Formal demographic analysis for migration is not fully explored yet. Migration is the social component of population change. Very important especially in developed countries. Definitions of commonly used terms are important (special attention to be paid for defining "a migrant", see opposite side of this handout). Typical characteristics of migrants are also given here.

- 1. The importance of migration
 - P(t+1) P(t) = Births Deaths + In Out (Population change = Natural increase + Net migration)
- 2. Basic measures and concepts of migration
 - 1. Who is migrant? (cf. https://migrationobservatory.ox.ac.uk/resources/briefings/who-counts-as-a-migrant-definitions-and-theirconsequences/)
 - -> Definitions are different by country and the nature/purpose of statistics
 - 2. Emigrants and immigrants (for international migration)
 - Inmigrants and outmigrants (for internal migration) 3.
 - 4. Return migrants: Migrants who back to the original place of residence
 - 5. Lifetime migrants: People who experienced migration between birth and the time of a census or survey.
 - Gross and net migration: Simply explained as, Gross migration = In + Out (The sum of arrivals and departures in an area), 6. Net migration = In - Out (The difference between the number of arrivals and departures in an area).
 - 7. The definition of migration rate is not so simple. It refers either [the ratio of the number of migrants to the number of people at risk of moving] or [the ratio of the number of movers to the size of the population at risk of sending or receiving the migrants]. (See, Rowland's text) There are arguments on the denominator being initial or end-of-period population.
 - Rate of inward migration = [arrivals]/[mid-period population] ·1000 1.
 - Rate of outward migration = [departures]/[mid-period population] ·1000 2.
 - Rate of net migration = [arrivals departures]/[mid-period population] ·1000 3.
 - Rate of gross migration = [arrivals + departures]/[mid-period population] ·1000 4.
 - Age-specific migration rate = [number of migrants aged x at the end of the period] / [end-of-period population aged x]5
 - Migration effectiveness ratio = [net migration] / [gross migration] · 100 6.
 - 7. Migration expectancy can be obtained from migration data and life table (see, US Census bureau's web page¹).
- The collection of migration data 3.
 - 1. Data from residence registry of japan (available from URL below) https://minato.sip21c.org/demography-special/japan-migration-2013.txt https://minato.sip21c.org/demography-special/inmig-outmig-2013.R
 - Census data also provides the change of residence from the previous census. 2.
 - (cf.) Census population structure may also suggest the migration status. Comparison of the shape of population pyramids among prefectures suggests the migration status (try, https://minato.sip21c.org/demography-special/compare-pyramids-among-pref.R_) The fukurami-shisuu (population expanding index = PEI, by Dr. Toshio Kuroda²) shows the extent of in-migration at prefecture level.

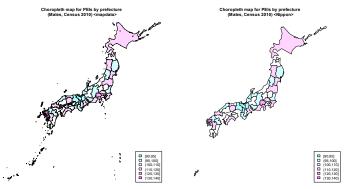
* Original definition

PEI = [Population aged 15-34] / { [Population aged 5-14]+[Population aged 35-44]} x 100

- * New definition (modification is suggested by Minato Nakazawa, July 2, 2011)
- PEI = [Population aged 20-39] / { [Population aged 10-19]+[Population aged 40-49]} x 100
- It's interesting to see the relationship with youth population (YP: nensho-jinko-kouzou-keisuu)
- $\underline{\mathbf{YP}} = [Population aged 0-14] / [Total population]$

Nagano suggests 20-39 population's outmigration due to few universities within the prefecture and their U-turn for marriage and reproduction. (try, https://minato.sip21c.org/demography-special/relations-PEI-YP.R.)

For youth population's international comparison, see https://www.citypopulation.de/en/world/bymap/youngpopulation/ Drawing choropleth map is impressive. (try, <u>https://minato.sip21c.org/demography-special/PEImap2.R</u>)



- The analysis of migration data 4.
- 1. Internal migration flow matrix (see, Table 7.1) 5.
 - The characteristics of migrants
 - 1. PEI focuses on the ages of migrants
 - Males tend to dominate labor migration flows 2.
 - 3. Unmarried tend to move more than the married
 - 4. Fitter, highly educated, richer, more ambitious people tend to move more
 - Refugees don't have common features of migrants

[Data] https://publications.iom.int/system/files/pdf/wmr_2020.pdf (World Migration Report 2020)

Dr Kuroda denoted this index as "Bulge Index" in abstract for the paper written in Japanese. 2 http://www.ipss.go.jp/syoushika/bunken/data/pdf/j119.pdf

https://www.census.gov/topics/population/migration/guidance/calculating-migration-expectancy.html 1

Migrant/Migration (UNESCO) <u>People on the Move: Handbook of selected terms and concepts.</u> <u>https://unesdoc.unesco.org/ark:/48223/pf0000163621</u>

The term **migrant** can be understood as "any person who lives temporarily or permanently in a country where he or she was not born, and has acquired some significant social ties to this country." However, this may be a too narrow definition when considering that, according to some states' policies, a person can be considered as a migrant even when s/he is born in the country.

The UN Convention on the Rights of Migrants defines a **migrant worker** as a "person who is to be engaged, is engaged or has been engaged in a remunerated activity in a State of which he or she is not a national." From this a broader definition of migrants follows: "The term 'migrant' in article 1.1 (a) should be understood as covering all cases where the decision to migrate is taken freely by the individual concerned, for reasons of 'personal convenience' and without intervention of an external compelling factor."

This definition indicates that **migrant** does not refer to refugees, displaced or others forced or compelled to leave their homes. Migrants are people who make choices about when to leave and where to go, even though these choices are sometimes extremely constrained. Indeed, some scholars make a distinction between voluntary and involuntary migration. While certain refugee movements face neither external obstacles to free movement nor is impelled by urgent needs and a lack of alternative means of satisfying them in the country of present residence, others may blend into the extreme of relocation entirely uncontrolled by the people on the move.

- The Special Rapporteur of the Commission on Human Rights has proposed that the following persons should be considered as **migrants**: (a) Persons who are outside the territory of the State of which their are nationals or citizens, are not subject to its legal protection and are in the territory of another State;
- (b) Persons who do not enjoy the general legal recognition of rights which is inherent in the granting by the host State of the status of refugee, naturalised person or of similar status;
- (c) Persons who do not enjoy either general legal protection of their fundamental rights by virtue of diplomatic agreements, visas or other agreements.

This broad definition of migrants reflects the current difficulty in distinguishing between migrants who leave their countries because of political persecution, conflicts, economic problems, environmental degradation or a combination of these reasons and those who do so in search of conditions of survival or well-being that does not exist in their place of origin. It also attempts to define migrant population in a way that takes new situations into consideration.

Turning to the concept of **migration**, it is the crossing of the boundary of a political or administrative unit for a certain minimum period of time. It includes the movement of refugees, displaced persons, uprooted people as well as economic migrants. Internal migration refers to a move from one area (a province, district or municipality) to another within one country. International migration is a territorial relocation of people between nation-states. Two forms of relocation can be excluded from this broad definition: first, a territorial movement which does not lead to any change in ties of social membership and therefore remains largely inconsequential both for the individual and for the society at the points of origin and destination, such as tourism; second, a relocation in which the individuals or the groups concerned are purely passive objects rather than active agents of the movement, such as organised transfer of refugees from states of origins to a safe haven.

The dominant forms of migration can be distinguished according to the motives (economic, family reunion, refugees) or legal status (irregular migration, controlled emigration/immigration, free emigration/immigration) of those concerned. Most countries distinguish between a number of categories in their migration policies and statistics. The variations existing between countries indicate that there are no objective definitions of migration. What follows is a more common categorisation of international migrants:

- **Temporary labour migrants** (also known as **guest workers** or **overseas contract workers**): people who migrate for a limited period of time in order to take up employment and send money home.
- **Highly skilled and business migrants**: people with qualifications as managers, executives, professionals, technicians or similar, who move within the internal labour markets of trans-national corporations and international organisations, or who seek employment through international labour markets for scarce skills. Many countries welcome such migrants and have special 'skilled and business migration' programmes to encourage them to come.
- Irregular migrants (or undocumented / illegal migrants): people who enter a country, usually in search of employment, without the necessary documents and permits.
- Forced migration: in a broader sense, this includes not only refugees and asylum seekers but also people forced to move due to external factors, such as environmental catastrophes or development projects. This form of migration has similar characteristics to displacement.
- Family members (or family reunion / family reunification migrants): people sharing family ties joining people who have already entered an immigration country under one of the above mentioned categories. Many countries recognise in principle the right to family reunion for legal migrants. Other countries, especially those with contract labour systems, deny the right to family reunion. Sometimes related with so-called "chain migration" (see, below).
- Return migrants: people who return to their countries of origin after a period in another country.

Migration is an important factor in the erosion of traditional boundaries between languages, cultures, ethnic group, and nation-states. Even those who do not migrate are affected by movements of people in or out of their communities, and by the resulting changes. Migration is not a single act of crossing a border, but rather a lifelong process that affects all aspects of the lives of those involved.

* Rowland DT (2003) Demographic methods and concepts. Oxford University Press. "Chapter 11. Migration" provides lots of useful information and Excel worksheet. So-called "**chain migration sequence**" is explained in Table 11.2³. Sometimes it is necessary to estimate the number of net migration for geographical areas, and for that purpose, the vital statistics method, the survival ratio methods (forward and reverse), and the birthplace method are applicable.

* UK Office for National Statistics (2019) International migration – terms, definitions, and frequently asked questions. <u>https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/methodologies/</u> longterminternationalmigrationfrequentlyaskedquestionsandbackgroundnotes

* UK Office for National Statistics (2020) Defining and measuring international migration: Overview of our research into how we define and measure international migration.

 $\label{eq:https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/articles/definingandmeasuringinternationalmigration/2020-02-14$

^{3 &}lt;u>https://cis.org/sites/default/files/2017-09/vaughan-chain-migration_1.pdf</u> is informative paper. <u>https://cis.org/Immigration-Topic/Chain-Migration</u> is a good list related to this topic.