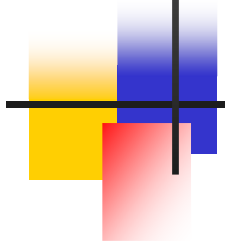


Basic Demographic Concepts

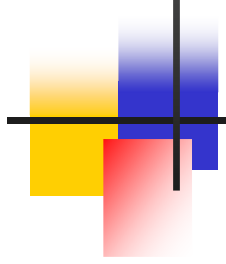
An Introduction



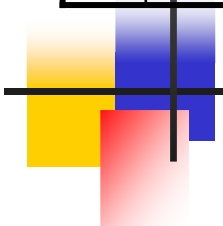
Population size

- Population size is the number of people in a population. The population in question may be of a society, a nation, or, even the world.
- Viet nam pop. Census : 1 April 1989; 1999; 2009

10 Largest Population in 2005



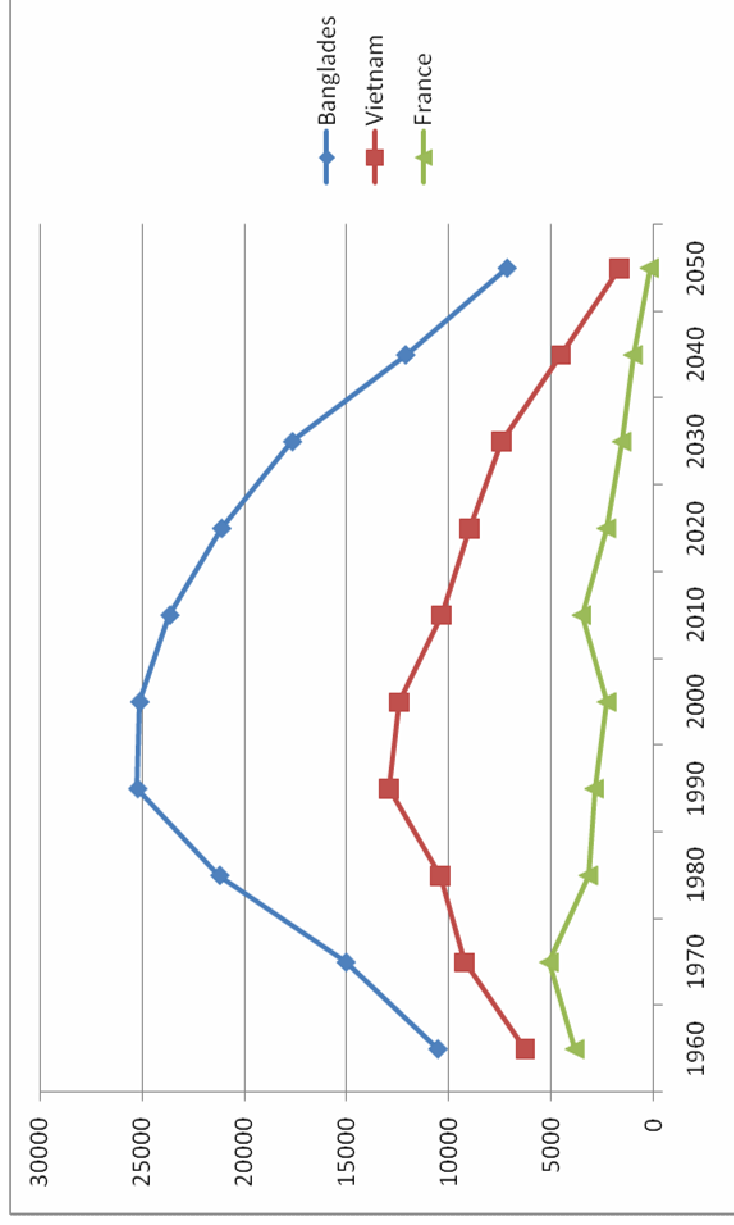
Country	Population Size (million)	Pop.Density (person/ Square Kilometer)
China	1300	132
India	1100	309
USA	296	29
Indonesia	222	118
Brazil	184	20
Pakistan	162	178
Bangladesh	144	897
Russia	143	9
Nigeria	132	133
Japan	128	335



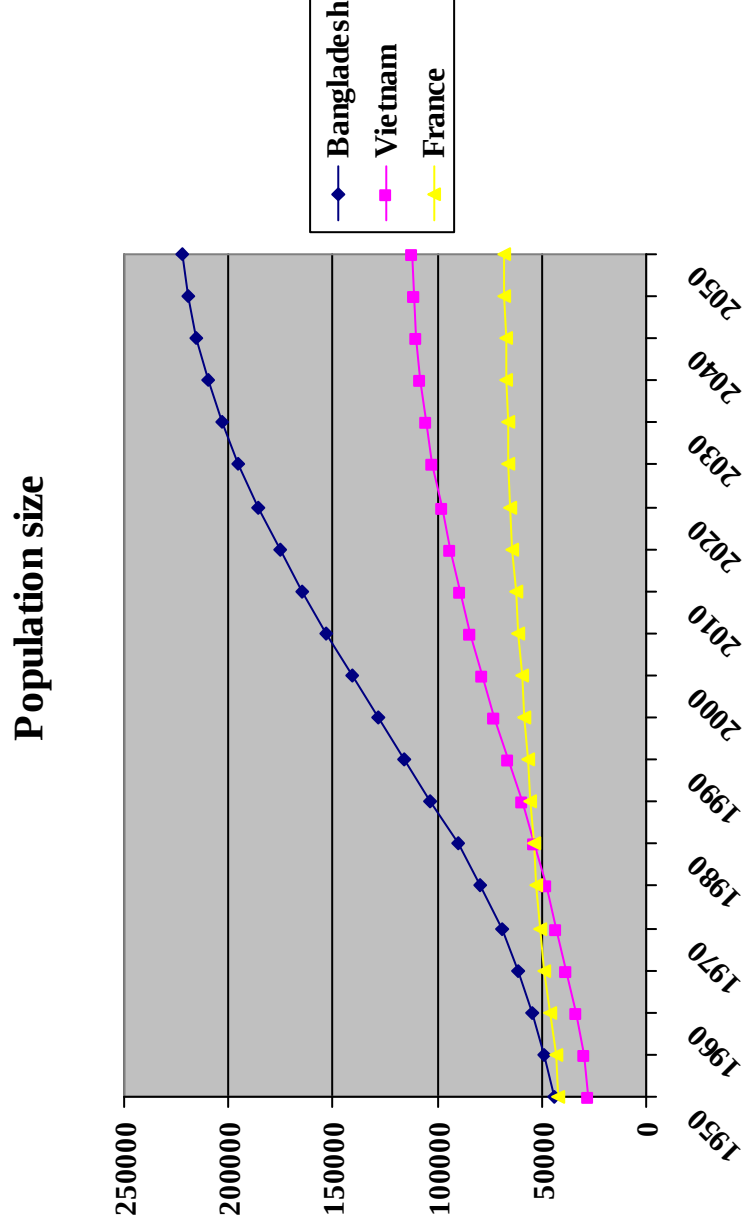
Population Growth

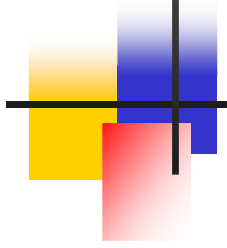
Year	Bang.	Viet	France
1950	43 595	27 367	41 832
1960	54 138	33 648	45 674
1970	69 178	42 898	50 771
1980	90 397	53 317	53 950
1990	115 632	66 247	56 842
2000	140 767	78 663	59 128
2010	164 425	89 029	62 637
2020	185 552	98 011	64 931
2030	203 214	105 447	66 474
2040	215 339	109 986	67 473
2050	222 495	111 666	67 668

The number of Population increase after 10 years



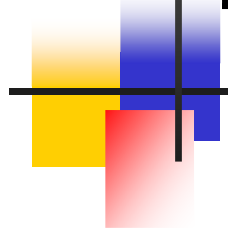
Population Growth





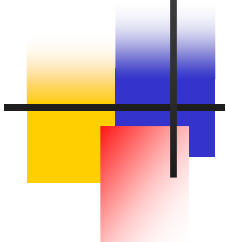
Population density

- Population density is the number of people living in some geographic unit.
- Density and size are different measures of population because even countries with very large populations can have some areas with very low density.

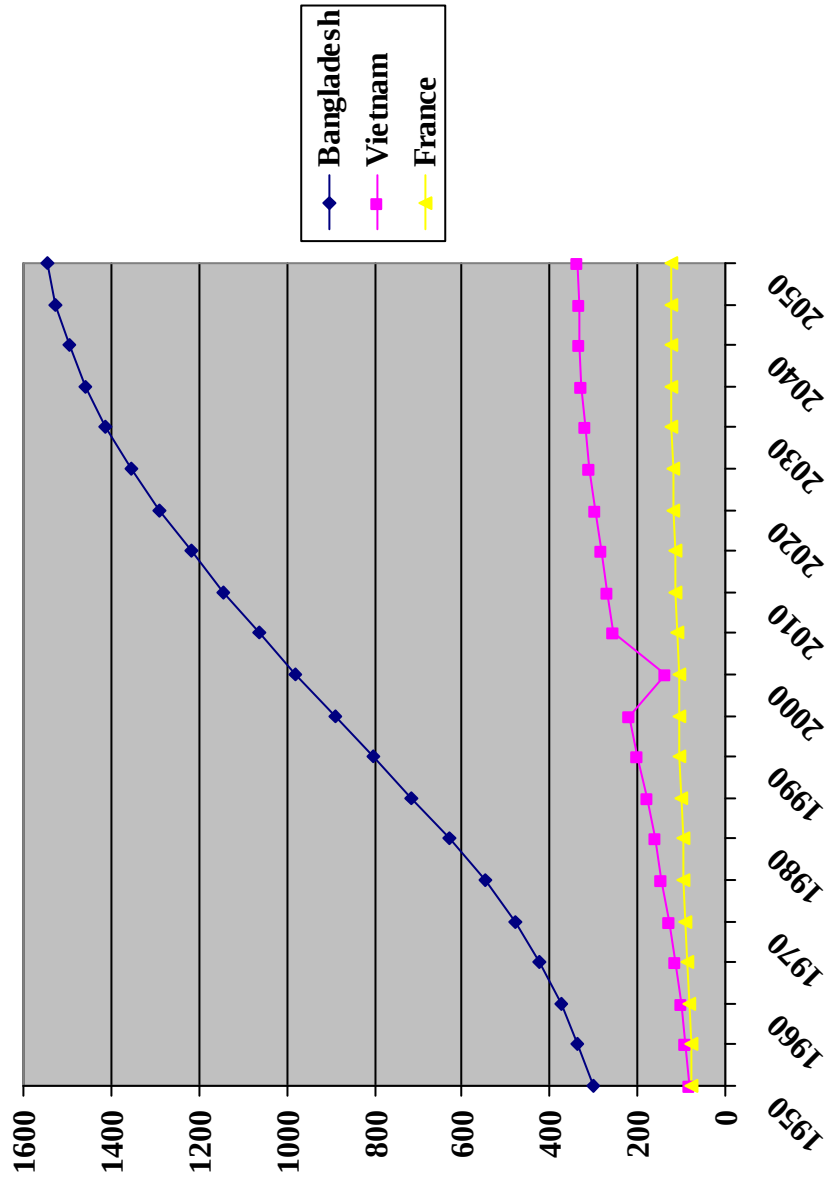


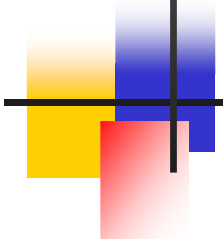
Population density

Year	Bang.	Viet.	France
1950	303	83	76
1970	480	129	92
1990	803	200	103
2010	1142	268	114
2030	1411	318	121
2050	1545	337	123



Population density





Doubling time

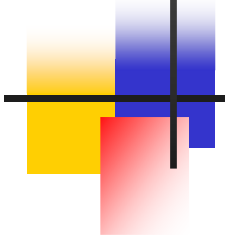
- The number of years it would take for the population to double its current size at the current annual rate of growth.

$$T = 70/r$$

T: Doubling time

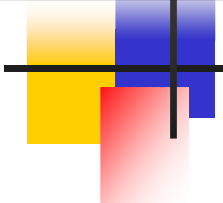
r: rate of growth.

Population Composition

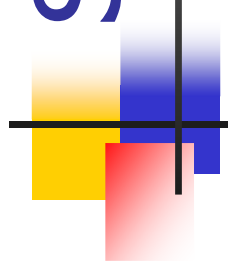


Sex ratio

The number of males per 100 females in a population.



Year	Bang.	Viet.
1950	115.9	98.9
1960	112.4	99.2
1970	109.1	99.0
1980	106.1	94.3
1990	104.0	93.8
2000	102.6	96.0
2010	102.3	97.8
2020	101.9	98.6
2030	101.4	99.1
2040	100.6	99.2
2050	99.6	99.1

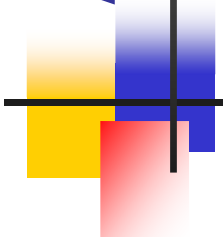


Sex Ratio at Birth

- VIETNAM

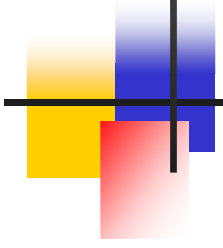
2006: 110

2008: 112



Population Composition by Age And Sex

- Population Composition by Age And Sex is distribution of a population by age and sex.

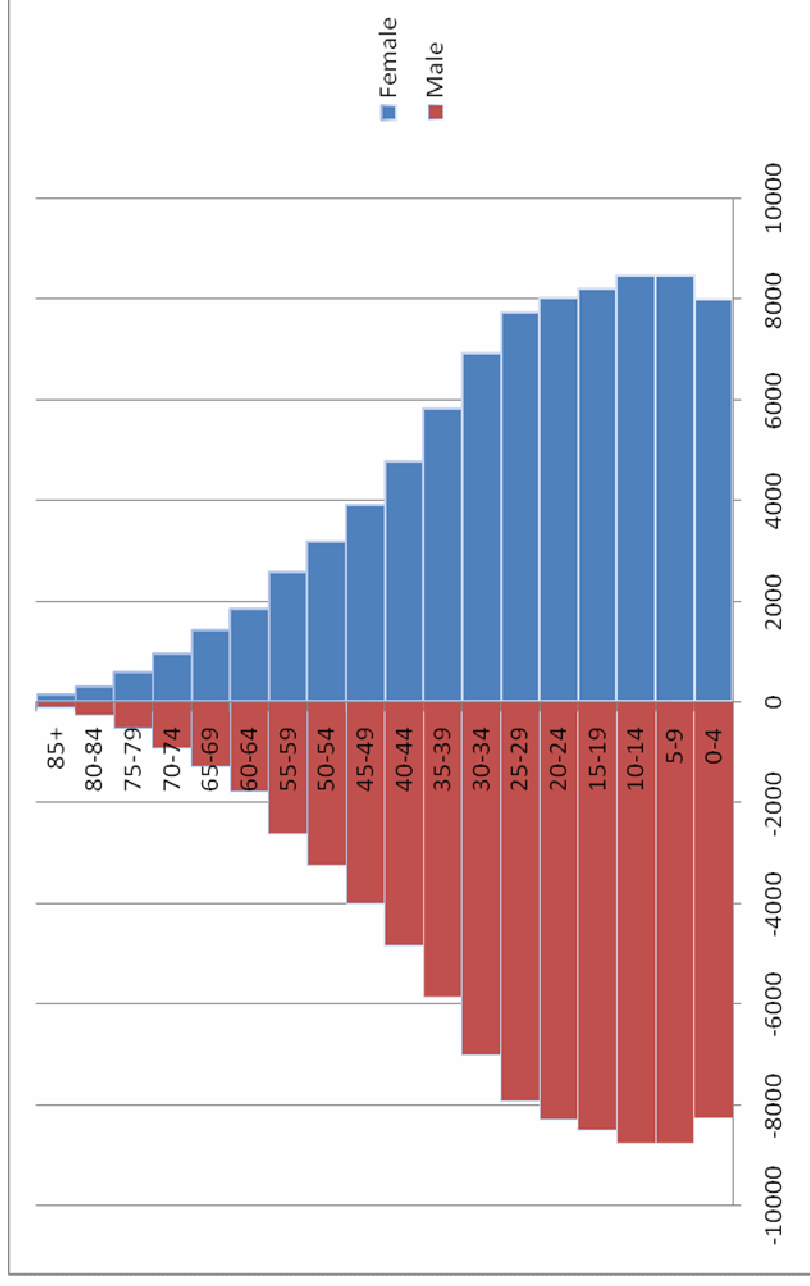


Population Pyramid

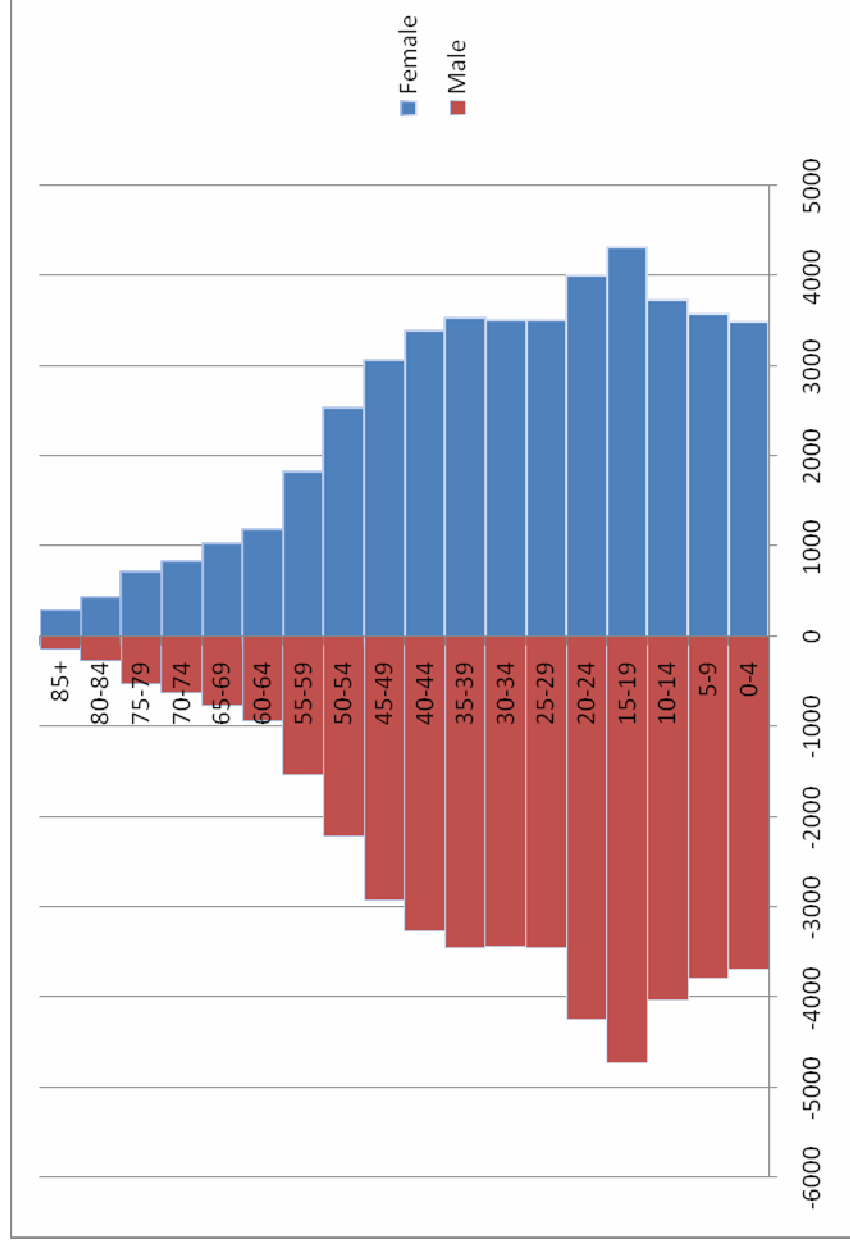
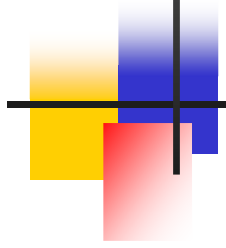
- A bar chart, arranged vertically, that shows the distribution of a population by age and sex.
- By convention, the younger ages are at the bottom, with males on the left and females on the right.

Population Composition by Age And Sex

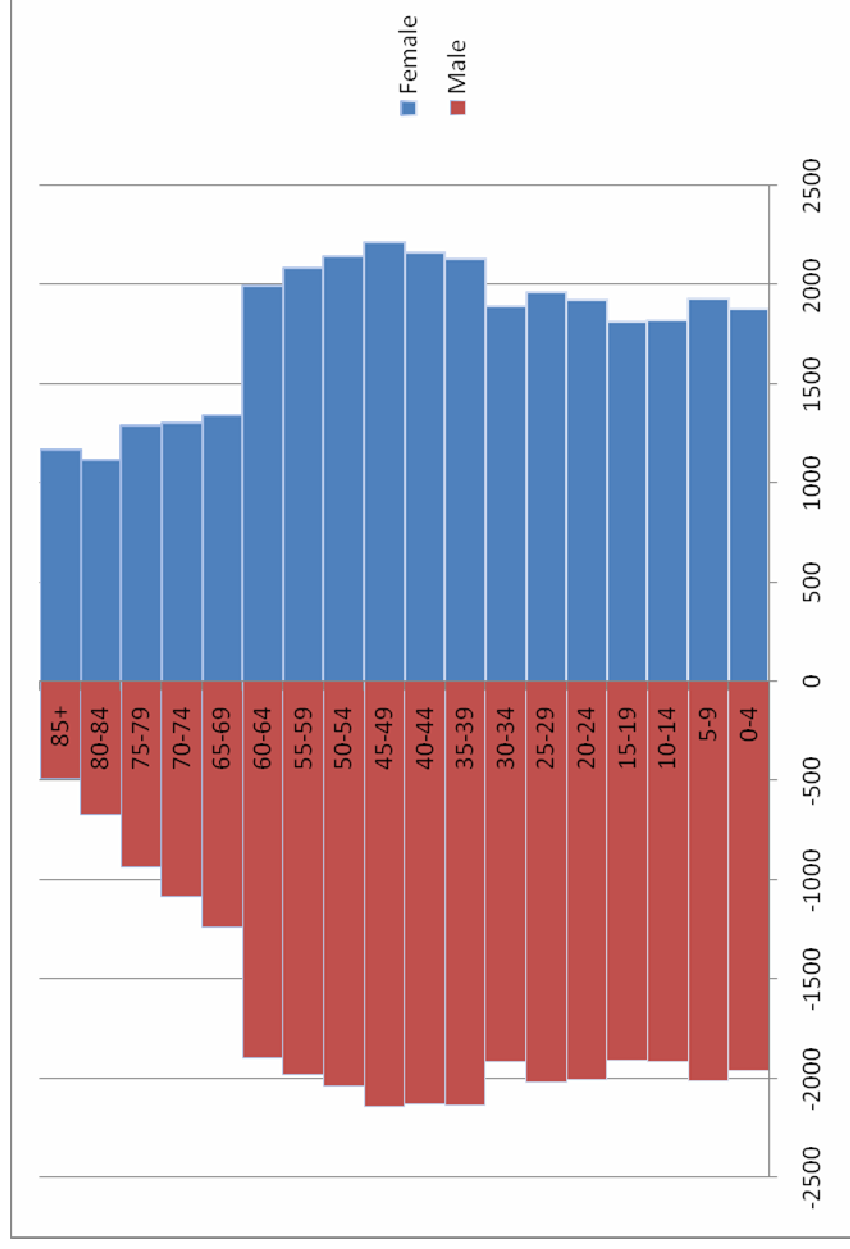
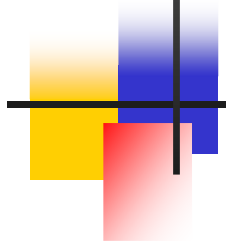
Population pyramid for Bangladesh, 2010

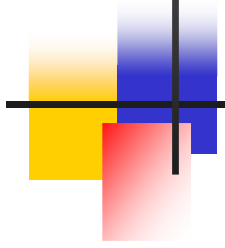


Population pyramid for VIETNAM, 2010



Population pyramid for FRANCE, 2010



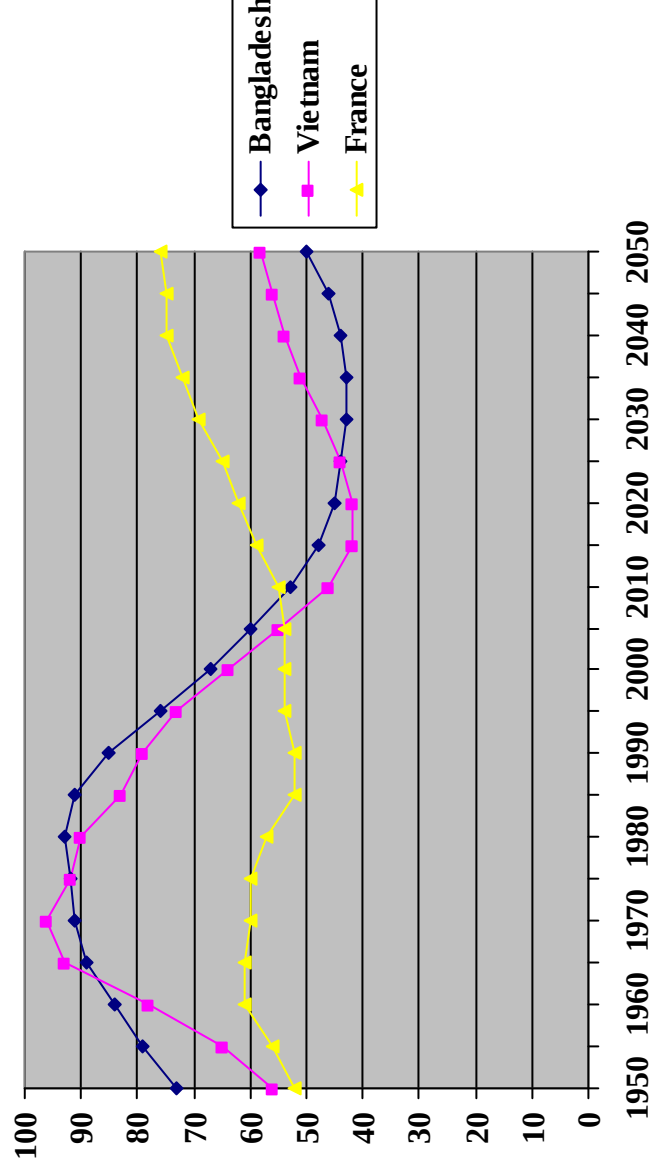


Dependency Ratio

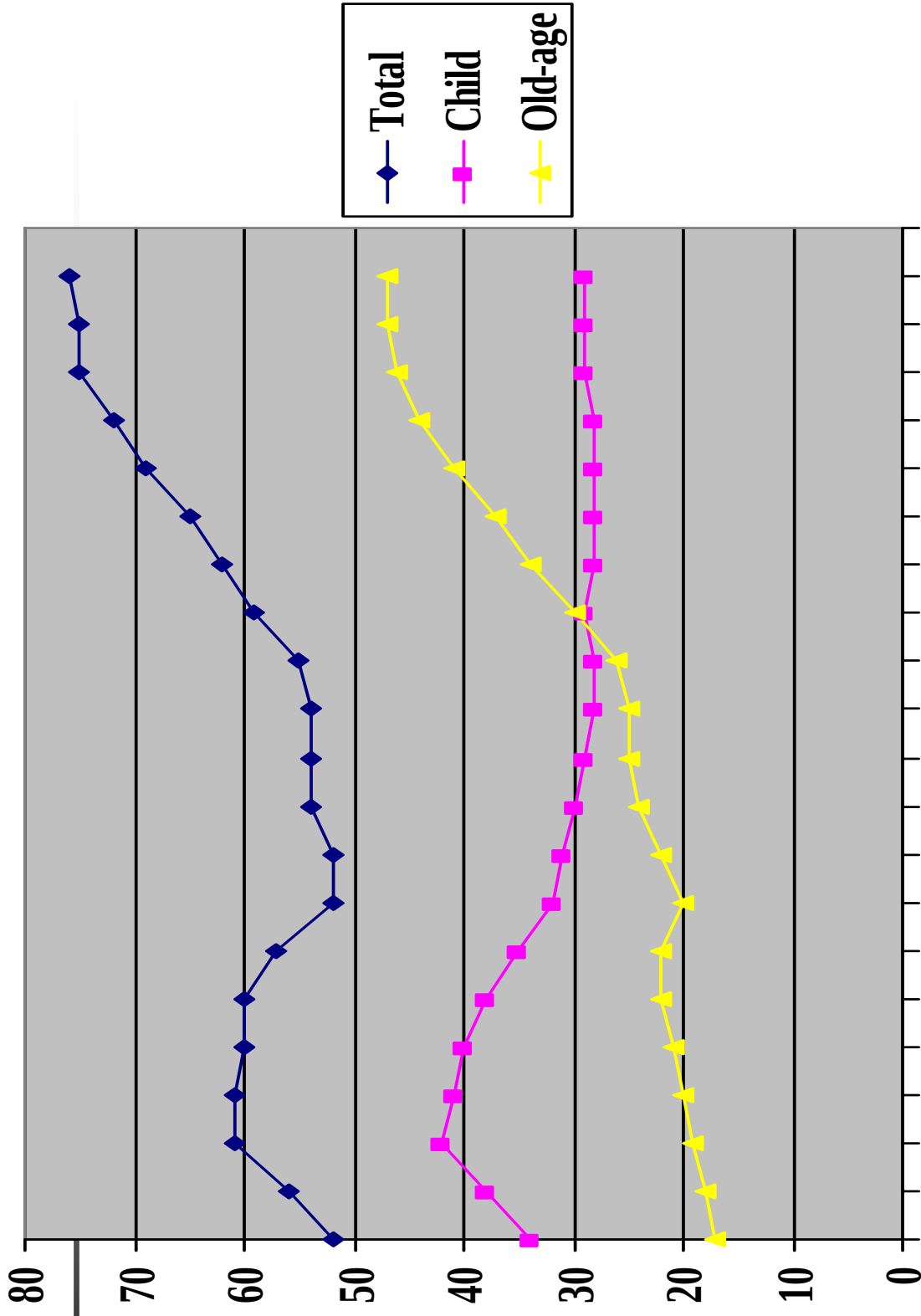
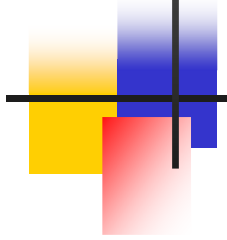
- The ratio of the economically dependent part of the population to the productive part; arbitrarily defined as the ratio of the elderly (ages 60 or 65 and older plus the young (under 15) to the population in the “working ages” (ages 15-64).

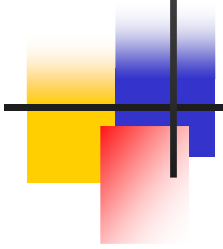
Dependency Ratios

Dependency Ratios

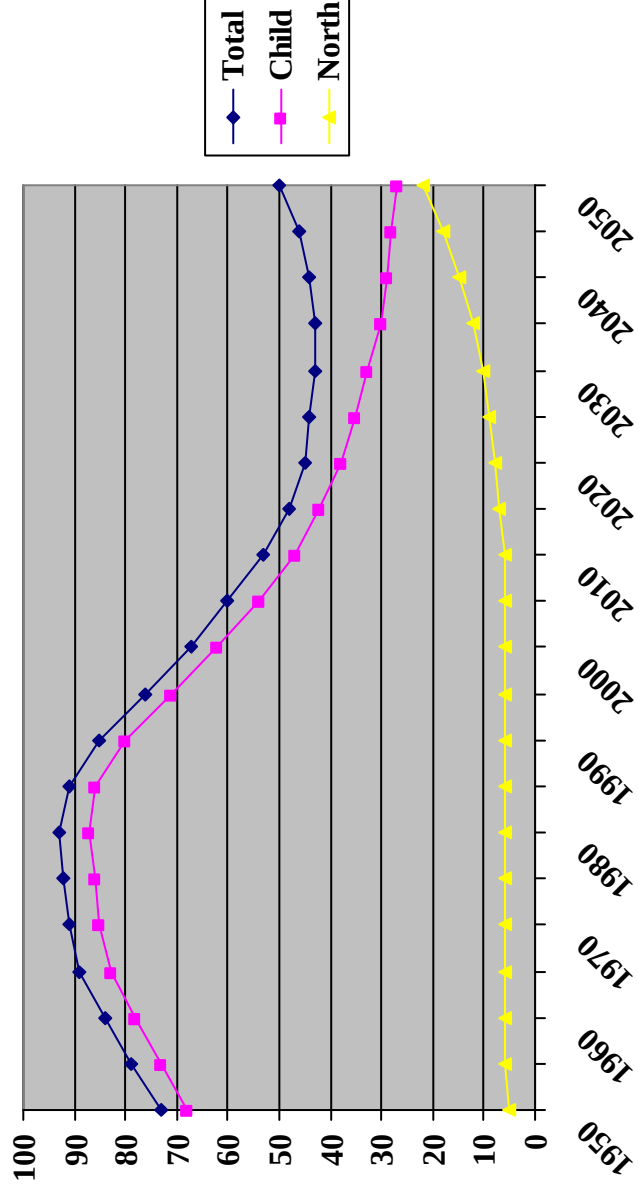


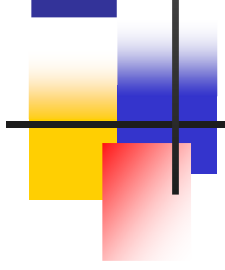
FRANCE: Dependency Ratios





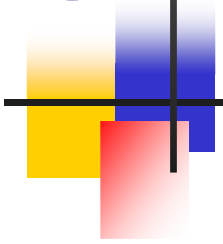
BANGLADESH: Dependency Ratios





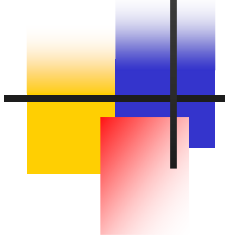
Births

- The total number of annual births.

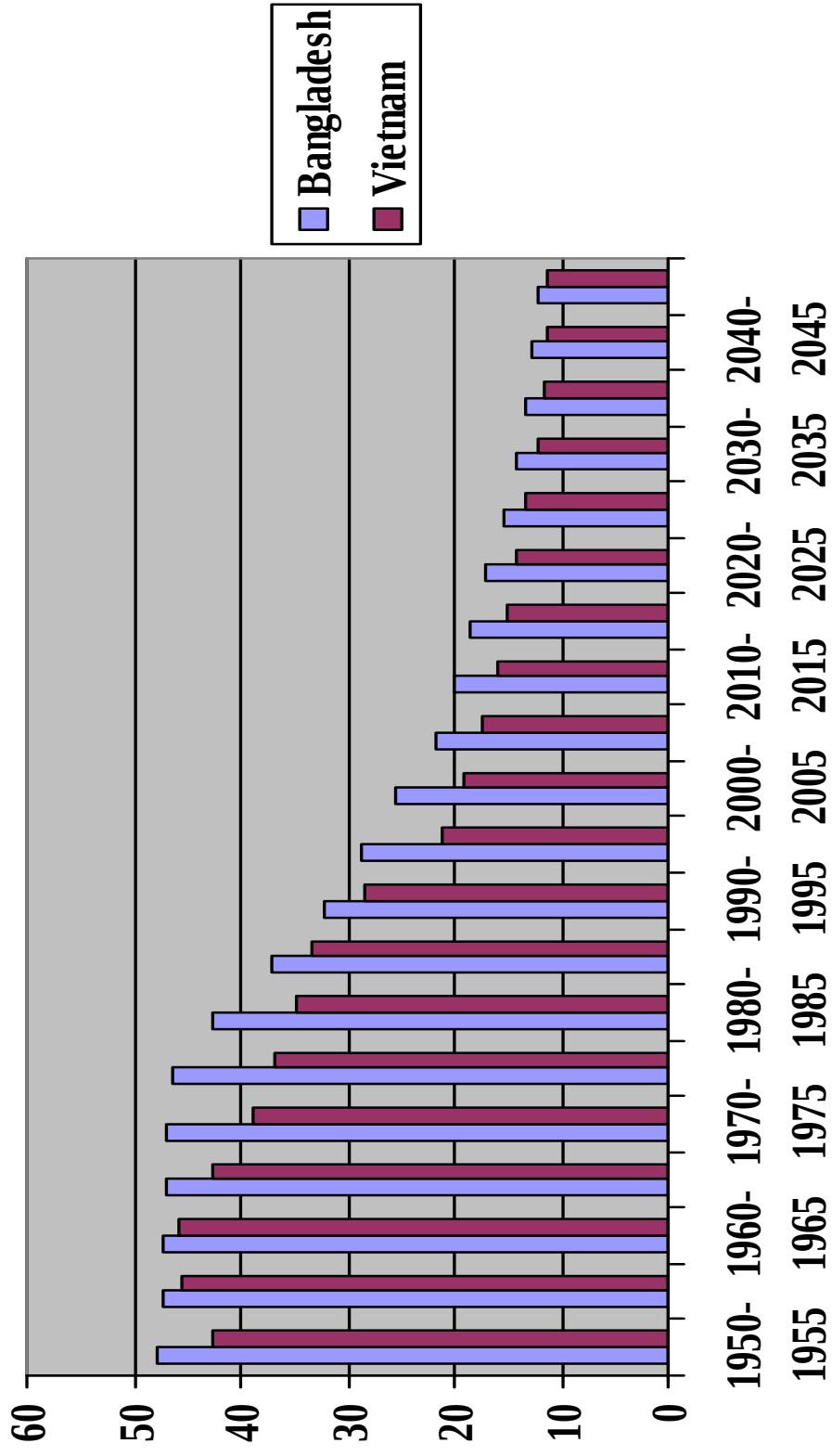


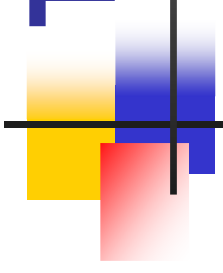
Crude birth rate (CBR)

- The number of live births per 1,000 population in a given year.



Crude birth rate





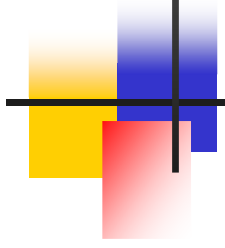
Total fertility rate (TFR)

- The average number of children that would be born alive to a woman (or a group of women) during her lifetime if she were to pass through all her childbearing years conforming to the age-specific fertility rates of a given year.

Calculation of TFR



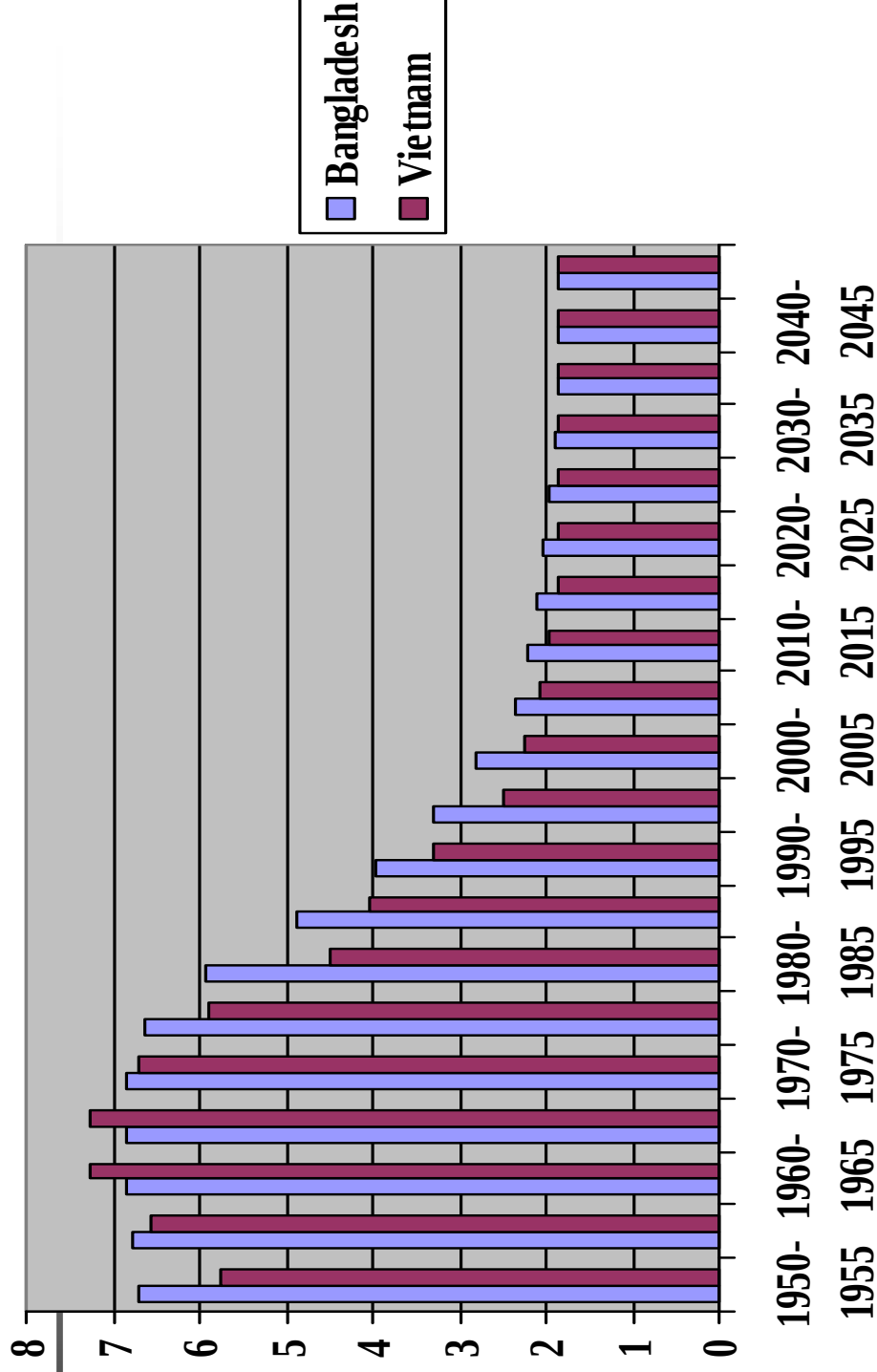
Age of women	(1) Number of women	(2) Number of births to that age group	(3) Birth rate (2)÷(1)	(4) Age-specific birth rate(3)x5
15-19	244,000	4,474	.018	.090
20-24	225,800	23,013	.124	.620
25-29	194,200	36,440	.188	.940
30-34	182,300	27,402	.150	.750
35-39	181,400	14,044	.077	.385
40-44	177,600	3,176	.018	.090
45-49	151,100	182	.001	.005
Sum =			Sum =	2.88

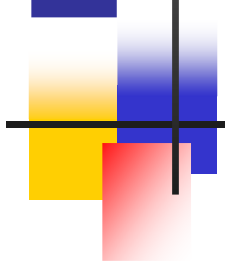


Replacement-level Fertility

- The level of fertility at which a couple has only enough children to replace themselves, or about two children per couple.

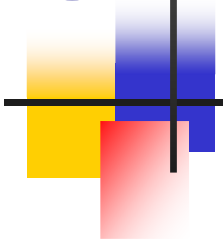
Total fertility





Deaths

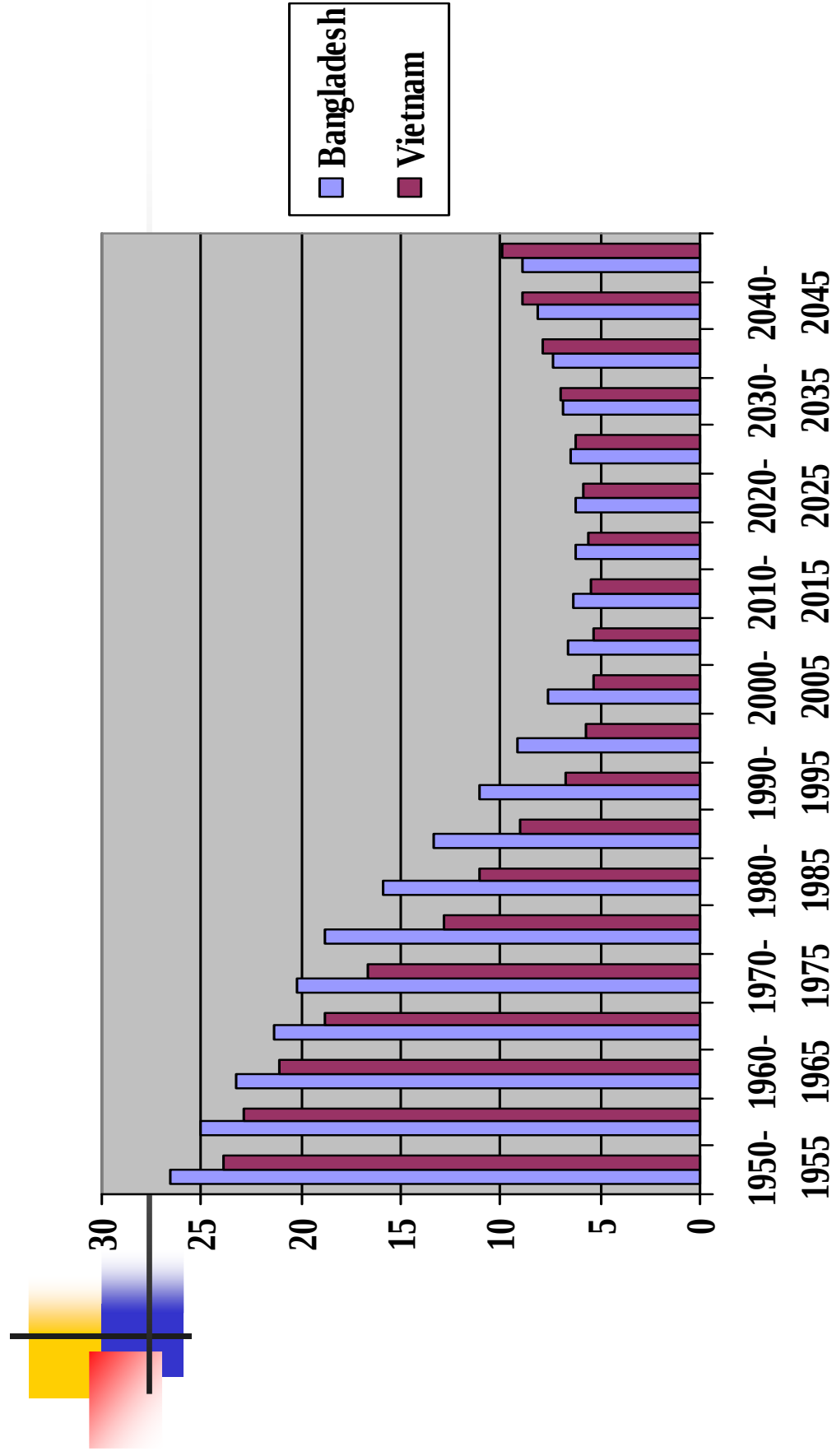
- The total number of annual deaths.

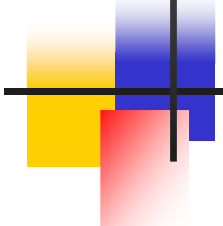


Crude death rate (CDR)

- The number of deaths per 1,000 population in a given year.

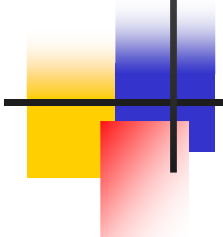
Crude death rate





Infant mortality rate (IMR)

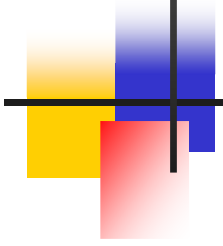
- The number of deaths to infants under one year of age per 1,000 live births.



Rate of natural increase (RNI)

- The rate at which the population is increasing or decreasing in a given year due to the surplus or deficit of births over deaths, expressed as a percentage of the base population.

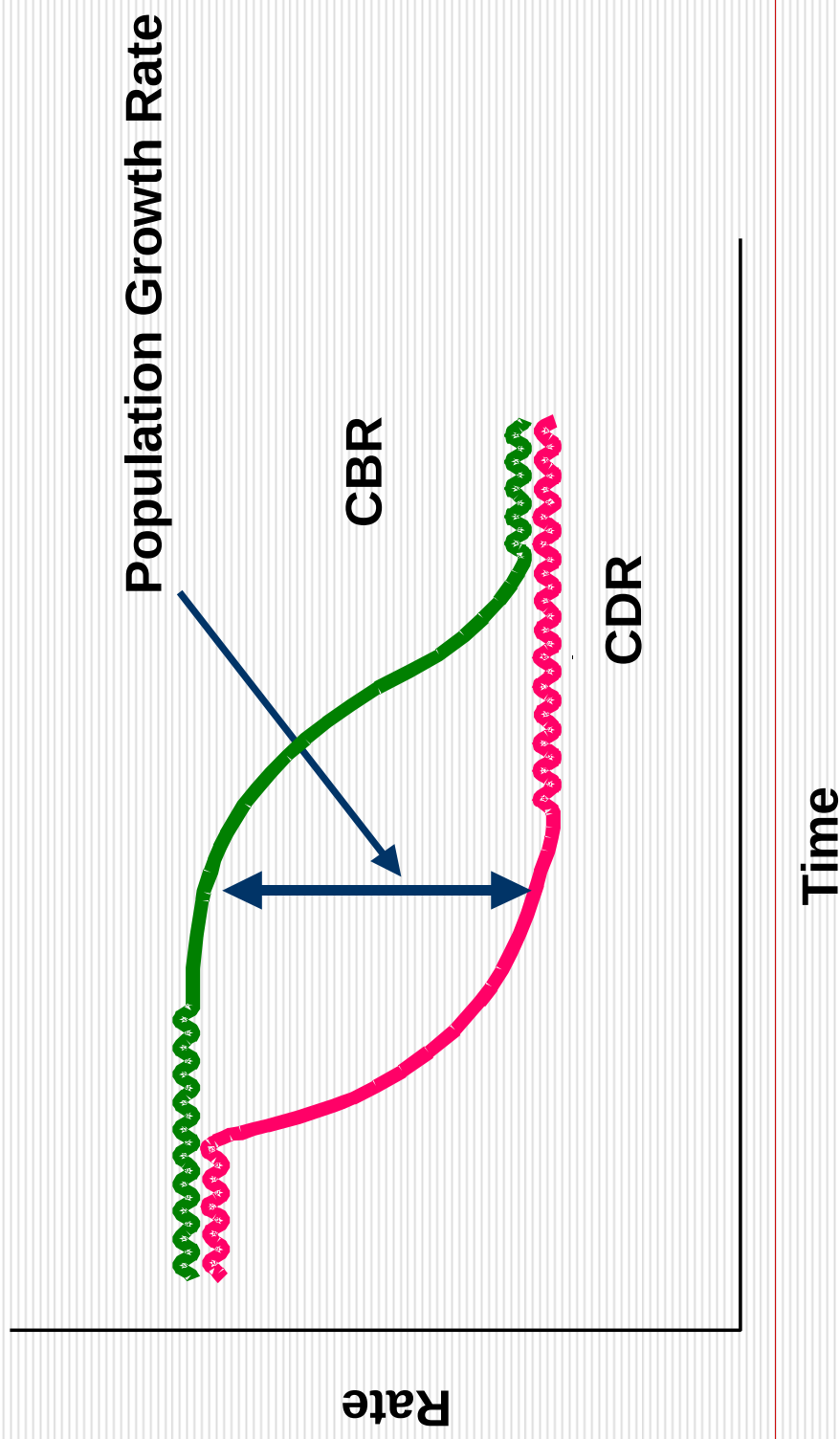
- $RNI = CBR - CDR$

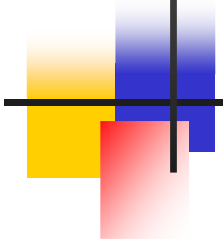


Demographic Transition

- The historical shift of birth and death rates from high to low levels in a population.
- The decline of mortality usually precedes the decline in fertility, thus resulting in rapid population growth during the transition period.

Demographic transition





Migration

- The process of leaving one country to take up permanent or semi-permanent residence in another.
- Different pattern and reason of migration.