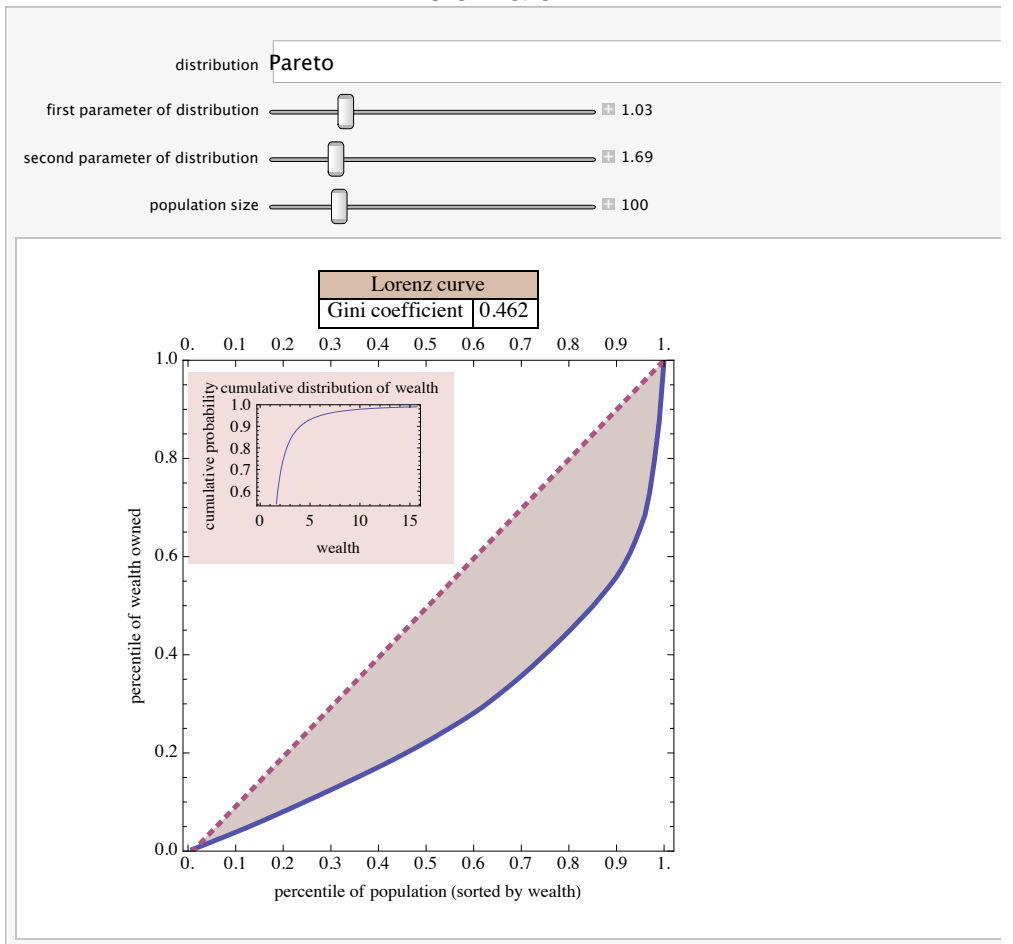


## Lorenz & Gini



**Inequality.** The ratio of total income received by the 20% of the population with the highest income (top quintile) to that received by the 20% of the population with the lowest income (lowest quintile).

**Table 1. Real growth of social protection expenditure in the EU, 1990-2002**

|      | 1990-93 <sup>2</sup> | 1993-96 | 1996-99 | 1999-2002 <sup>3</sup> | 1990-2002 <sup>2</sup> |
|------|----------------------|---------|---------|------------------------|------------------------|
| BE   | 5.5                  | 1.0     | 1.4     | 1.8                    | 2.4                    |
| CZ   | :                    | :       | 3.8     | 4.8                    | :                      |
| DK   | 4.3                  | 2.8     | 0.8     | 1.6                    | 2.3                    |
| DE   | 5.0                  | 3.3     | 1.0     | 1.2                    | 2.6                    |
| EE   | :                    | :       | :       | :                      | :                      |
| EL   | -0.7                 | 3.6     | 8.1     | 5.8                    | 4.1                    |
| ES   | 7.0                  | -0.4    | 1.6     | 3.7                    | 3.0                    |
| FR   | 3.4                  | 1.5     | 2.1     | 2.8                    | 2.4                    |
| IE   | 6.6                  | 3.0     | 4.7     | 11.9                   | 6.5                    |
| IT   | 2.0                  | -0.4    | 2.4     | 2.5                    | 1.6                    |
| CY   | :                    | :       | :       | :                      | :                      |
| LV   | :                    | :       | :       | :                      | :                      |
| LT   | :                    | :       | :       | :                      | :                      |
| LU   | 7.9                  | 4.6     | 5.3     | 5.6                    | 5.8                    |
| HU   | :                    | :       | :       | 6.6                    | :                      |
| MT   | :                    | :       | :       | 1.9                    | :                      |
| NL   | 2.3                  | 0.3     | 1.5     | 2.8                    | 1.7                    |
| AT   | 4.0                  | 2.8     | 2.5     | 1.7                    | 2.8                    |
| PL   | :                    | :       | :       | :                      | :                      |
| PT   | 10.3                 | 3.4     | 7.3     | 6.1                    | 6.8                    |
| SI   | :                    | :       | 5.4     | 3.4                    | :                      |
| SK   | :                    | :       | 3.7     | 0.6                    | :                      |
| FI   | 4.2                  | 1.7     | -0.6    | 1.2                    | 1.6                    |
| SE   | 3.0                  | -0.8    | 1.2     | 3.1                    | 1.6                    |
| UK   | 7.5                  | 1.9     | 1.5     | 4.7                    | 3.9                    |
| EU15 | 6.0                  | 1.7     | 1.4     | 2.6                    | 2.9                    |
| EU   | :                    | :       | :       | :                      | :                      |

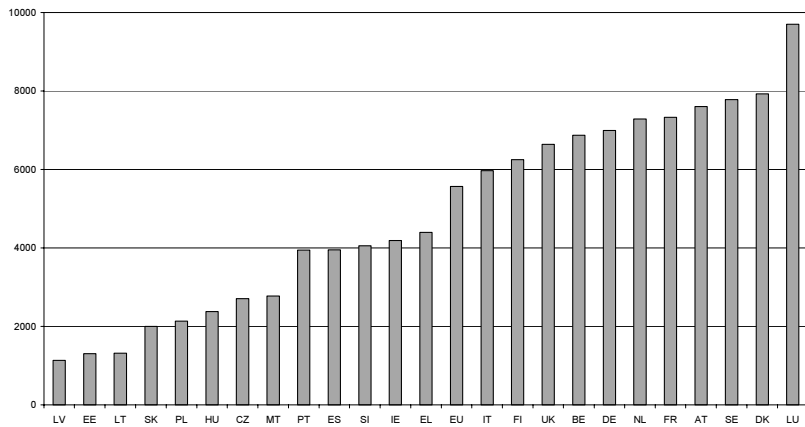
1) 2002 data are provisional

2) For Germany, data refer to 1991-1993 and 1991-2002.

3) For Estonia, Latvia, Lithuania and Poland, data refer to changes between 2000 and 2001. Data for Cyprus are not available.

Source: Eurostat – ESSPROS database

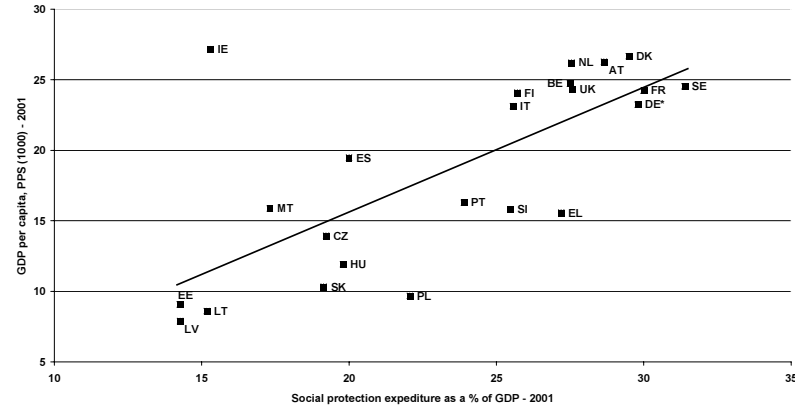
Figure 2. Social protection expenditure per capita in PPS, 2001



Luxembourg has to be considered as an outlier given that cross-border workers constitute a large share of its labour force.

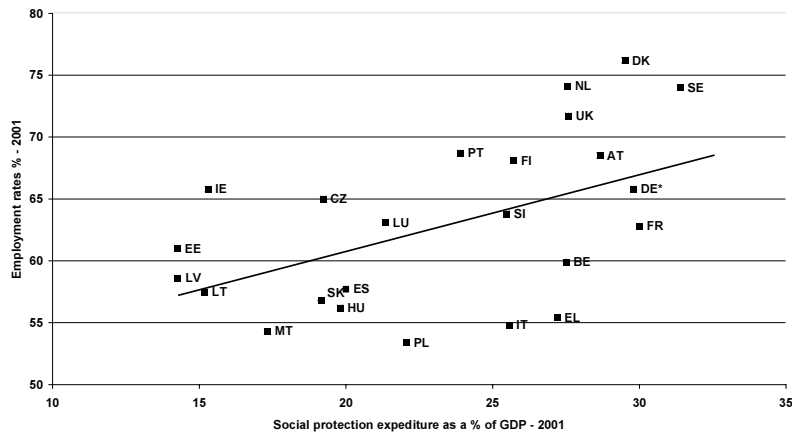
Data for Cyprus are not available.  
 Source: Eurostat - ESSPROS database

Figure 3a. Social protection expenditure and GDP per capita in the Member States, 2001



\* Luxembourg is not shown in the Chart given its status as an outlier.  
 Data for Cyprus are not available.  
 Source: Eurostat - New Cronos databank and ESSPROS.

Figure 3b. Social protection expenditure and the employment rate in the Member States, 2001



Data for Cyprus are not available.  
 Source: Eurostat - New Cronos databank and ESSPROS.

# EC4333 Lecture 9 Handout

Dr S. Kinsella

| The World        |        |
|------------------|--------|
| # of individuals | 5      |
| Individual       | Income |
| 1                | 1      |
| 2                | 4      |
| 3                | 7      |
| 4                | 10     |
| 5                | 15     |
| 6                | 0      |
| 7                | 0      |
| 8                | 0      |
| 9                | 0      |
| 10               | 0      |
| Total            | 37     |

| Gini Calculations |                   |                  |                  |
|-------------------|-------------------|------------------|------------------|
| Population Share  | Cumulative Income | Cumulative Share | Perfect Equality |
| 0                 | 0                 | 0.00             | 0                |
| 0.2               | 1                 | 0.03             | 0.2              |
| 0.4               | 5                 | 0.14             | 0.4              |
| 0.6               | 12                | 0.32             | 0.6              |
| 0.8               | 22                | 0.59             | 0.8              |
| 1                 | 37                | 1.00             | 1                |

