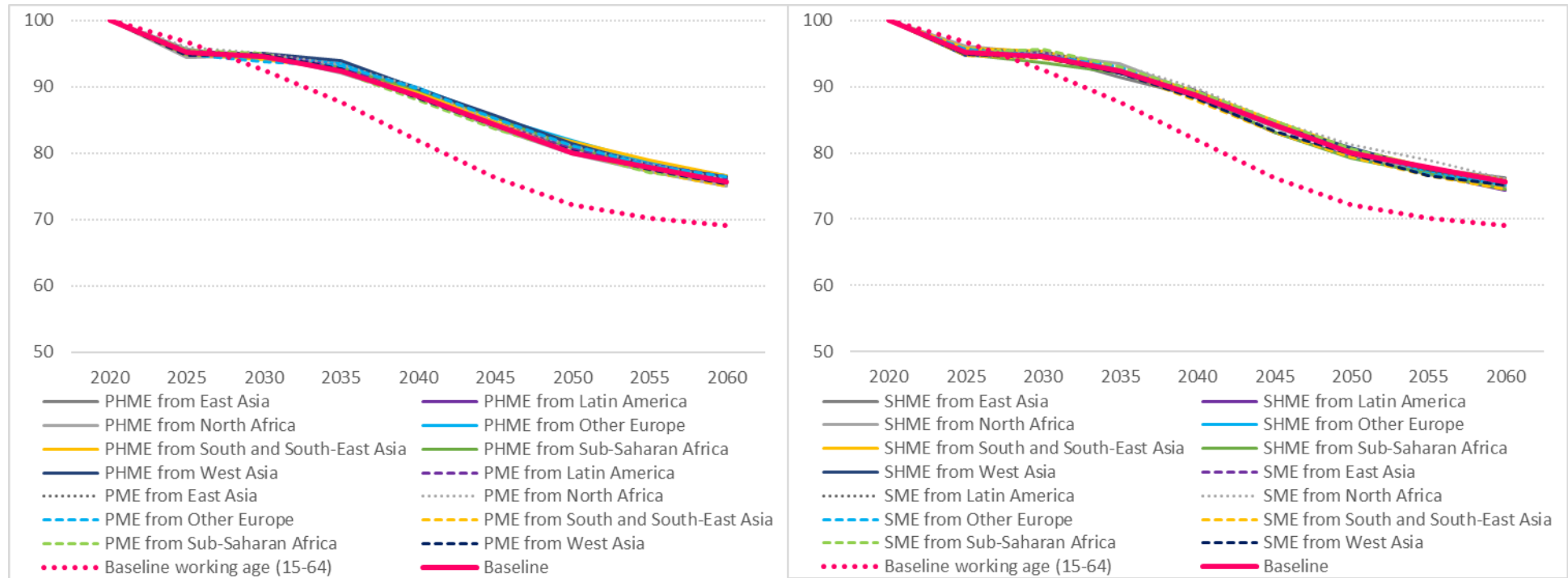


Note: \* persons can be active in the labour force between age 15 and 74

# GREECE

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

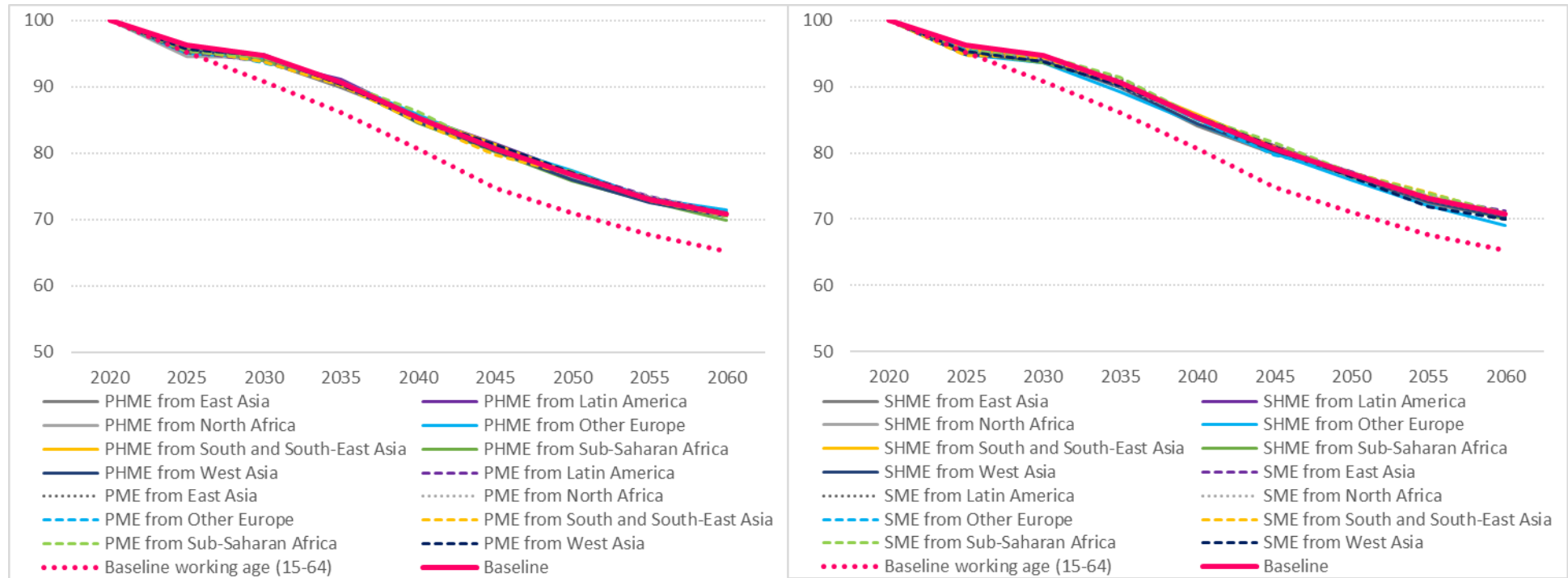


Note: \* persons can be active in the labour force between age 15 and 74

# HUNGARY

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

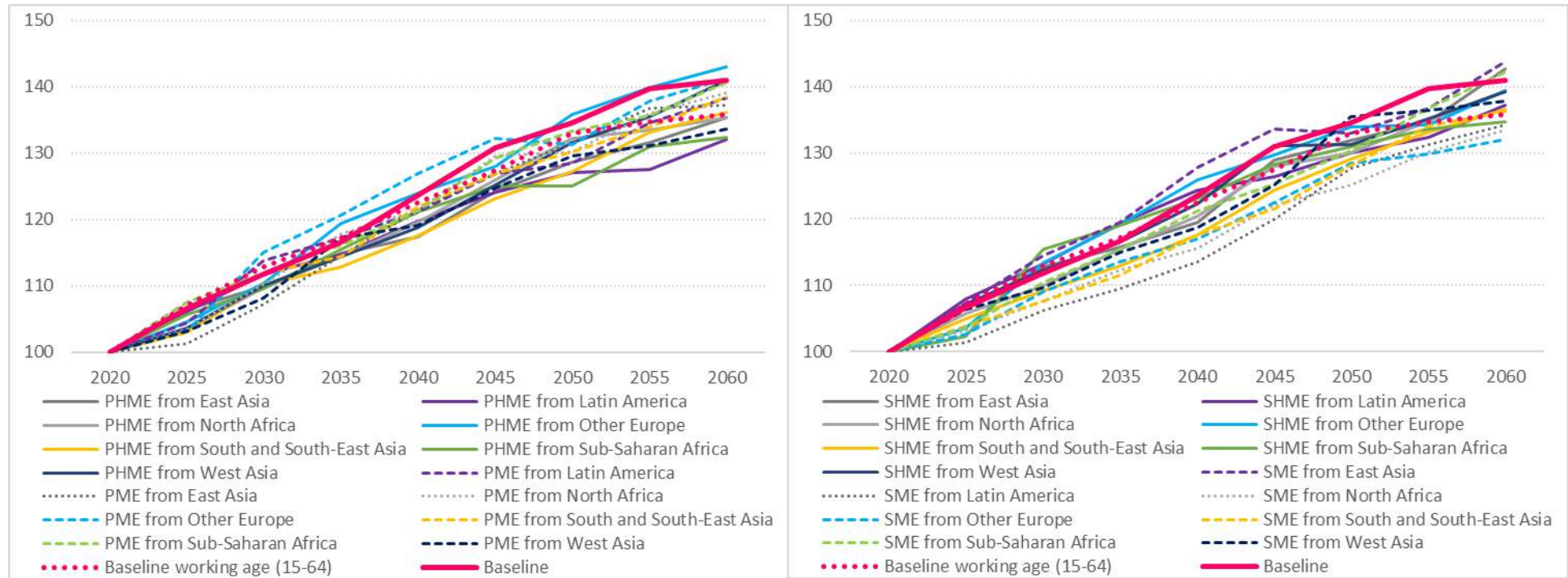


Note: \* persons can be active in the labour force between age 15 and 74

# ICELAND

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

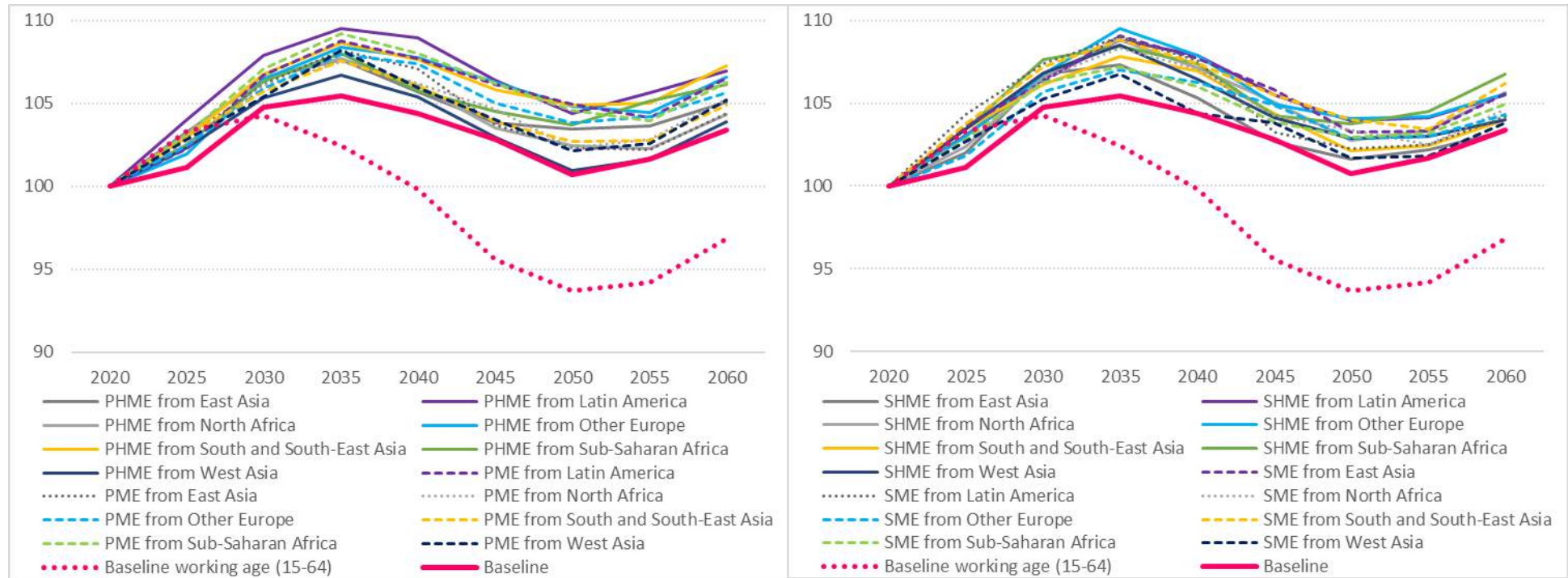


Note: \* persons can be active in the labour force between age 15 and 74

# IRELAND

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)



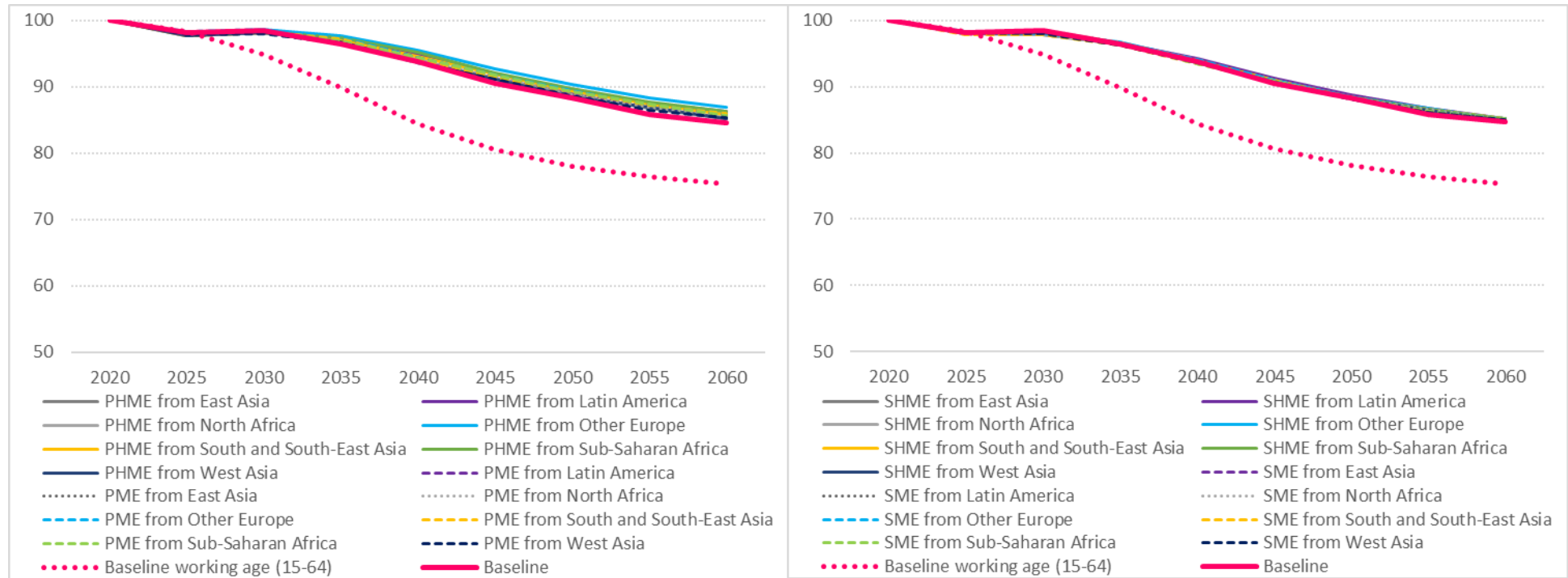
Note: \* persons can be active in the labour force between age 15 and 74



# ITALY

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

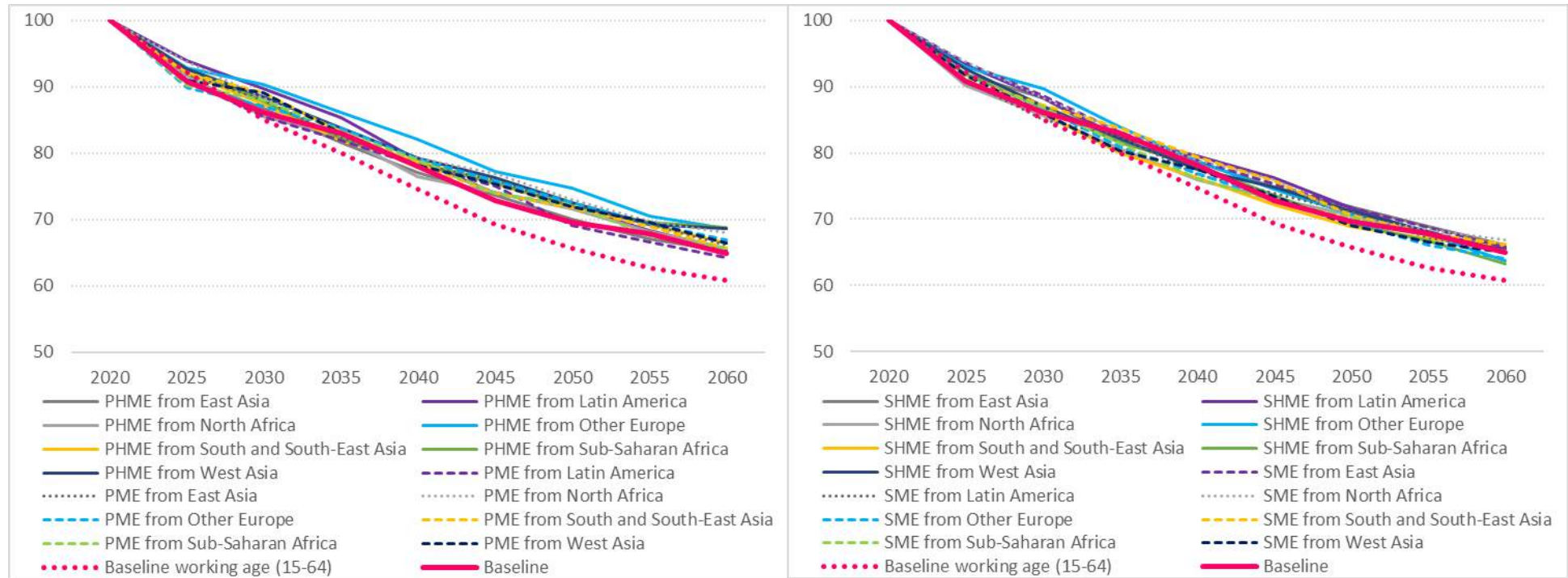


Note: \* persons can be active in the labour force between age 15 and 74

# LATVIA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

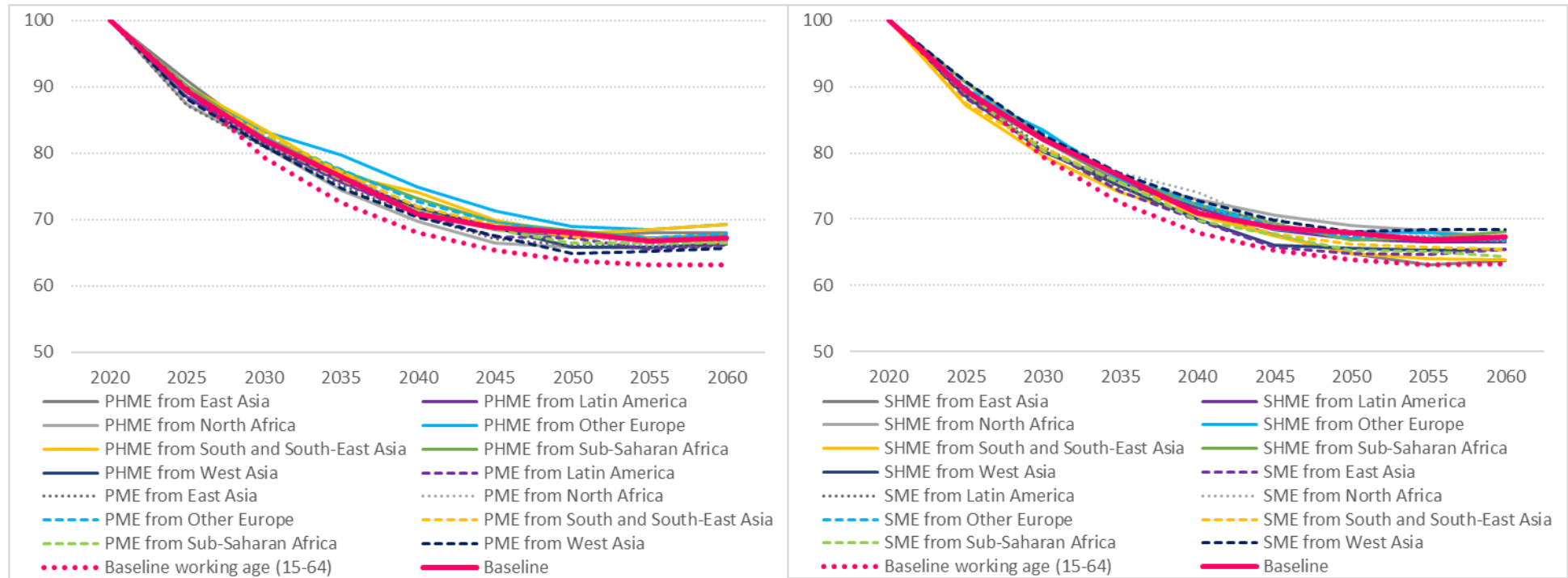


Note: \* persons can be active in the labour force between age 15 and 74

# LITHUANIA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

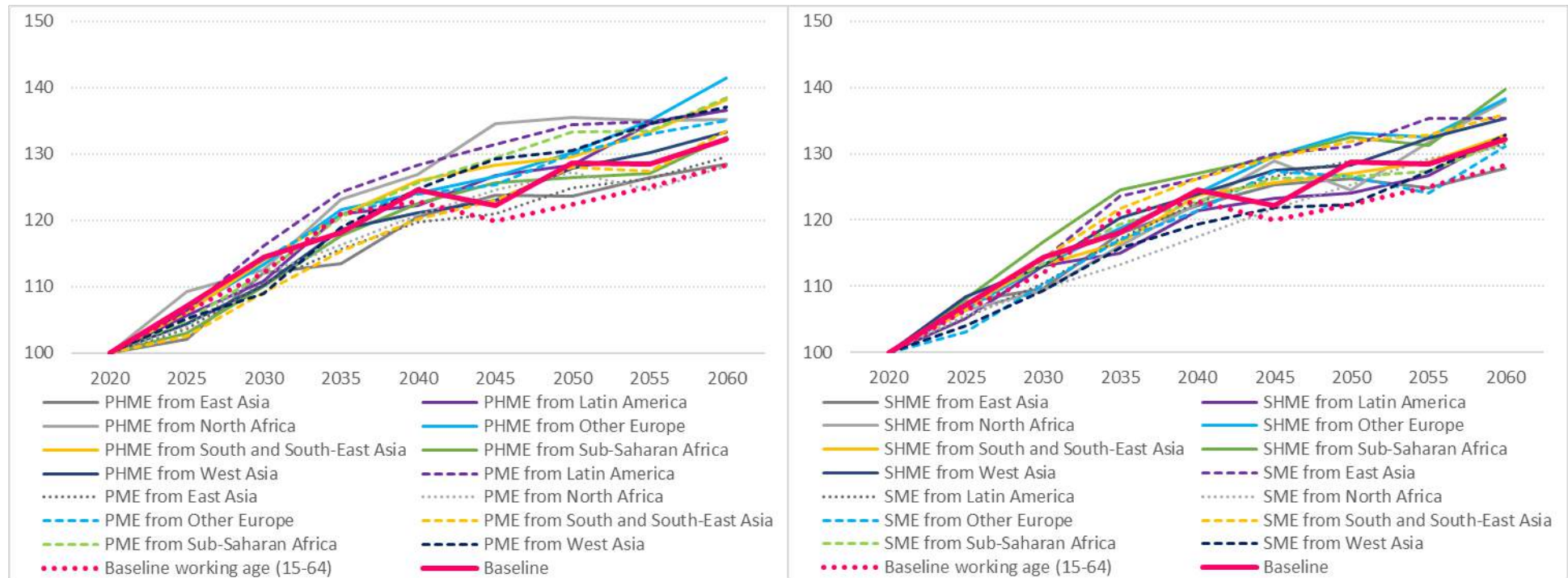


Note: \* persons can be active in the labour force between age 15 and 74

# LUXEMBURG

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

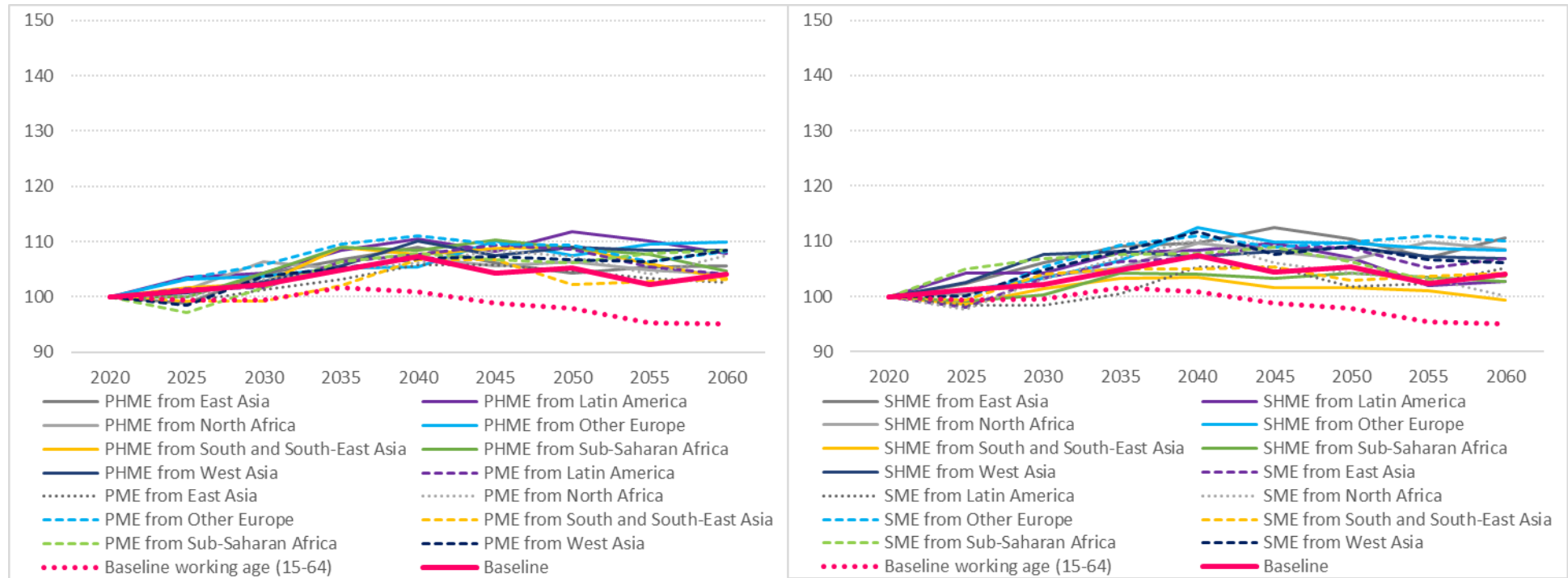


Note: \* persons can be active in the labour force between age 15 and 74

# MALTA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

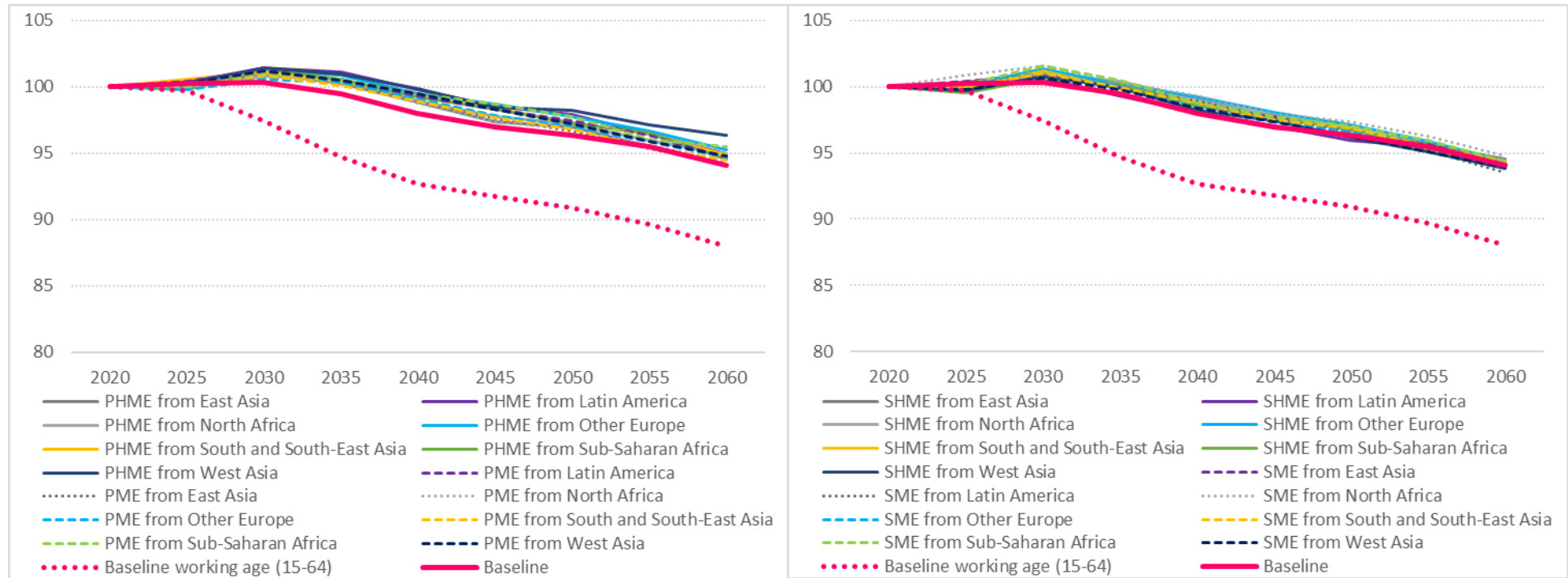


Note: \* persons can be active in the labour force between age 15 and 74

# NETHERLANDS

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

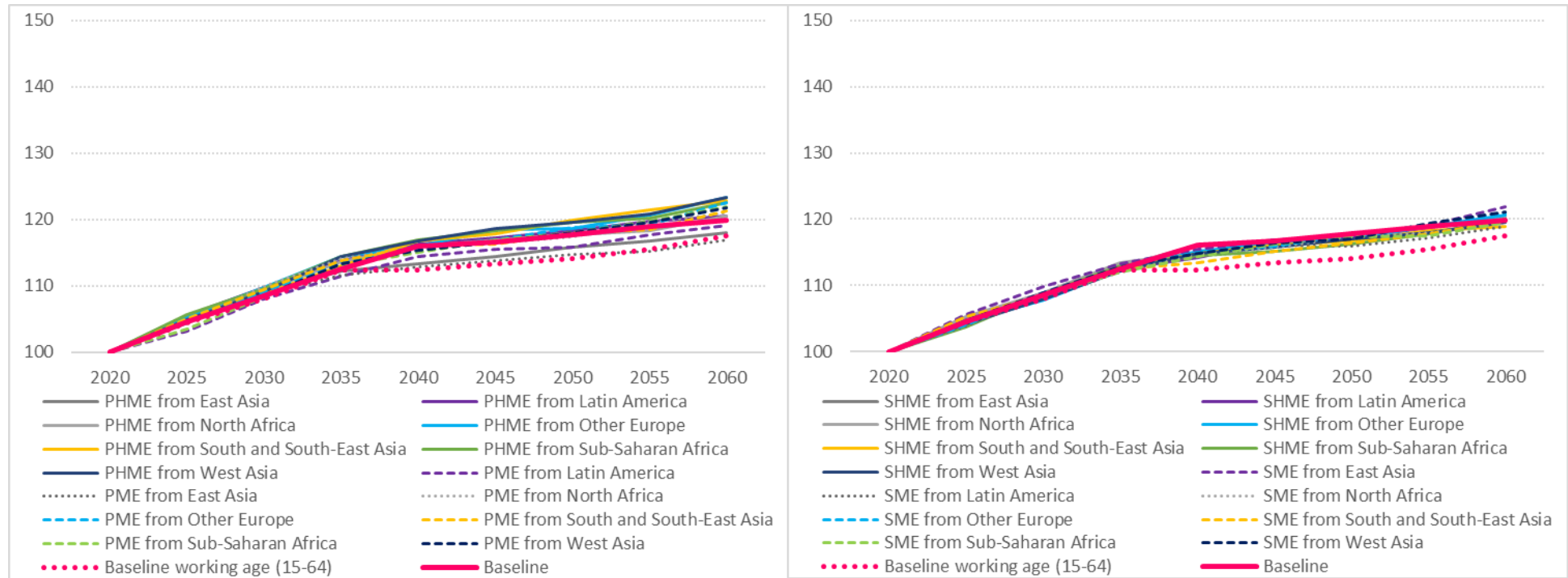


Note: \* persons can be active in the labour force between age 15 and 74

# NORWAY

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

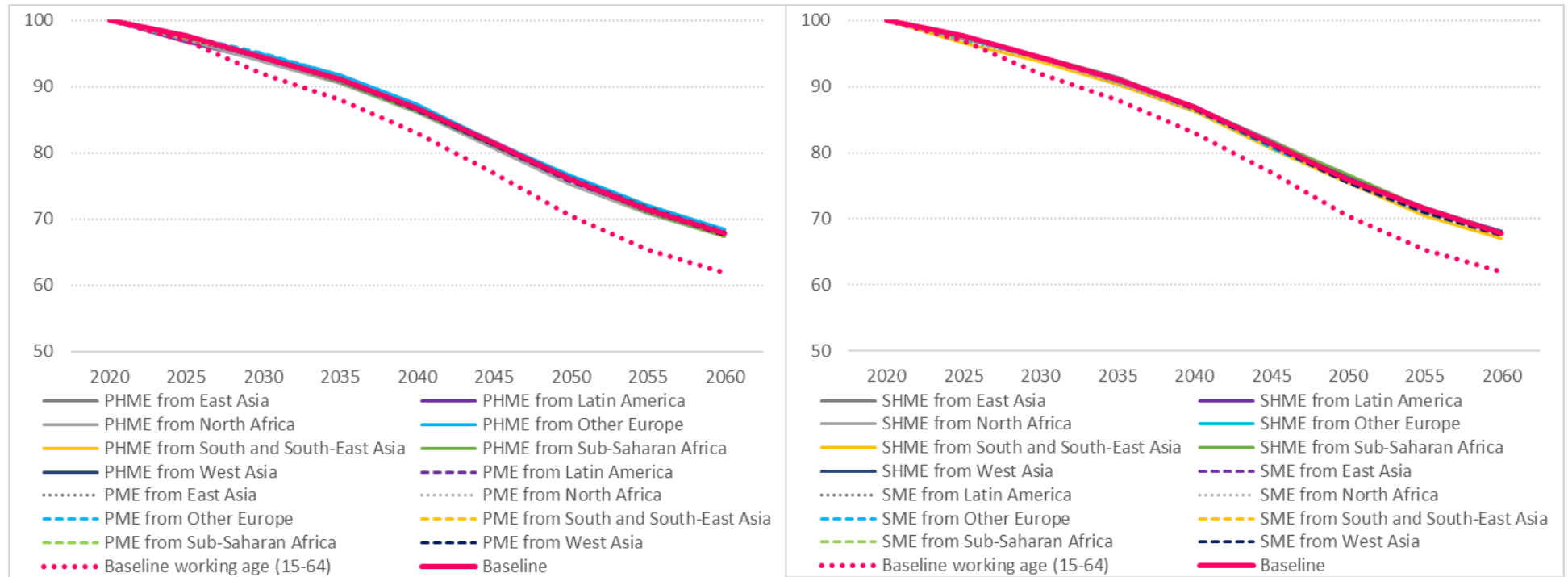


Note: \* persons can be active in the labour force between age 15 and 74

# POLAND

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



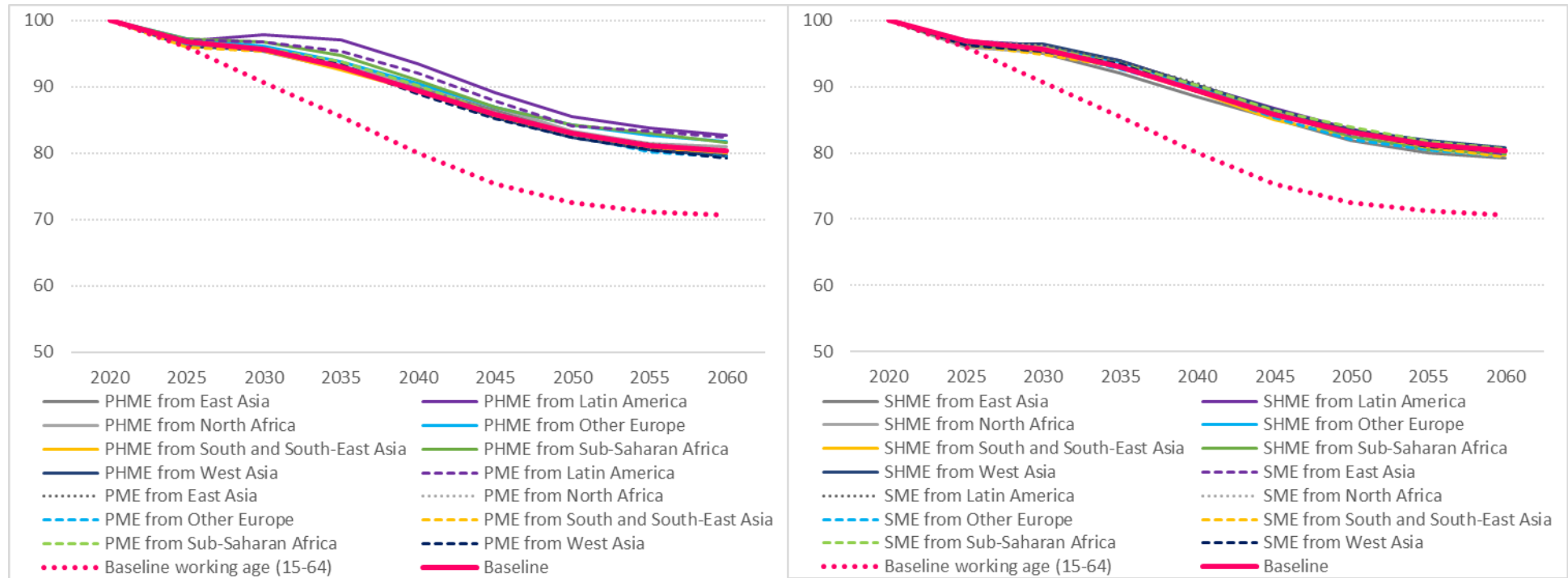
Note: \* persons can be active in the labour force between age 15 and 74



# PORTUGAL

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

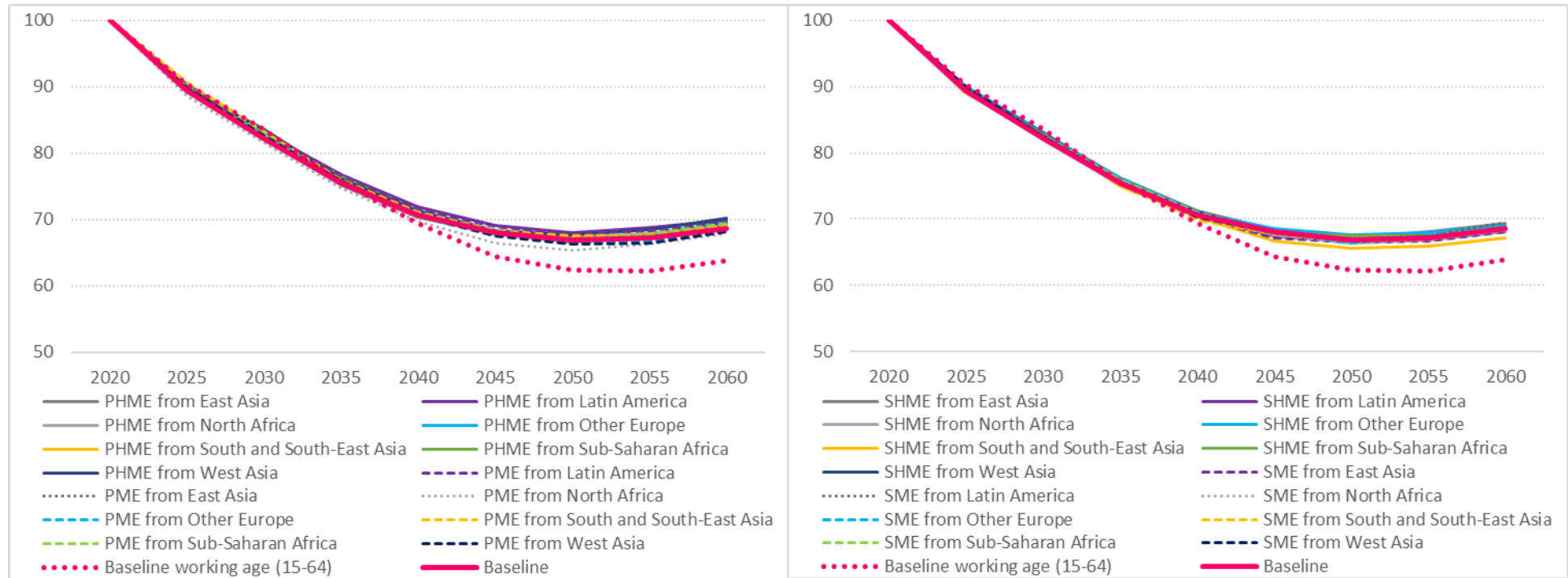


Note: \* persons can be active in the labour force between age 15 and 74

# ROMANIA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

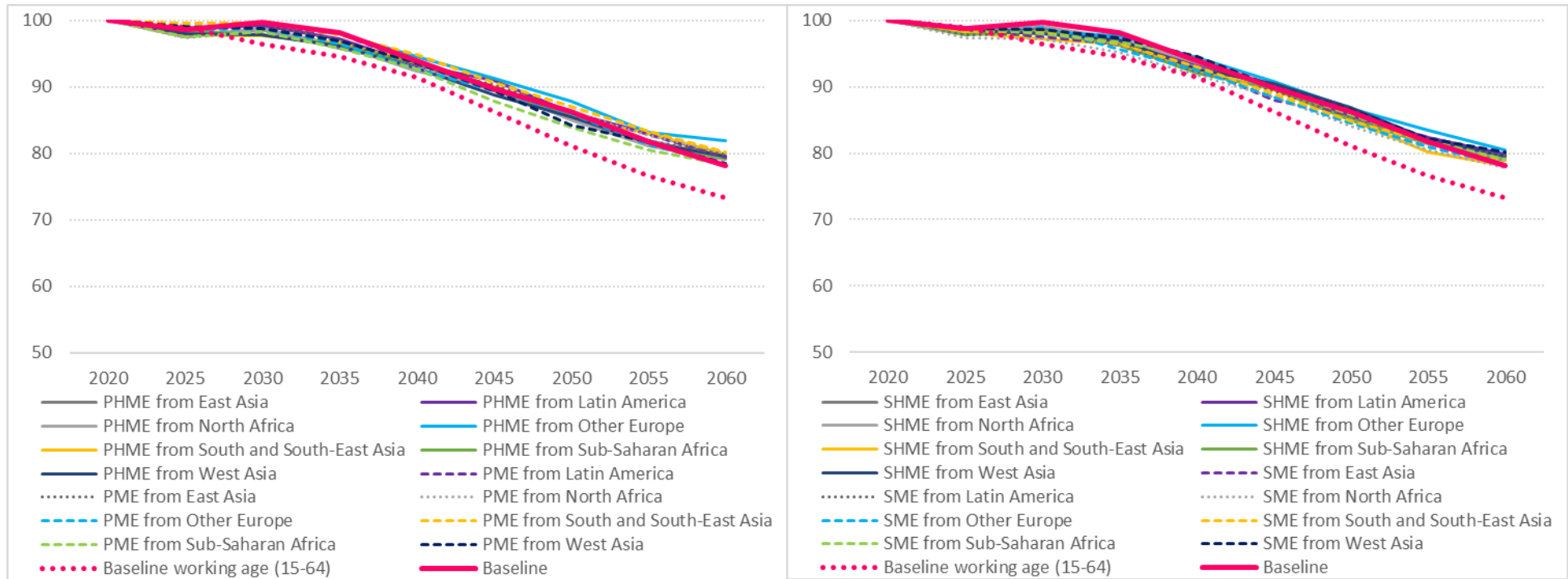


Note: \* persons can be active in the labour force between age 15 and 74

# SLOVAKIA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

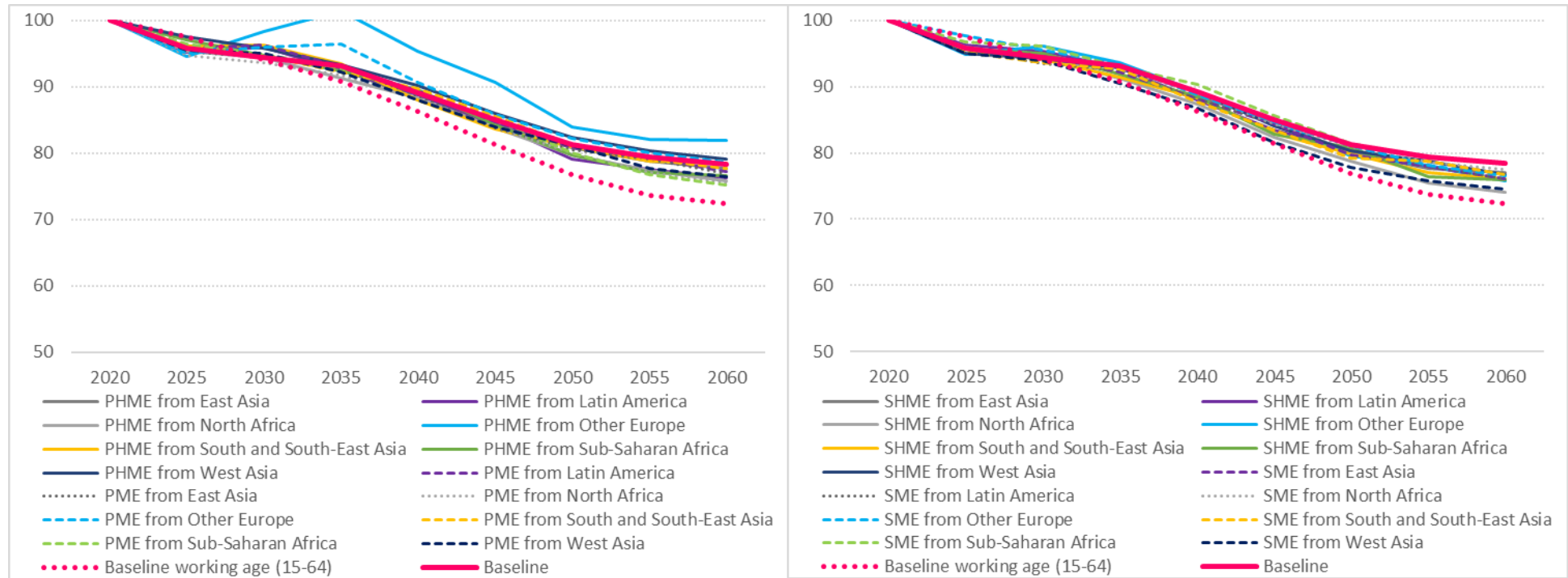


Note: \* persons can be active in the labour force between age 15 and 74

# SLOVENIA

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

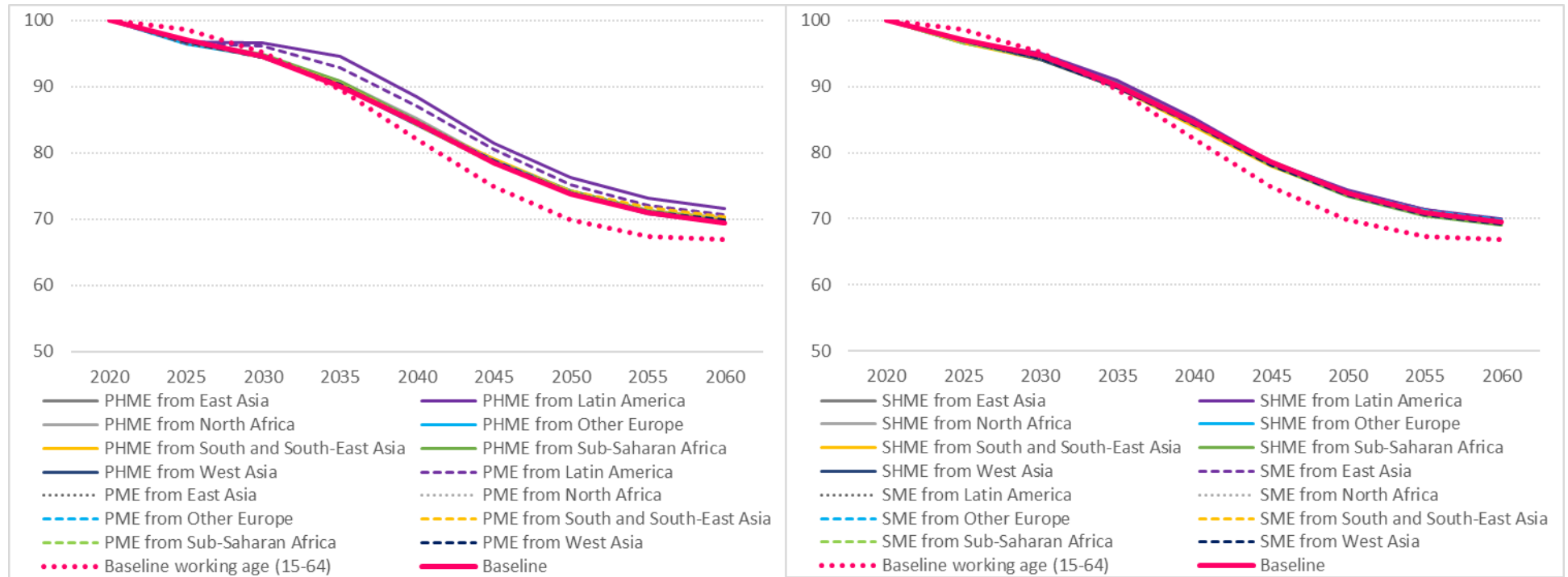


Note: \* persons can be active in the labour force between age 15 and 74

# SPAIN

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

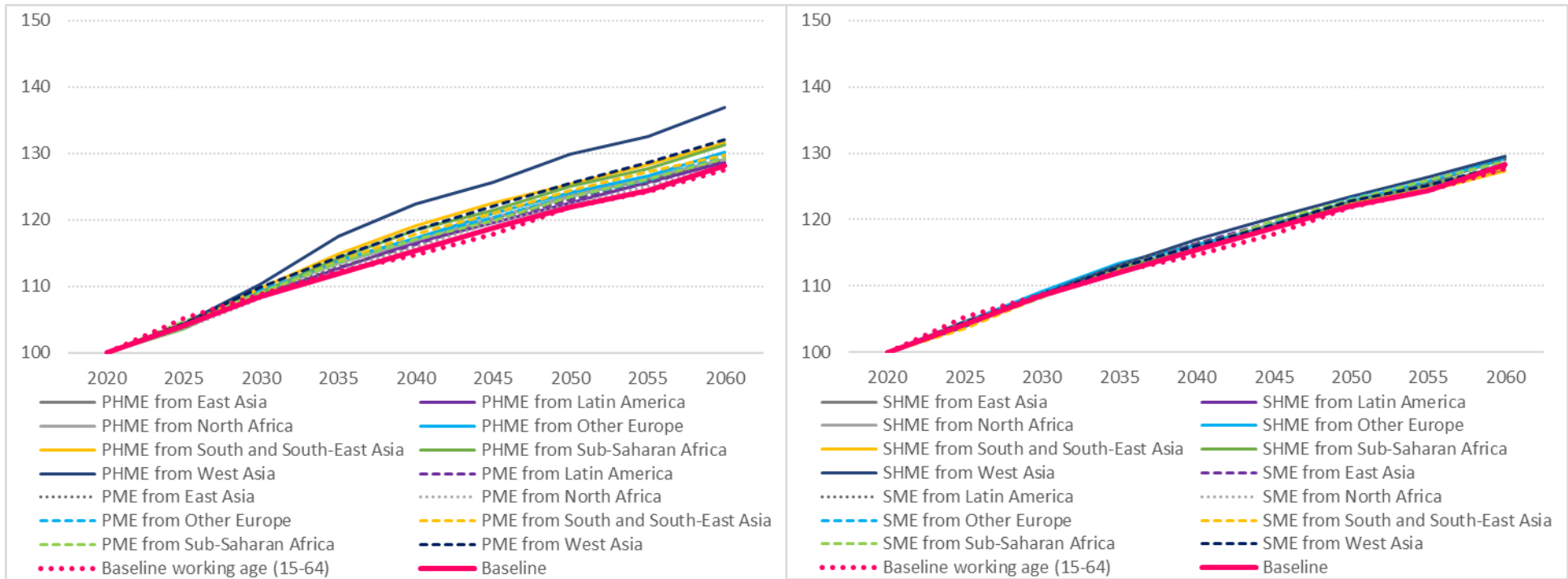


Note: \* persons can be active in the labour force between age 15 and 74

# SWEDEN

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)   Short high-migration events (SHME) and Short migration events (SME)

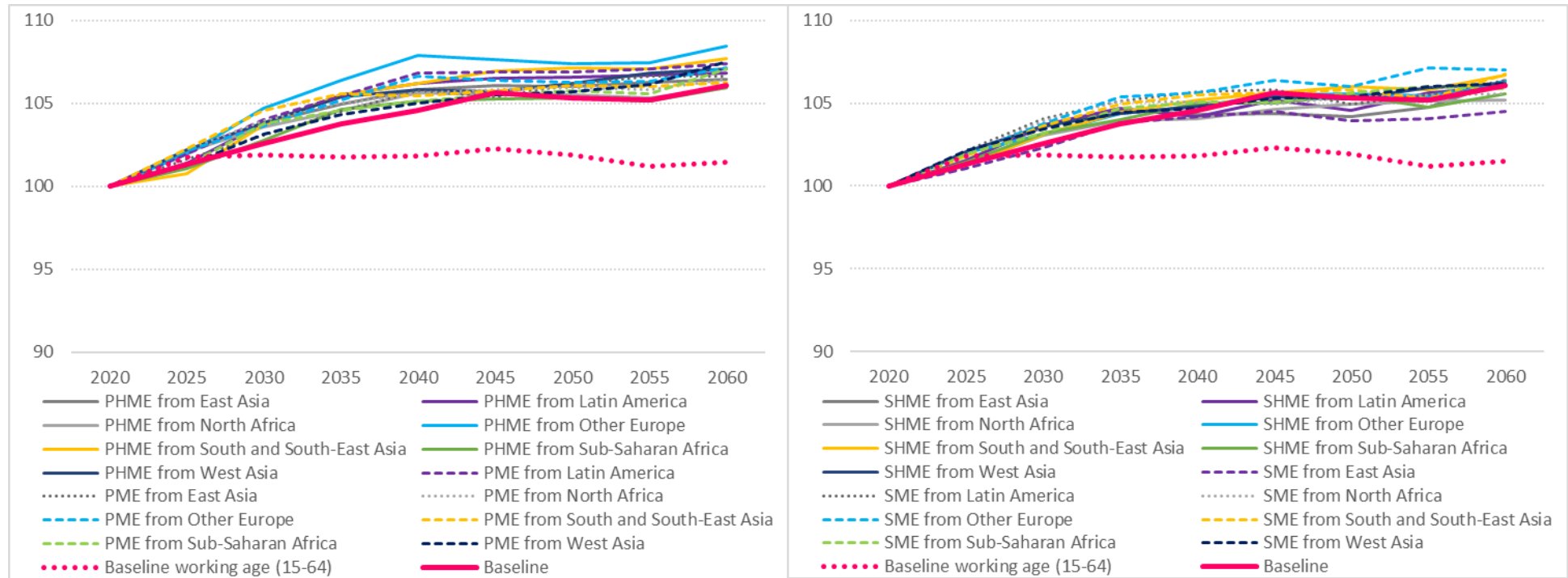


Note: \* persons can be active in the labour force between age 15 and 74

# SWITZERLAND

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)

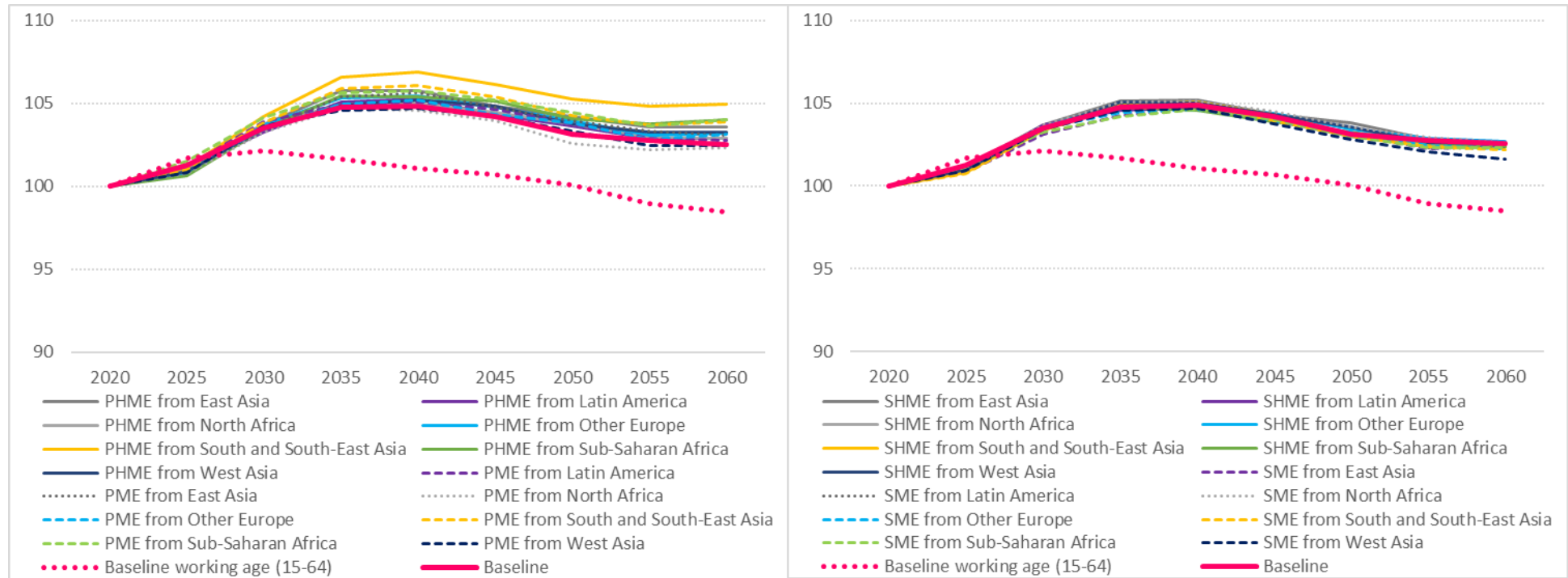


Note: \* persons can be active in the labour force between age 15 and 74

# UNITED KINGDOM

Relative change in total labour force\* in all scenarios and in working age population (15-64) in the baseline (2020 = 100)

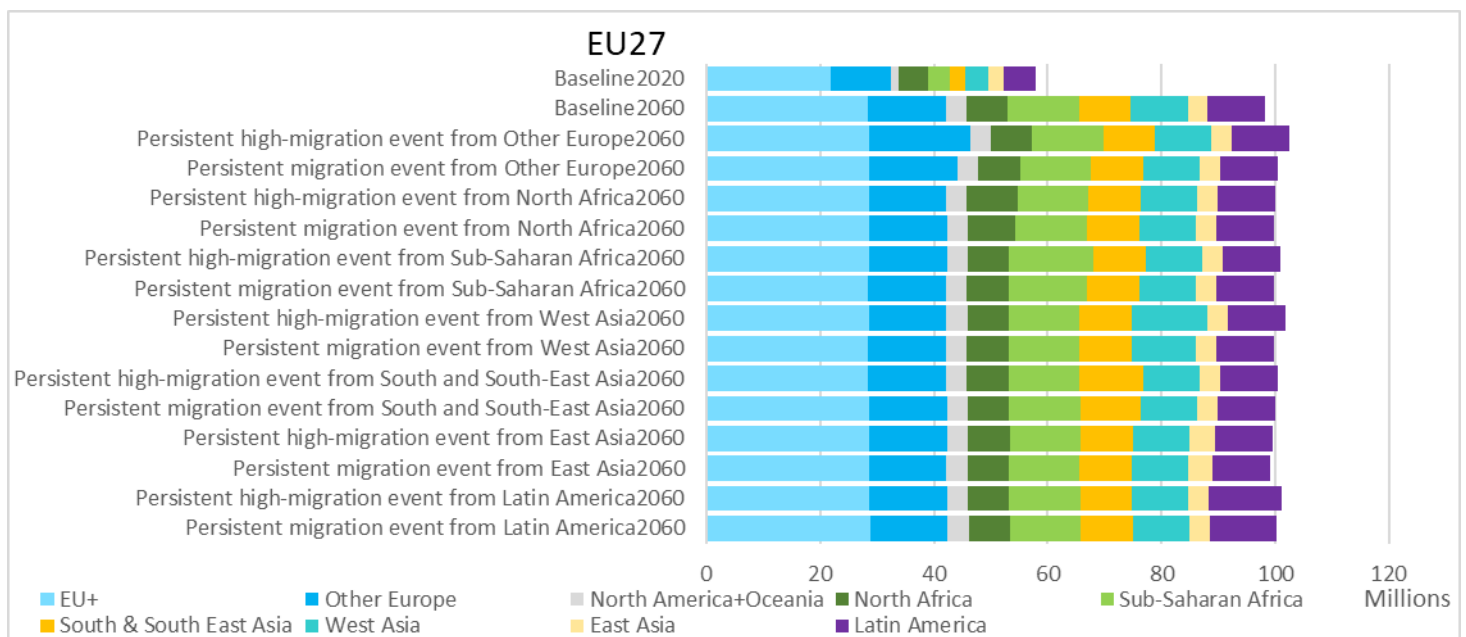
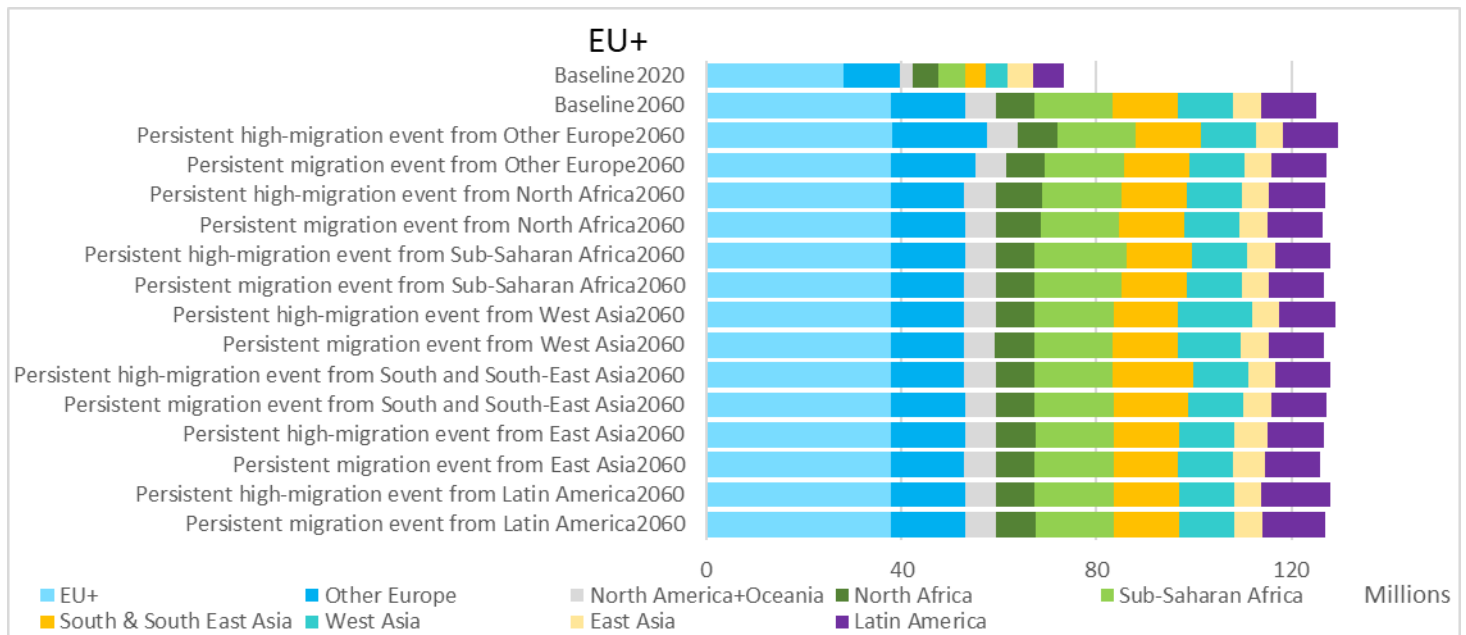
Persistent high-migration events (PHME) and Persistent migration events (PME)    Short high-migration events (SHME) and Short migration events (SME)



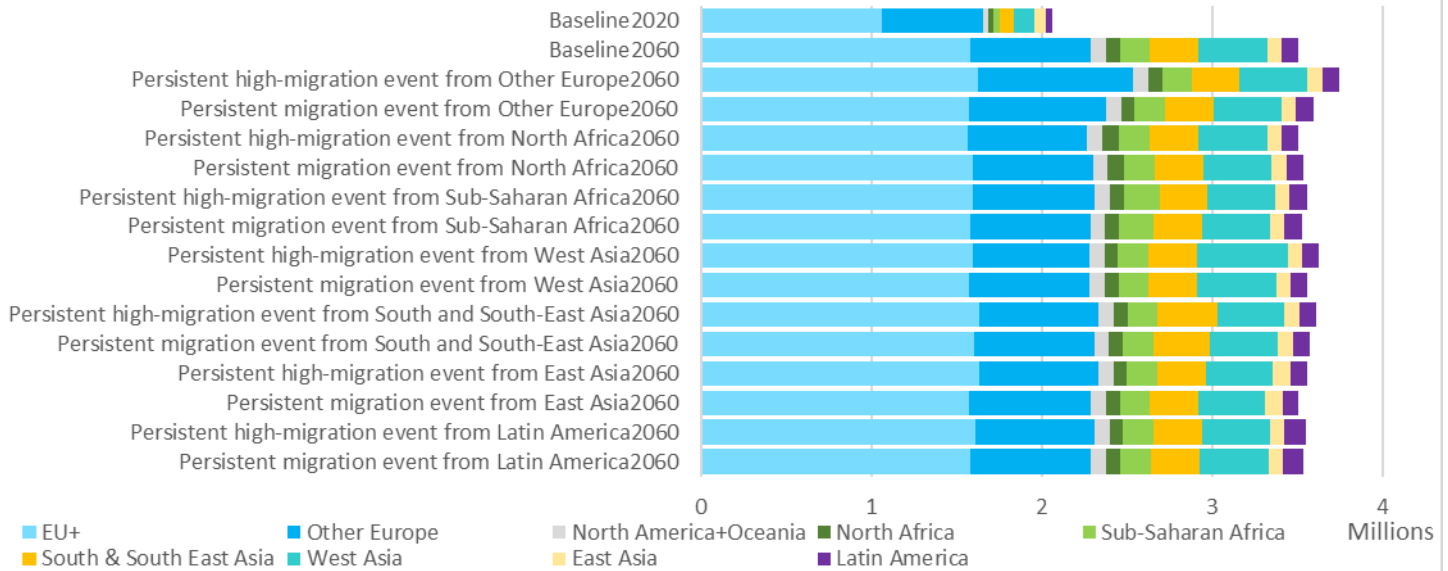
Note: \* persons can be active in the labour force between age 15 and 74



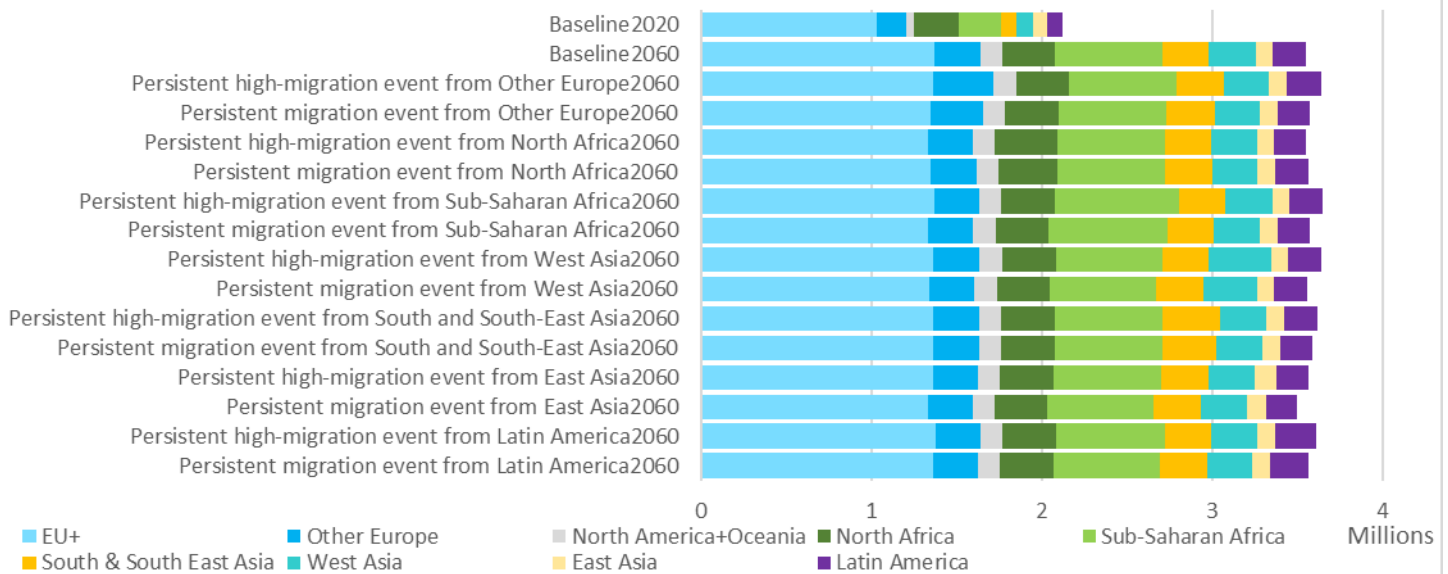
**Figure B.3 Composition of foreign-born populations in selected countries in 2020 and in 2060 in Baseline and Persistent high-migration events scenarios**



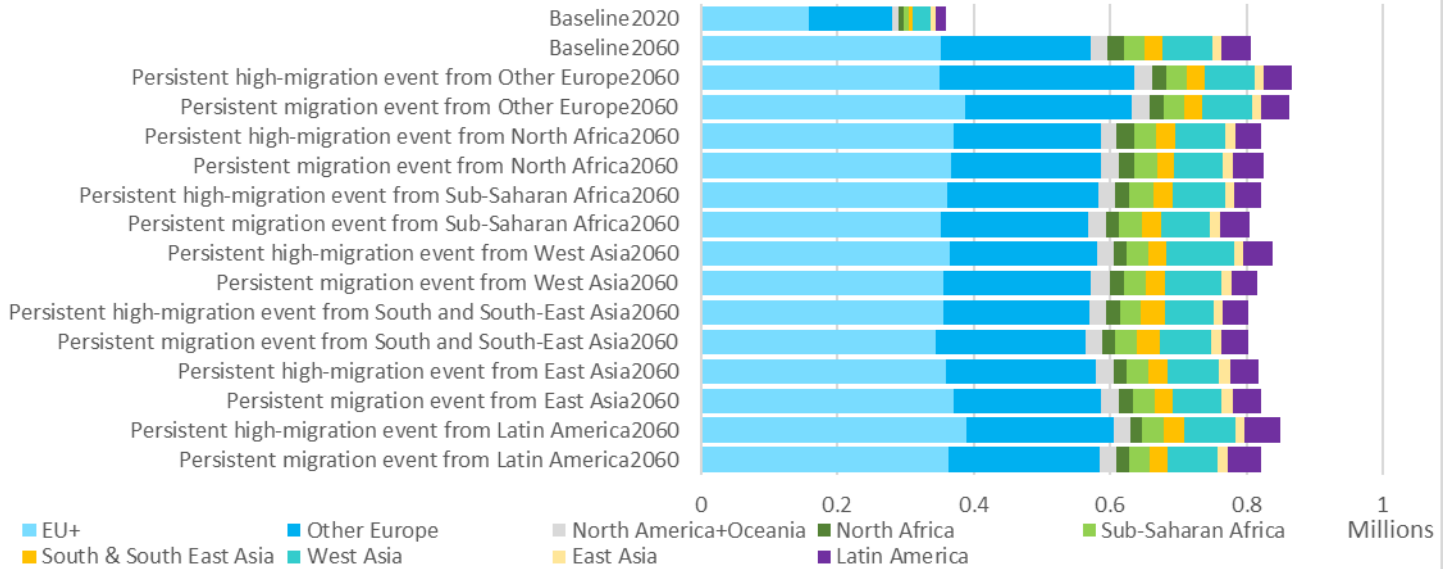
### Austria



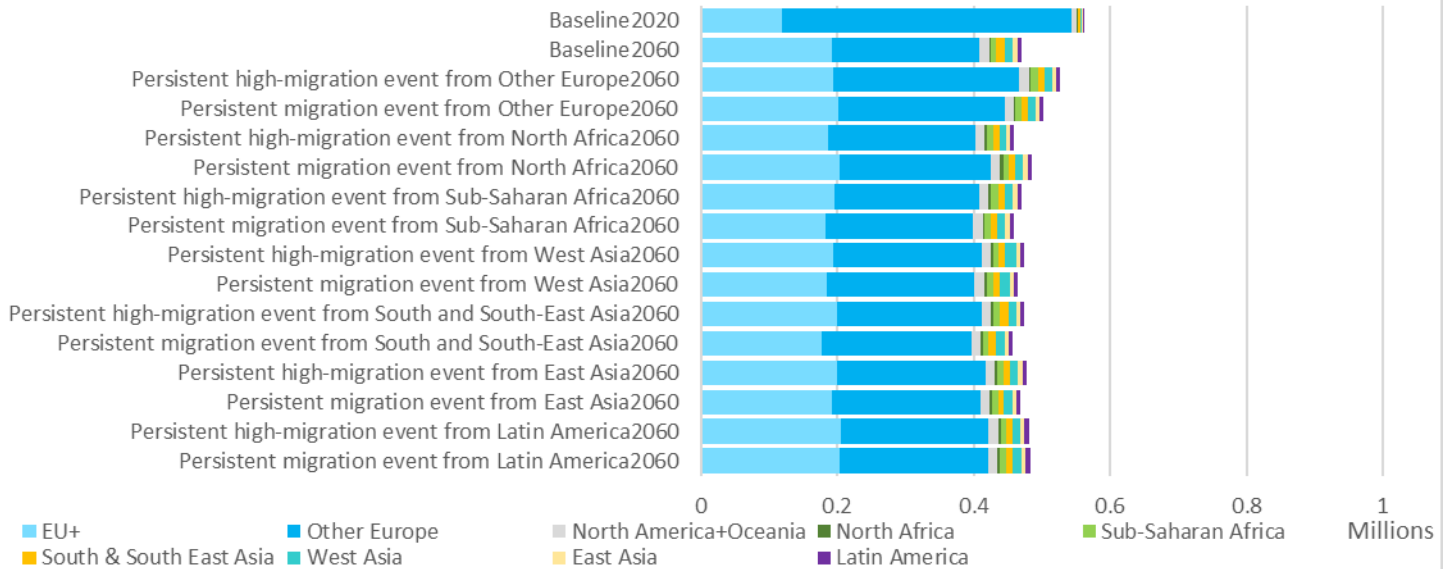
### Belgium



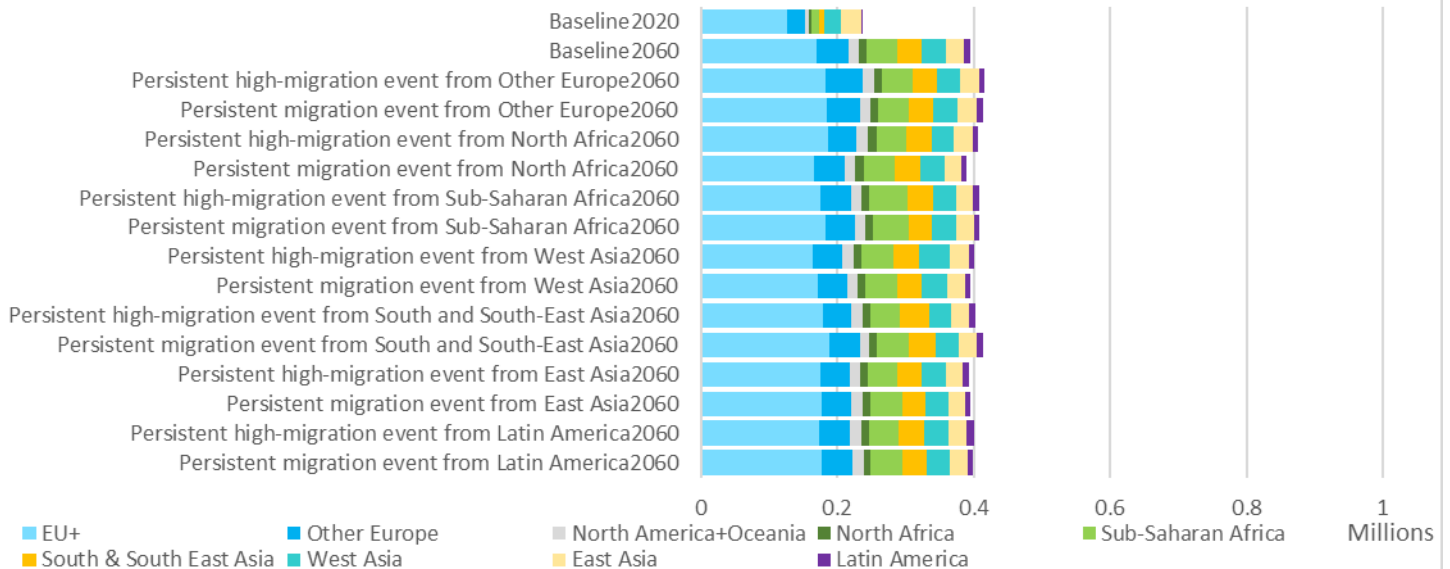
### Bulgaria



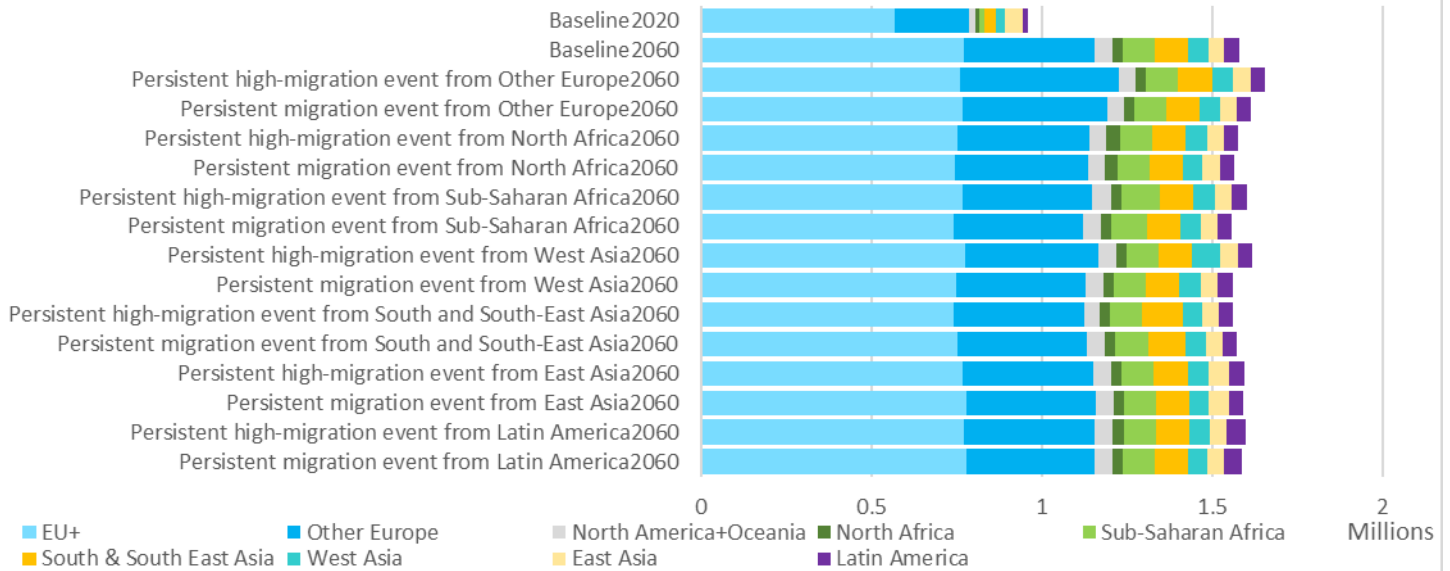
### Croatia



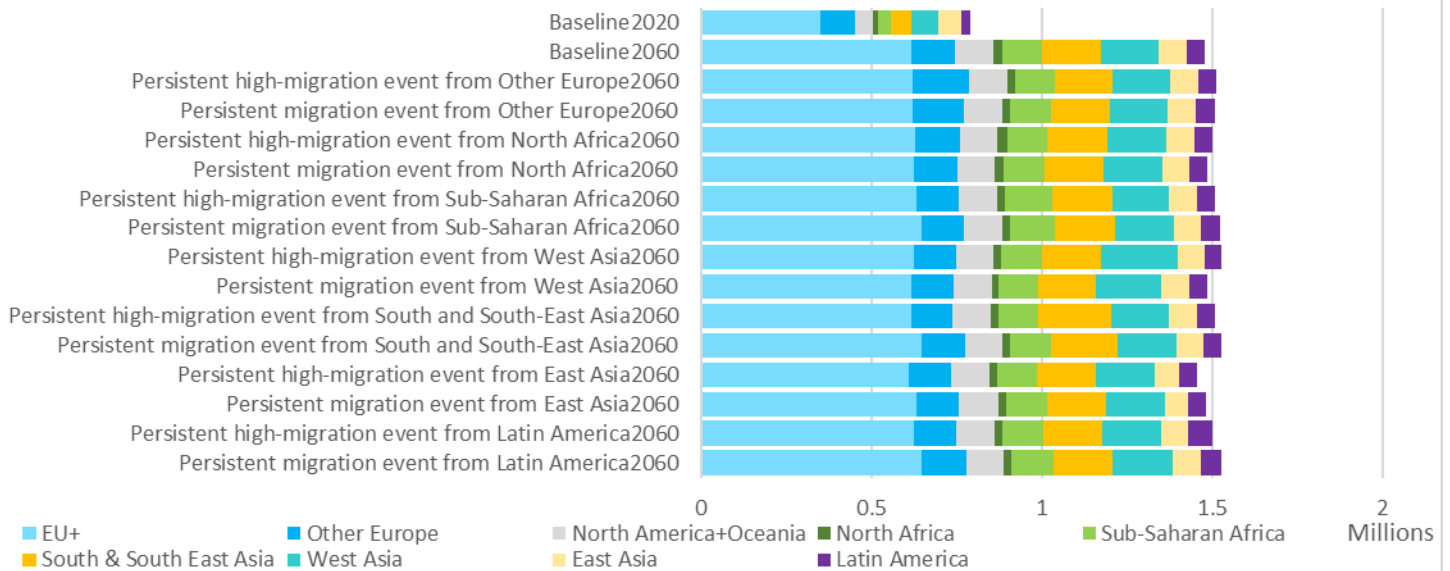
### Croatia



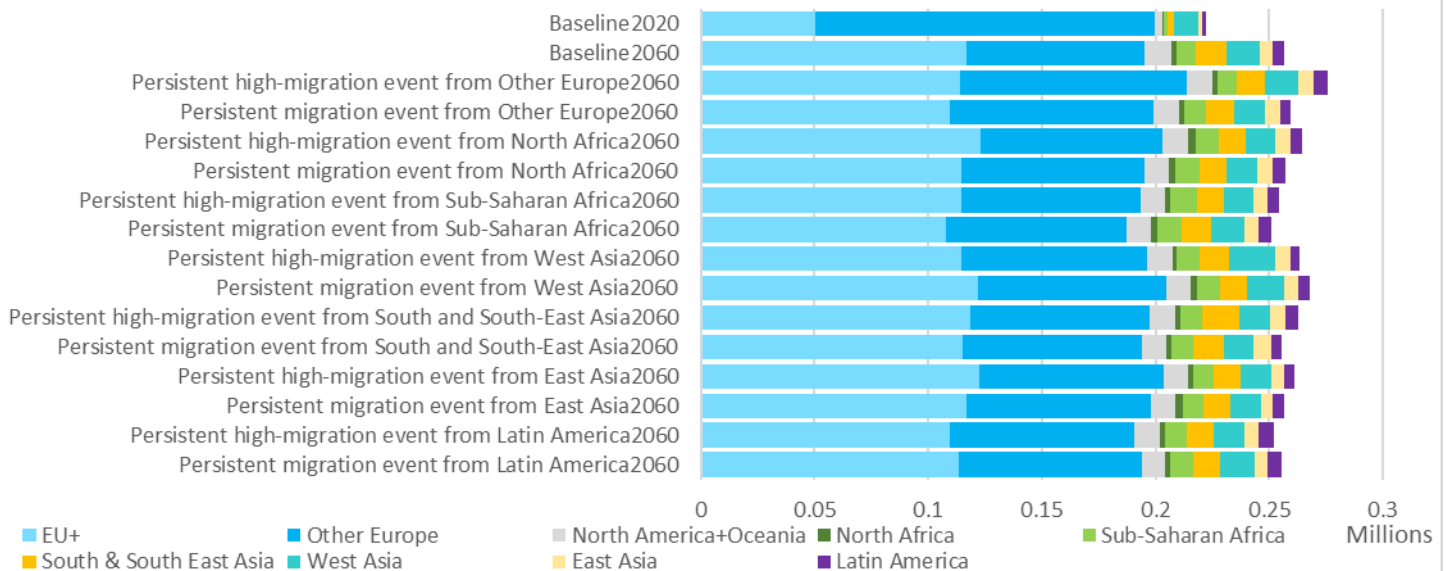
### Czechia



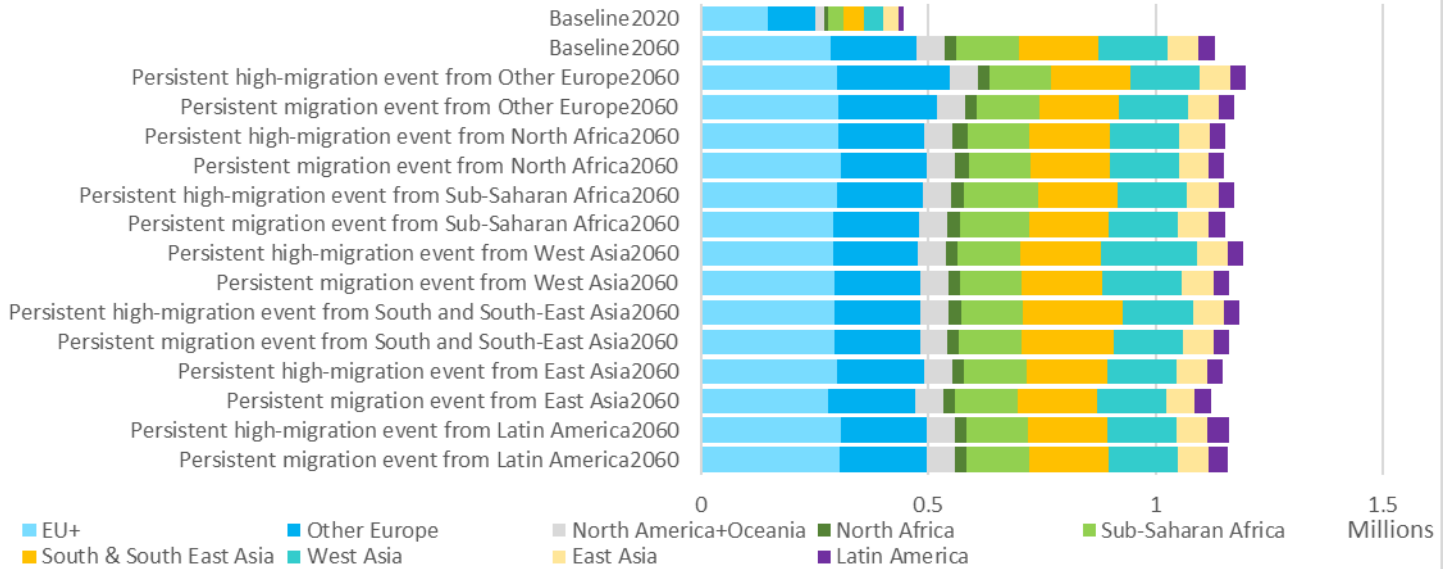
### Denmark



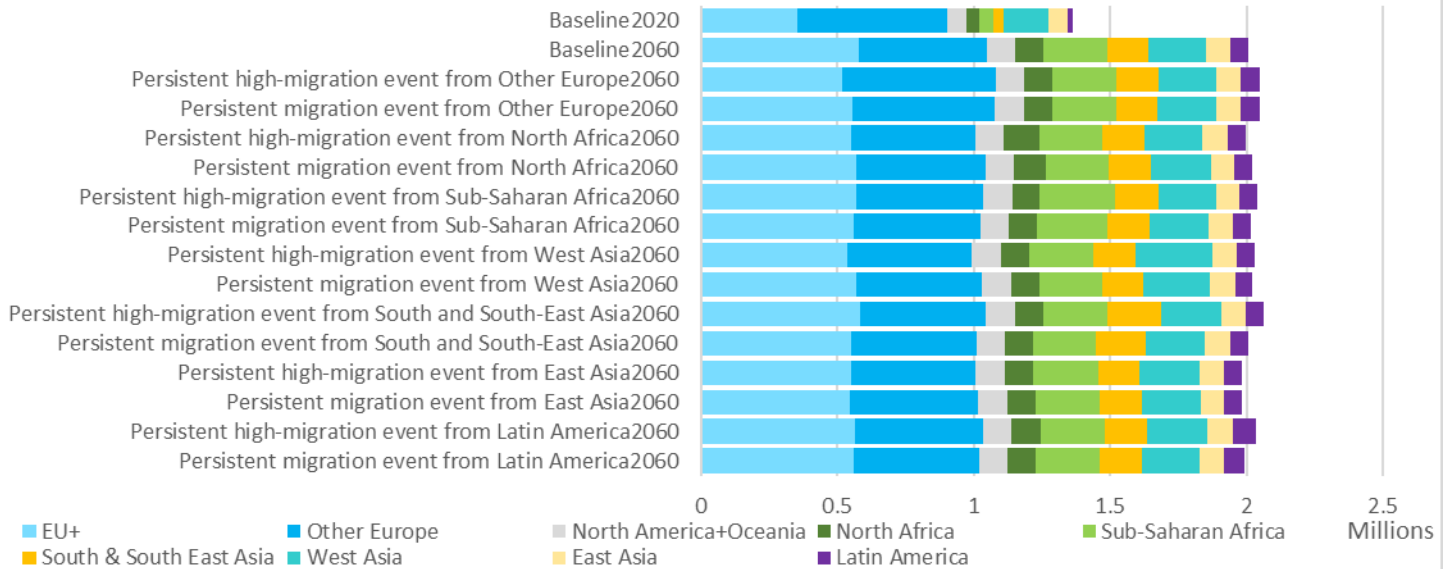
### Estonia



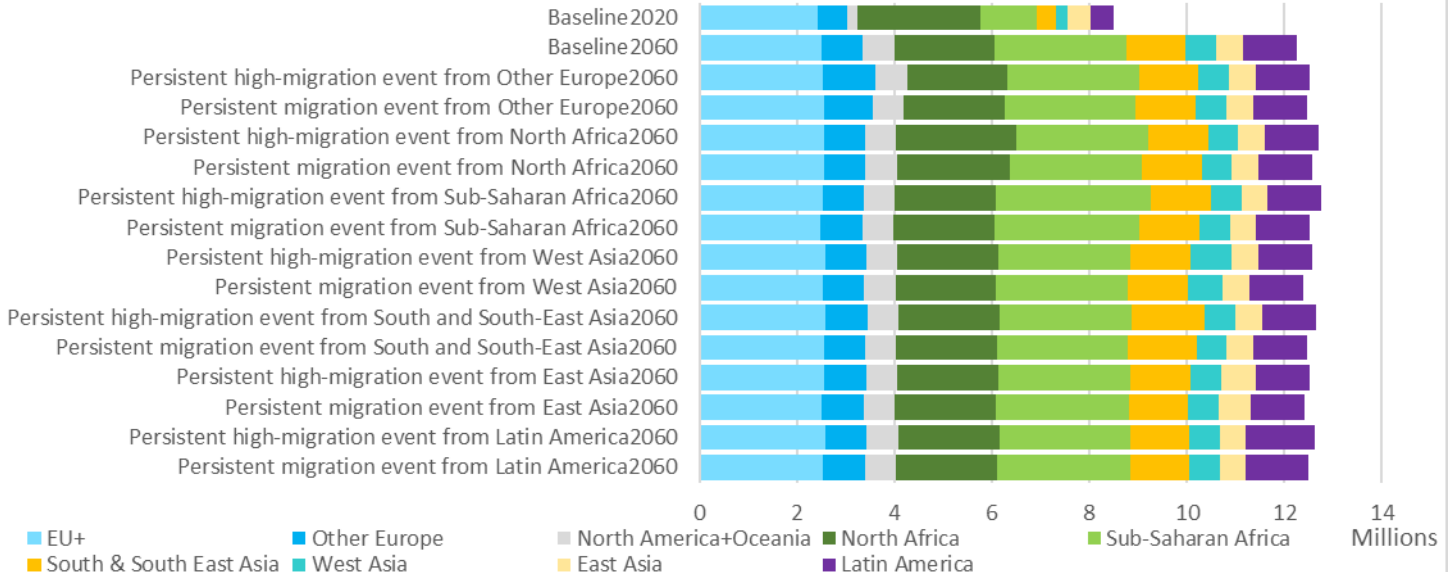
### Finland



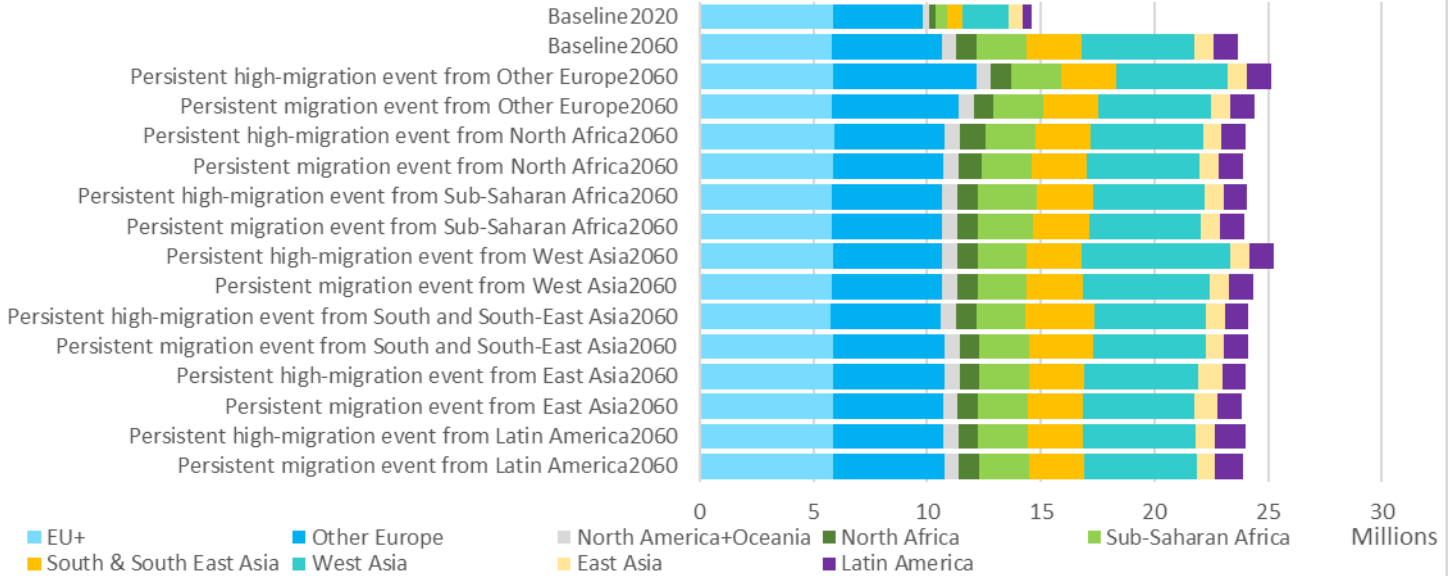
### Greece



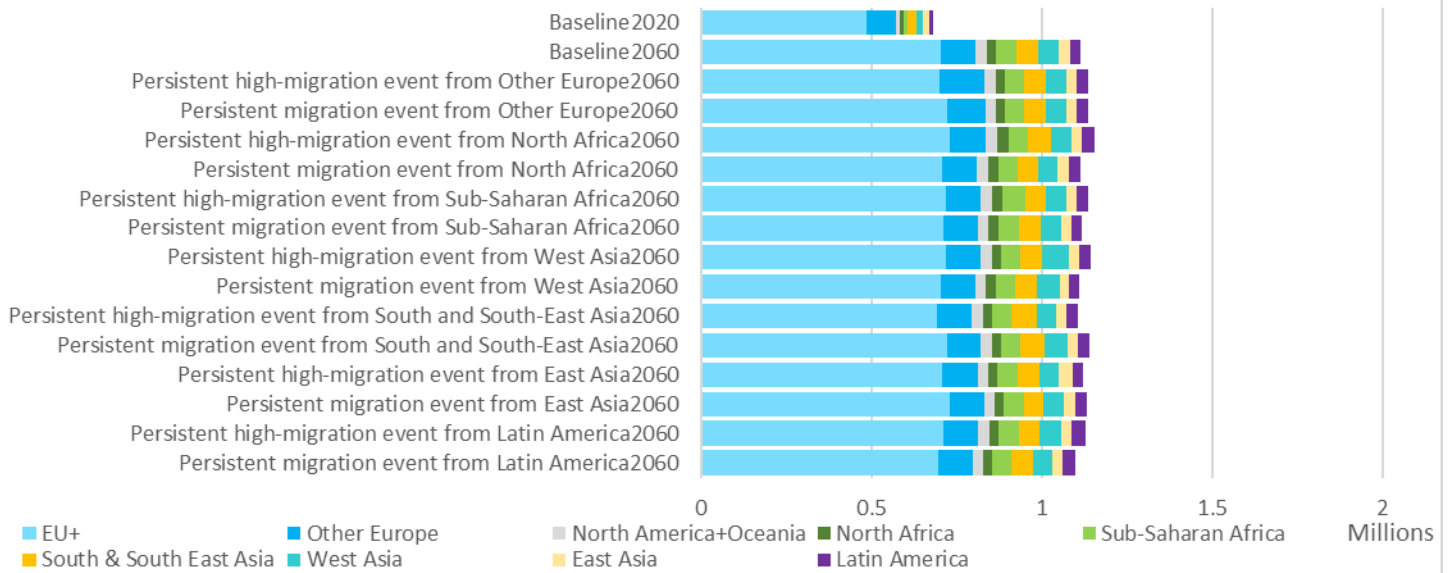
### France



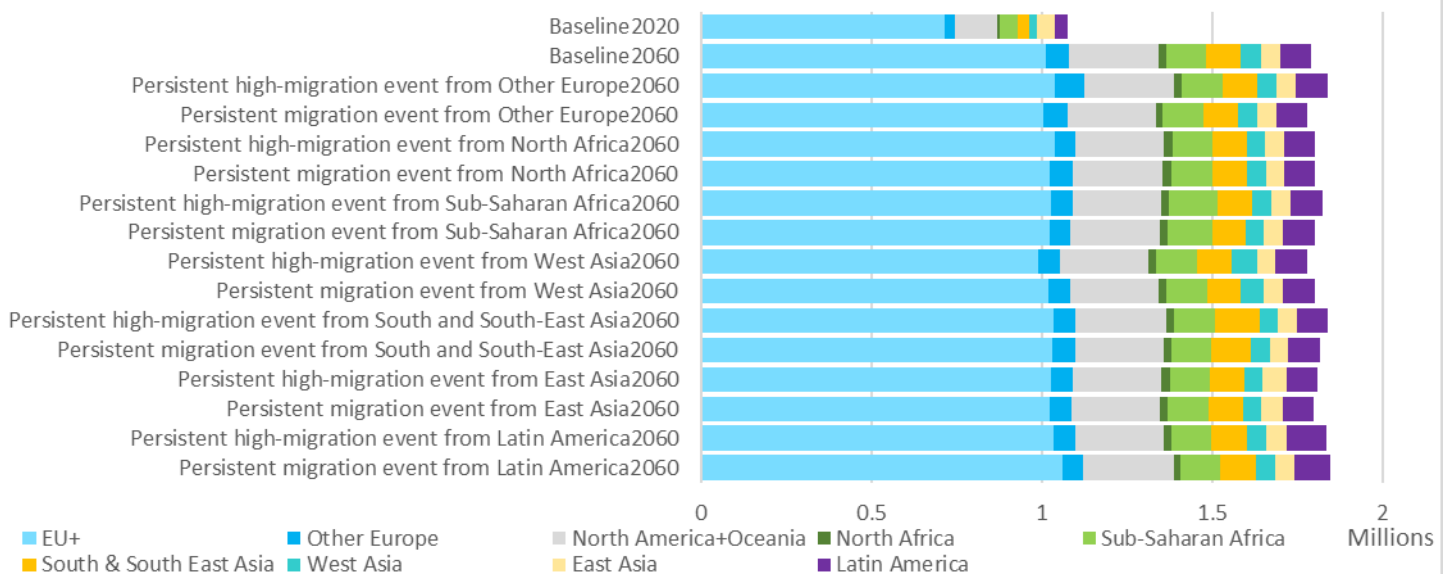
### Germany



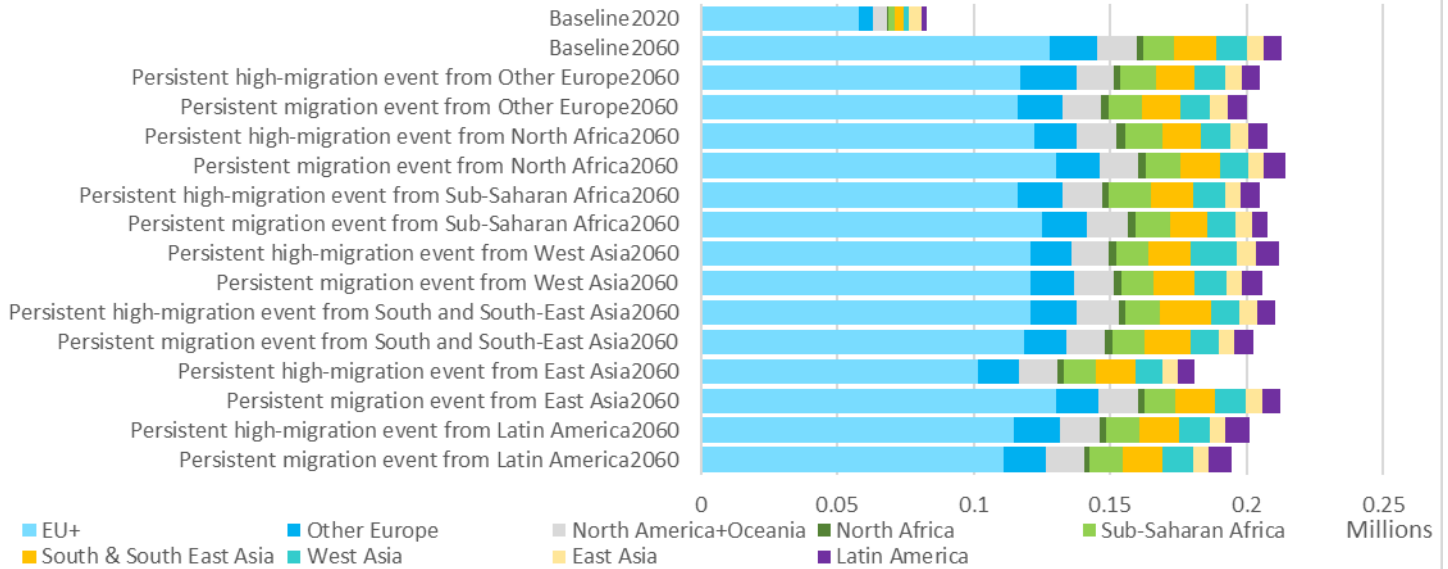
### Hungary



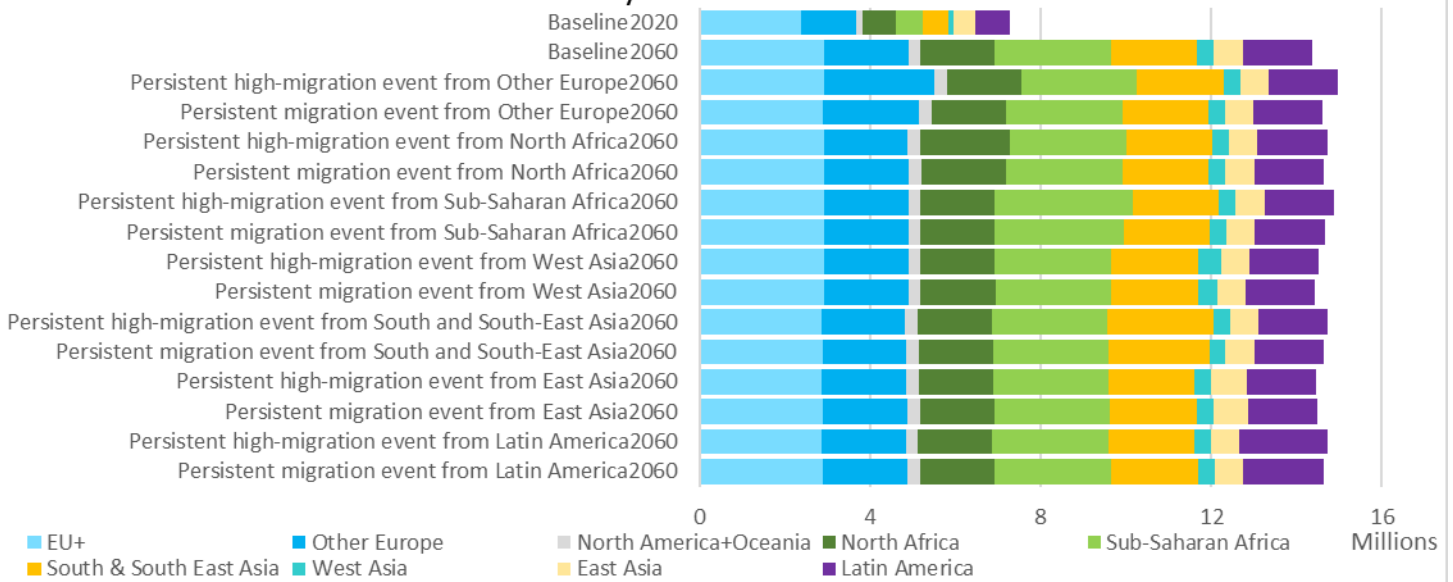
### Ireland



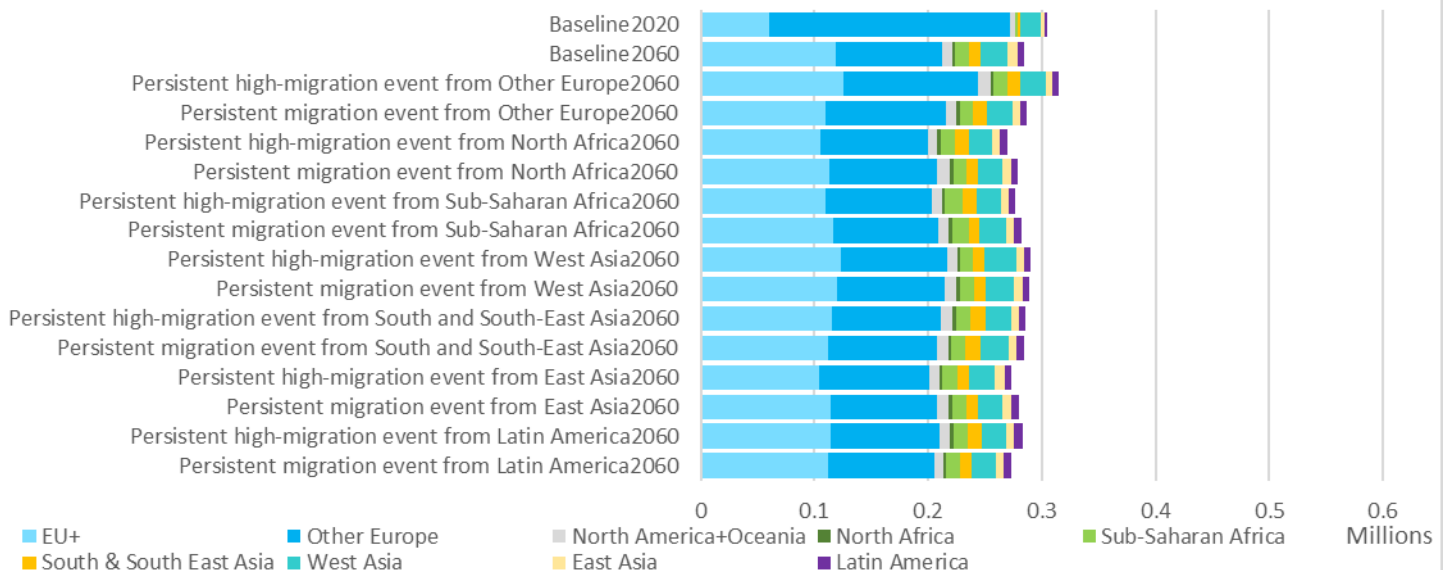
### Iceland



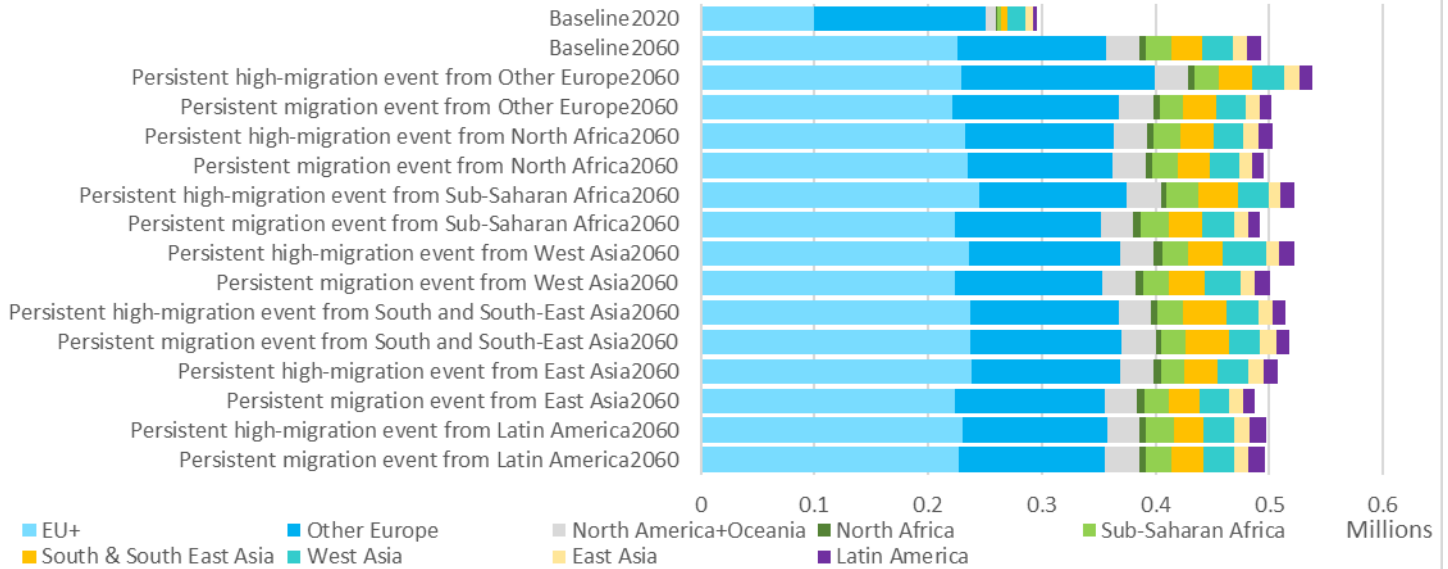
### Italy



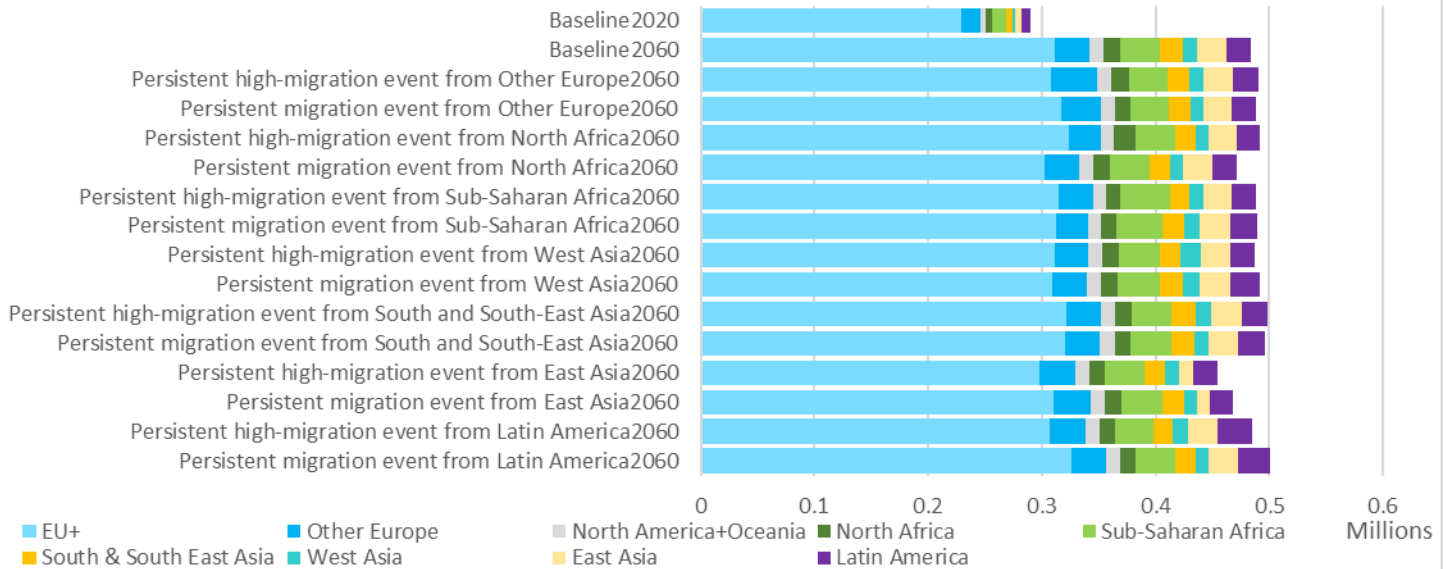
### Latvia



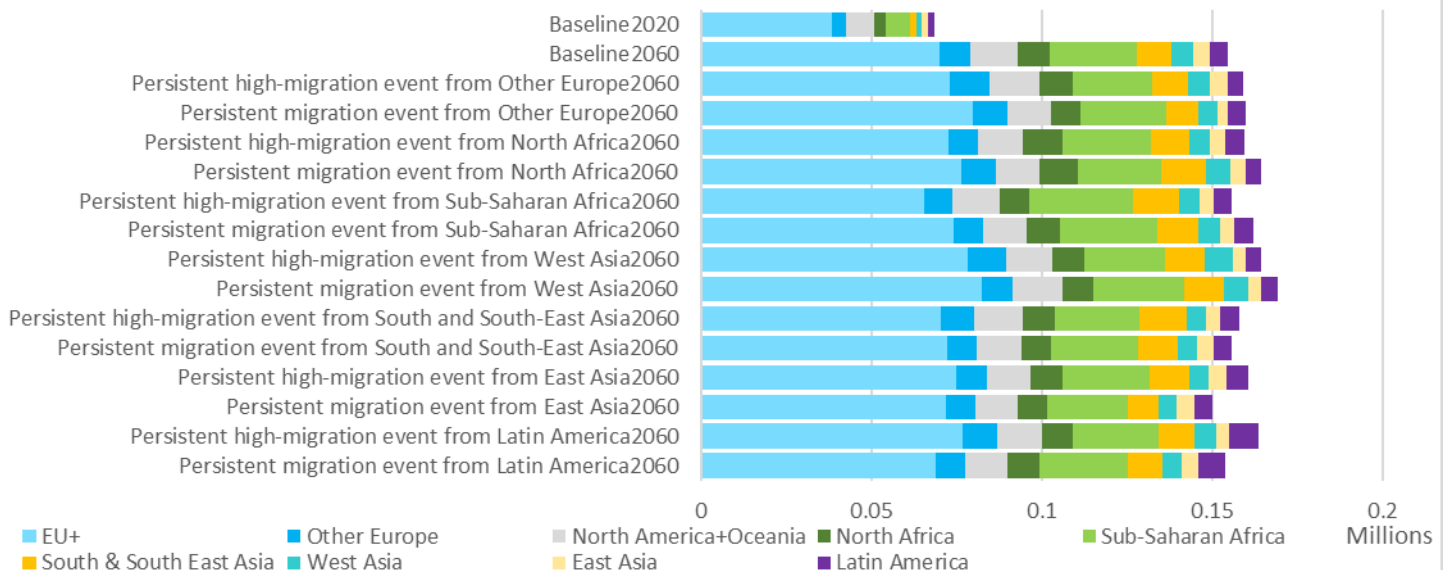
### Lithuania



### Luxemburg

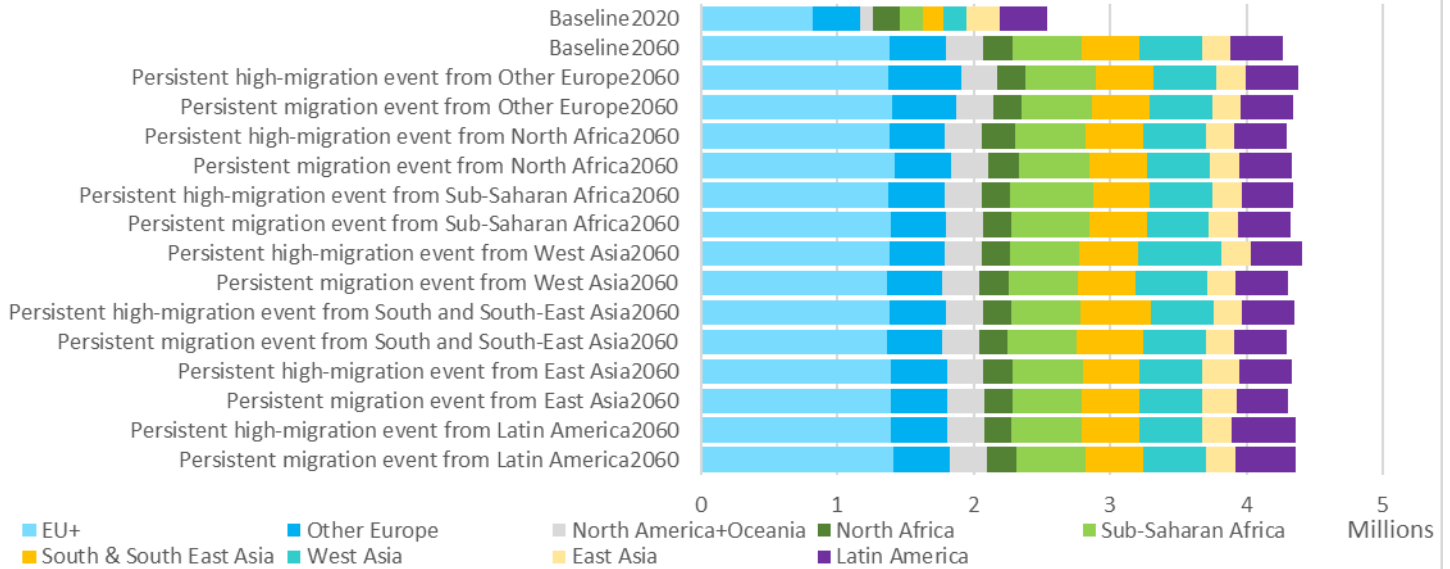


### Malta

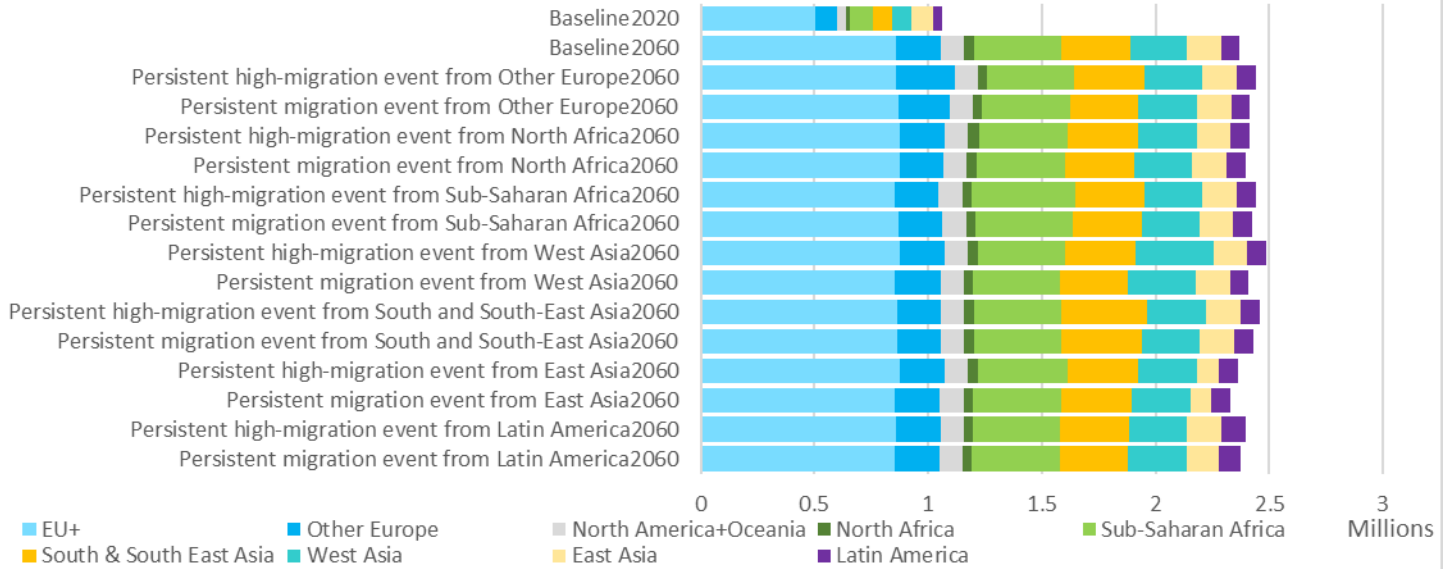




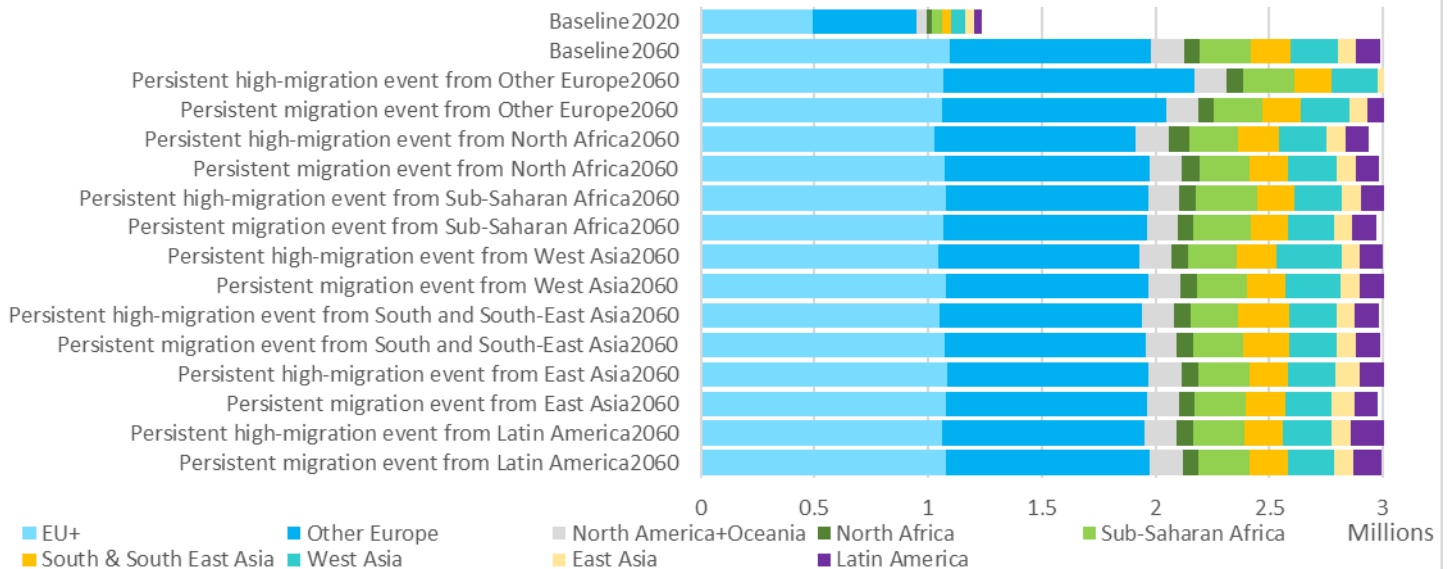
### Netherlands



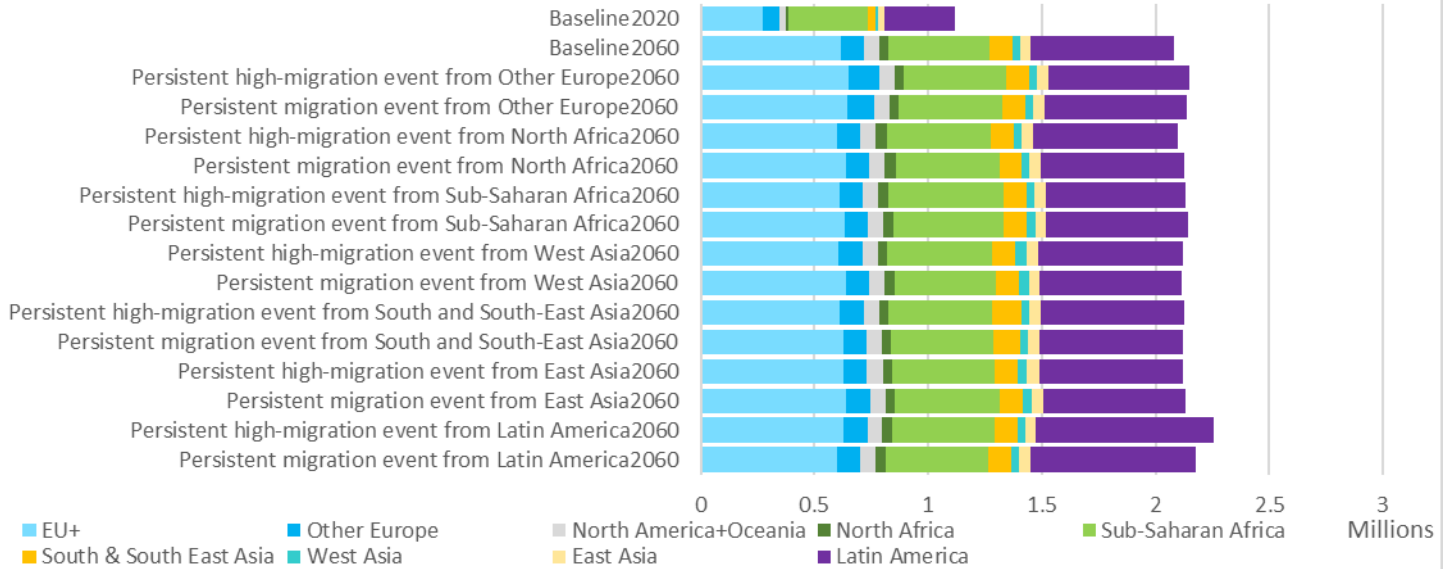
### Norway



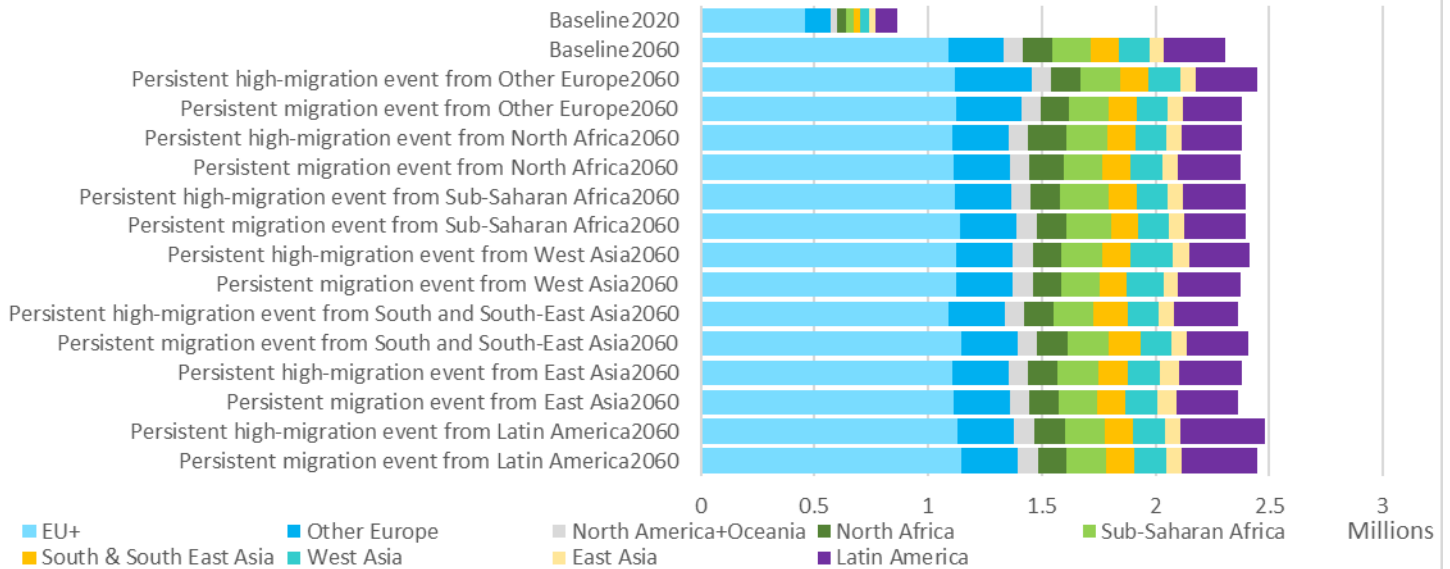
### Poland



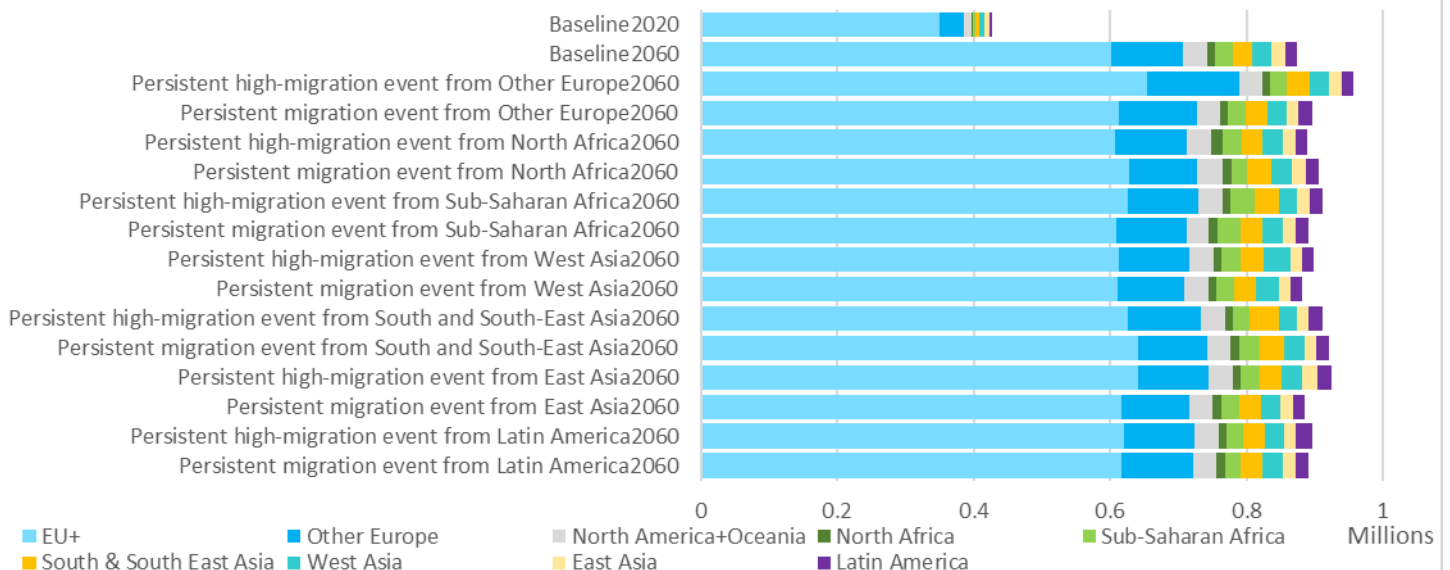
### Portugal



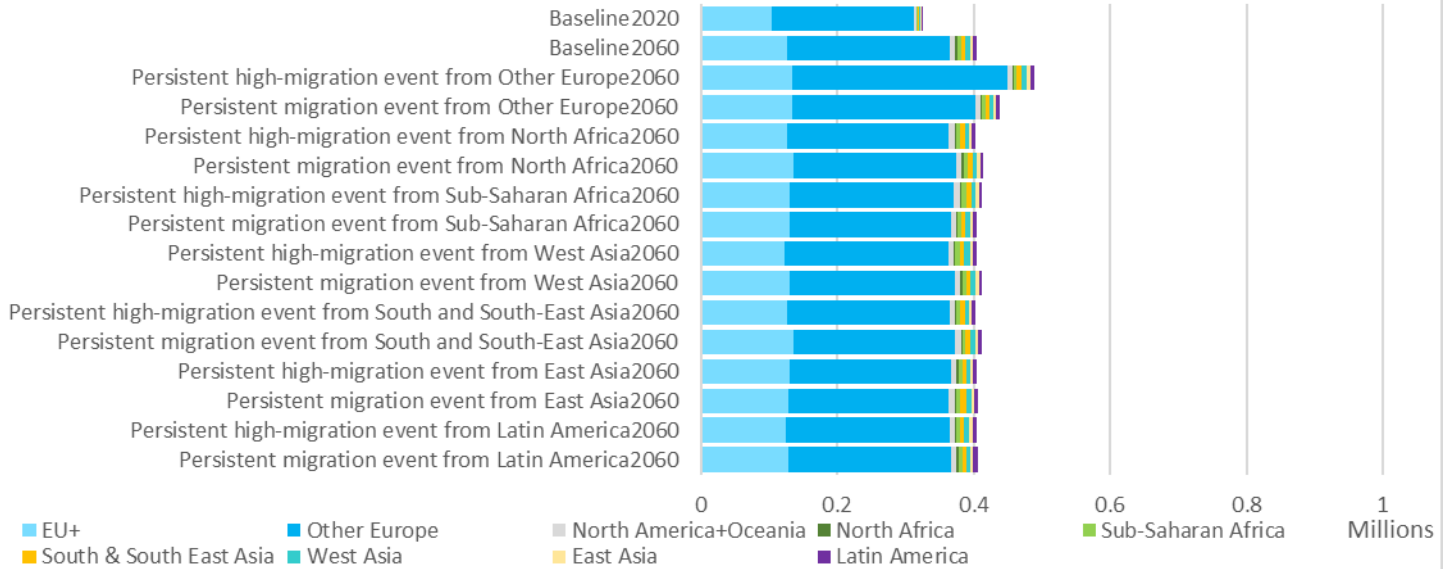
### Romania



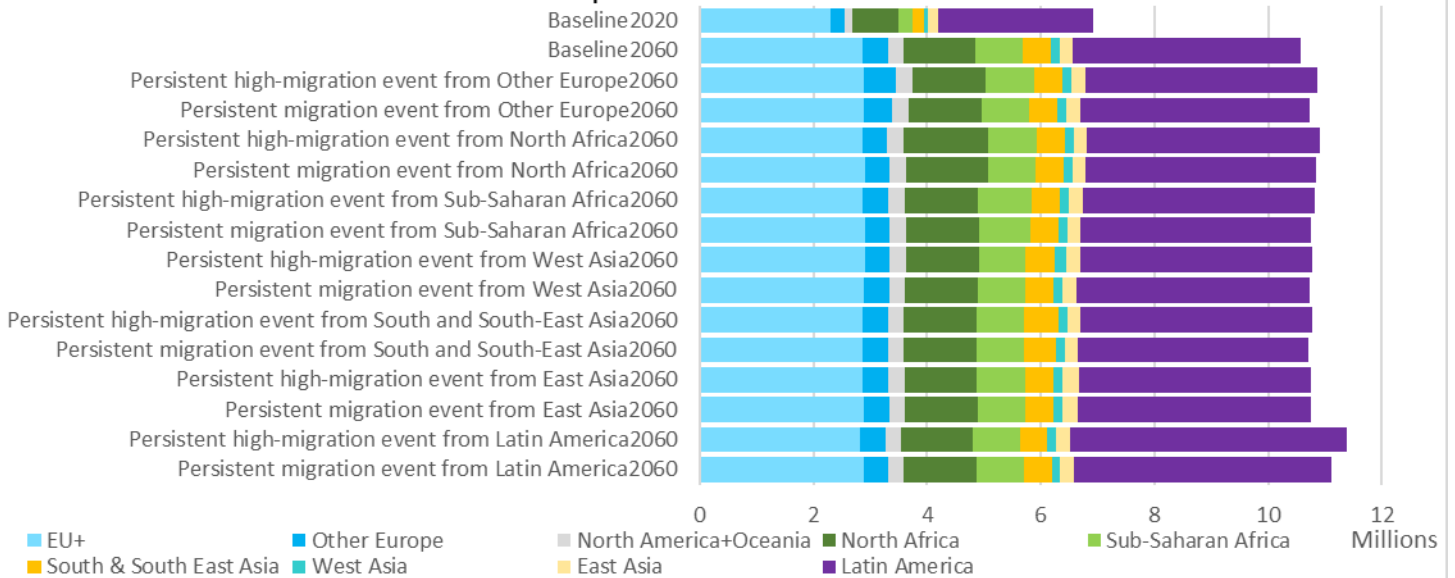
### Slovakia



### Slovenia



### Spain



### Sweden

