

# Life Expectancy

Data Source (<https://data.worldbank.org/indicator/SP.DYN.LE00.IN>)

```
In [1]: %matplotlib inline  
  
import pandas as pd  
import numpy as np
```

```
In [2]: ! head data/Life_Expectancy/API_SP.DYN.LE00.IN_DS2_en_csv_v2_713010.csv
```

```
In [3]: df = pd.read_csv("data/Life_Expectancy/API_SP.DYN.LE00.IN_DS2_en_csv_v2_713010.csv", header=2, index_col=[0,1,2,3])
df.head()
```

Out[3]:

				1960	1961	1962	1963	1964	1965
Country Name	Country Code	Indicator Name	Indicator Code						
Aruba	ABW	Life expectancy at birth, total (years)	SP.DYN.LE00.IN	65.662	66.074	66.444	66.787	67.113	67.435
Afghanistan	AFG	Life expectancy at birth, total (years)	SP.DYN.LE00.IN	32.446	32.962	33.471	33.971	34.463	34.948
Angola	AGO	Life expectancy at birth, total (years)	SP.DYN.LE00.IN	37.524	37.811	38.113	38.430	38.760	39.102
Albania	ALB	Life expectancy at birth, total (years)	SP.DYN.LE00.IN	62.283	63.301	64.190	64.914	65.463	65.850
Andorra	AND	Life expectancy at birth, total (years)	SP.DYN.LE00.IN	NaN	NaN	NaN	NaN	NaN	NaN

5 rows × 61 columns

```
In [4]: Life_Expectancy = df.groupby(level=0).first().transpose()
Life_Expectancy.head()
```

Out[4]:

Country Name	Afghanistan	Albania	Algeria	American Samoa	Andorra	Angola	Antigua and Barbuda	Arab World	Argentina
1960	32.446	62.283	46.141	NaN	NaN	37.524	61.968	46.546909	65.05
1961	32.962	63.301	46.599	NaN	NaN	37.811	62.523	47.141621	65.17
1962	33.471	64.190	47.056	NaN	NaN	38.113	63.049	47.731783	65.26
1963	33.971	64.914	47.509	NaN	NaN	38.430	63.540	48.320432	65.34
1964	34.463	65.463	47.958	NaN	NaN	38.760	63.992	48.910019	65.42

5 rows × 264 columns

```
In [5]: list (Life_Expectancy.columns)
```

```
Out[5]: ['Afghanistan',
        'Albania',
        'Algeria',
        'American Samoa',
        'Andorra',
        'Angola',
        'Antigua and Barbuda',
        'Arab World',
        'Argentina',
        'Armenia',
        'Aruba',
        'Australia',
        'Austria',
        'Azerbaijan',
        'Bahamas, The',
        'Bahrain',
        'Bangladesh',
        'Barbados',
        'Belarus',
        'Belgium',
        'Belize',
        'Benin',
        'Bermuda',
        'Bhutan',
        'Bolivia',
        'Bosnia and Herzegovina',
        'Botswana',
        'Brazil',
        'British Virgin Islands',
        'Brunei Darussalam',
        'Bulgaria',
        'Burkina Faso',
        'Burundi',
        'Cabo Verde',
        'Cambodia',
        'Cameroon',
        'Canada',
        'Caribbean small states',
        'Cayman Islands',
        'Central African Republic',
        'Central Europe and the Baltics',
        'Chad',
        'Channel Islands',
        'Chile',
        'China',
        'Colombia',
        'Comoros',
        'Congo, Dem. Rep.',
        'Congo, Rep.',
        'Costa Rica',
        'Cote d'Ivoire',
        'Croatia',
        'Cuba',
        'Curacao',
        'Cyprus',
        'Czech Republic',
        'Denmark',
```

'Djibouti',  
'Dominica',  
'Dominican Republic',  
'Early-demographic dividend',  
'East Asia & Pacific',  
'East Asia & Pacific (IDA & IBRD countries)',  
'East Asia & Pacific (excluding high income)',  
'Ecuador',  
'Egypt, Arab Rep.',  
'El Salvador',  
'Equatorial Guinea',  
'Eritrea',  
'Estonia',  
'Eswatini',  
'Ethiopia',  
'Euro area',  
'Europe & Central Asia',  
'Europe & Central Asia (IDA & IBRD countries)',  
'Europe & Central Asia (excluding high income)',  
'European Union',  
'Faroe Islands',  
'Fiji',  
'Finland',  
'Fragile and conflict affected situations',  
'France',  
'French Polynesia',  
'Gabon',  
'Gambia, The',  
'Georgia',  
'Germany',  
'Ghana',  
'Gibraltar',  
'Greece',  
'Greenland',  
'Grenada',  
'Guam',  
'Guatemala',  
'Guinea',  
'Guinea-Bissau',  
'Guyana',  
'Haiti',  
'Heavily indebted poor countries (HIPC)',  
'High income',  
'Honduras',  
'Hong Kong SAR, China',  
'Hungary',  
'IBRD only',  
'IDA & IBRD total',  
'IDA blend',  
'IDA only',  
'IDA total',  
'Iceland',  
'India',  
'Indonesia',  
'Iran, Islamic Rep.',  
'Iraq',  
'Ireland',

'Isle of Man',  
'Israel',  
'Italy',  
'Jamaica',  
'Japan',  
'Jordan',  
'Kazakhstan',  
'Kenya',  
'Kiribati',  
'Korea, Dem. People's Rep.',  
'Korea, Rep.',  
'Kosovo',  
'Kuwait',  
'Kyrgyz Republic',  
'Lao PDR',  
'Late-demographic dividend',  
'Latin America & Caribbean',  
'Latin America & Caribbean (excluding high income)',  
'Latin America & the Caribbean (IDA & IBRD countries)',  
'Latvia',  
'Least developed countries: UN classification',  
'Lebanon',  
'Lesotho',  
'Liberia',  
'Libya',  
'Liechtenstein',  
'Lithuania',  
'Low & middle income',  
'Low income',  
'Lower middle income',  
'Luxembourg',  
'Macao SAR, China',  
'Madagascar',  
'Malawi',  
'Malaysia',  
'Maldives',  
'Mali',  
'Malta',  
'Marshall Islands',  
'Mauritania',  
'Mauritius',  
'Mexico',  
'Micronesia, Fed. Sts.',  
'Middle East & North Africa',  
'Middle East & North Africa (IDA & IBRD countries)',  
'Middle East & North Africa (excluding high income)',  
'Middle income',  
'Moldova',  
'Monaco',  
'Mongolia',  
'Montenegro',  
'Morocco',  
'Mozambique',  
'Myanmar',  
'Namibia',  
'Nauru',  
'Nepal',

'Netherlands',  
'New Caledonia',  
'New Zealand',  
'Nicaragua',  
'Niger',  
'Nigeria',  
'North America',  
'North Macedonia',  
'Northern Mariana Islands',  
'Norway',  
'Not classified',  
'OECD members',  
'Oman',  
'Other small states',  
'Pacific island small states',  
'Pakistan',  
'Palau',  
'Panama',  
'Papua New Guinea',  
'Paraguay',  
'Peru',  
'Philippines',  
'Poland',  
'Portugal',  
'Post-demographic dividend',  
'Pre-demographic dividend',  
'Puerto Rico',  
'Qatar',  
'Romania',  
'Russian Federation',  
'Rwanda',  
'Samoa',  
'San Marino',  
'Sao Tome and Principe',  
'Saudi Arabia',  
'Senegal',  
'Serbia',  
'Seychelles',  
'Sierra Leone',  
'Singapore',  
'Sint Maarten (Dutch part)',  
'Slovak Republic',  
'Slovenia',  
'Small states',  
'Solomon Islands',  
'Somalia',  
'South Africa',  
'South Asia',  
'South Asia (IDA & IBRD)',  
'South Sudan',  
'Spain',  
'Sri Lanka',  
'St. Kitts and Nevis',  
'St. Lucia',  
'St. Martin (French part)',  
'St. Vincent and the Grenadines',  
'Sub-Saharan Africa',

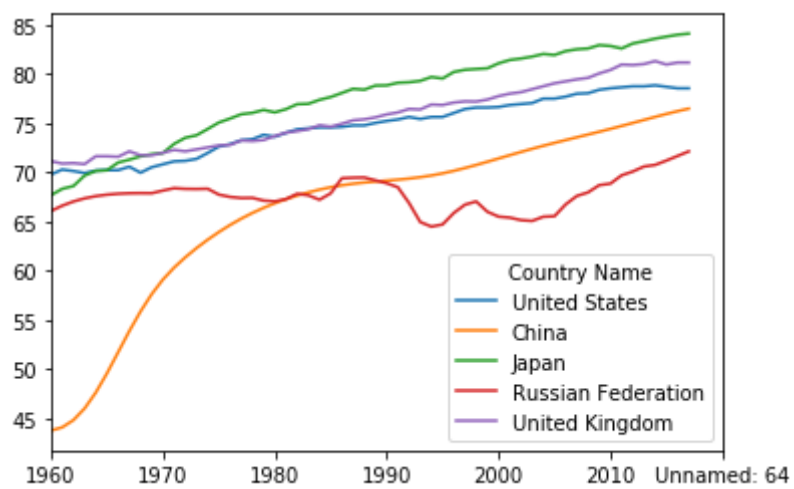
```
'Sub-Saharan Africa (IDA & IBRD countries)',  
'Sub-Saharan Africa (excluding high income)',  
'Sudan',  
'Suriname',  
'Sweden',  
'Switzerland',  
'Syrian Arab Republic',  
'Tajikistan',  
'Tanzania',  
'Thailand',  
'Timor-Leste',  
'Togo',  
'Tonga',  
'Trinidad and Tobago',  
'Tunisia',  
'Turkey',  
'Turkmenistan',  
'Turks and Caicos Islands',  
'Tuvalu',  
'Uganda',  
'Ukraine',  
'United Arab Emirates',  
'United Kingdom',  
'United States',  
'Upper middle income',  
'Uruguay',  
'Uzbekistan',  
'Vanuatu',  
'Venezuela, RB',  
'Vietnam',  
'Virgin Islands (U.S.)',  
'West Bank and Gaza',  
'World',  
'Yemen, Rep.',  
'Zambia',  
'Zimbabwe']
```

```
In [6]: Life_Expectancy_subset = Life_Expectancy[['United States', 'China', 'Japan', 'Russian Federation', 'United Kingdom']]
```



```
In [7]: Life_Expectancy_subset.plot()
```

```
Out[7]: <matplotlib.axes._subplots.AxesSubplot at 0x113b27a90>
```



```
In [ ]:
```