

Week 6: Migration

Qing Guan

DEMO2002 POPULATION ANALYSIS
SCHOOL OF DEMOGRAPHY, ANU



Australian
National
University

Who is a migrant and what is migration?

Where are the data coming from?

Levels, rates, and age patterns

Who is a migrant?

No clear definition — not as simple as births and deaths

At the international level, no universally accepted definition for “migrant” exist.

- International Organization for Migration (IOM), the UN Migration Agency



The UN 1998 Recommendations on Statistics of International Migration

An international migrant is defined as “any person who changes his or her country of usual residence” and a person’s country of usual residence is “that in which the person lives, i.e., the country that the person has a place to live where he or she normally spends the daily period of rest.”

“Temporary travel abroad for purposes of recreation, holiday, business, medical treatment or religious pilgrimage does not entail a change in the country of usual residence.”

(para. 32)



What is migration?

- Permanent change of usual residence, moving a great enough distance that all activities are transferred from one place to another.
- “Permanence” usually means that you have been away from your usual residence for at least one year.
- “Distance moved” – internal long distance (e.g. cross state/territory borders), international (cross national borders)

Migration and mobility

- Daily
 - Seasonal or temporary
 - Residential
 - Internal long distance
 - International
- } Migration

length of time: usually one year, but this has not been universally applied across countries

Migrant vs migration

Migrant: the person who made the move

- Immigrant, emigrant, in-migrant, out-migrant

Migration: the movement event

- Immigration, emigration, in-migration, out-migration

‘stocks’ v ‘flows’

- Migrant stocks: the group of people who have ever migrated, measured at a point in time
 - e.g. In 2022, 29.5% of Australia's resident population were **born overseas** (7.7 million migrants) [ABS, Australia's population by country of birth](#)
- Migration flows: the number of people migrating in a given period, usually measured per year
 - e.g. In 2022, the number of **immigrants moving to** Australia was 646,110 and the number of **emigrants moving from** Australia was 223,880. [ABS, Overseas migration](#)
- Stocks and flows have different considerations and different implications

Different types of migrant populations

- Foreign-born: those born abroad
- Foreigner: not a citizen
- Ethnic group:
 - Ancestral origins (e.g., European, African, Asian, Indigenous)
 - Race (e.g., white or black)
 - Religion
 - Language
 - Culture





International Migration 2020 Highlights presents key facts and messages regarding international migration globally and by region during 2000-2020, based on the 2020 revision of the international migrant stock data set, which provides updated estimates of numbers of persons living outside their country of birth, classified by age, sex and origin, for 232 countries and areas. This *Highlights* also reviews policies and programmes to promote planned and well-managed migration and provides an overview of SDG indicator 10.7.2 on the number of countries with migration policies to facilitate orderly, safe, regular and responsible migration and mobility of people, used for measuring progress toward the achievement of SDG target 10.7.

ISBN 978-92-1-146052-9



United Nations

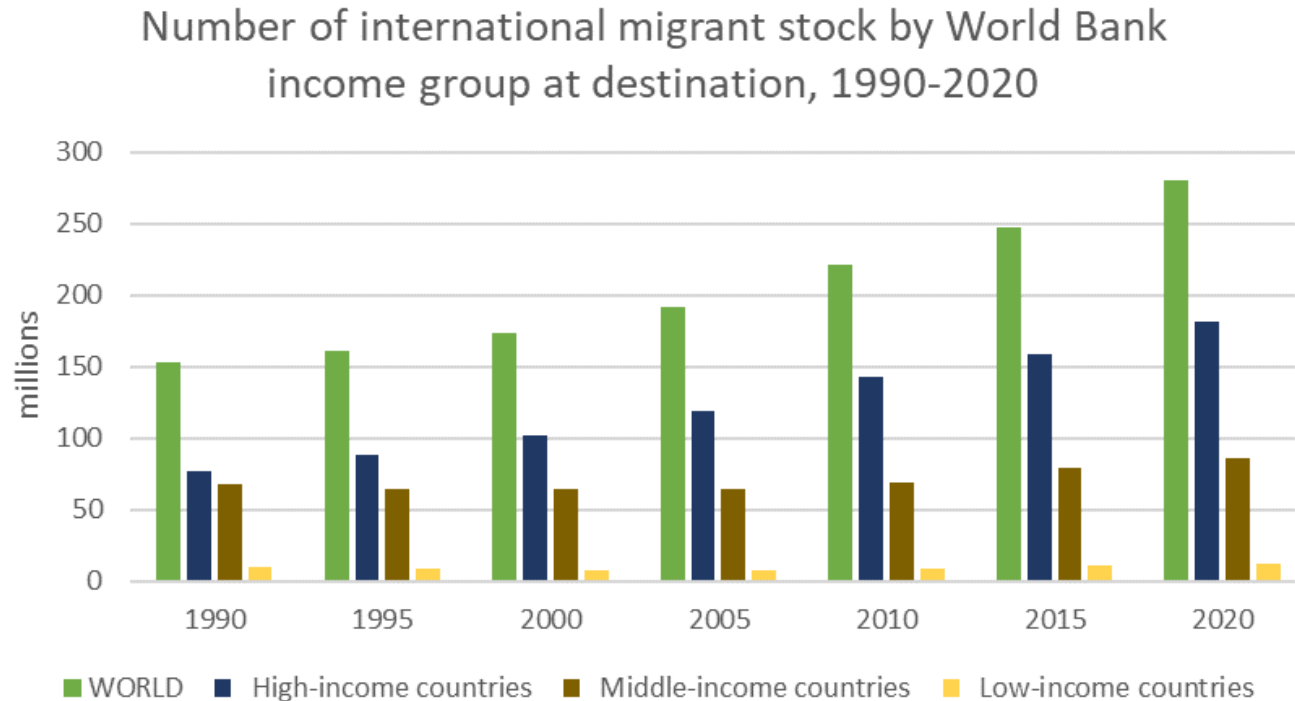
Department of
Economic and
Social Affairs

International Migration 2020

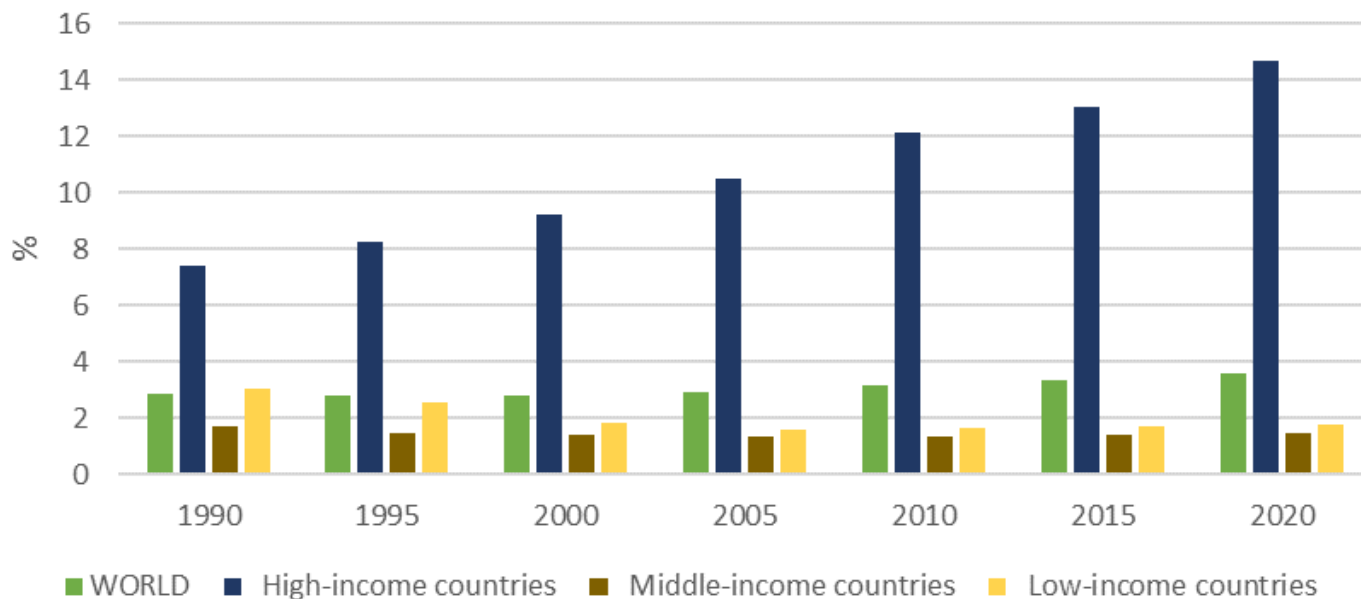
Highlights



- The number of international migrants worldwide reached 281 million in 2020
- Nearly two thirds of all international migrants live in high-income countries

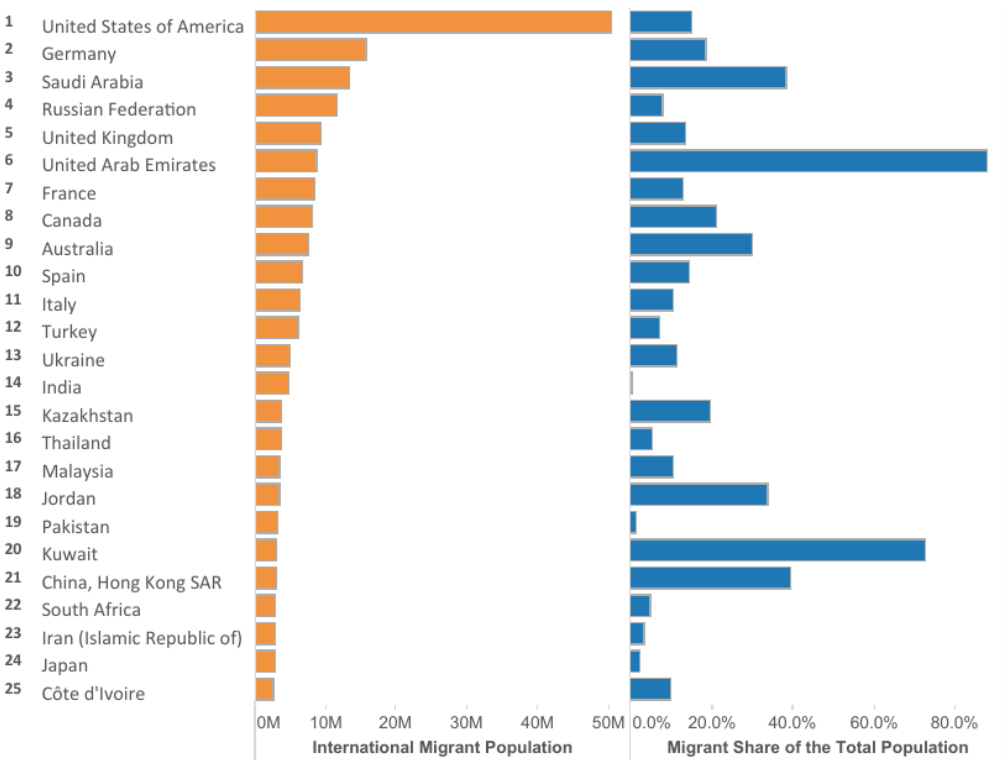


International migrant stock as a percentage of the total population at destination, 1990-2020



International Migrant Population and Migrant Share of Total Population

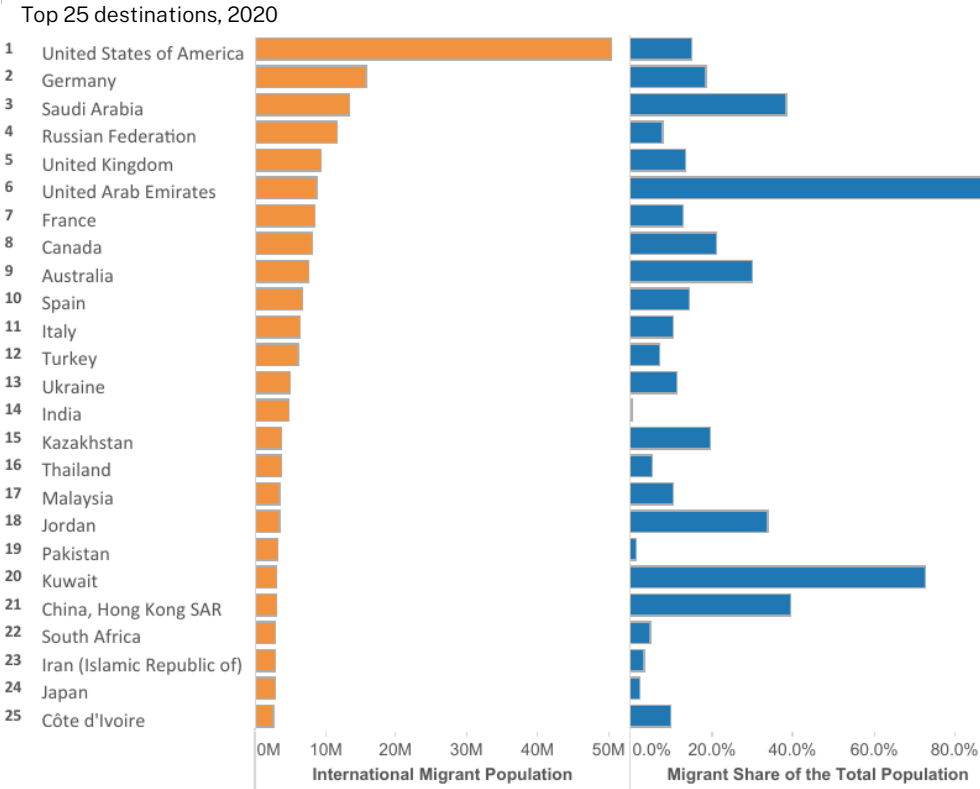
Top 25 destinations, 2020



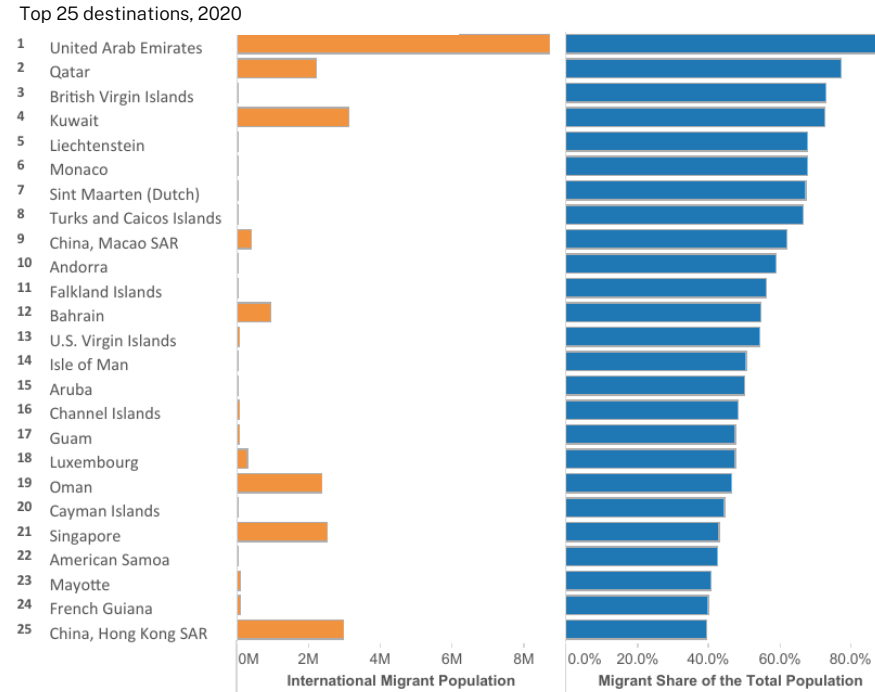
Sort countries by
Number of migrants

Year
2020

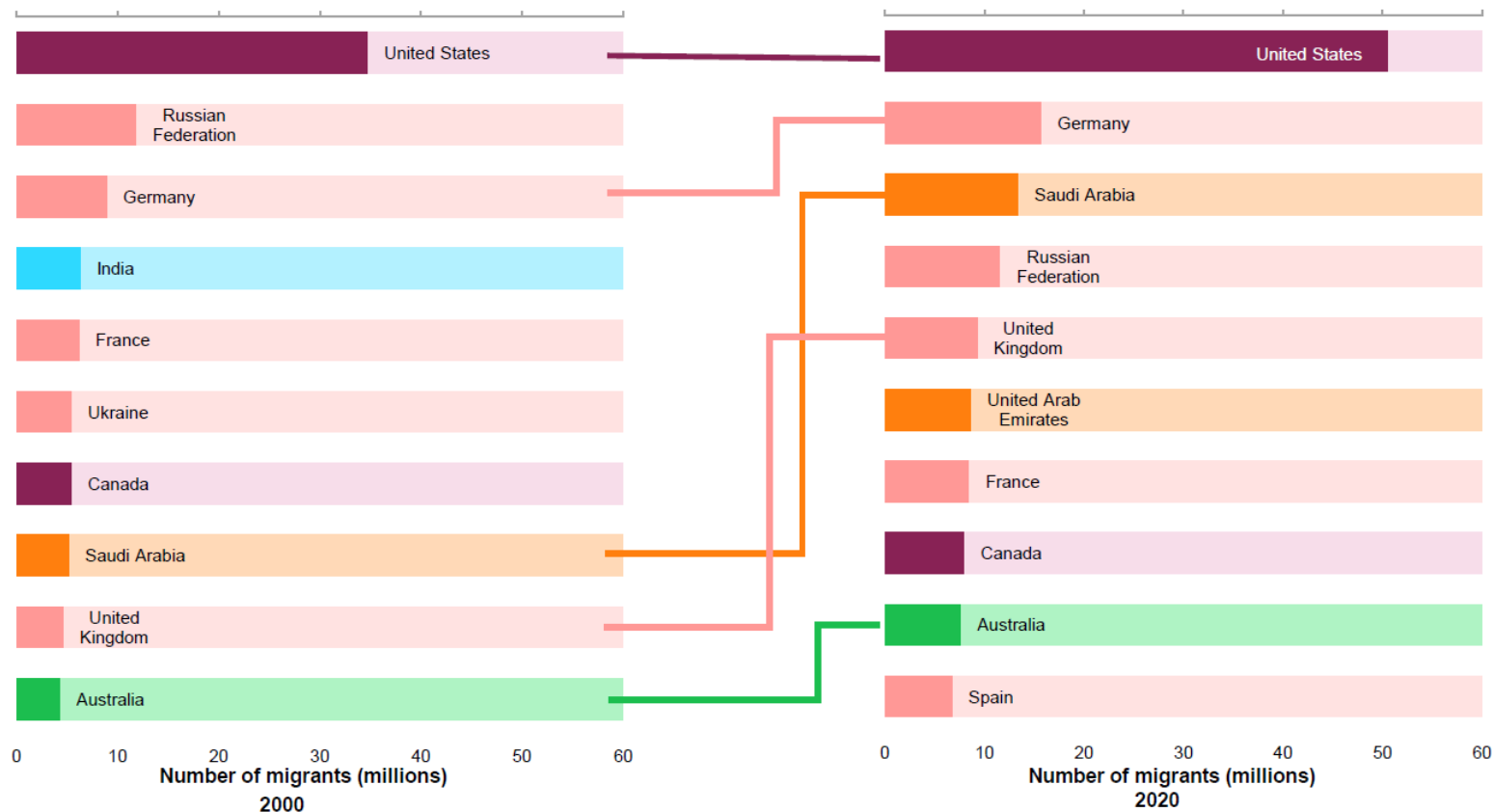
International Migrant Population and Migrant Share of Total Population



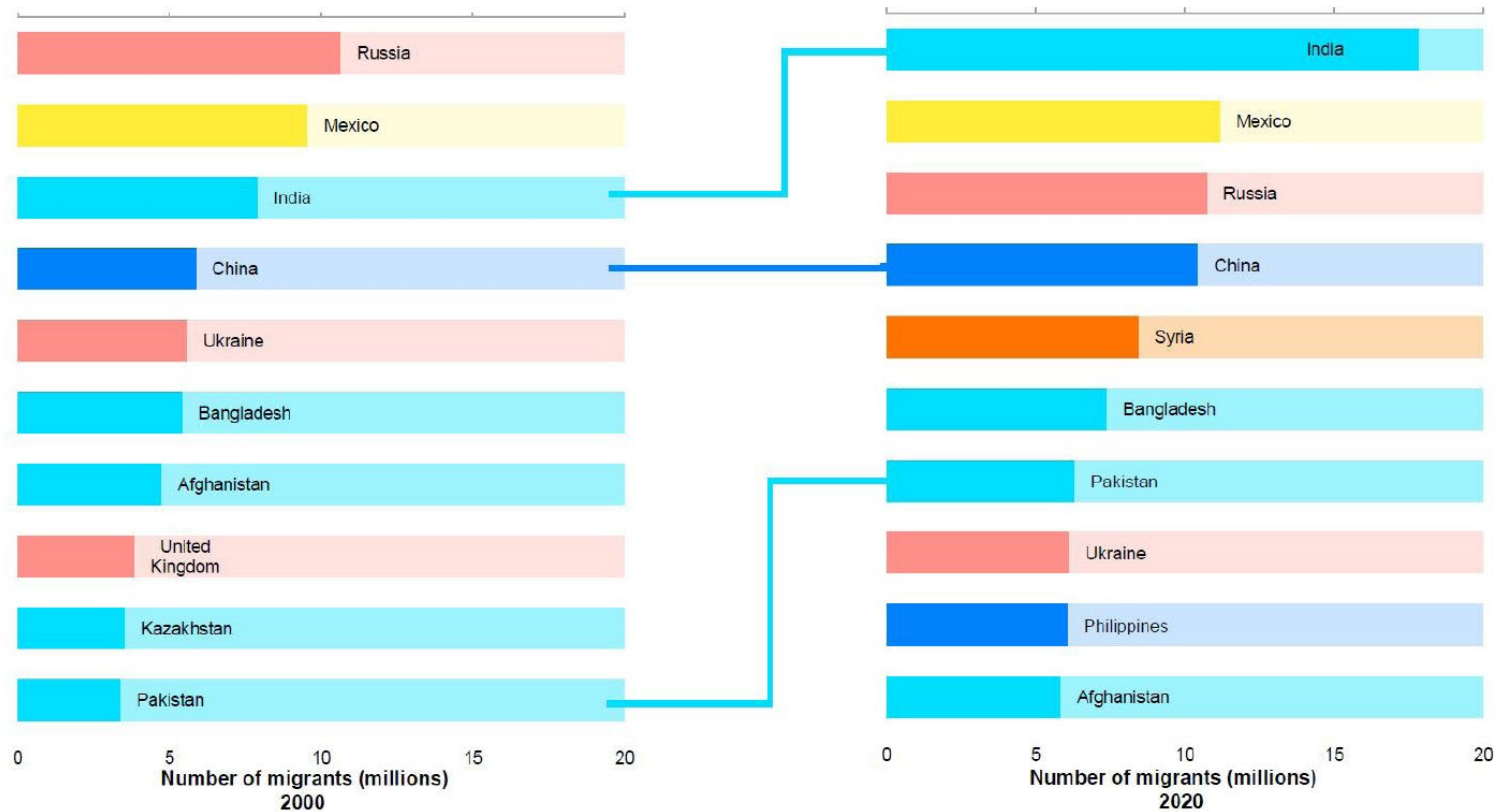
International Migrant Population and Migrant Share of Total Population



Ten countries of destination with the largest number of international migrants, by region, 2000 and 2020

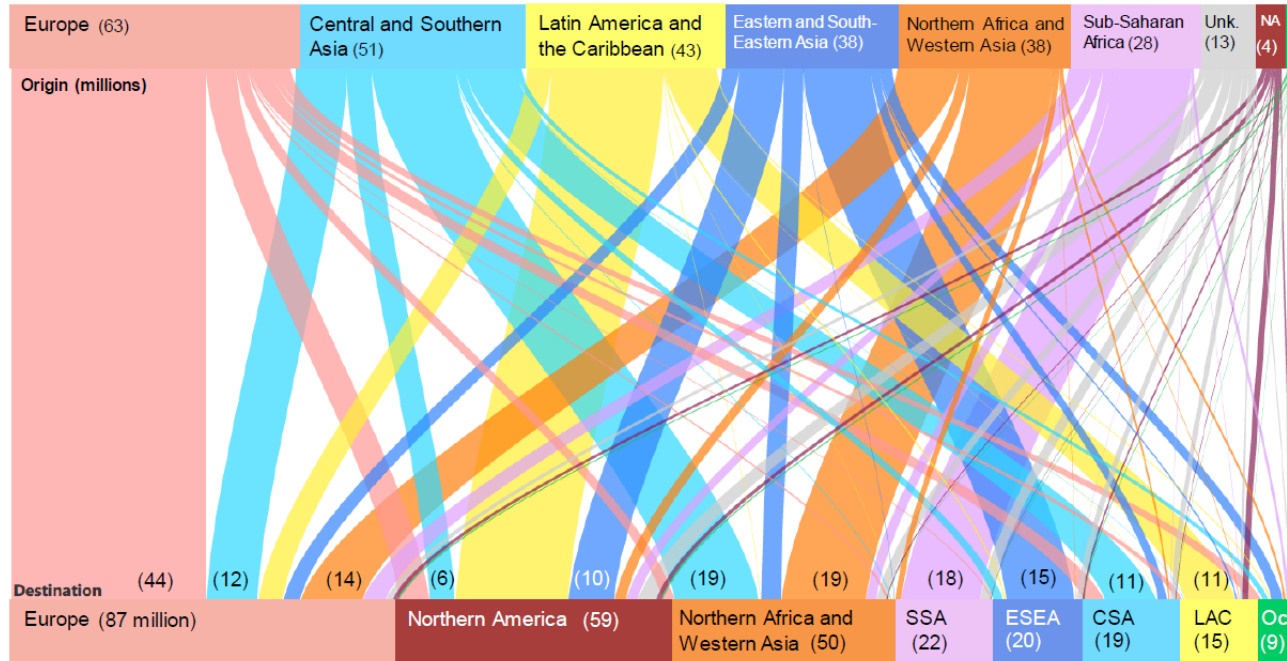


Top ten countries of origin for international migrants, by region, 2000 and 2020



- International migration often takes place within regions

Number of international migrants, by regions of origin and destination, 2020



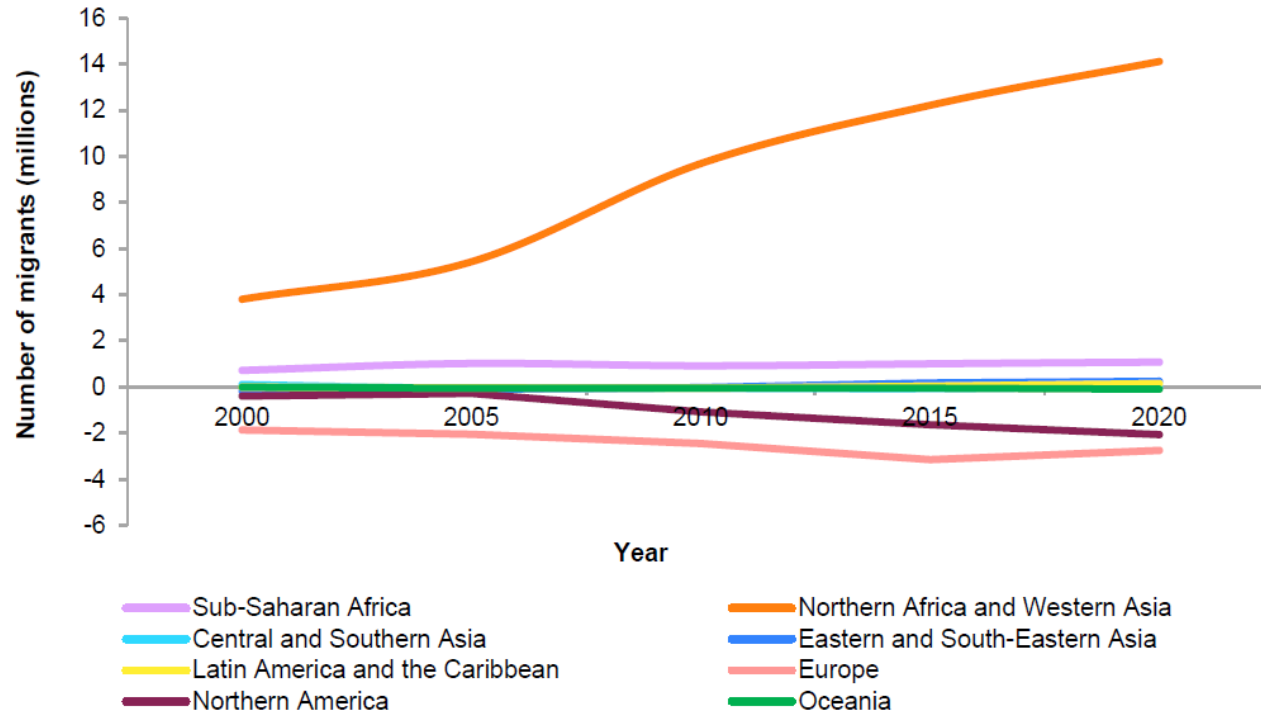
Source: United Nations Department of Economic and Social Affairs, Population Division (2020b). *International Migrant Stock 2020*.

Note: The category "Unk." refers to unknown origin, the category "NA" to Northern America, the category "Oc." to Oceania, the category "SSA" to sub-Saharan Africa, the category "ESEA" to Eastern and South-Eastern Asia, the category "LAC" to Latin America and the Caribbean, the category "CSA" to Central and Southern Asia.

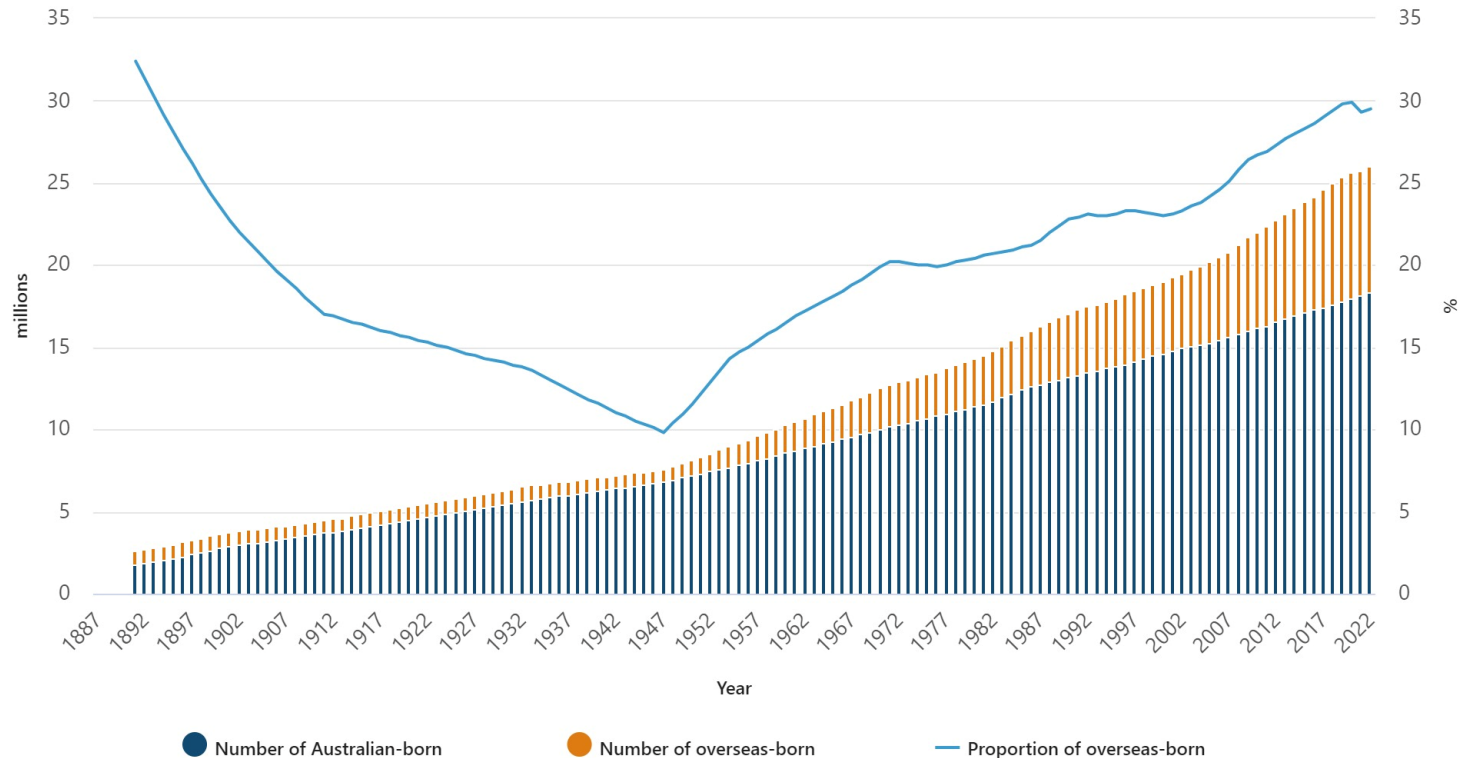
Source: International migrant stock 2020

- Women and girls comprise 48 per cent of all international migrants

Difference between the number of male and female international migrants, by region of destination, 2000 to 2020

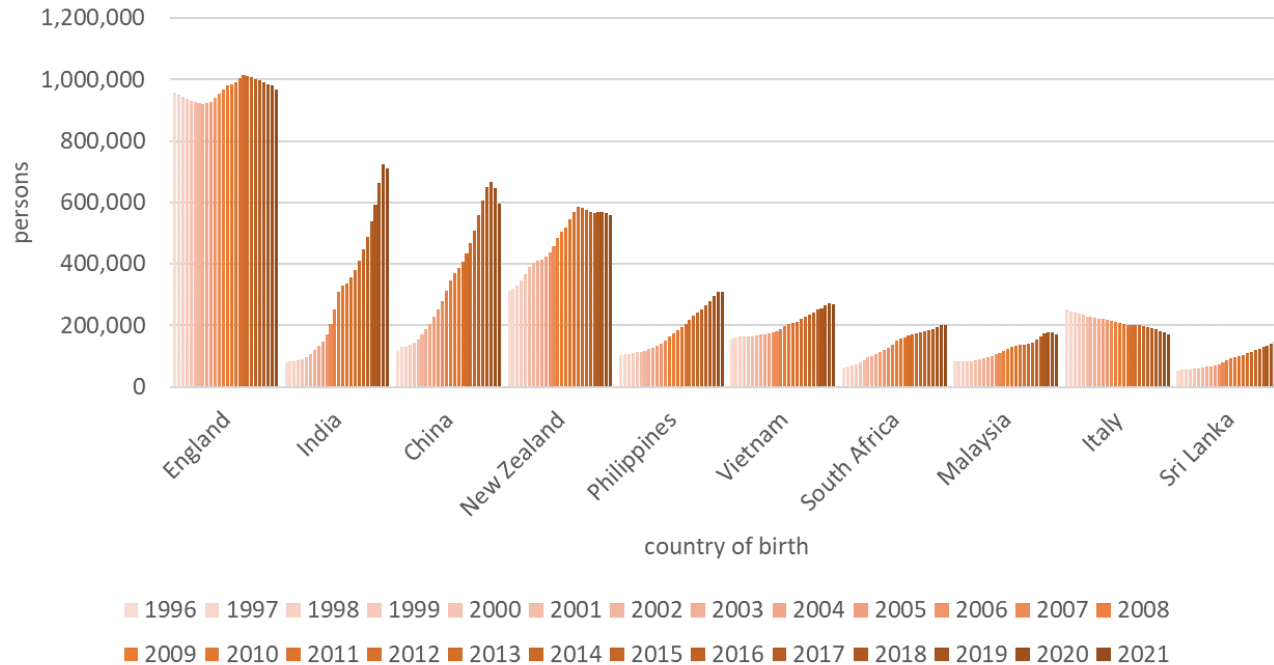


Percentage of overseas-born resident population in Australia, 1891-2022



Note: Based on estimated resident population at 30 June each year. Prior to 1986 based on Census years. Population estimates for 2022 are preliminary. See Revision status in the methodology page. Source prior to 1986: [Historical population - country of birth data cube](#)

Population change for the 10 largest overseas-born groups in Australia, 1996-2021



Source: Australian Bureau of Statistics (2022) *Australia's Population by Country of Birth*

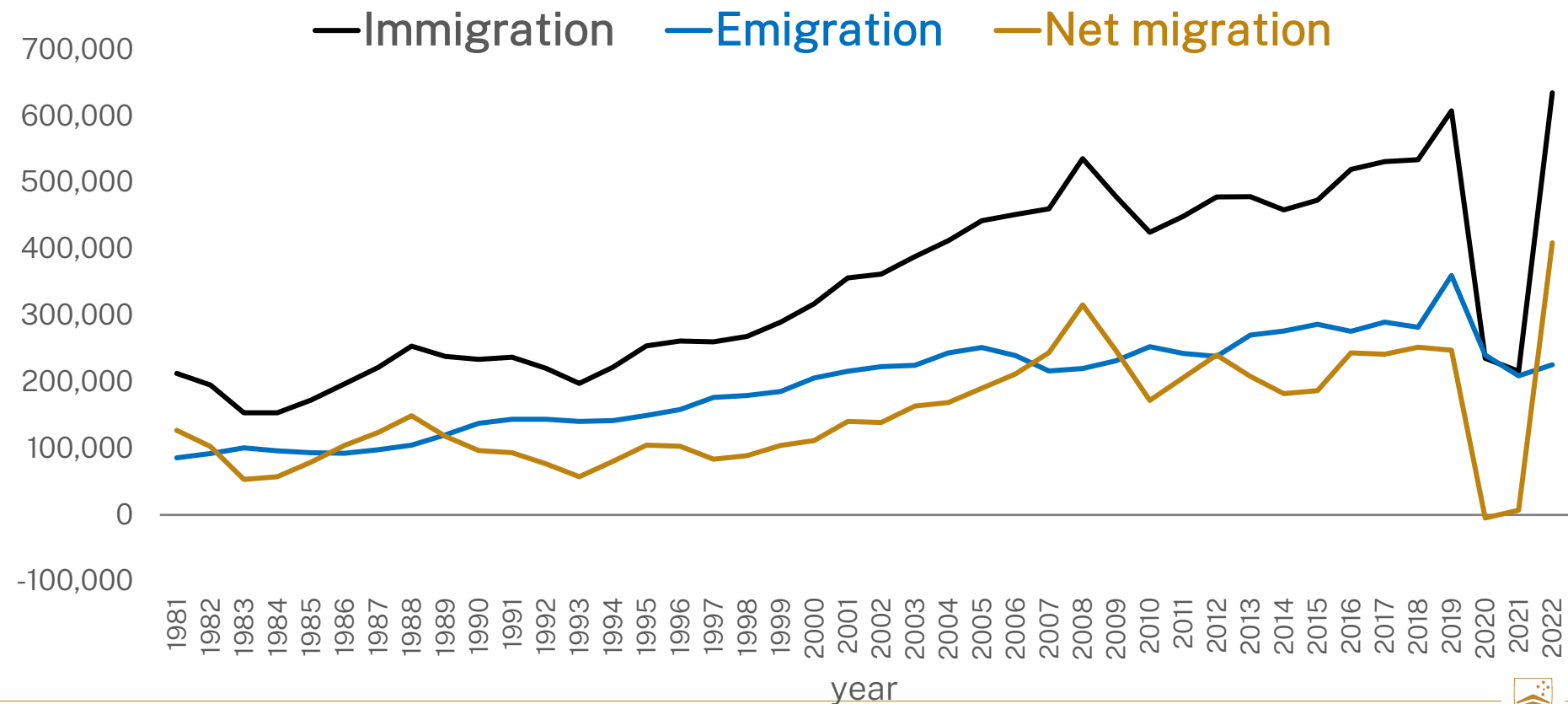
Who is a migrant in Australia?

- Born overseas (lifetime migrants)
 - An Australia-born migrant?
 - Timing of migration? Last year vs a few decades ago

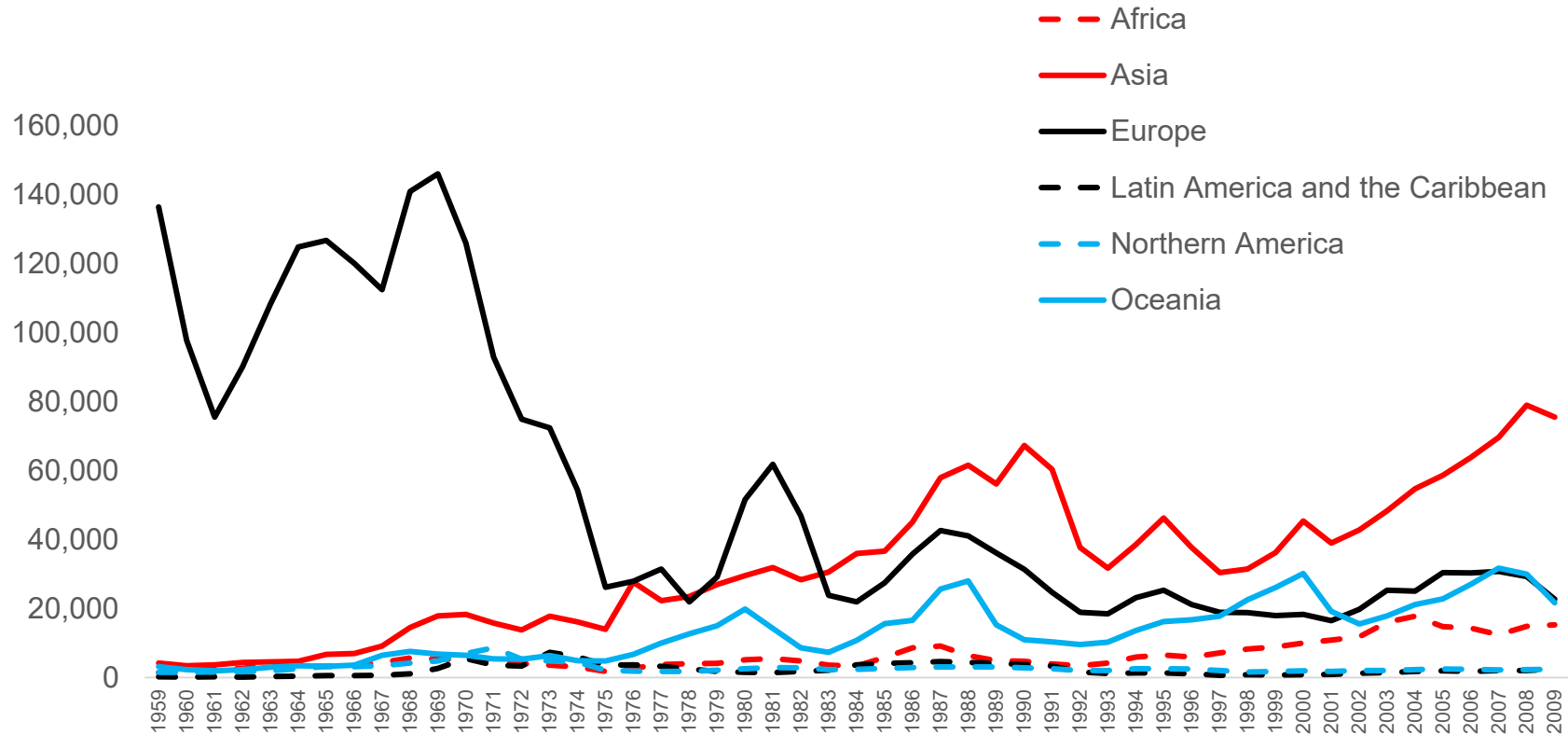
Flows of international migrants

- Migration flows “refer to the number of migrants entering or leaving a given country during a given period of time, usually one calendar year”. ([UN SD, 2017](#))
- Flows can be hard to measure (compared to migrant stocks, births, deaths)
- Countries can have immigration flows (people migrating to the country) and emigration flows (people migrating out of the country). The balance of immigration and emigration is net (international) migration

Annual immigration, emigration, and net migration flows, Australia, 1981 to 2022

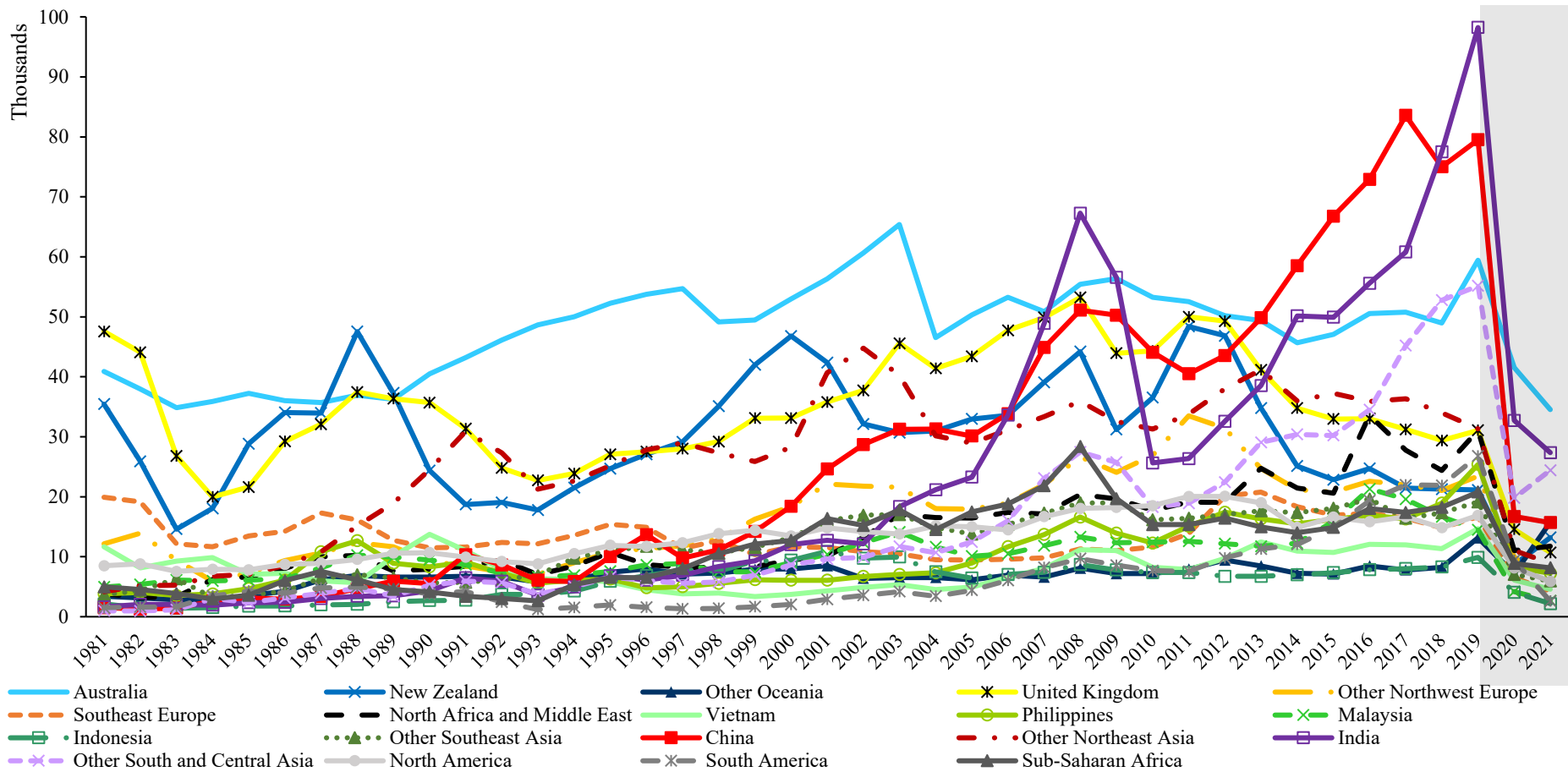


Immigration to Australia by world region: 1959-2009



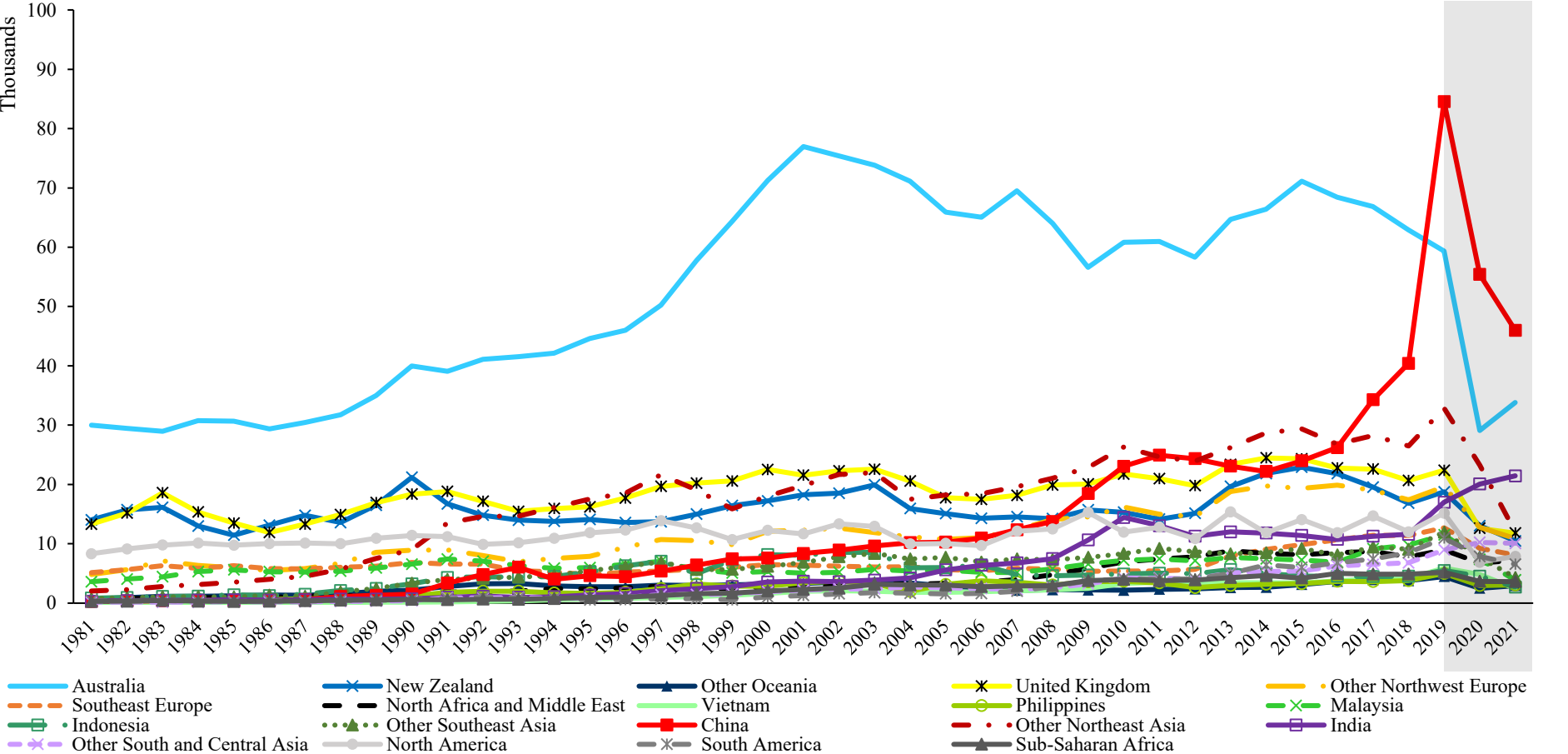
Source: United Nations (2010)

Annual immigration flows to Australia by birthplace: 1981-2021



Source: ABS NOM statistics

Annual emigration flows from Australia by birthplace: 1981-2021

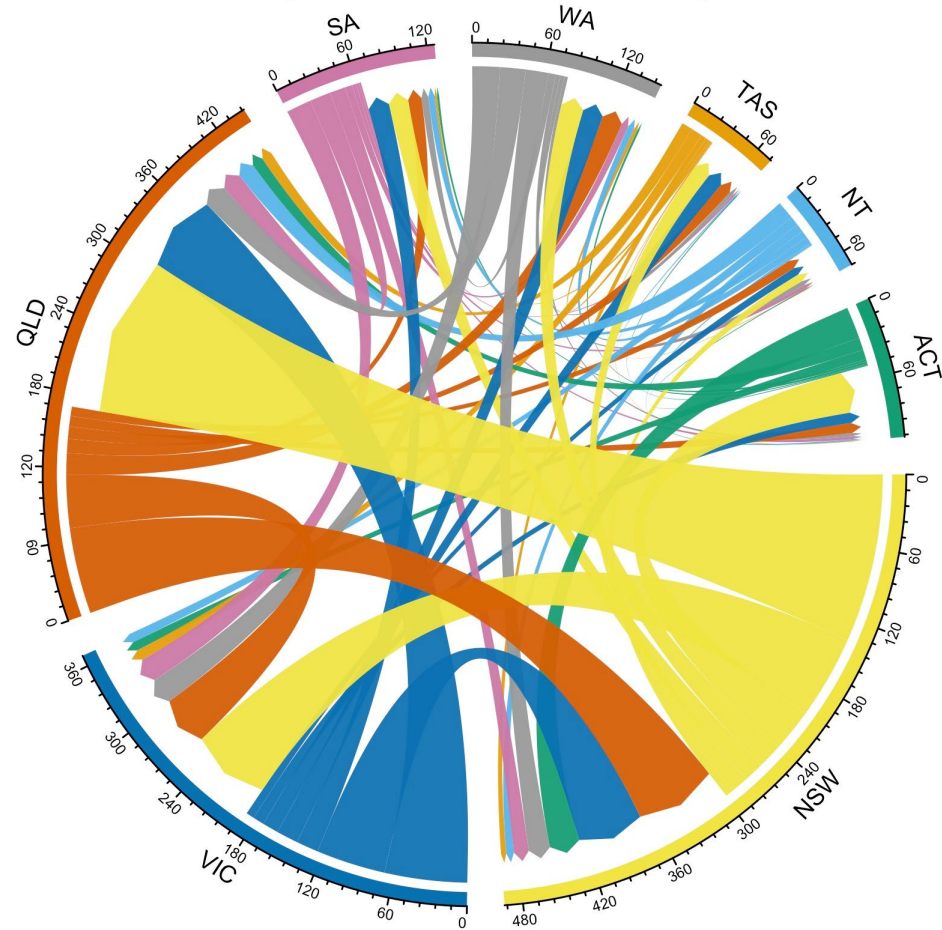


Source: ABS NOM statistics

Internal migration

- International migrants move between countries (with or without documentation).
- Internal migrants move within national boundaries (usually without constraint, but not always).
 - “Internal migration is the movement of people from one defined area to another within a country”. ([ABS – Population movement in Australia](#))
 - Types: interstate, inter-city, intra-state, etc.
 - In-migration (people migrating to a place), out-migration (people migrating out of a place), and the balance of the two is net (internal) migration

Five-year interstate migration flows (in thousand), Australia, 2016-21
(source: 2021 Australian Census)



Sources of migration data?

International migrant stock & internal migration data source

8 Where does the person usually live?

- For persons who usually live in another country and who are visiting Australia for less than one year, mark 'Other country'.
- For other persons, 'usually live' means the address at which the person has lived, or intends to live, for a total of six months or more in 2016.
- For persons who have no usual address, write 'NONE' in the 'Suburb/Locality' box.
- For boarders at boarding school, write the address of the boarding school or college.
- Remember to mark the box like this: ☐

- ☐ Same as in Question 1
☐ Elsewhere in Australia (please specify address)

Apartment/Flat/Unit number (if any)

Street number

Street name

Suburb/Locality

State/Territory

Postcode

☐ Other country

9 Where did the person usually live one year ago (at 9 August 2015)?

- If the person is less than one year old, leave blank.
- For persons who had no usual address on 9 August 2015, write the address at which they were then living.
- Remember to mark the box like this: ☐

- ☐ Same as in Question 8
☐ Elsewhere in Australia (please specify address)

Apartment/Flat/Unit number (if any)

Street number

Street name

Suburb/Locality

State/Territory

Postcode

☐ Other country

10 Where did the person usually live five years ago (at 9 August 2011)?

- If the person is less than five years old, leave blank.
- For persons who had no usual address on 9 August 2011, write the address at which they were then living.
- Remember to mark the box like this: ☐

12 In which country was the person born?

- Remember to mark the box like this: ☐

- ☐ Australia **▶ Go to 14**
☐ England
☐ New Zealand

14 In which country was the person's father born?

- ☐ Australia
Other (please specify)

15 In which country was the person's mother born?

- ☐ Australia
Other (please specify)

18 What is the person's ancestry?

- Provide up to two ancestries only.
- Examples of 'Other': GREEK, VIETNAMESE, HMONG, KURDISH, MAORI, LEBANESE, AUSTRALIAN SOUTH SEA ISLANDER.
- Remember to mark the box like this: ☐

i Go to census.abs.gov.au for more information.

- ☐ English
☐ Irish
☐ Scottish
☐ Italian
☐ German
☐ Chinese
☐ Australian

Other ancestry 1 (if any)

Other ancestry 2 (if any)

16 Does the person speak a language other than English at home?

- Mark one box only.
- If more than one language other than English, write the one that is spoken most often.
- Remember to mark the box like this: ☐

YOUR CONTACT DETAILS IN AUSTRALIA

Phone ()
 E-mail
 OR
 Address State

EMERGENCY CONTACT DETAILS (FAMILY OR FRIEND)

Name
 E-mail, Phone OR
 Mail address

PLEASE COMPLETE IN ENGLISH

► In which country did you board this flight or ship?

◆ What is your usual occupation?

► Nationality as shown on passport

► Date of birth Day Month Year

► PLEASE X AND ANSWER A OR B OR C

A Migrating permanently to Australia

MAKE SURE YOU HAVE COMPLETED BOTH SIDES OF THIS CARD.
 PRESENT THIS CARD ON ARRIVAL WITH YOUR PASSPORT.

B Visitor or temporary entrant

► Your intended length of stay in Australia
 Years Months Days
 OR
 ► Your country of residence

► Your main reason for travel (X one only)
 Convention/conference ☐ 1 Visiting
 Business ☐ 2

C Resident returning to Australia

► Country where you spent most time abroad

Information sought on this form is required to administer immigration, customs, quarantine, statistical, health, wildlife and other currency laws of Australia and its collection is authorised by legislation. It will be disclosed only to agencies administering these areas and authorised or required to receive it under Australian law. Form 1442i Privacy notice is available from <https://immi.homeaffairs.gov.au/help-support/departamental-forms>

Incoming passenger card • Australia

PLEASE COMPLETE IN ENGLISH WITH A BLUE OR BLACK PEN

► Family/surname
 ► Given names
 ► Passport number

◆ Flight number or name of ship

► Intended address in Australia

State

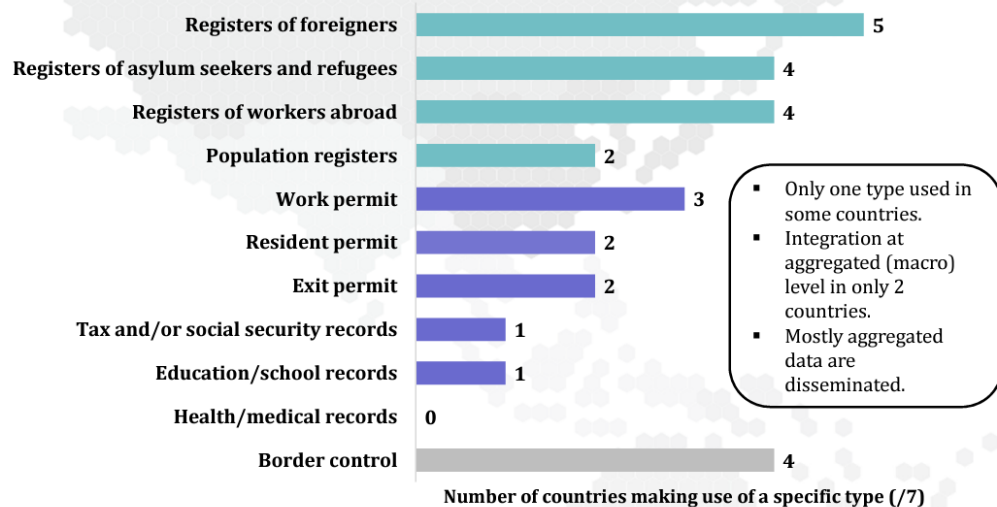
► Do you intend to live in Australia for the next 12 months?

Yes No

Migration data sources

- Population census / surveys (transitions)
- Administrative register, e.g. visas, Medicare, population register, border statistics (events / movements)
- Indirect estimation of net migration from the demographic balance equation (no information on immigration and emigration)
- Innovative data sources, .e.g Facebook/mobile phone data

Types of administrative sources commonly used for migration statistics in Asia-Pacific*



Findings of the "Toolkit to assess National Migration Data Capacity" (responses from 8 ESCAP member States + Jordan)

[Serrao, UN Economic and Social Commission for Asia and the Pacific \(2019\)](#)

Migration in the demographic accounting equation

Balancing equation

$$P_t - P_0 = (Births - Deaths) + (Immigrants - Emigrants)$$



Population growth

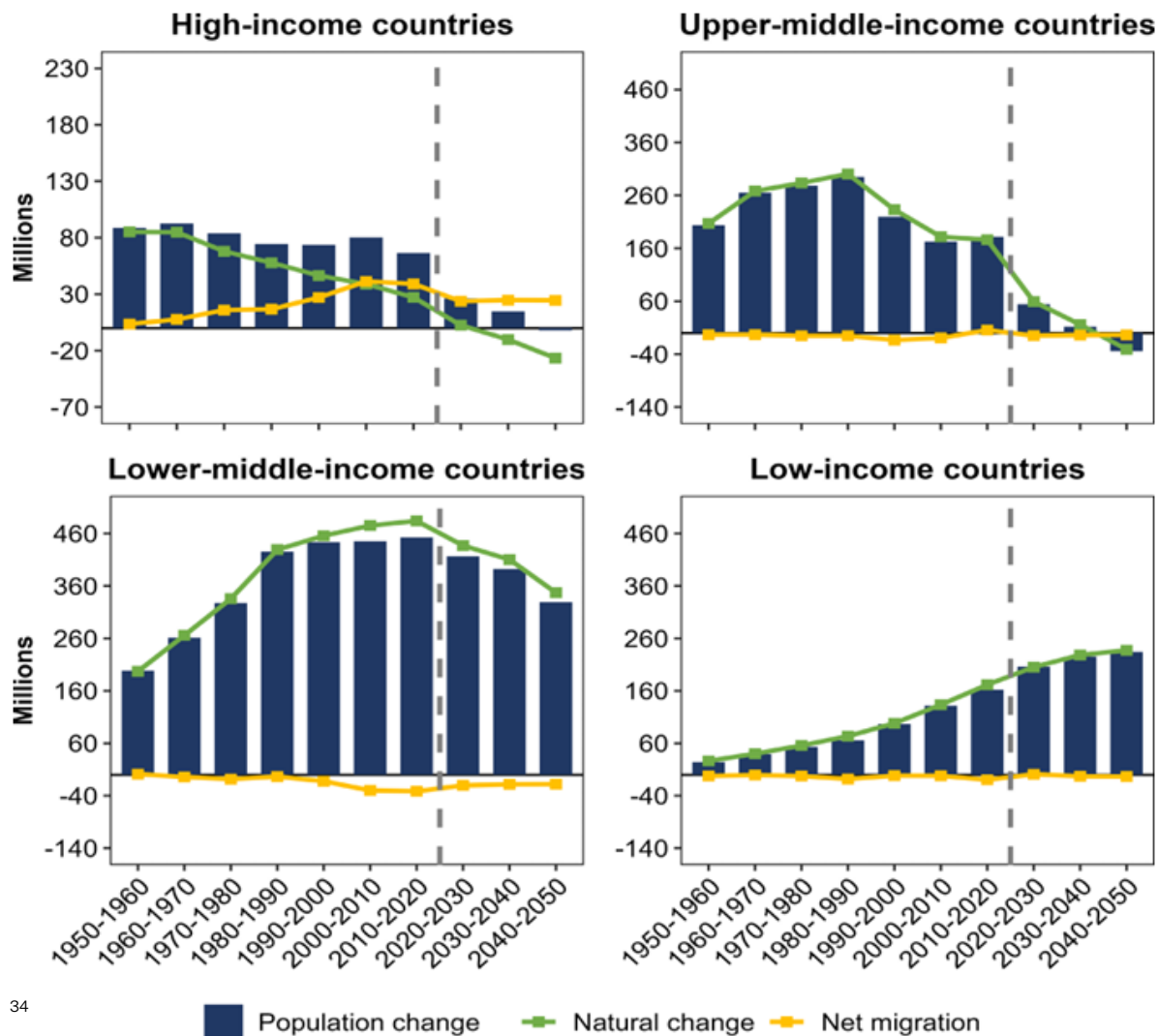


Natural increase



Net migration

In practice, net migration are usually estimated as the differences between population growth and natural increase due to a lack of reliable migration data



Contributions to total population change, by income group, from 1950-1960 to 2040-2050

Demographic accounting for a subnational population

Balancing equation

$$P_t - P_0 = (\text{Births} - \text{Deaths}) + (\text{Immigrants} - \text{Emigrants}) + (\text{In-migrants} - \text{Out-migrants})$$



Population growth



Natural increase



Net international migration



Net internal migration

Migration rates

Emigration rate

$$\frac{E}{P_{orig.}}$$

E = number of emigrants

$P_{orig.}$ = total population at origin

Migration rates

Immigration rate

$$\frac{I}{P_{dest.}}$$

I = number of immigrants

$P_{dest.}$ = total population at destination

Rate, ratio, proportion?

Not a usual rate!

Migration rates

Net migration rate

$$\frac{I - E}{P}$$

I = number of immigrants

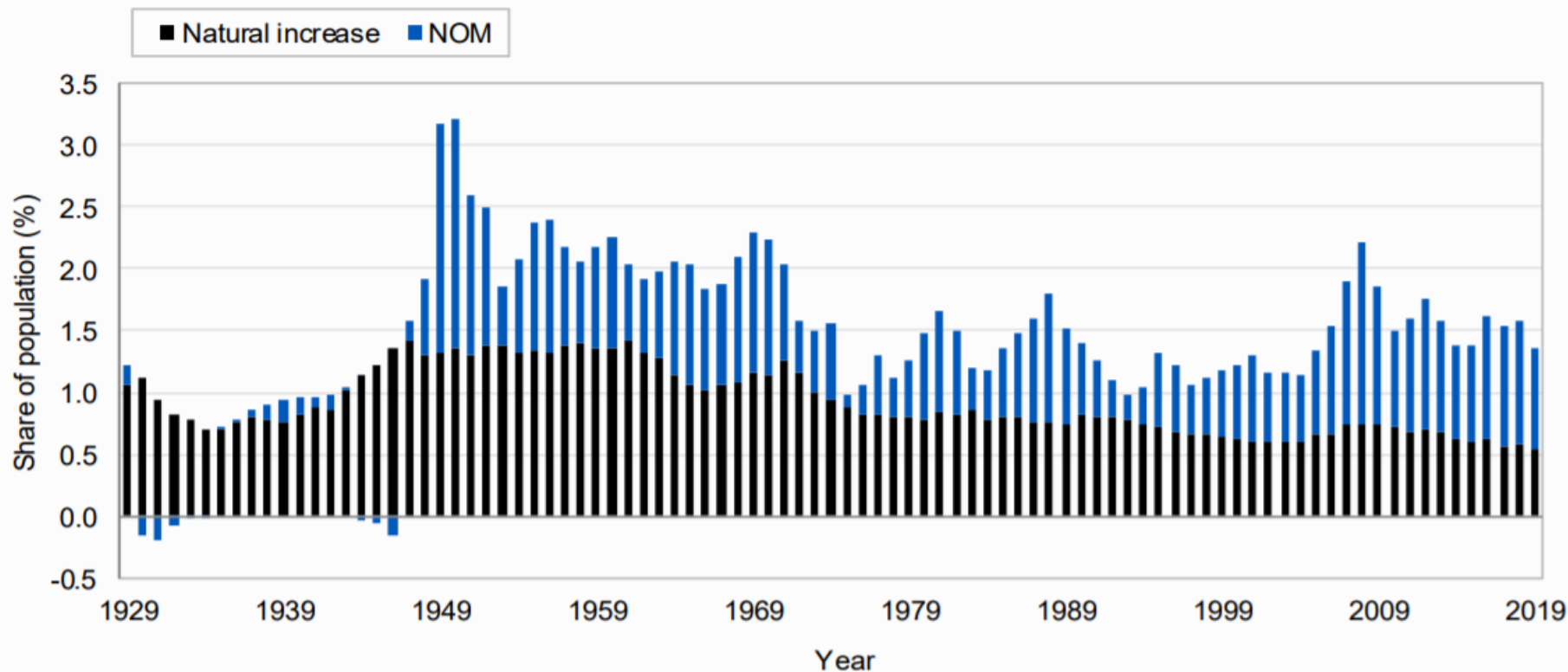
E = number of emigrants

P = total population

Also not a usual rate, but a widely used rate

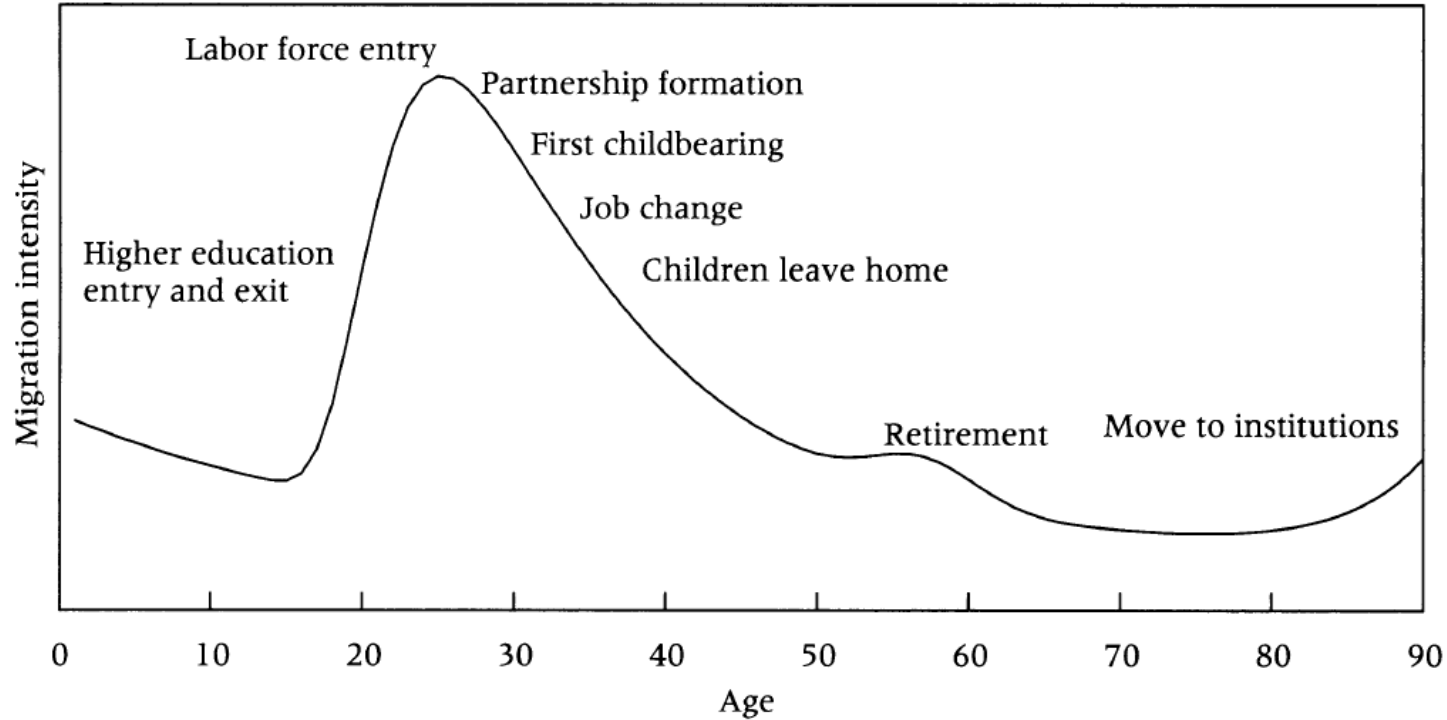
Measure the relative importance (the impact) of migration in respect to the population

Net migration and natural increase rate in Australia, 1929-2019

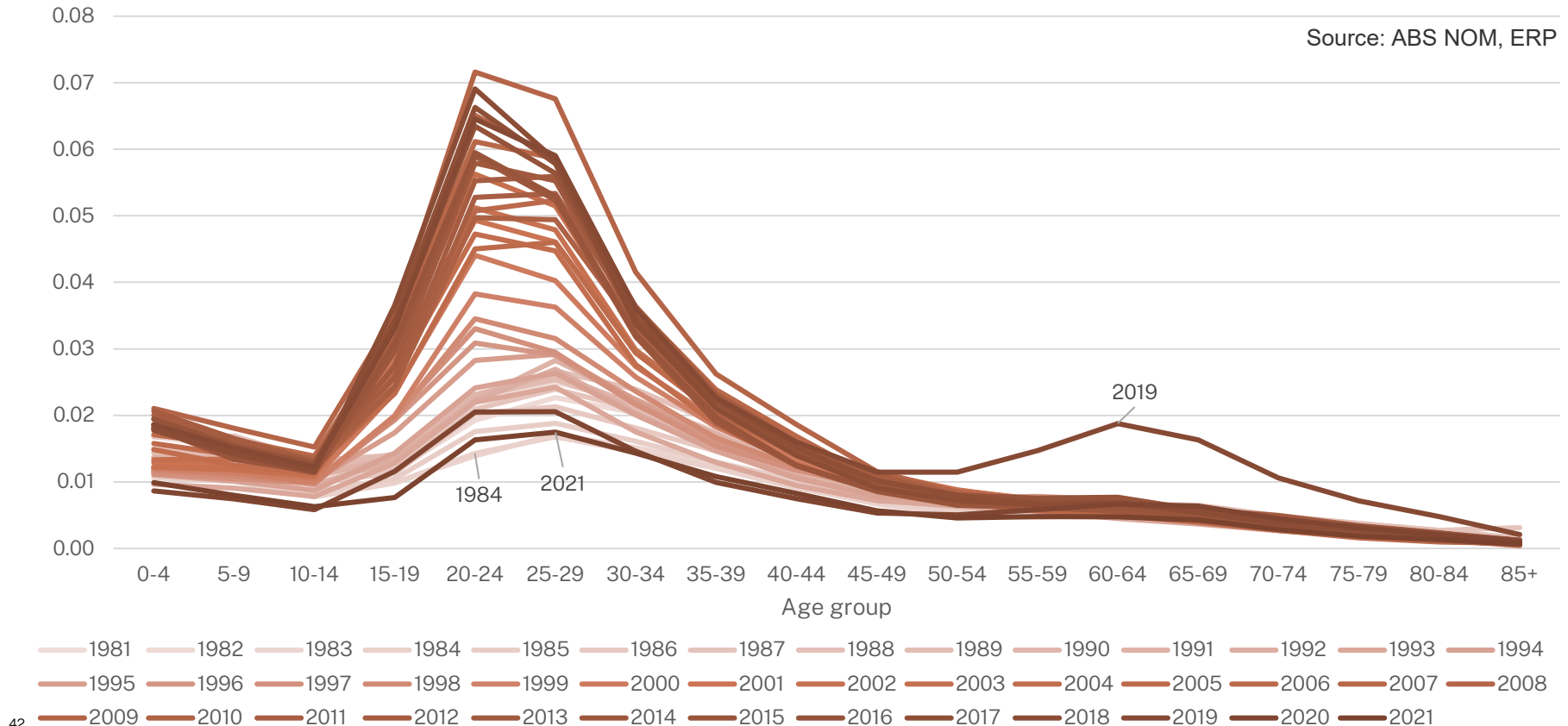


Age-specific migration rates?

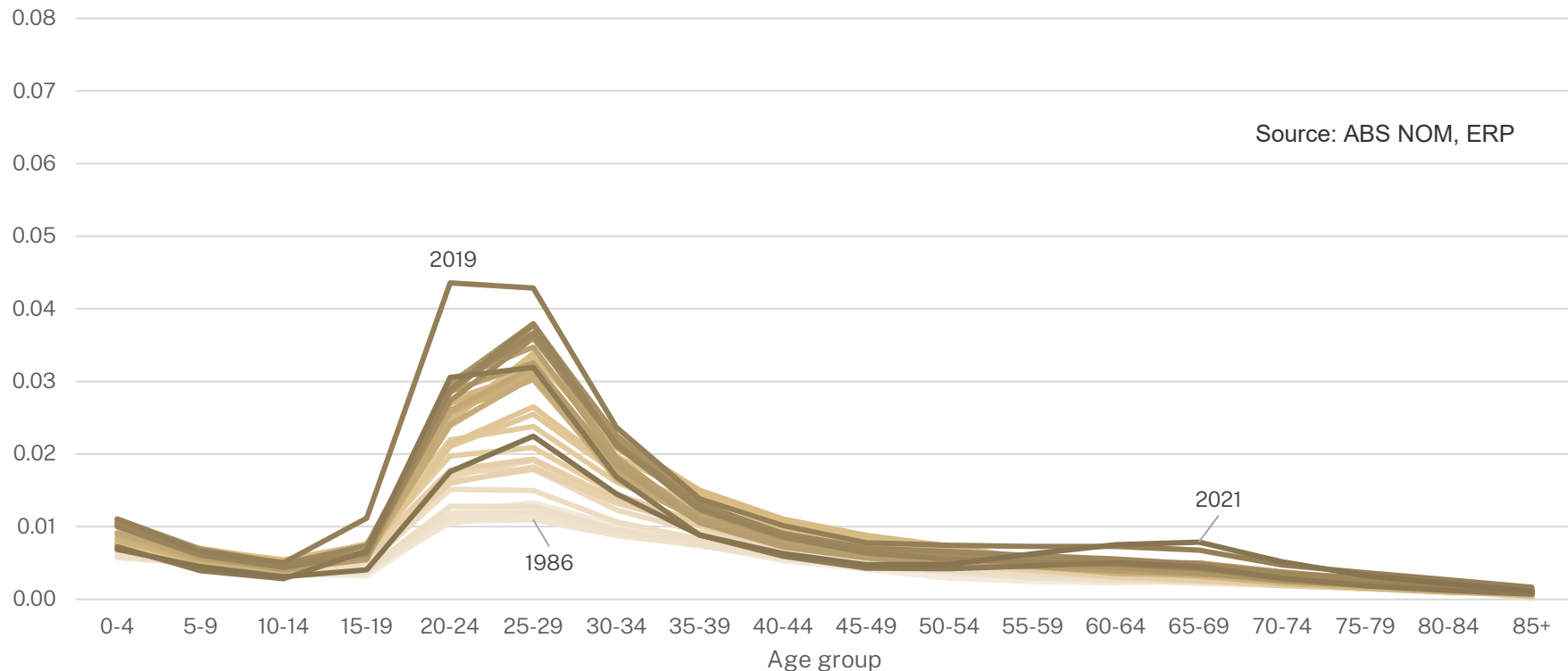
Age profile of migration flows



Age-specific immigration rates: Australia, 1981-2021



Age-specific emigration rates: Australia, 1981-2021



Source: ABS NOM, ERP

A horizontal timeline spanning from 1981 to 2021. The years are listed in three rows: 1981-1994, 1995-2008, and 2009-2021. The timeline is marked with vertical lines and corresponding year labels. The year 2020 is highlighted in a darker shade of blue, indicating the focus of the report.

Migration intensity

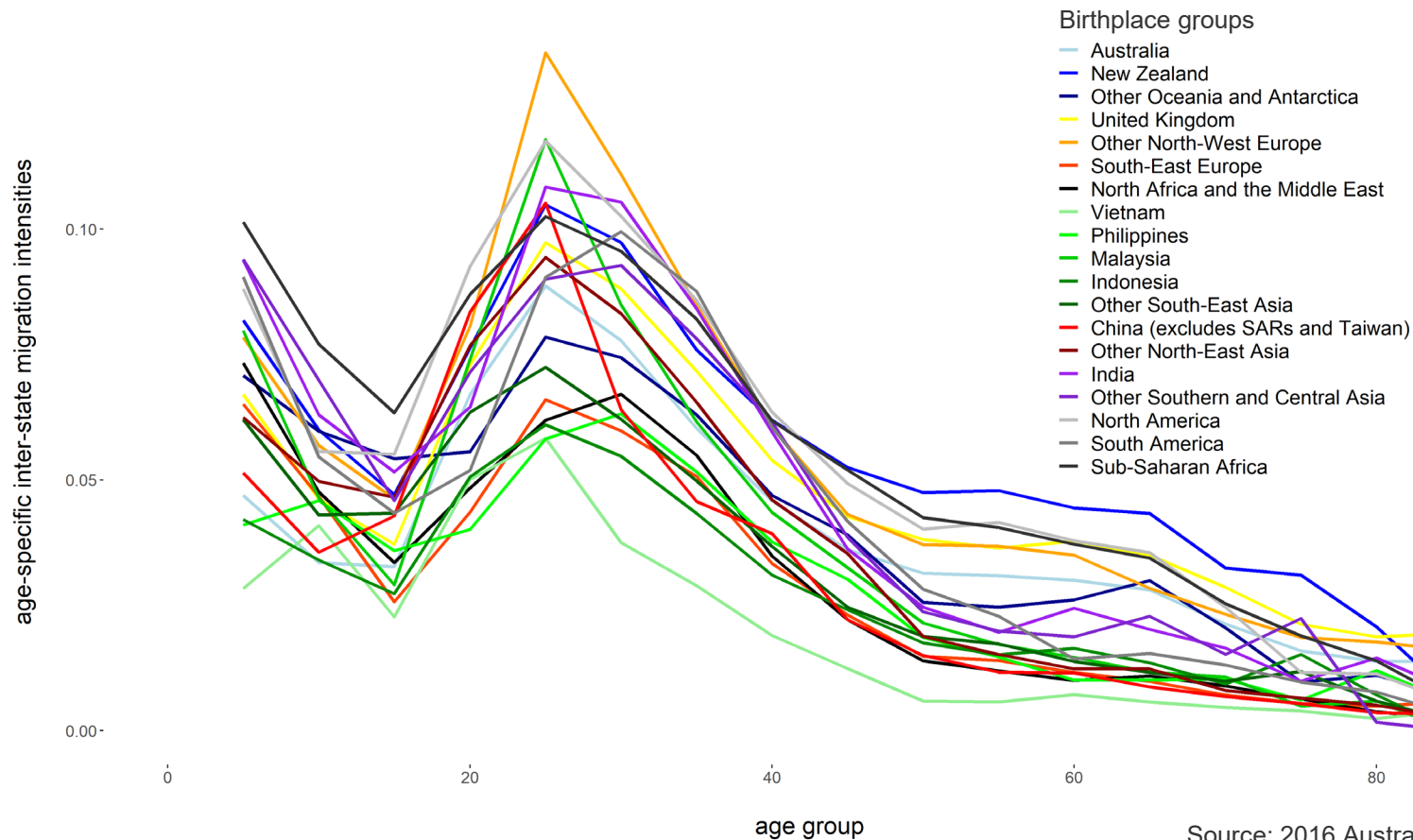
$$\frac{M}{P}$$

M: total number of migrants in a given time period (by age)

P: the national population at risk of moving (by age)



Five-year interstate migration intensity by age and birthplace, Australia, 2016



The 3rd demographic component

- Migration is increasingly important as a demographic component (complements fertility and mortality)
- Stock (~3% worldwide) and flow
- International migration and internal migration
- Characterised by a young age profile
- Flow data are often of poor quality or non-existent
- Some migration rates are not usual rates but we still use them -- because migration flow data are largely absent

Population Analysis for Policies & Programmes 101 - S09

Migration and population distribution



Australian
National
University