
Prepared by The Population Reference Bureau for the NIA P-30 Coordinating Center at the Michigan Center on the Demography of Aging, University of Michigan
Countries Included

- AFRICA: Gabon, Mauritius*, South Africa
- AMERICAS: Argentina, Brazil, Chile, Costa Rica, Mexico, Panama, United States, Canada, Uruguay
- ASIA: Japan, Hong Kong*, Malaysia, Rep. of Korea*, Singapore
- EUROPE: Austria, Belgium, Cyprus*, Denmark, Finland, France, Germany*, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom
- MIDDLE EAST: Saudi Arabia
- OCEANIA: Australia, New Zealand

*Data only available for some years

Preview Results:
- More adequate social security income benefit levels
- Higher benefit levels in richer countries?
- Replacement rates suggest U.S. benefits less generous
- Pension system variety

Key Concepts
- Replacement Rate
- Defined Benefit and Defined Contribution
# Countries with the 10 Highest Replacement Rates

## 1970

<table>
<thead>
<tr>
<th>#</th>
<th>Country</th>
<th>Total Rate (%)</th>
<th>From Defined Benefit (%)</th>
<th>From Defined Contribution (%)</th>
<th>Real GDP per Cap. (Current PPP, $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Greece</td>
<td>114</td>
<td>114</td>
<td>0</td>
<td>2,873</td>
</tr>
<tr>
<td>2</td>
<td>Uruguay</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td>1,764</td>
</tr>
<tr>
<td>3</td>
<td>Japan</td>
<td>87</td>
<td>87</td>
<td>0</td>
<td>3,516</td>
</tr>
<tr>
<td>4</td>
<td>Luxembourg</td>
<td>83</td>
<td>83</td>
<td>0</td>
<td>6,571</td>
</tr>
<tr>
<td>5</td>
<td>Argentina</td>
<td>82</td>
<td>82</td>
<td>0</td>
<td>2,838</td>
</tr>
<tr>
<td>6</td>
<td>Austria</td>
<td>77</td>
<td>77</td>
<td>0</td>
<td>3,753</td>
</tr>
<tr>
<td>7</td>
<td>Brazil</td>
<td>75</td>
<td>75</td>
<td>0</td>
<td>1,222</td>
</tr>
<tr>
<td>8</td>
<td>Italy</td>
<td>74</td>
<td>74</td>
<td>0</td>
<td>3,378</td>
</tr>
<tr>
<td>9</td>
<td>Chile</td>
<td>70</td>
<td>70</td>
<td>0</td>
<td>1,855</td>
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<tr>
<td>9</td>
<td>Portugal</td>
<td>70</td>
<td>70</td>
<td>0</td>
<td>1,840</td>
</tr>
<tr>
<td>9</td>
<td>Costa Rica</td>
<td>70</td>
<td>70</td>
<td>0</td>
<td>1,660</td>
</tr>
</tbody>
</table>
### Countries with the 10 Highest Replacement Rates

#### 2000

<table>
<thead>
<tr>
<th>#</th>
<th>Country</th>
<th>Total Rate (%)</th>
<th>From Defined Benefit (%)</th>
<th>From Defined Contribution (%)</th>
<th>Real GDP per Cap. (Current PPP, $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Singapore</td>
<td>119</td>
<td>0</td>
<td>119</td>
<td>30,988</td>
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<td>Brazil</td>
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<td>100</td>
<td>0</td>
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<td>2</td>
<td>Panama</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td>5,947</td>
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<tr>
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<td>98</td>
<td>0</td>
<td>54,109</td>
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<tr>
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<td>Mexico</td>
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<td>94</td>
<td>0</td>
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<tr>
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<td>89</td>
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<tr>
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<td>Costa Rica</td>
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<td>87</td>
<td>1</td>
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<tr>
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<td>86</td>
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<td>21,345</td>
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<tr>
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<td>0</td>
<td>27,575</td>
</tr>
<tr>
<td>10</td>
<td>Italy</td>
<td>80</td>
<td>80</td>
<td>0</td>
<td>23,572</td>
</tr>
</tbody>
</table>
Bubble Charts

- Y-AXIS – Replacement Rates

- X-AXIS – Real Gross Domestic Product Per Capita
  - In Purchasing Power Parity Dollars
  - On a logarithmic scale

- Size of Bubbles – Total Population Age 60 or Older
1980

Replacement Rate (%) vs. Real GDP per Capita (Current PPP $) in Logarithmic Scale

Total Pop. >= 60

Brazil
Uruguay
Singapore
Spain

Americas
Asia
Europe
Africa
Middle East
Oceania
1980

Real GDP per Capita (Current PPP $) in Logarithmic Scale

Replacement Rate (%)

Total Pop. >= 60

- Americas
- Asia
- Europe
- Africa
- Middle East
- Oceania

Singapore

United States

Hong Kong
1990

Real GDP per Capita (Current PPP $) in Logarithmic Scale

Replacement Rate (%)

Total Pop. >= 60

Americas  Asia  Europe  Africa  Middle East  Oceania

Chile  Switzerland  United States  R. of Korea
Change from 1970 to 2000
Conclusions

- Adequacy of Social Security Benefits
- Outliers
- Replacement Rates and National Wealth?
- Benefits and Age of Eligibility
OTHER RESOURCES

- David Canning (data)
  http://www.hsph.harvard.edu/faculty/david-canning/data-sets/

- David Wise
  http://www.hks.harvard.edu/about/faculty-staff-directory/david-wise

- Ronald Lee
  http://berkeley.edu/news/extras/experts/rlee.htm
Data Sources and References

Data Sources


References


This presentation was developed by the Population Reference Bureau with funding from the University of Michigan Demography Center. This center coordinates dissemination of findings from 14 NIA demography centers. The presentation was authored by Marlene Lee, Senior Research Associate and Jonathan Stall, an intern at the Population Reference Bureau.