Assigment 4 Data

在课程网站上直接下载 countriesData.csv 文件。 文件共包含 215 个国家, 2010-2014年, 17 项条目的数据。 每个国家的数据参考下图:

| | 2010 | 2011 | 2012 | 2013 | 2014 |
|--|--|---|---|--|---|
| GDP growth (annual %) | 11 | 9 | 8 | 8 | 7 |
| GDP (current US\$) | 6,039,658,508,486 | 7,492,432,097,810 | 8,461,623,162,714 | 9,490,602,600,148 | 10,360,105,247,908 |
| Internet users (per 100 people) | 34 | 38 | 42 | 46 | 49 |
| Rural population | 679,206,337 | 664,363,135 | 649,832,871 | 635,688,202 | 621,970,693 |
| Population, female (% of total) | 49 | 49 | 49 | 48 | 48 |
| Population growth (annual %) | 0 | 0 | 0 | 0 | 1 |
| Population, total | 1,337,705,000 | 1,344,130,000 | 1,350,695,000 | 1,357,380,000 | 1,364,270,000 |
| GDP per capita growth (annual %) | 10 | 9 | 7 | 7 | 7 |
| GDP per capita (current US\$) | 4,515 | 5,574 | 6,265 | 6,992 | 7,594 |
| Labor force, total | 781,054,640 | 790,183,028 | 795,863,202 | 801,790,592 | |
| Labor force, female (% of total labor force) | 44 | 44 | 44 | 44 | |
| Armed forces personnel (% of total labor force) | 0 | 0 | 0 | 0 | |
| Surface area (sq. km) | 9,562,911 | 9,562,911 | 9,562,911 | 9,562,911 | 9,562,911 |
| Population density (people per sq. km of land area) | 142 | 143 | 144 | 145 | 145 |
| Arable land (% of land area) | 11 | 11 | 11 | 11 | |
| | | | 5 | 5 | |
| Unemployment, total (% of total labor force) (modeled ILO estimate) Unemployment, female (% of female labor force) (modeled ILO estimate) | 4 | 4 | 4 | 4 | |
| | | | | _ | 2014 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) | 3 | 2011 | 4 | 2013 | |
| | 2010 | 2011 | 2012 | 2013 | |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 增长率(年百分比) GDP (现价美元) | 2010 | 2011 9 7,492,432,097,810 | 2012 | 2013 8 9,490,602,600,148 | 10,360,105,247,90 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 增长率(年百分比) GDP (现价美元) 互联网用户(每 100 人) | 2010 111 6,039,658,508,486 | 2011 9 7,492,432,097,810 38 | 2012 8 8,461,623,162,714 | 2013 8 9,490,602,600,148 46 | 10,360,105,247,90 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 增长率(年百分比) GDP (现价美元) 互联网用户(每 100 人) 农村人口 | 2010 111 6,039,658,508,486 34 | 2011 9 7,492,432,097,810 38 664,363,135 | 2012 8 8,461,623,162,714 42 649,832,871 | 2013 8 9,490,602,600,148 46 635,688,202 | 10,360,105,247,90 4 621,970,69 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 增长率(年百分比) GDP (现价美元) 互联网用户(每 100 人) 农村人口 人口,女性(占总人口的百分比) | 2010 111 6,039,658,508,486 34 679,206,337 | 2011 9 7,492,432,097,810 38 664,363,135 | 2012 8 8,461,623,162,714 42 649,832,871 | 2013 8 9,490,602,600,148 46 635,688,202 48 | 10,360,105,247,90 4 621,970,69 4 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 增长率(年百分比) GDP (现价美元) 互联网用户(每 100 人) 农村人口 人口,女性(占总人口的百分比) 人口,增长(年度百分比) | 2010 111 6,039,658,508,486 679,206,337 49 | 2011 9 7,492,432,097,810 38 664,363,135 49 0 | 2012 8 8,461,623,162,714 42 649,832,871 49 | 2013 8 9,490,602,600,148 46 635,688,202 48 0 | 10,360,105,247,90 4' 621,970,69 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 增长率 (年百分比) GDP (现价美元) 互联网用户 (每 100 人) 农村人口 人口,女性 (占总人口的百分比) 人口,长年度百分比) | 2010 11 6,039,658,508,486 34 679,206,337 49 | 2011 9 7,492,432,097,810 38 664,363,135 49 0 1,344,130,000 | 2012 8 8,461,623,162,714 42 649,832,871 49 0 | 2013 8 9,490,602,600,148 46 635,688,202 48 0 1,357,380,000 | 10,360,105,247,90 4' 621,970,69 4: 1,364,270,00 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 增长率 (年百分比) GDP (现价美元) 互联网用户 (每 100 人) 农村人口 人口,女性(占总人口的百分比) 人口增长(年度百分比) 人口,总数 | 2010 111 6,039,658,508,486 34 679,206,337 49 0 1,337,705,000 | 2011 9 7,492,432,097,810 38 664,363,135 49 0 1,344,130,000 9 | 2012 8 8,461,623,162,714 42 649,832,871 43 0 1,350,695,000 | 2013 8 9,490,602,600,148 46 635,688,202 48 0 1,357,380,000 7 | 10,360,105,247,90 4 621,970,69 4 1,364,270,00 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 增长率 (年百分比) GDP (现价美元) 互联网用户 (每 100 人) 农村人口 人口,女性(占总人口的百分比) 人口,女性(占总人口的百分比) 人口,战数 人均 GDP增长 (年增长率) 人均 GDP(现价美元) | 2010 111 6,039,658,508,486 34 679,206,337 49 0 1,337,705,000 | 2011 9 7,492,432,097,810 38 664,363,135 49 0 1,344,130,000 9 5,574 | 2012 8 8,461,623,162,714 42 649,832,871 49 0 1,350,695,000 7 | 2013 8 9,490,602,600,148 46 635,688,202 48 0 1,357,380,000 7 6,992 | 10,360,105,247,90 4 621,970,69 4 1,364,270,00 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 增长率(年百分比) GDP(现价美元) 互联网用户(每 100 人) 农村人口 人口,女性(占总人口的百分比) 人口,终(年度百分比) 人口,总数 人均 GDP增长(年增长率) 人均 GDP (现价美元) 劳动力,总数 | 2010 111 6,039,658,508,486 34 679,206,337 48 0 1,337,705,000 10 4,515 | 2011 9 7,492,432,097,810 38 664,363,135 49 0 1,344,130,000 9 5,574 790,183,028 | 2012 8 8,461,623,162,714 42 649,832,871 48 0 1,350,695,000 7 6,265 | 2013 8 9,490,602,600,148 46 635,688,202 48 0 1,357,380,000 7 6,992 801,790,592 | 10,360,105,247,90 4' 621,970,69 4: 1,364,270,00 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 増长率 (年百分比) GDP (現价美元) 互联网用户 (毎 100 人) 农村人口 人口 ,女性 (占总人口的百分比) 人口増长 (年度百分比) 人口 ,足 (本度百分比) 人口 ,足 (大り GDP (現价美元) 劳动力, 点数 劳动力, 点数 劳动力, 点数 劳动力, 点数 劳动力, 点数 | 2010 111 6,039,658,508,486 34 679,206,337 48 0 1,337,705,000 10 4,515 781,054,640 | 2011 9 7,492,432,097,810 38 664,363,135 40 0 1,344,130,000 9 5,574 790,183,028 44 | 2012 8 8,461,623,162,714 42 649,832,871 49 0 1,350,695,000 7 6,265 795,863,202 | 2013 8 9,490,602,600,148 635,688,202 48 0 1,357,380,000 7 6,992 801,790,592 44 | 10,360,105,247,90 4 621,970,69 4 1,364,270,00 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 増长率 (年百分比) GDP (現价美元) 互联网用户 (毎 100 人) 农村人口 人口 ,女性 (占总人口的百分比) 人口増长 (年度百分比) 人口 ,足 (本度百分比) 人口 ,足 (大り GDP (現价美元) 劳动力, 点数 劳动力, 点数 劳动力, 点数 劳动力, 点数 劳动力, 点数 | 2010 111 6,039,658,508,486 34 679,206,337 49 0 1,337,705,000 10 4,515 781,054,644 | 2011 9 7,492,432,097,810 38 664,363,135 49 0 1,344,130,000 9 5,574 790,183,028 44 | 2012 8 8,461,623,162,714 42 649,832,871 43 0 1,350,695,000 7 6,265 795,863,202 44 | 2013 8 9,490,602,600,148 46 635,688,202 48 0 1,357,380,000 7 6,992 801,790,592 44 0 | 10,360,105,247,90 4 621,970,69 4 1,364,270,00 7,59 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 増长率 (年百分比) GDP (現价美元) 互联网用户 (毎 100 人) 农村人口 人口,女性 (占总人口的百分比) 人口 場悠 (4度百分比) 人口 場悠 (4度百分比) 人内 GDP増长 (年増长率) 人均 GDP増长 (年増长率) 人均 GDP 現价美元) 等动力,总数 等动力,总数 等动力,总数 等动力,总数 | 2010 111 6,039,658,508,486 34 679,206,337 49 0 1,337,705,000 10 4,515 781,054,640 | 2011 9 7,492,432,097,810 3,335 664,363,135 0 1,344,130,000 9 5,574 790,183,028 44 0 9,562,911 | 2012 8 8,461,623,162,714 42 649,832,871 49 0 1,350,695,000 7 6,265 795,863,202 44 | 2013 8 9,490,602,600,148 46 635,688,260 1,357,380,000 7 6,992 801,790,592 44 0 9,562,911 | 10,360,105,247,90 4 621,970,69 4 1,364,270,00 7,59 9,562,91 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 増长率 (年百分比) GDP (现价美元) 互联网用户 (毎 100 人) 农材人口 人口,女性 (占总人口的百分比) 人口,女性 (占度百分比) 人口,总数 人均 GDP增长 (年増长率) 人均 GDP 現份美元) 劳动力,总数 劳动力,之数 劳动力,之数 大力 (占劳动力总数的百分比) 武美部队人员 (占劳动力总数的百分比) 武美部队人员 (占劳动力总数的百分比) 国土面积 (平方千米) 人口密度 (每公里土地面积人数) 耕地 (占土地面积的百分比) | 2010 11 6,039,658,508,486 34 679,206,337 49 0 1,337,705,000 10 4,515 781,054,640 44 0 9,562,911 | 2011 9 7,492,432,097,810 38 664,363,135 49 0 1,344,130,000 9 5,574 790,183,028 44 0 9,562,911 | 2012 8 8,461,623,162,714 42 649,832,877 49 0 1,350,695,000 7 6,265 795,863,202 44 0 9,562,911 | 2013 8 9,490,602,600,148 46 635,688,202 48 0 1,357,380,000 7 6,992 801,790,592 44 0 9,562,911 145 | 10,360,105,247,90 4' 621,970,69 4' 1,364,270,00 7,59 |
| Unemployment, female (% of female labor force) (modeled ILO estimate) GDP 増长率 (年百分比) GDP (現价美元) | 2010 111 6,039,658,508,4866 34 679,206,337 49 0 1,337,705,000 10 4,5115 781,054,640 44 0 9,562,911 142 | 2011 9 7,492,432,097,810 38 664,363,135 40 0 1,344,130,000 9 5,574 790,183,028 44 0 9,562,911 143 | 2012 8 8,461,623,162,714 42 649,832,871 49 0 1,350,695,000 7 6,265 795,863,202 44 0 9,562,911 144 | 2013 8 9,490,602,600,148 635,688,202 48 0 1,357,380,000 7 6,992 801,790,592 44 0 9,562,911 1455 | 10,360,105,247,90 44 621,970,69; 41 1,364,270,000 7,59- 9,562,91: |

图 1 中国的数据内容

在 CSV 文件中,第一行为数据属性名称,包括 Country Name, Country Code, Series Name, Series Code, 2010 [YR2010], 2011[YR2011], 2012[YR2012], 2013[YR2013], 2014[YR2014].其中 Series Name 可能取值有 17 中,分别是 GDP growth (annual %),GDP (current US\$),Internet users (per 100 people), Rural population, Population, female (% of total), Population growth (annual %), Population, total, GDP per capita growth (annual %), GDP per capita (current US\$), Laborforce, total. Laborforce, female (% of total laborforce), Armedforcespersonnel (% of total labor force), Surface area (sq. km), Population density (people per km of land sq. area), Arableland(%oflandarea), Unemployment, total(%oftotallaborforce) (modeledILO estimate), Unemployment, female (% of female labor force) (modeled ILO estimate)。 注意:csv 文件中.存在数据缺失现象。比如中国.劳动 力总数在 2014 年是没有数据的。csv 文件中,使用".."表示数据的缺失。 建议大 家开始设计前,先理解数据,选择某一些角度对数据进行分析。