

## Aging in the European Union & UK

### Too Little, Too Late

**“All over the world, countries are confronting population and a fertility bust, a dizzying reversal unmatched in recorded history that will make first birthday parties a rarer sight than funerals, and empty homes a common eyesore.”**

“Long slide looms for world population”

Damian Cave & Emma Bubola

New York Times, May 23 2021

It is a given that most 1<sup>st</sup> and 2<sup>nd</sup> world countries have not been keeping pace with the fertility rate that is necessary to continue the future growth of their countries.

Demographers routinely identify the acceptable fertility rate as 2.1 – that is, 2.1 births for women aged 16-45 (Census Bureau)..

Countries that do not meet the 2.1 rate inevitably see their economies shrink and their housing markets atrophy.

I want to focus now on the European Union and the United Kingdom. The European Union consists of 29 countries, as shown in the map below:

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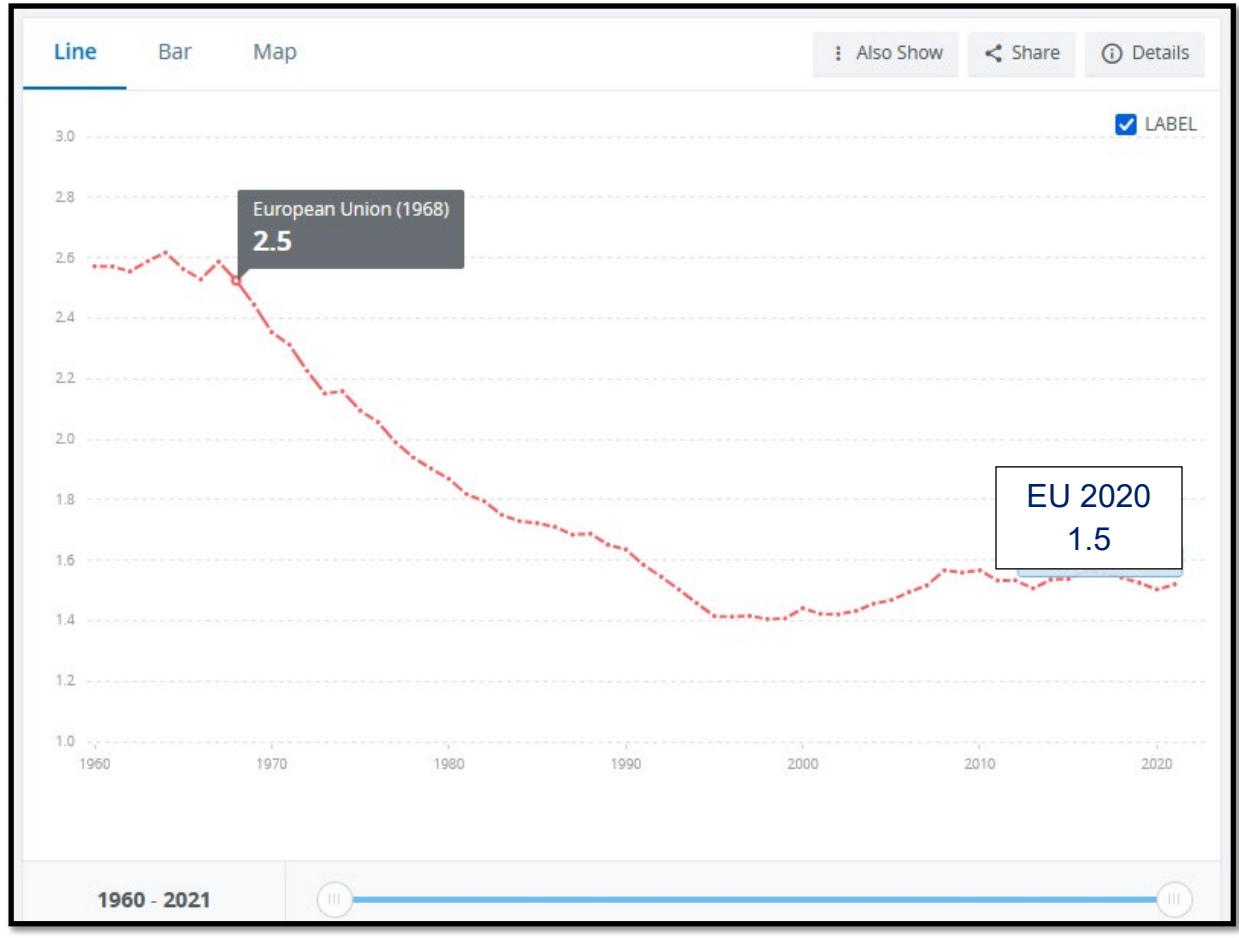
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The following exhibit displays the **fertility rates** in the European Union countries and Great Britain. In the 1980-2022 timeframe, the average number of births declined from 1.9 to 1.5.

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The countries shown in the exhibit below account for 75%+ of the gross national products of the EU/UK countries. The other countries had a similar birth rate performance.

## Fertility Rates (1) Major Countries European Union & United Kingdom 1980-2022

| Country        | 1980       | 2022       | Change      | % Change    |
|----------------|------------|------------|-------------|-------------|
| Netherlands    | 1.6        | 1.6        | 0.00        | 0.0%        |
| France         | 1.9        | 1.8        | -0.10       | -5.3%       |
| Germany        | 1.7        | 1.6        | -0.10       | -5.9%       |
| UK             | 1.9        | 1.8        | -0.15       | -7.6%       |
| Belgium        | 1.7        | 1.5        | -0.20       | -11.8%      |
| Italy          | 1.6        | 1.3        | -0.30       | -18.8%      |
| Romania        | 2.4        | 1.8        | -0.60       | -25.0%      |
| Poland         | 2.3        | 1.3        | -1.00       | -43.5%      |
| Spain          | 2.2        | 1.2        | -1.00       | -45.5%      |
| <b>Average</b> | <b>1.9</b> | <b>1.5</b> | <b>-38%</b> | <b>-18%</b> |

(1) women, aged 16-45

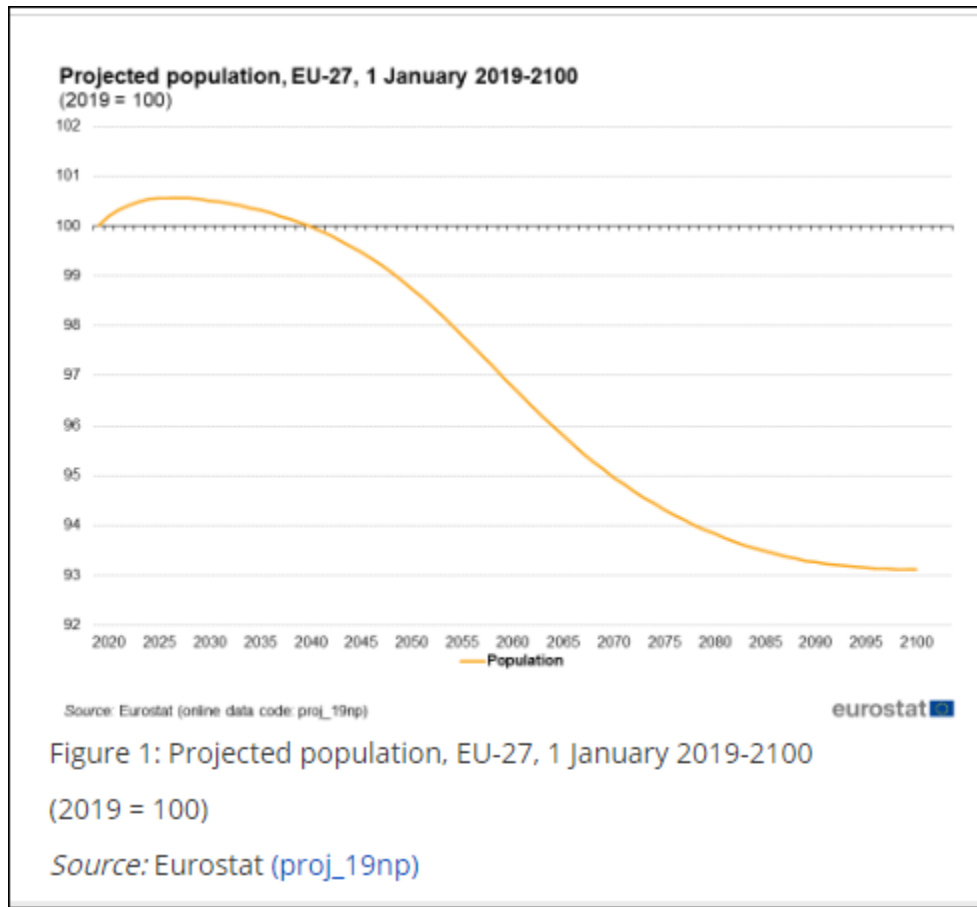
Source: World Bank Databank

### Long-Term Population Trends

The **World Bank Database** has produced projections of population for most of the countries in the world. In the next two exhibits, we show their projections for the European Union from 2020 to 2100. They show the European Union shrinking by 75 million persons, or **18.5%**.

| Population Projections<br>Major European Union Countries & United Kingdom<br>1980-2100 |                    |                    |                    |                   |                     |              |               |
|--|--------------------|--------------------|--------------------|-------------------|---------------------|--------------|---------------|
|  | 1980               | 2020               | 2100               | Change            |                     | Change       |               |
|  |                    |                    |                    | 1980-2020         | 2020-2100           | 1980-2020    | 2020-2100     |
| <b>Major Countries</b>   |                    |                    |                    |                   |                     |              |               |
| Germany  | 77,786,703         | 83,328,988         | 68,936,000         | 5,542,285         | (14,392,988)        | 7.1%         | -17.3%        |
| UK   | 56,395,846         | 67,059,474         | 70,485,000         | 10,663,628        | 3,425,526           | 18.9%        | 5.1%          |
| France   | 53,713,830         | 64,480,053         | 60,851,000         | 10,766,223        | (3,629,053)         | 20.0%        | -5.6%         |
| Italy  | 56,329,482         | 59,240,330         | 36,874,000         | 2,910,848         | (22,366,330)        | 5.2%         | -37.8%        |
| Spain  | 37,491,666         | 47,363,807         | 30,880,000         | 9,872,141         | (16,483,807)        | 26.3%        | -34.8%        |
| Poland   | 35,521,429         | 37,654,042         | 23,082,000         | 2,132,613         | (14,572,042)        | 6.0%         | -38.7%        |
| Romania  | 22,125,224         | 19,442,038         | 13,105,000         | (2,683,186)       | (6,337,038)         | -12.1%       | -32.6%        |
| Netherlands  | 14,130,387         | 17,434,557         | 16,580,000         | 3,304,170         | (854,557)           | 23.4%        | -4.9%         |
| Belgium  | 9,859,242          | 11,561,716         | 11,521,000         | 1,702,474         | (40,716)            | 17.3%        | -0.4%         |
| <b>Major Countries</b>   | <b>363,353,809</b> | <b>407,565,005</b> | <b>332,314,000</b> | <b>44,211,196</b> | <b>(75,251,005)</b> | <b>12.2%</b> | <b>-18.5%</b> |

Source: World Bank; Database Earth; UN Data Portal (EU has 27 countries); Populat Nevin Real Estate Advisors 5.2024



## Fertility Rates and Female Labor Participation Rates

The most prominent comparison are the Fertility Rates and Female Labor Participation Rates in the EU/UK and United States. In the 1980-2020 timeframe, the fertility rates in the European Union/United Kingdom declined from 1.9 to 1.5. Coincidentally, the labor participation rate in the European Union/United Kingdom increased dramatically from 35.3% to 69.8%.

In the U.S., the fertility remained stable at 1.8 in that 1980-2020 period and the female labor participation rate remained relatively stable as shown in this exhibit:

| <b>Female Fertility and Labor Participation Rates<br/>United Kingdom, European Union &amp; United States<br/>1960-2020</b> |             |             |
|--|-------------|-------------|
| <b>Locale</b>  | <b>1980</b> | <b>2020</b> |
| <b>European Union &amp; UK</b>   |             |             |
| Fertility Rates  | 1.9         | 1.5         |
| Female Labor Participation Rates   | 35.3%       | 69.8%       |
| <b>United States</b>   |             |             |
| Fertility Rates  | 1.8         | 1.8         |
| Female Labor Participation Rates   | 51.5%       | 56.8%       |

Source: World Bank Databank

## The Two Most Important Age Groups in Projecting the Economic Future of the EU and UK

The two most important age groups, from a demographic standpoint, are 15-19 and 65+.

The **15-19 year olds** are those who will be the primary labor force in the next few decades. And the 65+ age group are those who will retire and inevitably rely on

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increasing social services and health care. The **65+ age group** also has the work history and experience of several decades and allowed the economies to function smoothly and expand.

In the past 40+ years (1980-2022), the 15-19 age group has become a routinely smaller part of the population, declining from 8.4% to 6.9%. That age group will continue to decline causing a long-term shortage of the labor force, and, as a result, the inability of the economy to produce sufficient goods for the country's needs and exports.

## Summary: Population Age 15-19 European Union & Great Britain 1980 and 2022

|                 | Population         |                    | % Age 15-19 |             |
|-----------------|--------------------|--------------------|-------------|-------------|
|                 | 1980               | 2022               | 1980        | 2022        |
| Major Countries | 362,524,000        | 413,200,000        | 8.1%        | 5.2%        |
| Minor Countries | 105,192,327        | 38,797,088         | 9.4%        | 8.5%        |
| <b>Total</b>    | <b>467,716,327</b> | <b>451,997,088</b> | <b>8.4%</b> | <b>6.9%</b> |
| <b>% Major</b>  | <b>78%</b>         | <b>91%</b>         |             |             |

Source: United Nations

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Perhaps most devastating to a Nation's economy is the growth of the **65+ population**. In less than a half century, the 65+ population has expanded from 9.0% to 20.1% of the European Union and Great Britain population..

With the aging of the population inevitably comes the increase in dementia -- a condition that requires a cadre of skilled caretakers and the costs associated with that expansion. **The demand for senior care facilities is expanding to meet that need.** A substantial portion of those costs will fall on local and National governments.

| Summary: Population Over Age 65<br>European Union & Great Britain<br>1980 and 2022 |             |             |             |           |       |
|--|-------------|-------------|-------------|-----------|-------|
|  | Population  |             |             | % Over 65 |       |
|  | 1980        | 2022        | Change      | 1980      | 2022  |
| Major Countries  | 362,524,000 | 413,200,000 | 50,676,000  | 8.1%      | 20.0% |
| Minor Countries  | 105,192,327 | 102,450,000 | (2,742,327) | 11.9%     | 20.5% |
| Total  | 467,716,327 | 515,650,000 | 47,933,673  | 9.0%      | 20.1% |

Source: United Nations                      Nevin Real Estate Advisors 4.17.2024

### Reversing the Downward Fertility Trend

It has proven incredibly difficult to reverse the downward **fertility trend**. A number of countries have tried to bribe their populace into having more children, but, so far, it has failed to work.

Denmark, for instance, has tried to encourage their young adults to have as many as three children, using monetary incentives as well as free daycare. The country has gone so far as advertising its desire for larger families. Their theme was “Do it for Denmark.” So far, no luck. Look at Denmark’s website: “**Fertility Out Loud**”.

These same countries have taken a strong stand, for the most part, on in-migration. They would like to encourage in-migration of young, educated persons who look like them, but that has not proven to be possible. The recent out-migration of young educated persons from Russia has been a Godsend for the European countries, but not a long term cure.

### The Muslim Influence

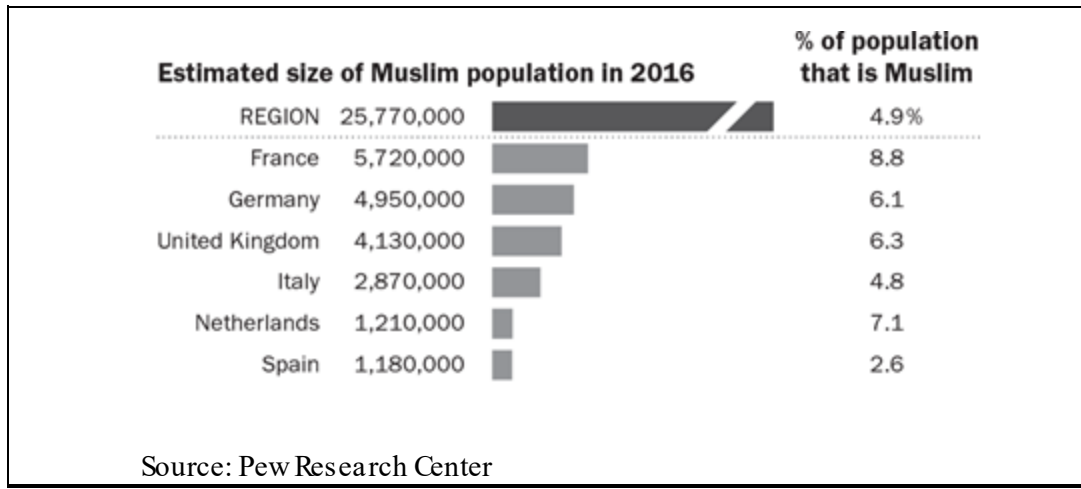
In the past decade, there has been a major influx of Muslims to Europe, trying to escape civil war, strife and violence. The EU/UK is now approximately 5.0% Muslim. With France leading the pack with 8.8% of its population Muslim.



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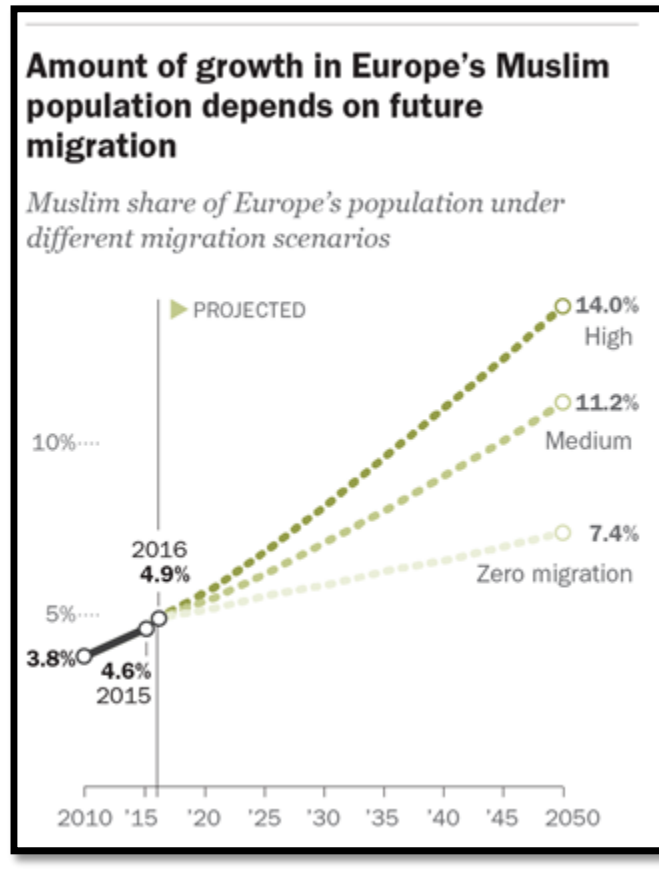
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The **Muslim fertility rate** is substantially higher than the non-Muslim rate. As a result, Muslims are anticipated to account for approximately 10% of the EU/UK population by 2050, providing an offset to the declining fertility rate.

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## The Economic Picture of the EU/UK

### Average National Income

Primarily as a result of the increase in female labor participation rate, and multi-job households, the average national income has increased by almost two-thirds from 1980 to 2022, moving upward from \$28,015 to \$41,877 in that forty plus year timeframe.

## Average National Income (Euros) Major Countries, European Union 1980-2022

| Locale            | 1980             | 2022 (1)         | Difference       | % Difference |
|-------------------|------------------|------------------|------------------|--------------|
| Poland            | \$ 13,176        | \$ 31,573        | \$ 18,397        | 140%         |
| UK                | \$ 21,271        | \$ 42,832        | \$ 21,561        | 101%         |
| Germany           | \$ 25,660        | \$ 50,200        | \$ 24,540        | 96%          |
| Belgium           | \$ 28,199        | \$ 46,460        | \$ 18,261        | 65%          |
| Romania           | \$ 15,454        | \$ 25,400        | \$ 9,946         | 64%          |
| Spain             | \$ 24,629        | \$ 38,475        | \$ 13,846        | 56%          |
| France            | \$ 32,594        | \$ 45,878        | \$ 13,284        | 41%          |
| Netherlands       | \$ 40,595        | \$ 56,216        | \$ 15,621        | 38%          |
| Italy             | \$ 32,555        | \$ 39,861        | \$ 7,306         | 22%          |
|                   |                  |                  |                  |              |
| <b>EU/UK Avg.</b> | <b>\$ 26,015</b> | <b>\$ 41,877</b> | <b>\$ 15,862</b> | <b>61%</b>   |

(1) some data may be 2019-2022

Source: United Nations World Inequality Database (WID)

### Household Spending

As a result of the increase in the female labor participation rate and inflation, the household spending in the European Union increased by more than three quarters in the 1980-2020 period.

| <b>Household Spending (1)<br/>European Union<br/>1980-2022</b> |                    |
|--|--------------------|
| <b>Year</b>  | <b>Billions \$</b> |
| 1980   | \$ 10,012          |
| 2020   | \$ 17,688          |
| <b>Change</b>  | <b>\$ 7,676</b>    |
| <b>%</b>   | <b>76.7%</b>       |

(1) U.S. Dollars  
Source: Macrotrends

## Manufacturing Output

Inevitably, the most important part of economies is their manufacturing output. In the following exhibit, I show the change in manufacturing value as a percent of Gross Domestic Product for the major European countries and the U.S.

Since 2000, the European countries and the United Kingdom have lost an average of 20% of their manufacturing value. The UK has seen the greatest loss, with only Poland showing a gain.

Unfortunately, the United States has seen a 31.5% decline in its manufacturing as a percent of its manufacturing value.

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| Major European Countries<br>Manufacturing Value Added as % of Gross Domestic Product<br>(all figures in U.S. Dollars)<br>2000-2022 |              |              |                      |               |
|--|--------------|--------------|----------------------|---------------|
| Country  | 2000<br>%    | 2022<br>%    | Change 2000-<br>2022 | % Change      |
| Germany  | 20.6%        | 18.4%        | -2.2%                | -10.5%        |
| UK   | 13.3%        | 8.4%         | -4.9%                | -36.8%        |
| France   | 14.5%        | 9.5%         | -5.0%                | -34.3%        |
| Italy  | 17.6%        | 14.5%        | -3.1%                | -17.5%        |
| Spain  | 16.2%        | 11.4%        | -4.8%                | -29.8%        |
| Poland (1)   | 16.1%        | 17.5%        | 1.4%                 | 8.9%          |
| Romania (1)  | 19.8%        | 15.1%        | -4.7%                | -23.8%        |
| Netherlands  | 13.4%        | 11.4%        | -2.0%                | -14.6%        |
| Belgium  | 17.5%        | 12.5%        | -5.0%                | -28.6%        |
| <b>Total Major</b>   | <b>16.5%</b> | <b>13.2%</b> | <b>-3.3%</b>         | <b>-20.3%</b> |
| United States  | 15.1%        | 10.4%        | -4.8%                | -31.5%        |

Sources: World Bank Databank

The third world countries have seen major increases in their manufacturing prowess, as shown in this exhibit, while most of the first world countries have suffered a loss of manufactured goods production.

| Selected Countries<br>Manufacturing Value Added as % of GDP<br>(all figures in U.S. Dollars)<br>2000-2022 |       |       |                  |          |
|---|-------|-------|------------------|----------|
| Country   | 2000  | 2022  | Change 2000-2022 | % Change |
|   | %     | %     |                  |          |
| Bangladesh  | 14.0% | 21.8% | 7.8%             | 55.7%    |
| Pakistan  | 9.1%  | 13.8% | 4.7%             | 51.6%    |
| Viet Nam  | 18.8% | 24.8% | 6.0%             | 31.7%    |
| European Union  | 16.5% | 13.2% | -3.3%            | -20.3%   |
| Japan   | 22.5% | 19.2% | -3.3%            | -14.5%   |
| India   | 15.9% | 13.3% | -2.6%            | -16.3%   |
| United States   | 15.1% | 10.4% | -4.8%            | -31.5%   |

Sources: World Bank Databank

## Home Prices

The fertility rate has taken its toll on the housing market in the EU and UK. Whereas the United States has seen a strong growth in the value of its housing stock, the EU and UK have experienced a gain of 3.5% annually in the 2010-2022 period.

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| <b>Home Price Index<br/>European Union<br/>2010-2022</b> |                   |                   |                   |                 |
|--|-------------------|-------------------|-------------------|-----------------|
| <b>Country</b>   | <b>2010</b>       | <b>2021</b>       | <b>Change</b>     | <b>% Change</b> |
| Netherlands  | 121.8             | 133.9             | 12.1              | 9.9%            |
| France   | 128.8             | 118.9             | -9.9              | -7.7%           |
| Germany  | 116.5             | 116.8             | 0.3               | 0.3%            |
| Belgium  | 115.8             | 121.8             | 6.0               | 5.2%            |
| Spain  | 106.7             | 102.0             | -4.7              | -4.4%           |
| Italy  | 99.1              | 98.8              | -0.3              | -0.3%           |
| Romania  | 43.1              | 45.2              | 2.1               | 4.9%            |
| <b>Index</b>   | <b>100.7</b>      | <b>139.2</b>      | <b>38.5</b>       | <b>3.5%</b>     |
| <b>United States</b>                                     | <b>\$ 278,000</b> | <b>\$ 497,300</b> | <b>\$ 219,300</b> | <b>78.9%</b>    |

Source: Eurostat

## Home Ownership

Home ownership in the European Union is modestly higher than in the United States, on average. Both the EU and U.S. have approximately 40% of their homes without mortgages. Home ownership is largely responsible for the stability of the EU and U.S.

| <b>Home Ownership<br/>Selected Countries<br/>European Union</b> |                  |                                   |
|---|------------------|-----------------------------------|
| <b>Country</b>  | <b>Total O-O</b> | <b>% Own with<br/>No Mortgage</b> |
| Netherlands   | 69.1%            | 8.4%                              |
| Sweden  | 64.4%            | 12.3%                             |
| Germany   | 50.5%            | 19.0%                             |
| France  | 64.0%            | 33.5%                             |
| Portugal  | 77.3%            | 38.4%                             |
| Spain   | 75.1%            | 44.8%                             |
| Turkey  | 57.9%            | 46.9%                             |
| Italy   | 75.1%            | 59.9%                             |
| Poland  | 85.6%            | 72.5%                             |
| Lithuania   | 88.5%            | 74.5%                             |
| Average   | 70.8%            | 41.0%                             |
| United States   | 65.6%            | 39.3%                             |

Source: Eurostat

## United Nations Happiness Index

Other than the long term implications of declining population, the other elements of the European Union and United Kingdom appear to be in good condition. As a result, the “happiness index” prepared by the United Nations indicates that the citizens of the EU/UK are among the happiest in the world.

The happiness index focuses on satisfaction with living arrangements, self-rated health, economic situation and absence of discrimination.



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The survey is conducted by a number of non-profit organizations and compiled by the Gallup company. It covers 150 countries. Of the top 35 countries, 20 are in the European Union/UK.

**Rank of Happiness 2019-2021  
Top 35 of 150 Countries in Survey  
United Nations Happiness Report**

| Rank | Country              | EU/UK |
|------|----------------------|-------|
| 1    | Finland              | x     |
| 2    | Denmark              | x     |
| 3    | Iceland              | x     |
| 4    | Switzerland          | x     |
| 5    | Netherlands          | x     |
| 6    | Luxembourg           | x     |
| 7    | Sweden               | x     |
| 8    | Norway               |       |
| 9    | Israel               |       |
| 10   | New Zealand          |       |
| 11   | Austria              | x     |
| 12   | Australia            |       |
| 13   | Ireland              | x     |
| 14   | Germany              | x     |
| 15   | Canada               |       |
| 16   | United States        |       |
| 17   | United Kingdom       | x     |
| 18   | Czechia              | x     |
| 19   | Belgium              | x     |
| 20   | France               | x     |
| 21   | Bahrain              |       |
| 22   | Slovenia             | x     |
| 23   | Costa Rica           |       |
| 24   | United Arab Emirates |       |
| 25   | Saudia Arabia        |       |
| 26   | Taiwan               |       |
| 27   | Singapore            |       |
| 28   | Romania              | x     |
| 29   | Spain                | x     |
| 30   | Uruguay              |       |
| 31   | Italy                | x     |
| 32   | Kosovo               |       |
| 33   | Malta                | x     |
| 34   | Lithuania            | x     |
| 35   | Slovakia             | x     |

Source: United Nations

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This compares with a few other countries that have far lower rates of happiness:

| <b>Rank of Happiness 2019-2021<br/>Low Ranking<br/>Based on 150 Countries<br/>United Nations Happiness Report</b> |                |
|---|----------------|
| <b>Rank</b>   | <b>Country</b> |
| 72  | China          |
| 80  | Russia         |
| 98  | Ukraine        |
| 81  | Hong Kong      |

Source: United Nations

**Overall, the EU and the UK will continue to see their population shrink; their labor supply atrophy and eventually see a decline in their country's output and a stagnation of their gross national product. And their happiness ranking may decline. But, for now, there is stability and happiness.**