



# **Multinational Comparisons of Health Systems Data, 2002**

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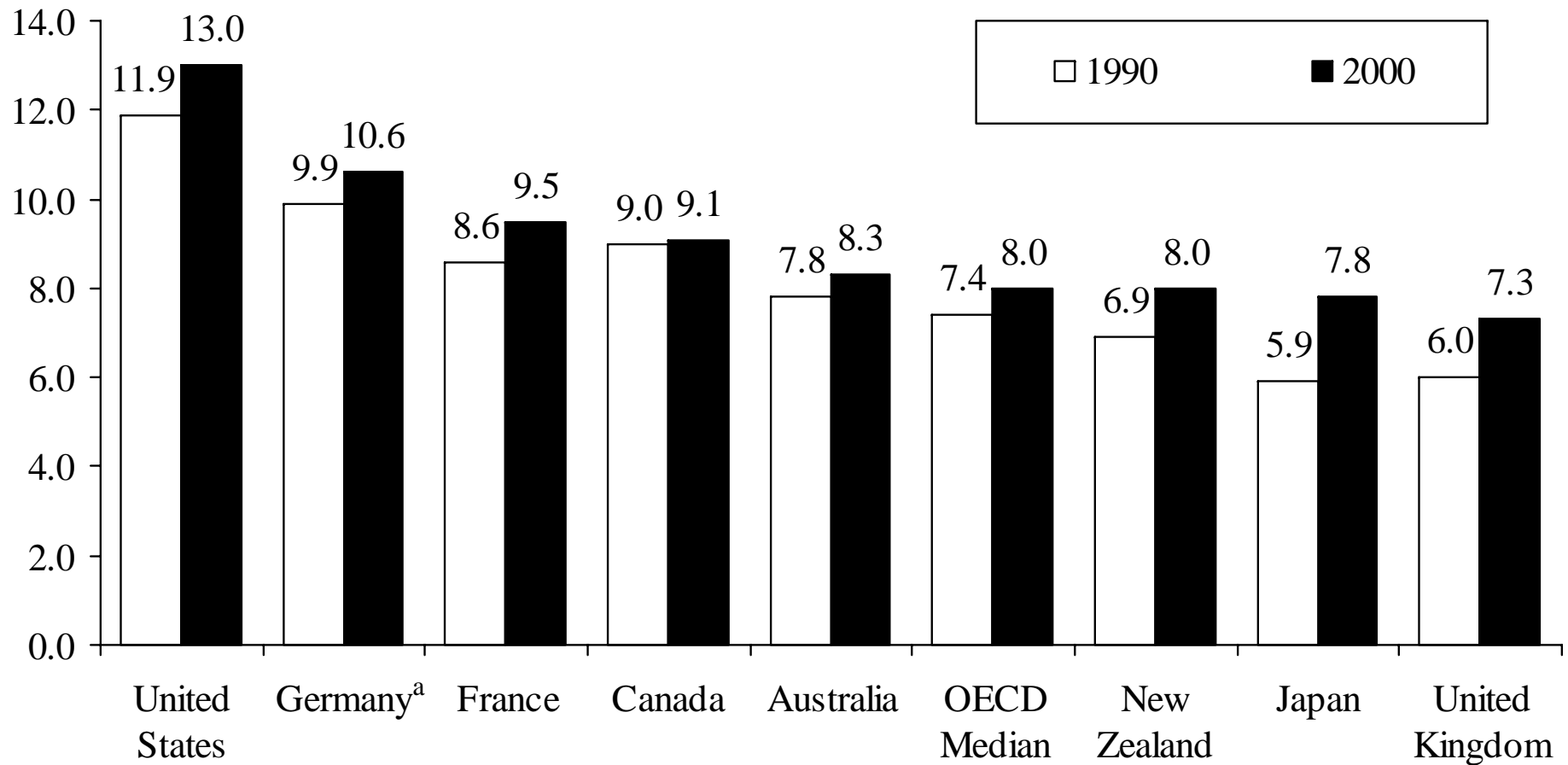
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## II. Total Health Care Spending<sup>1,3</sup>

- Countries spent between 7.3 percent (United Kingdom) and 13.0 percent (United States) of their gross domestic product (GDP) on health care in 2000.
- Health care spending is an increasing share of GDP: the percentage of GDP spent on health care increased in all eight countries between 1990 and 2000.
- Health care spending per capita in the United States was more than twice the OECD median in 2000.
- Health care spending per capita grew most rapidly between 1990 and 2000 in Japan and the United Kingdom and least rapidly in Canada.
- Health care spending per capita increased 2 percent to 4 percent faster than overall inflation during the 1990s in all eight countries.



**Chart II-1**  
**Percentage of Gross Domestic Product (GDP) Spent on Health Care in 1990 and 2000<sup>2,3,4,5</sup>**



<sup>a</sup> 1992–2000

**Chart II-2**  
**Percentage of GDP Spent on Health Care from 1990 to 2000**

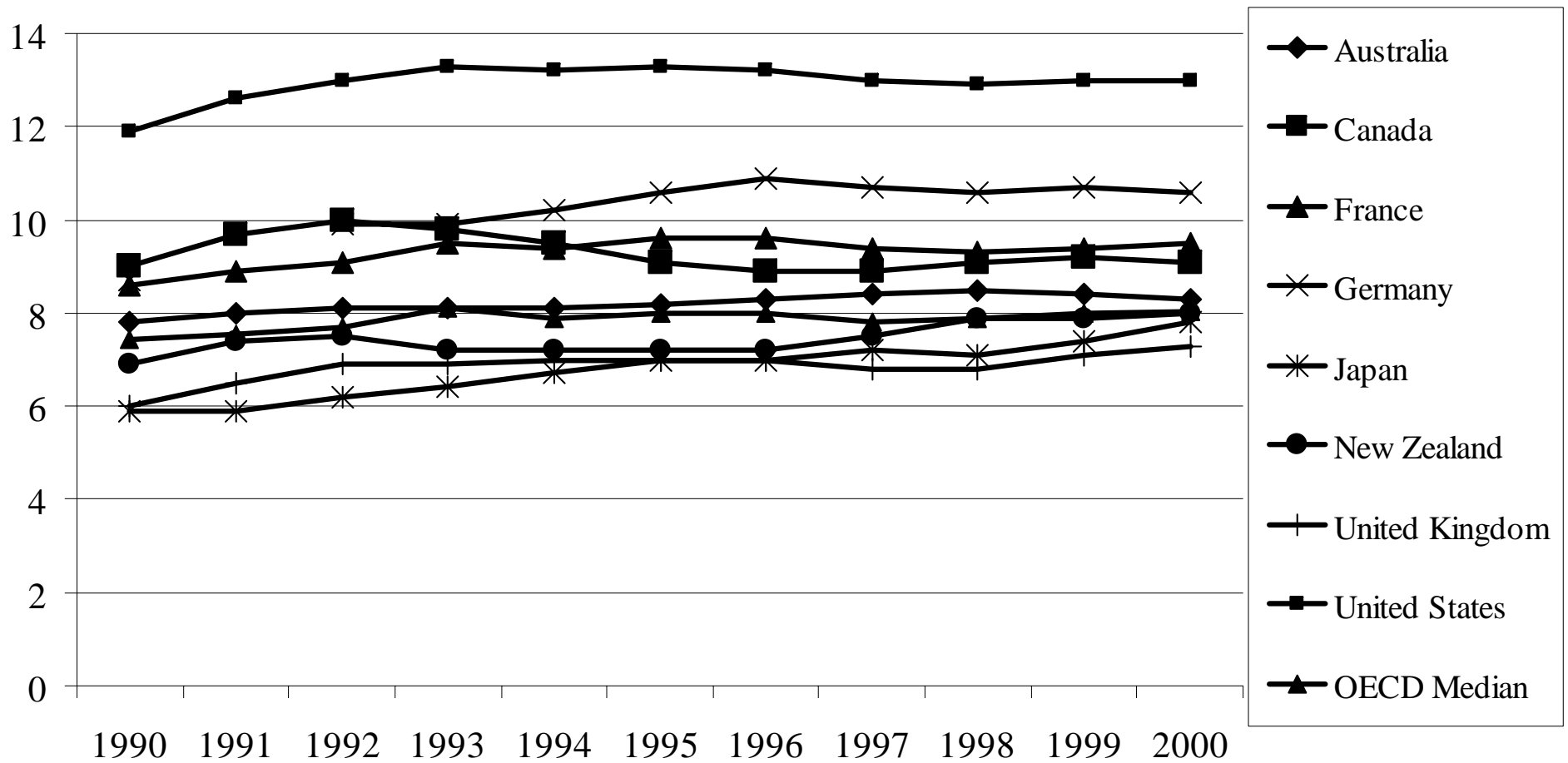


Chart II-3  
**Health Care Spending per Capita in 2000**  
Adjusted for Differences in the Cost of Living<sup>6</sup>

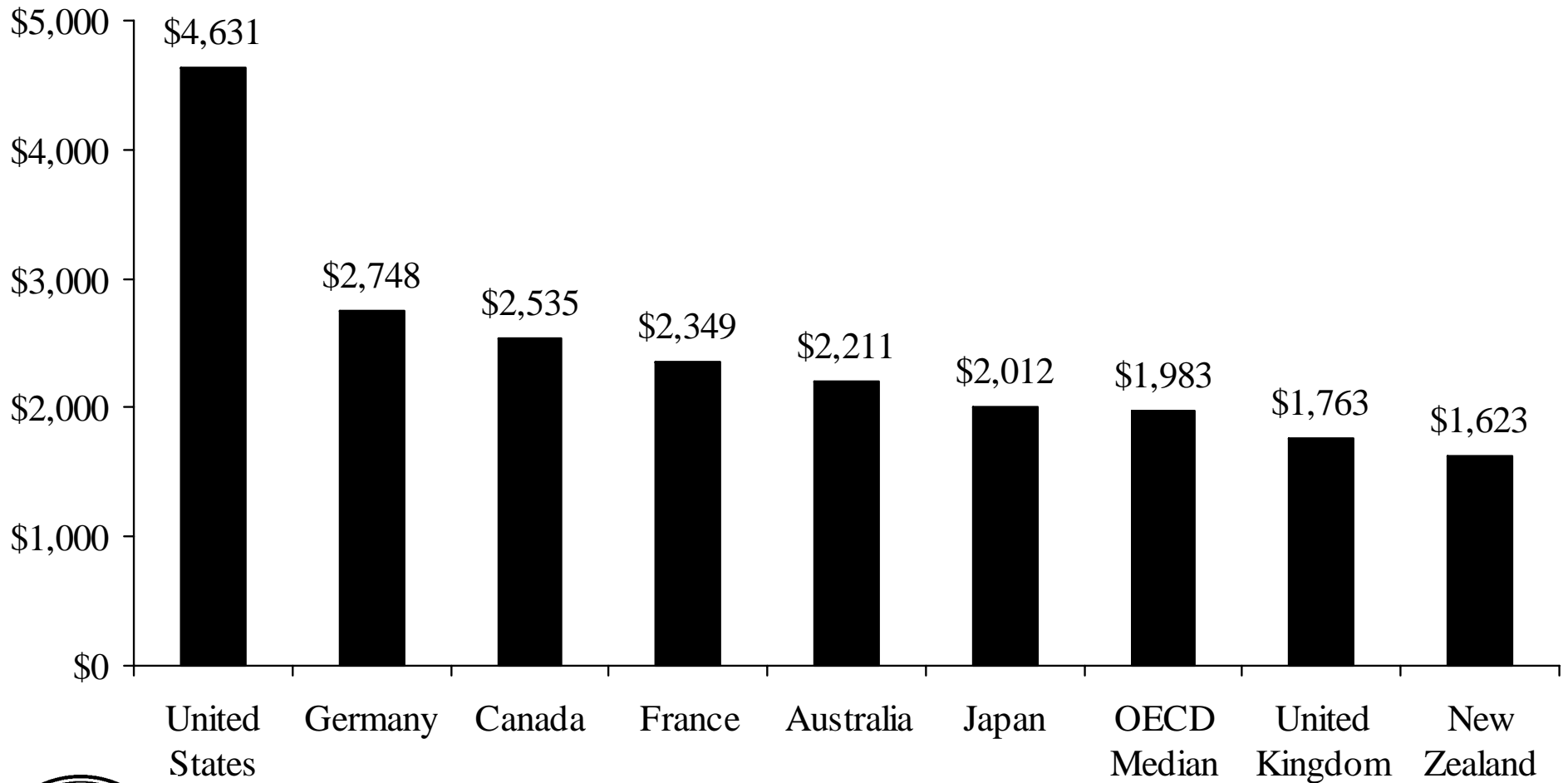
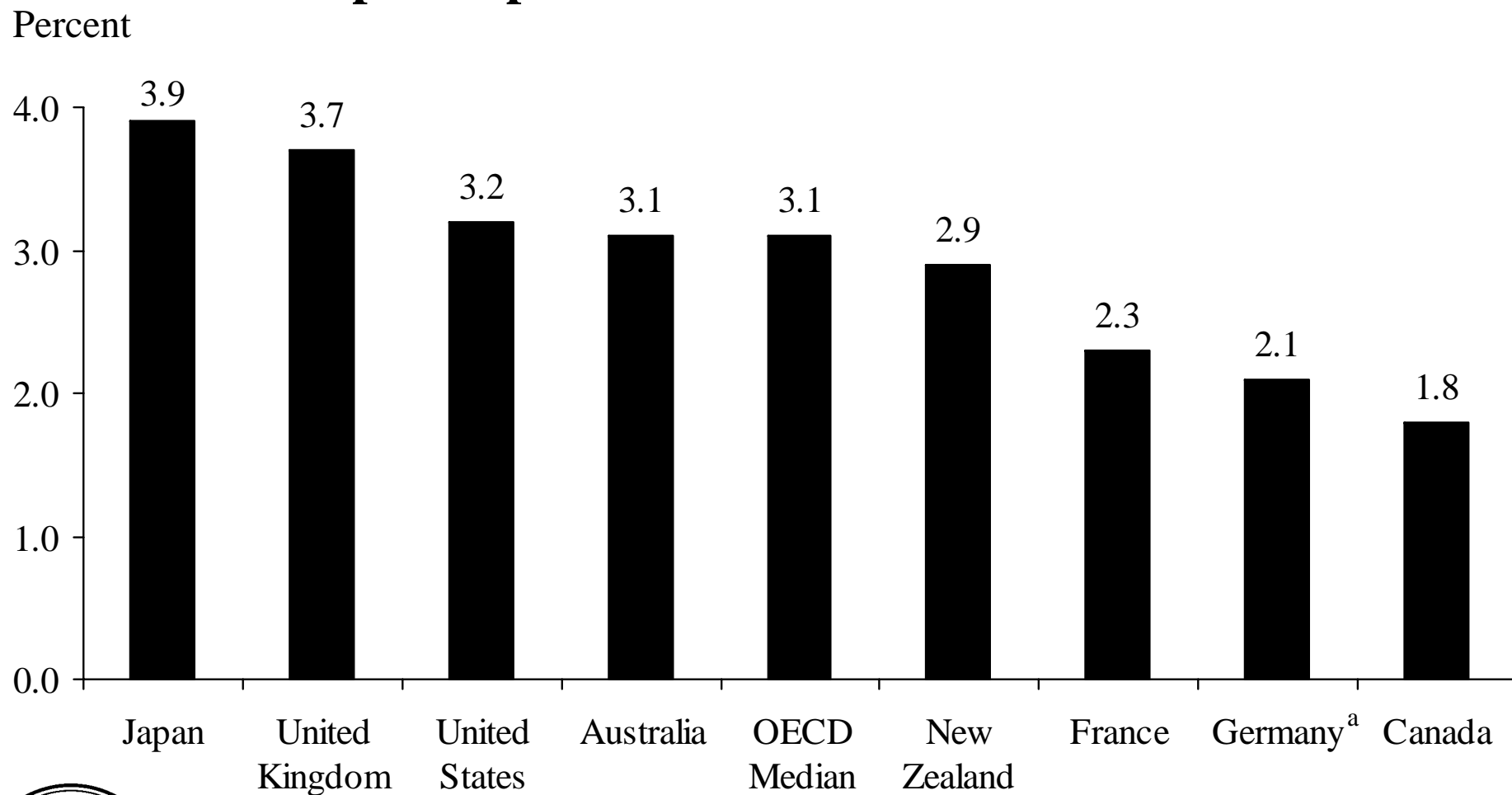


Chart II-4

# Average Annual Growth Rate of Real Health Care Spending per Capita Between 1990 and 2000<sup>7,8</sup>



<sup>a</sup> 1992–2000

Sources: OECD Health Data 2002; U.K. Department of Health

### III. Public and Private Health Care Financing

- Approximately three-quarters of health care spending was publicly financed in all countries except the United States in 2000.
- The eight countries spent between 5.8 percent and 8.0 percent of GDP on publicly financed health care in 2000.
- The United States spent approximately the same portion of the country's GDP on publicly financed health care as most other OECD countries in 2000, although public programs covered only 45 percent of the U.S. population.
- Per capita spending on publicly financed health care ranged from \$1,266 in New Zealand to \$2,063 in Germany in 2000.
- The United States spent 7.2 percent of GDP on privately financed health care in 2000 while Germany, the country with the second-highest level, spent 2.6 percent.



- Private health care spending per capita in the United States was 4 to 8 times higher than in the other seven countries in 2000.
- In the United States, private health insurance is used much differently than in the other countries, typically providing primary coverage for medical care rather than coverage that is supplementary to public insurance.
- Out-of-pocket spending for uncovered services and cost-sharing varied considerably across countries in 2000, with individuals in the United States experiencing the highest out-of-pocket costs (\$707) and those in the United Kingdom the lowest (\$171).





# Chart III-1 Public Versus Private Health Care Spending in 2000

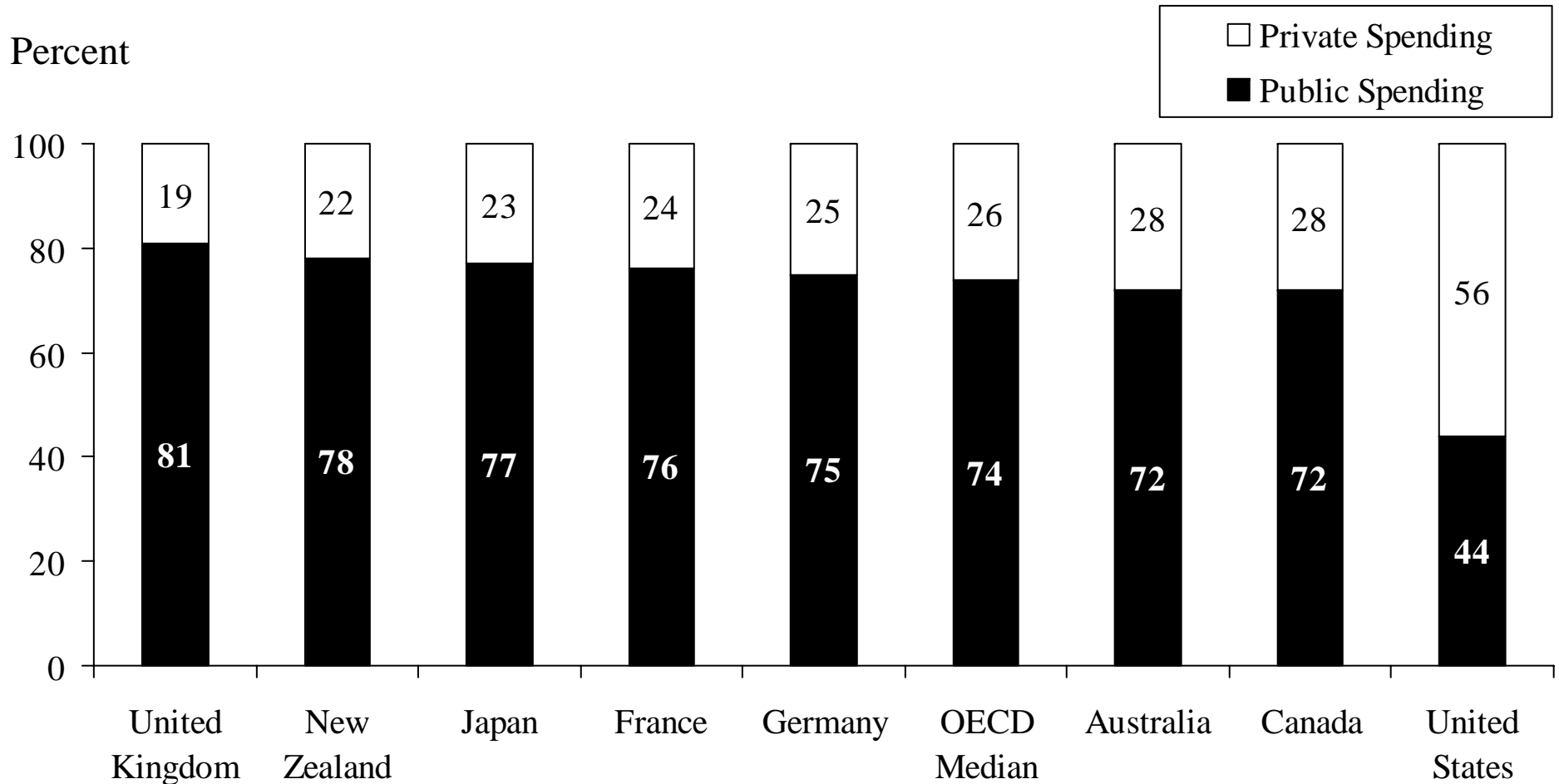


Chart III-2

# Public Spending on Health Care as a Percentage of GDP in 2000

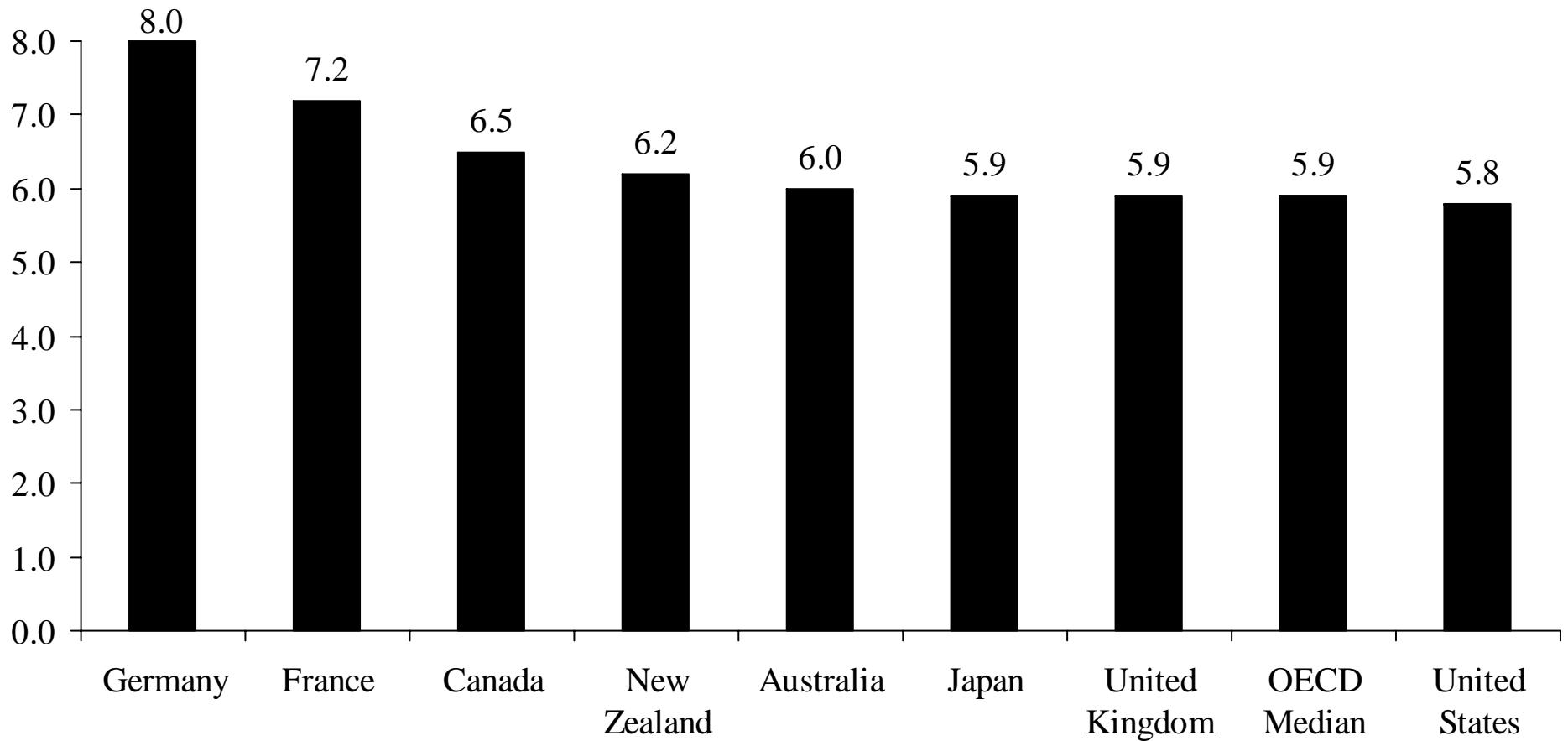


Chart III-3

# Public Spending on Health Care per Capita in 2000

Total Public Spending Divided by Total National Population,  
Adjusted for Differences in the Cost of Living<sup>9</sup>

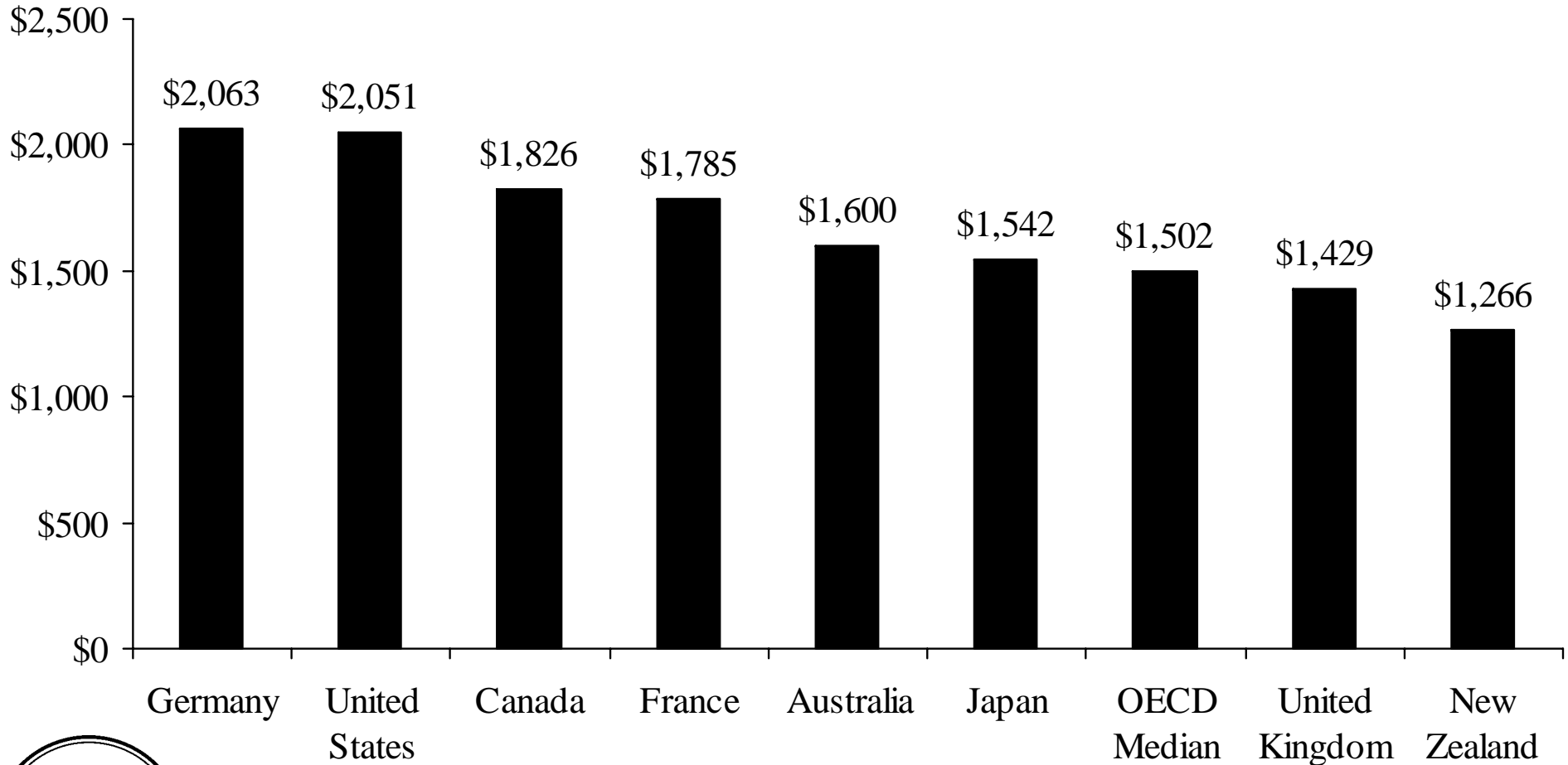


Chart III-4

# Private Spending on Health Care as a Percentage of GDP in 2000<sup>10,11</sup>

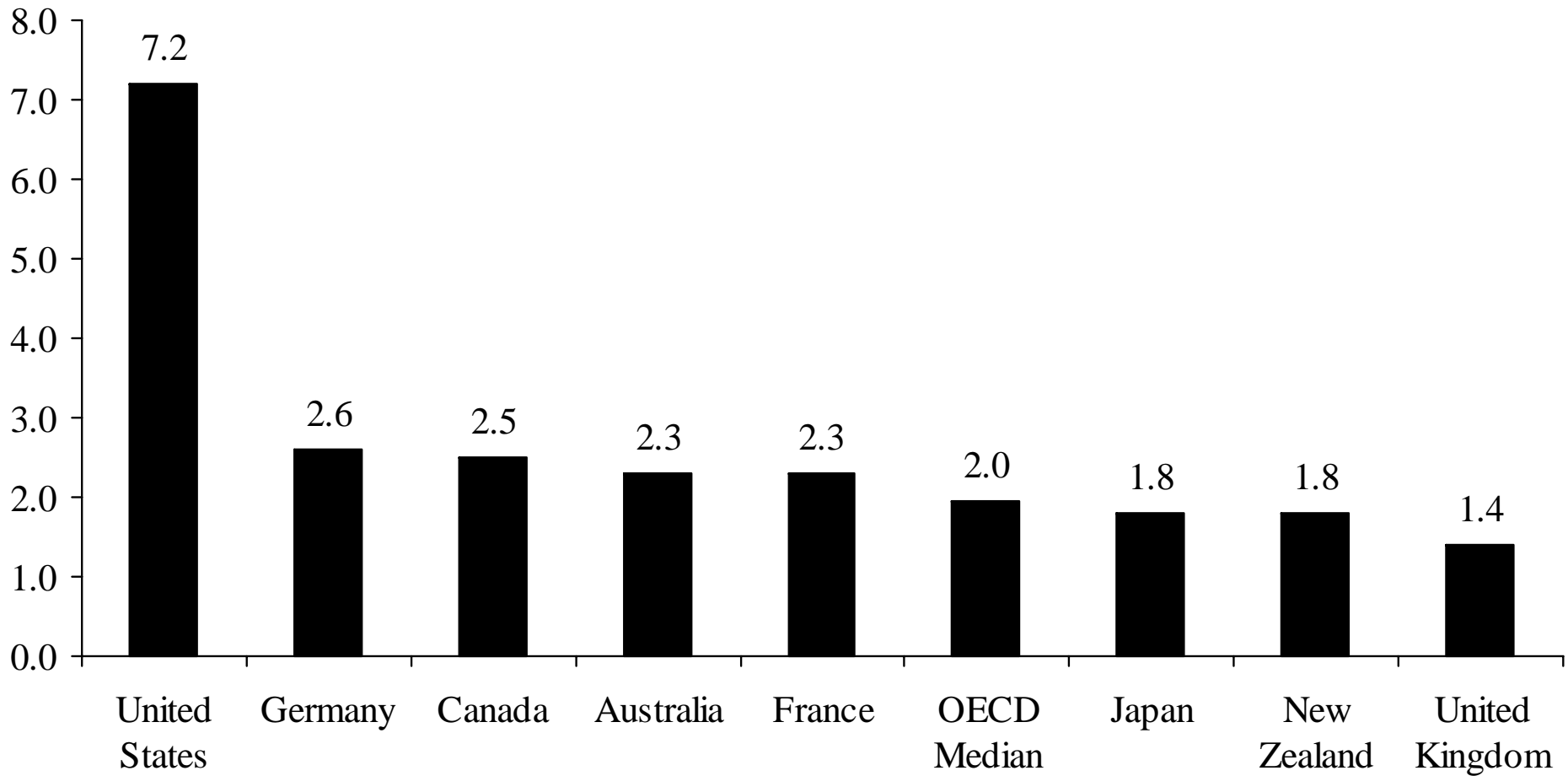


Chart III-5  
**Private Spending on Health Care per Capita in 2000**  
Adjusted for Differences in the Cost of Living<sup>9</sup>

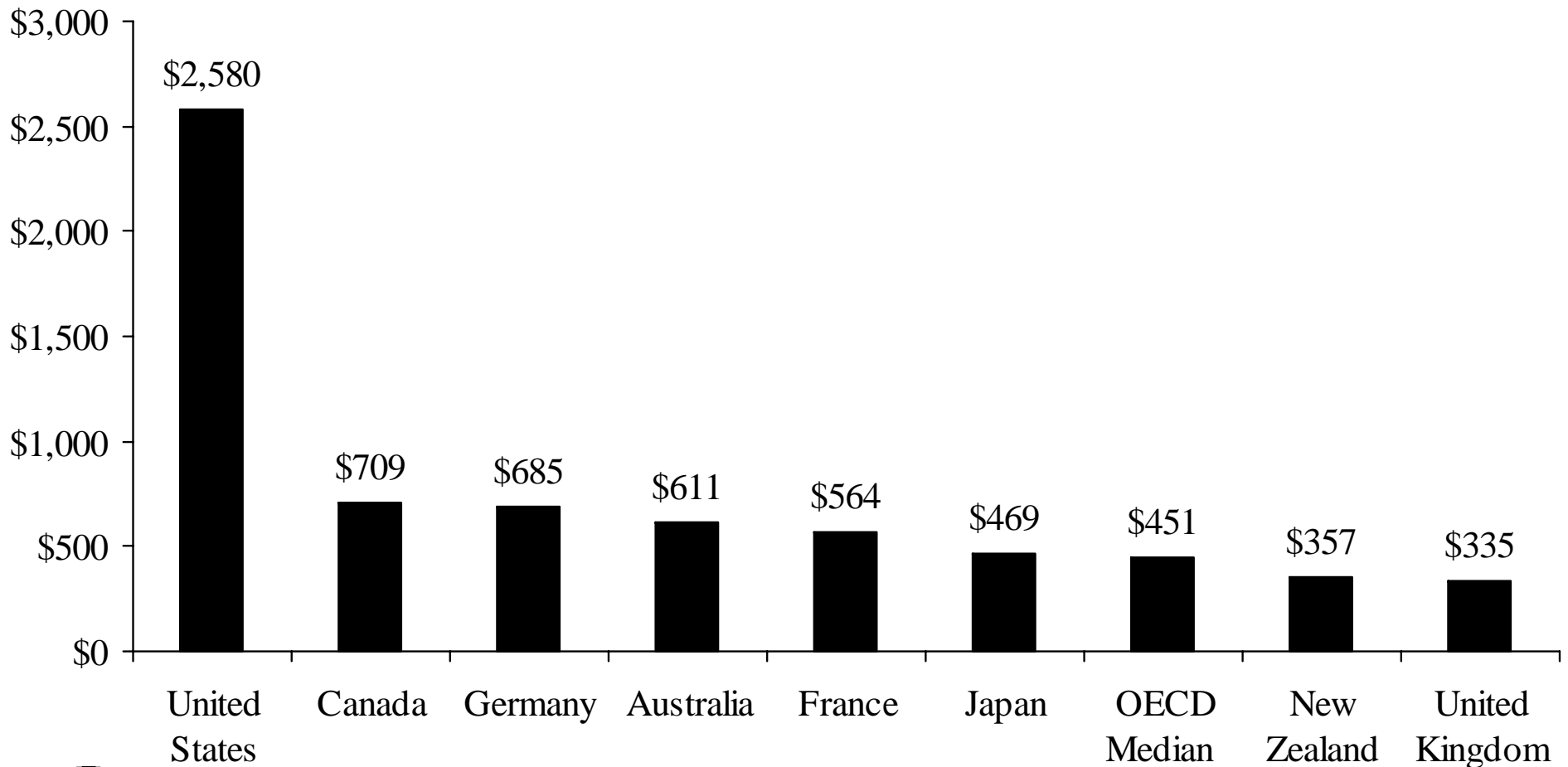
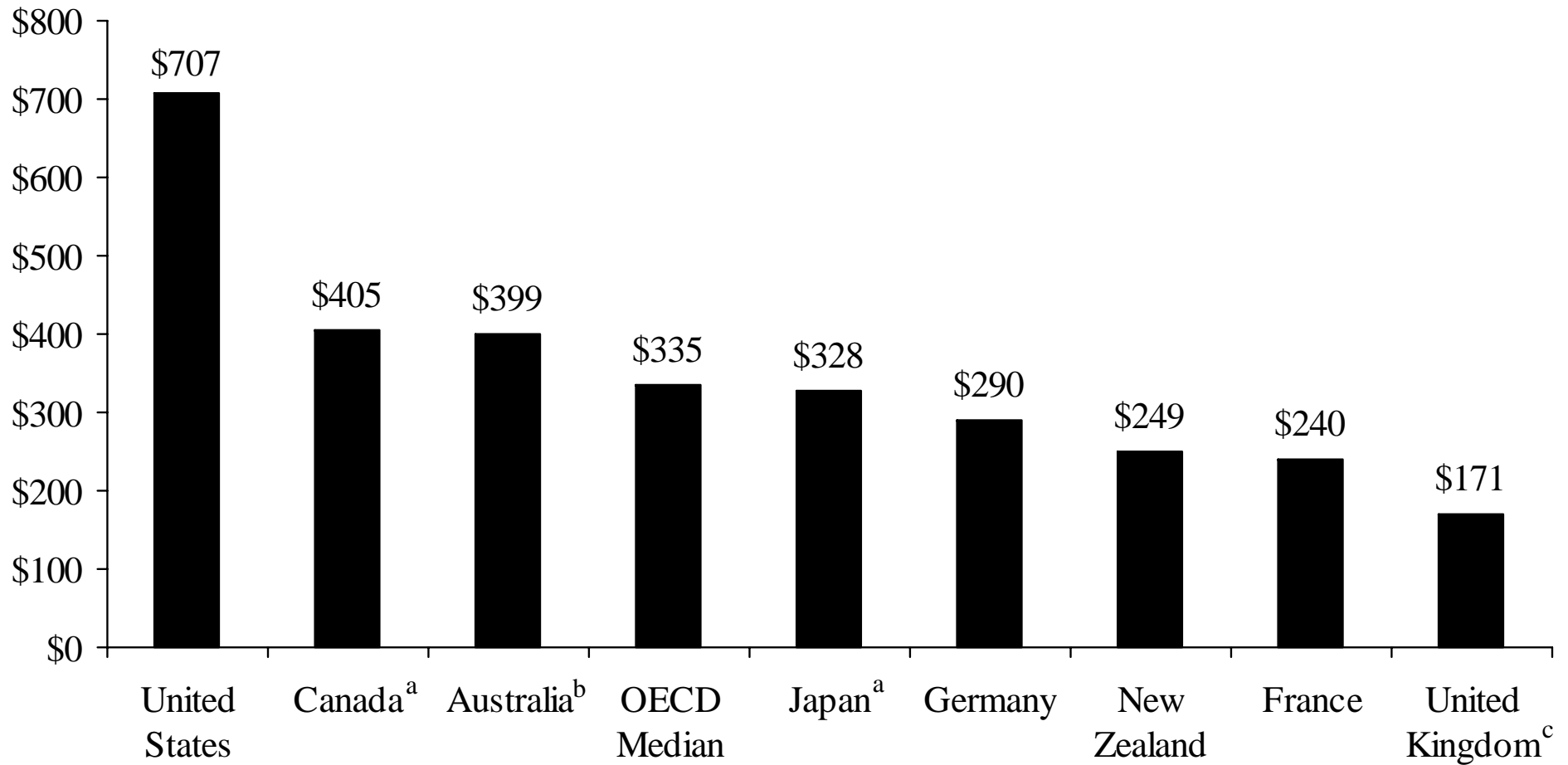


Chart III-6  
**Out-of-Pocket Health Care Spending per Capita in 2000**  
 Adjusted for Differences in the Cost of Living<sup>12,13</sup>



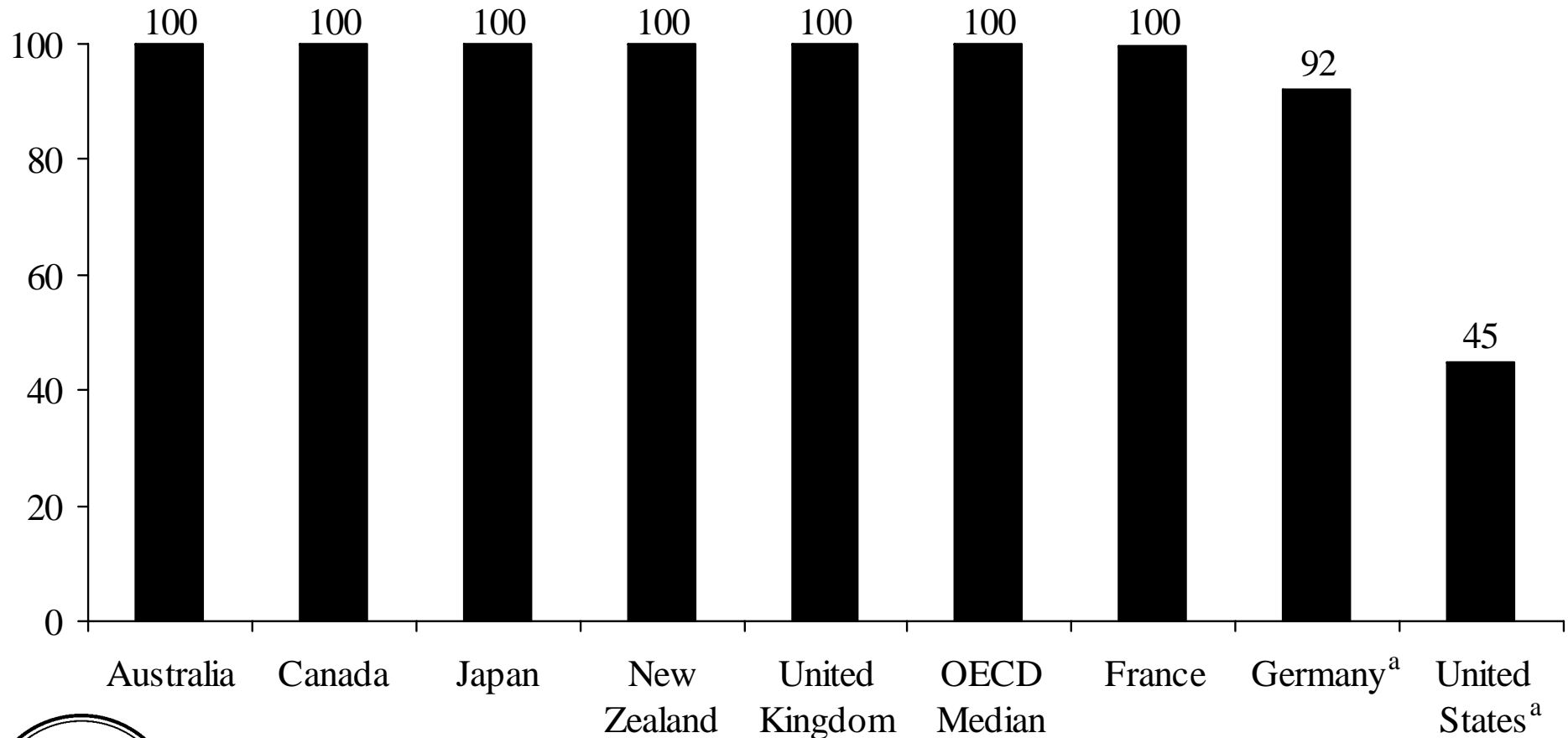
<sup>a</sup> 1999  
<sup>b</sup> 1998  
<sup>c</sup> 1996

## IV. Role of Public Insurance Program Coverage<sup>14</sup>

- In the United States, fewer than half the population received health insurance coverage from government and public programs in 2000.
- In Germany, the most affluent are permitted to self-insure or buy private health insurance coverage. Nearly all of them (about 8% of the population) purchase private health insurance.
- The United States is the only country with a large portion of its population (one of seven) without health insurance coverage.<sup>15</sup>
- Germany, Canada, and the United States did not have universal public coverage for pharmaceuticals in 2000.



Chart IV-1  
**Percentage of Total Population with Health Insurance  
Coverage Through Public Programs in 2000**

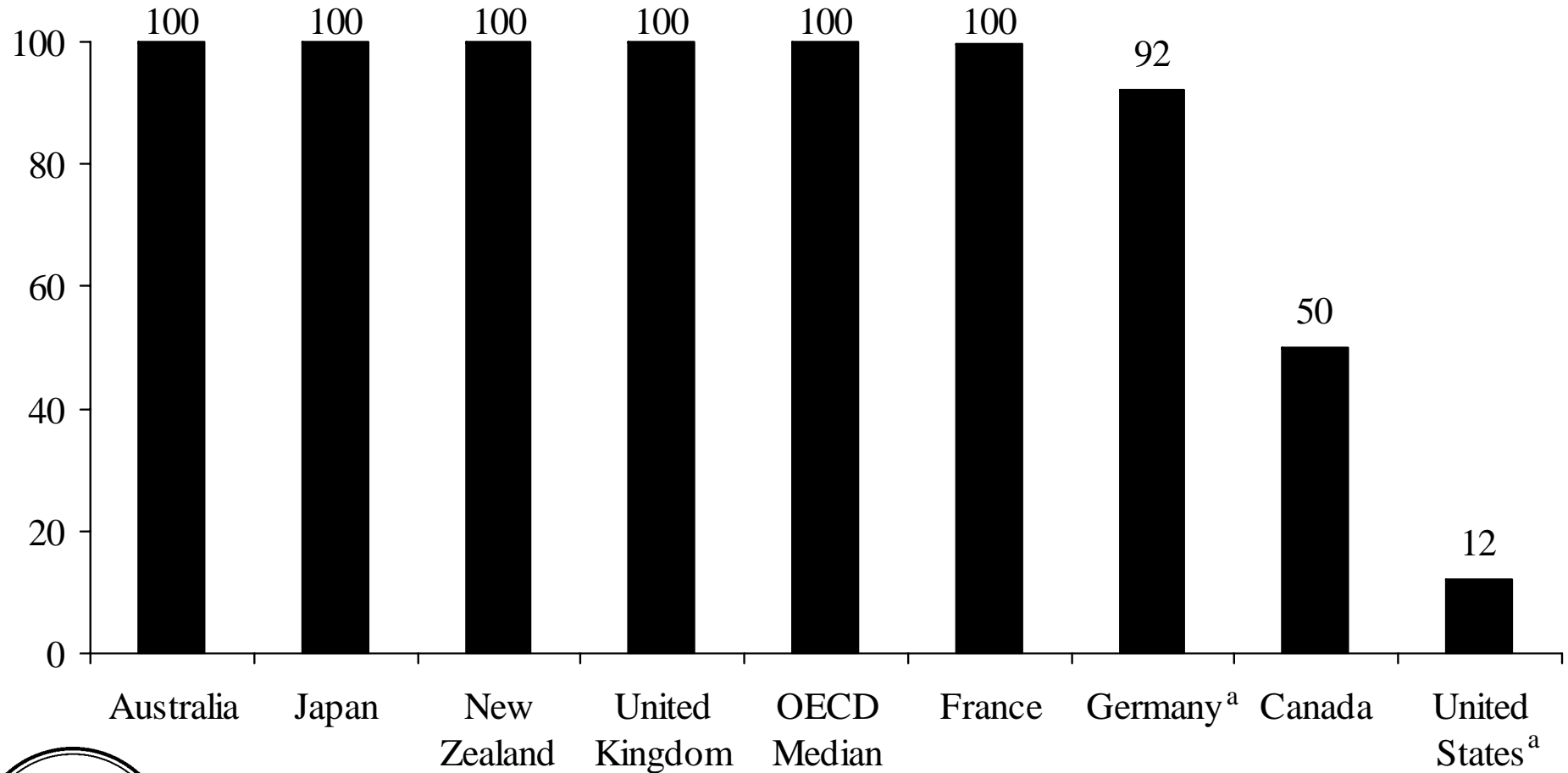


<sup>a</sup> 1997



Chart IV-2

# Percentage of Total Population with Pharmaceutical Insurance Coverage through Public Programs in 2000



<sup>a</sup> 1995

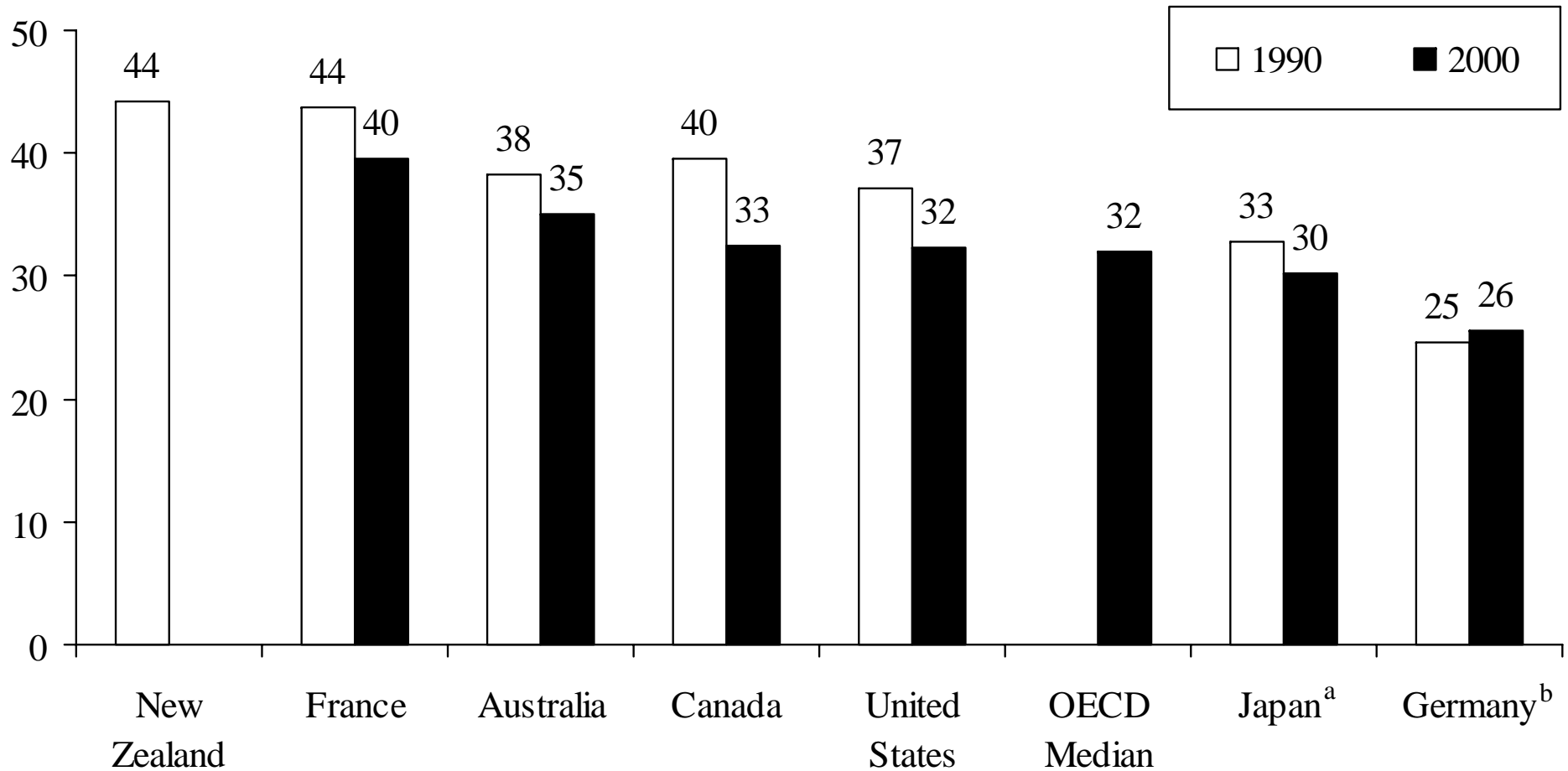
## V. Hospital Spending, Capacity, and Utilization

- Hospital care represented the largest component of total health care spending in all eight countries in 2000 (see Appendix).<sup>16</sup>
- Hospital spending declined as a share of total health care spending from 1990 to 2000 in all countries except Germany.
- Between 2.3 percent (Japan) and 4.2 percent (United States) of GDP was spent on hospital care in 2000.
- Hospital spending per capita in the United States was substantially higher than in the other countries in 2000.
- Germany had approximately twice as many acute care hospital beds per capita as Canada, the United Kingdom, and the United States in 2000.<sup>17</sup>
- The number of hospital beds per 1,000 population decreased in almost all the countries during the 1990s.
- In 2000, people were approximately twice as likely to be admitted for inpatient acute care in Germany and France as in the United States and Canada.
- The average length of hospital stay for acute care varied widely among the countries.
- Despite a common clinical literature across the eight countries, average length of hospital stay after a heart attack or normal delivery differed by a factor of about two or three.



Chart V-1

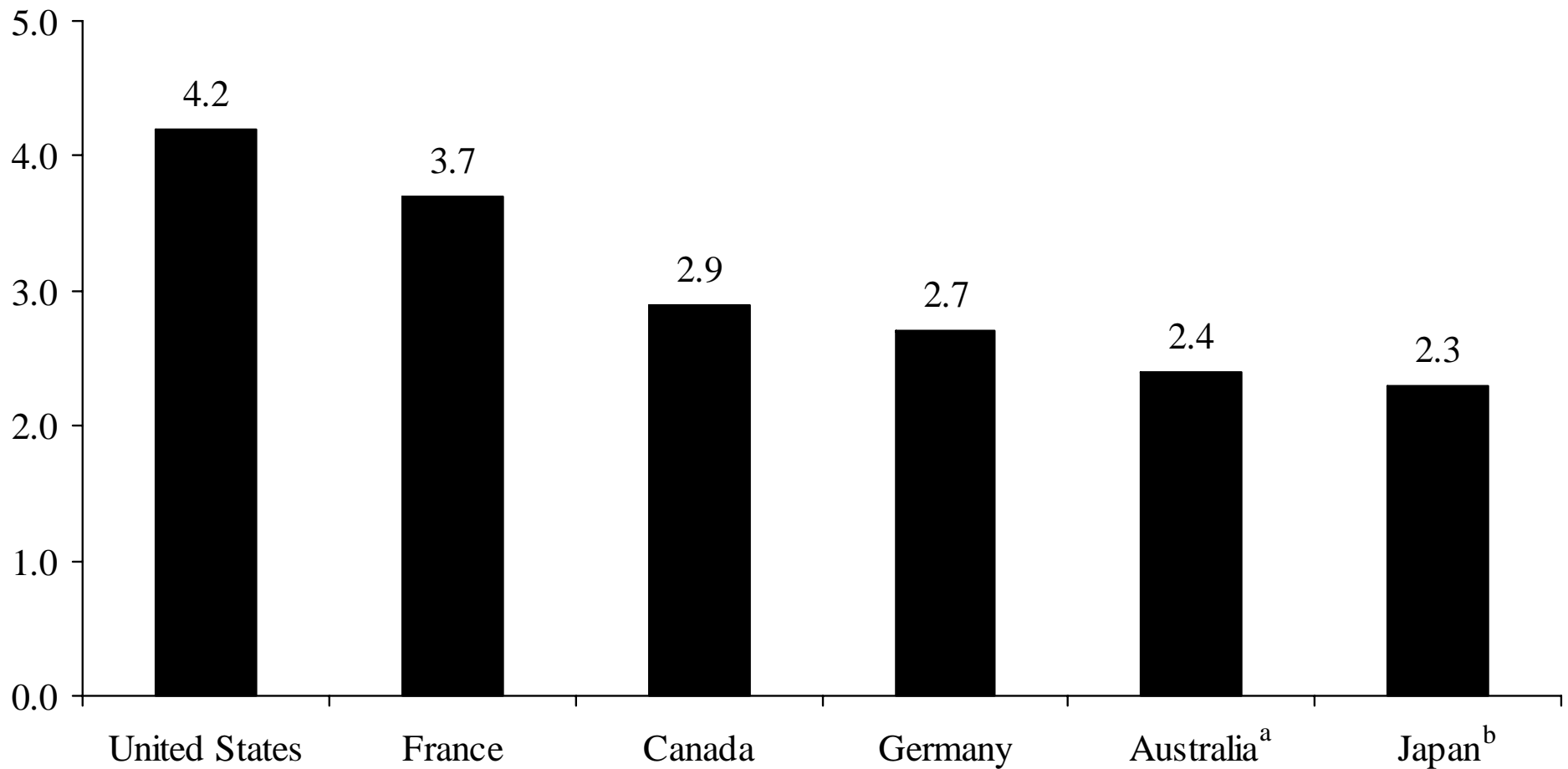
# Percentage of Total Health Care Spending on Hospital Care<sup>16,18</sup>



<sup>a</sup> 1990–1999

<sup>b</sup> 1992–2000

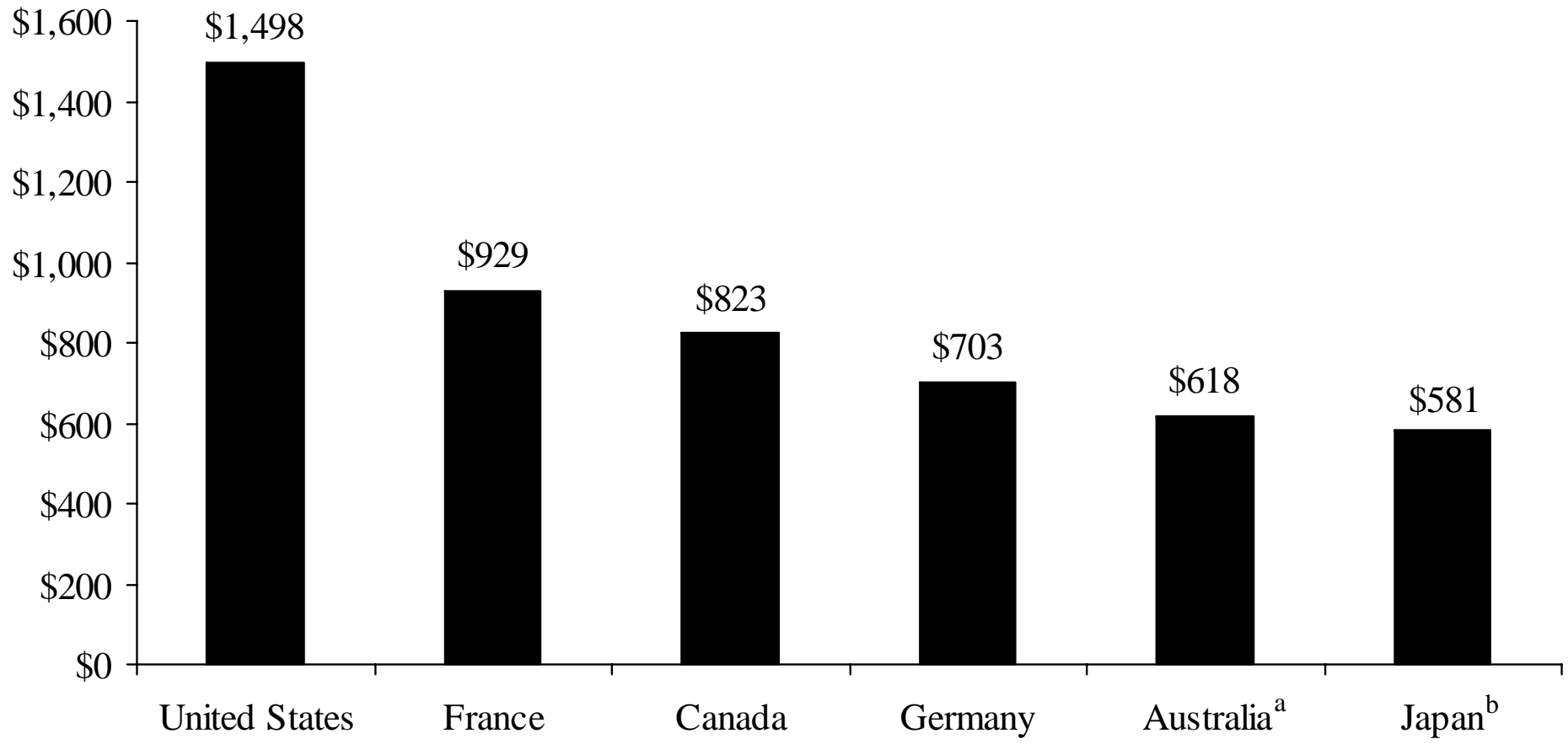
Chart V-2  
Percentage of GDP Spent on Hospital Care in 2000



<sup>a</sup> 1998

<sup>b</sup> 1999

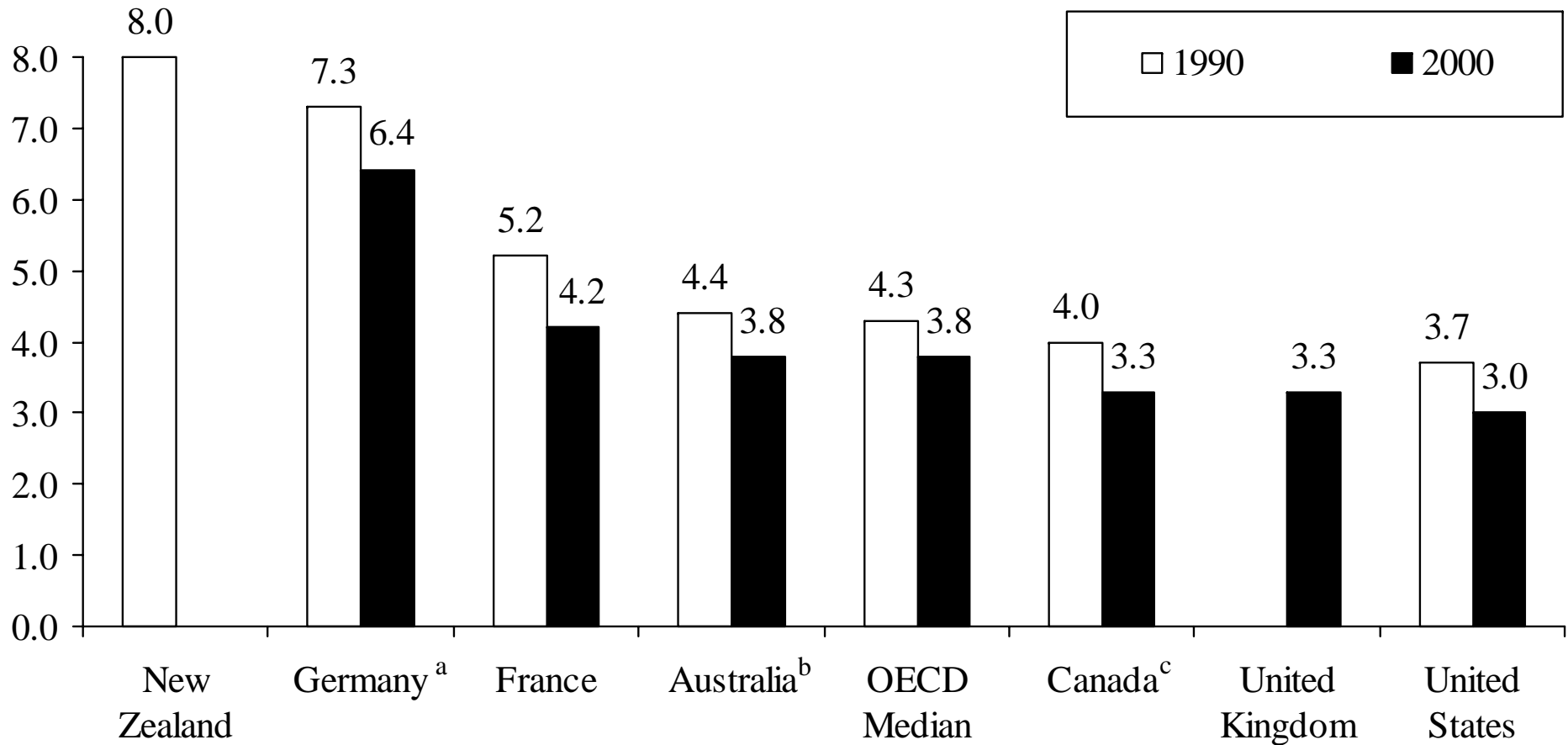
Chart V-3  
**Hospital Spending per Capita in 2000**  
Adjusted for Differences in the Cost of Living<sup>13</sup>



<sup>a</sup> 1998  
<sup>b</sup> 1999

Chart V-4

# Number of Acute Care Hospital Beds per 1,000 Population<sup>17,19</sup>



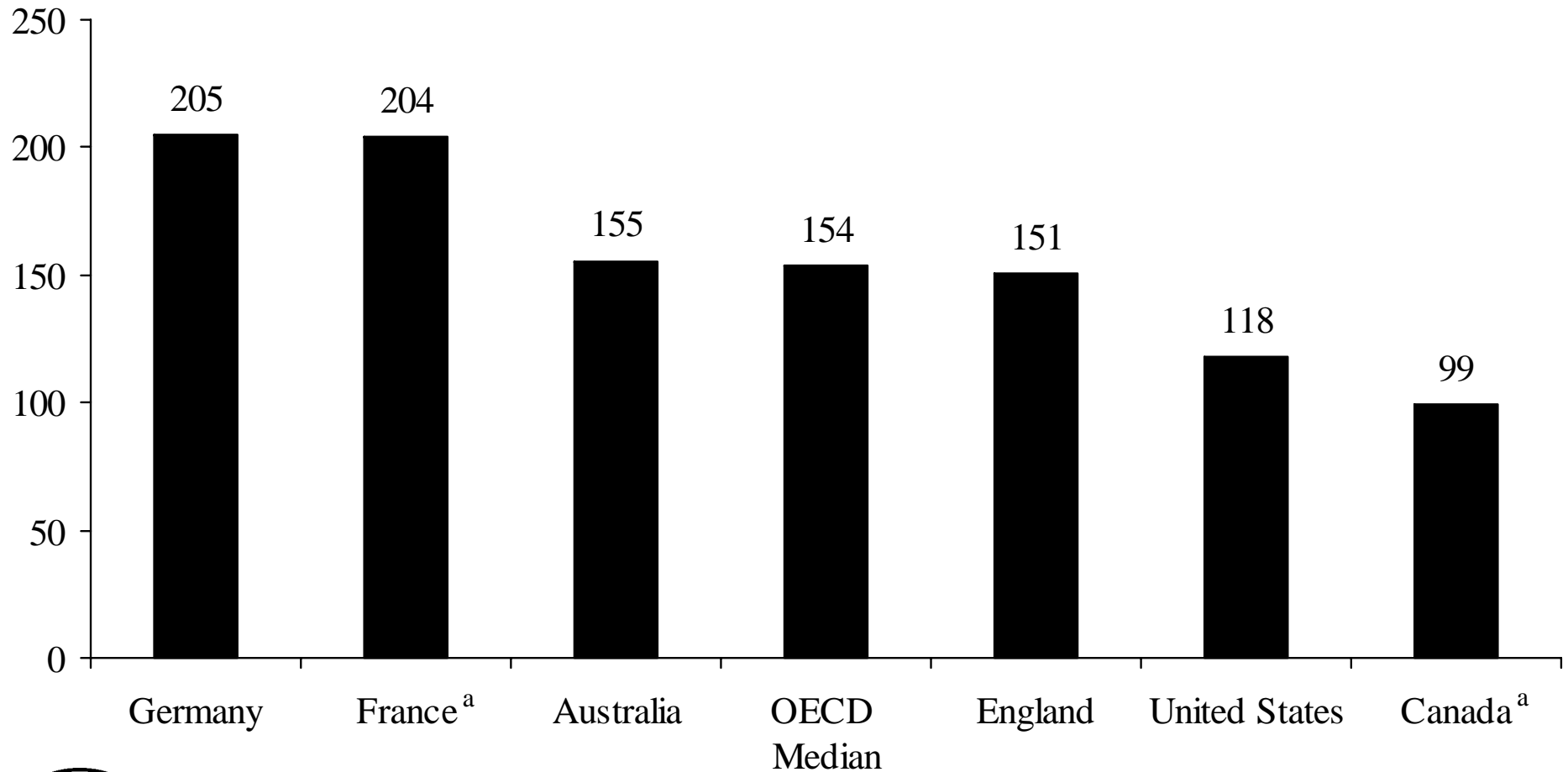
<sup>a</sup> 1992–2000

<sup>b</sup> 1991–1999

<sup>c</sup> 1990–1999

Chart V-5

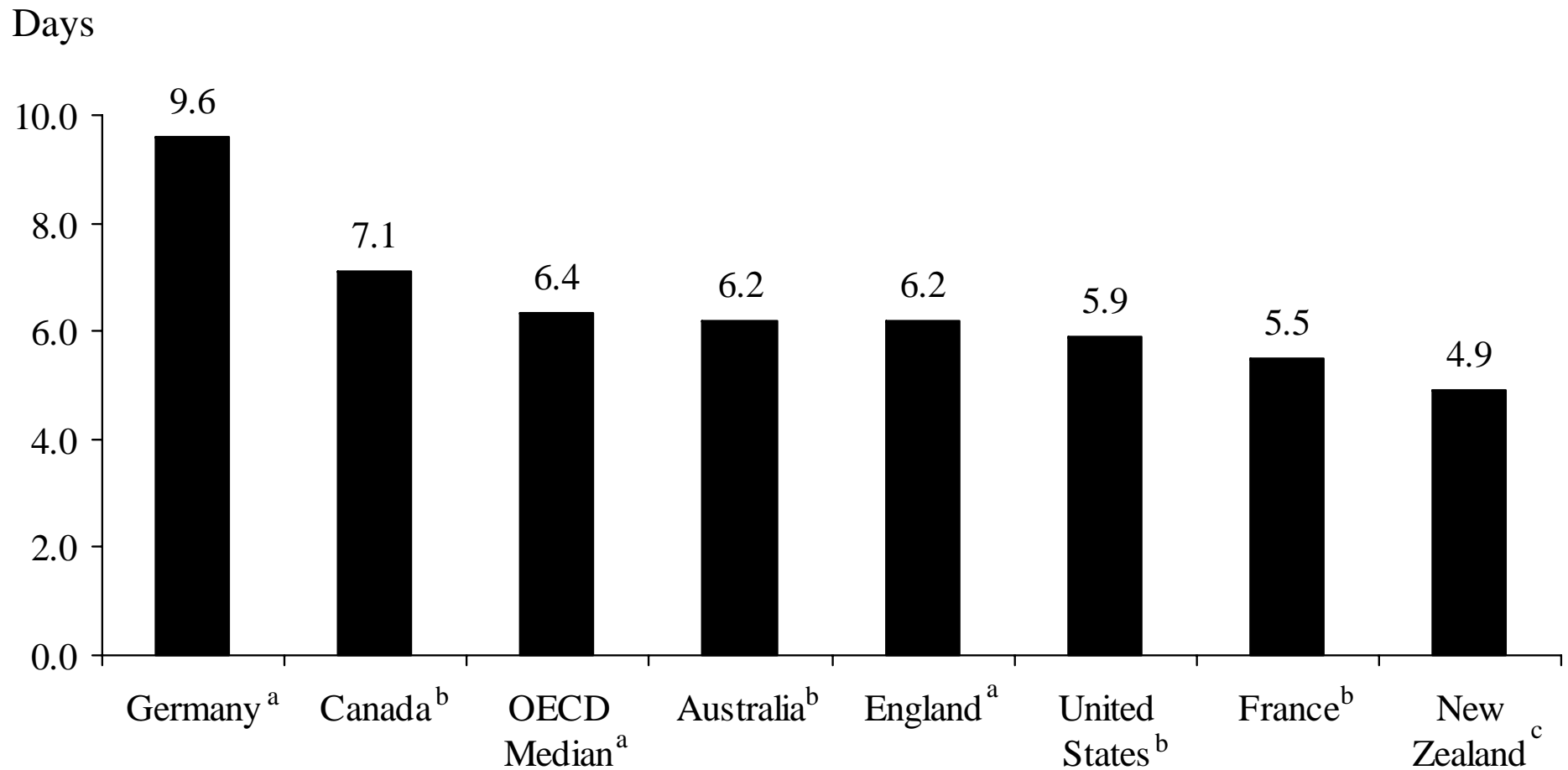
# Hospital Admissions for Acute Care per 1,000 Population in 2000<sup>20</sup>



<sup>a</sup> 1999

Sources: OECD Health Data 2002; U.K. Department of Health 31

**Chart V-6**  
**Average Length of Hospital Stay for Acute Care**  
**in 1998, 1999, or 2000<sup>21,22</sup>**

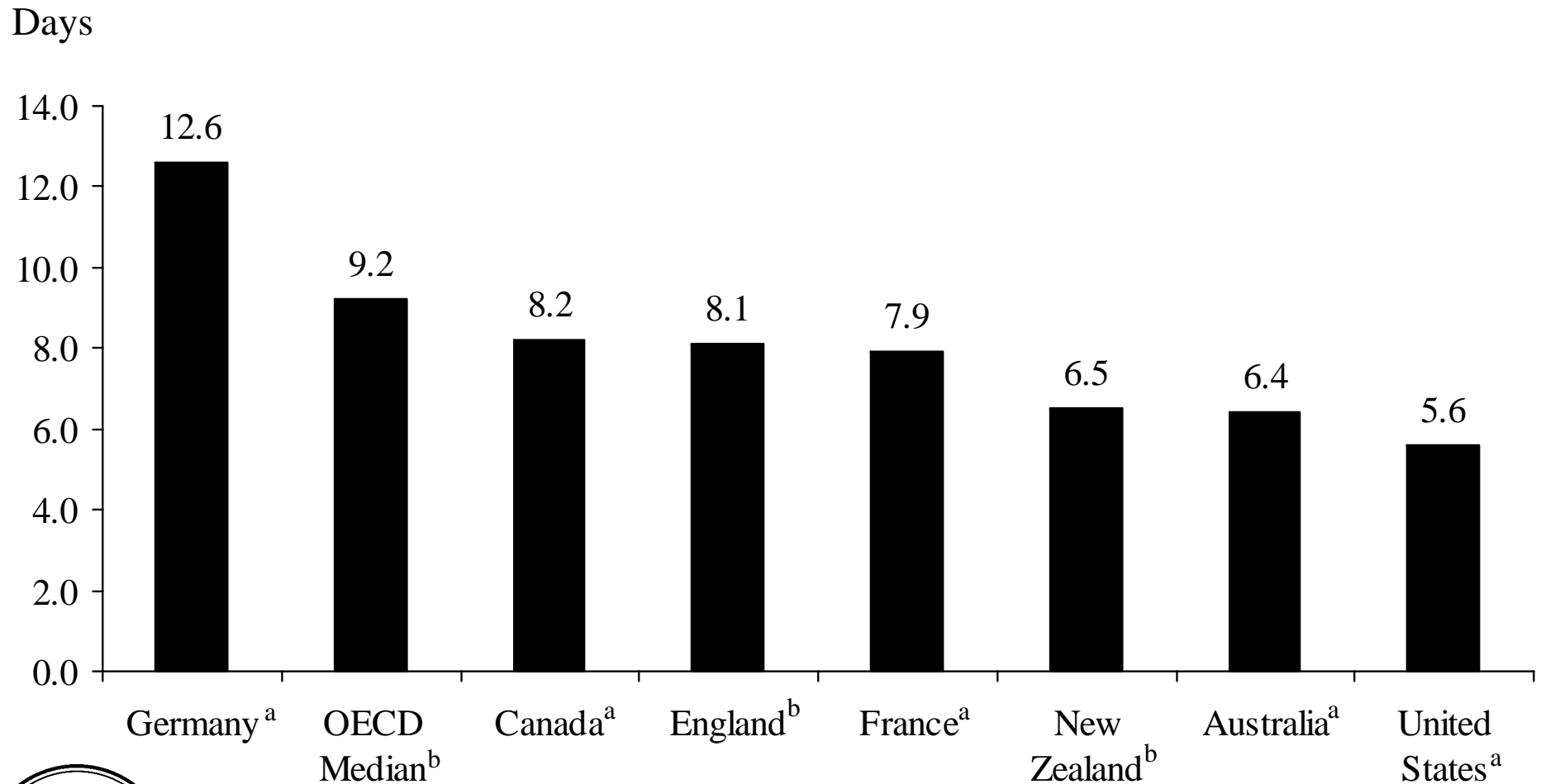


<sup>a</sup> 2000  
<sup>b</sup> 1999  
<sup>c</sup> 1998



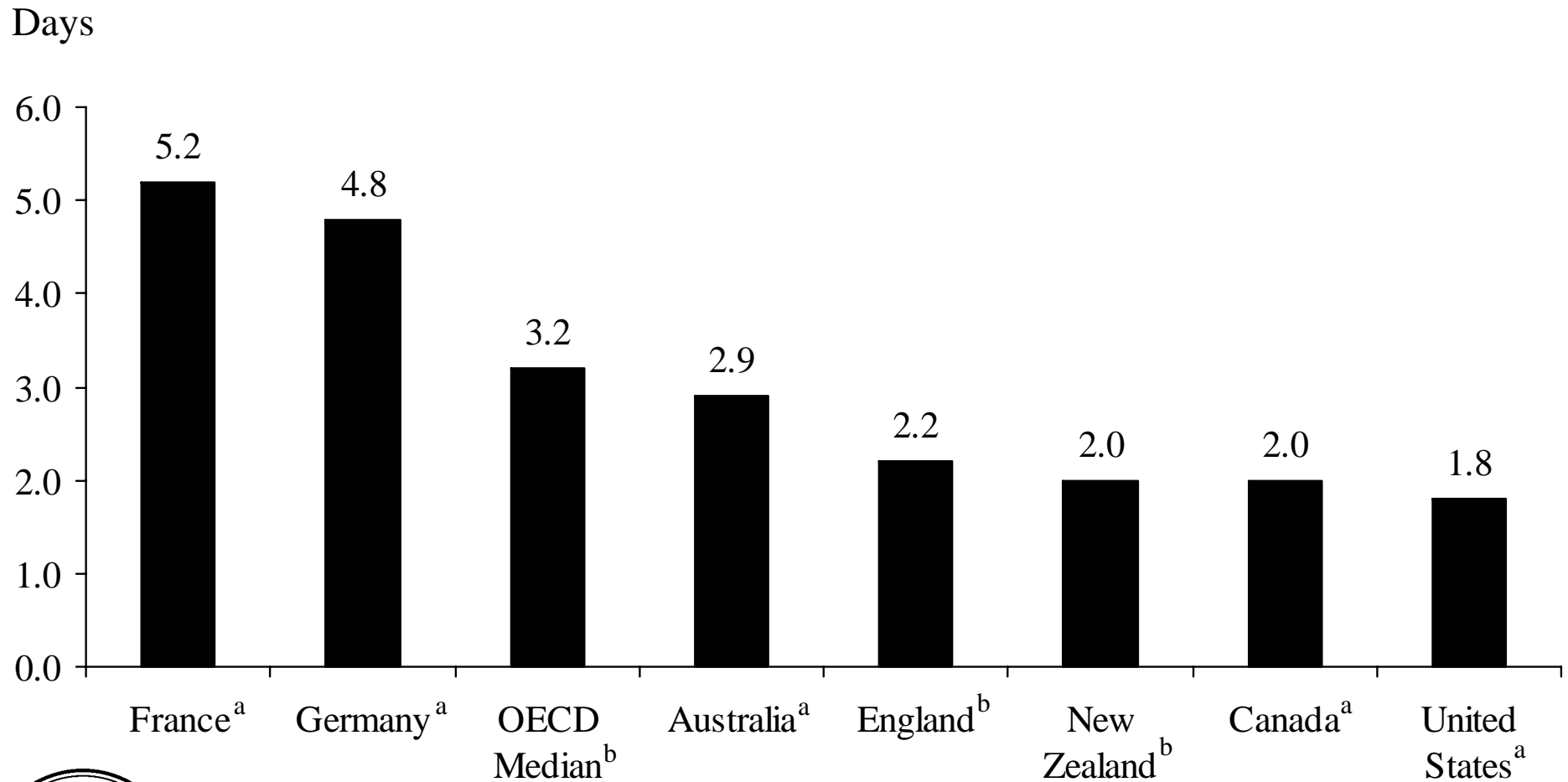
Chart V-7

# Average Length of Hospital Stay for Acute Myocardial Infarction in 1999 or 2000<sup>21,22</sup>



<sup>a</sup> 1999  
<sup>b</sup> 2000

Chart V-8  
**Average Length of Hospital Stay for Normal Delivery  
 in 1999 or 2000<sup>21,22</sup>**



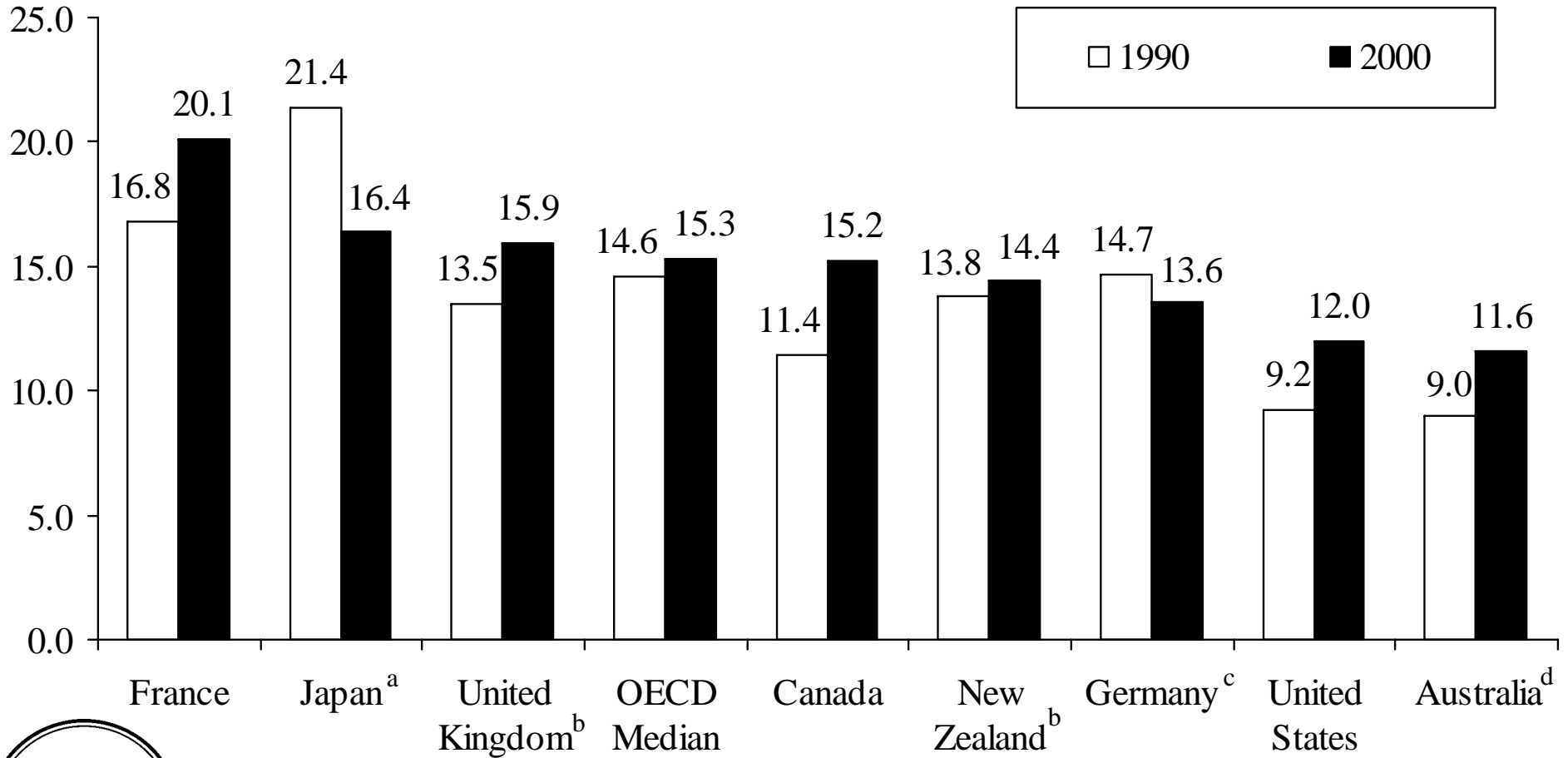
<sup>a</sup> 1999  
<sup>b</sup> 2000

## VI. Pharmaceutical Spending<sup>23</sup>

- Pharmaceuticals were the second largest component of health care spending in three of the eight countries (Canada, France, and Germany) in 2000 (see Appendix).
- Pharmaceuticals were a growing percentage of total health care spending between 1990 and 2000 in all countries except Germany and Japan.
- The percentage of health care spending on pharmaceuticals ranged from 11.6 percent in Australia to 20.1 percent in France in 2000.
- Between 1.0 percent (Australia) and 1.9 percent (France) of GDP was spent on pharmaceuticals in 2000.
- In 2000, the United States and France spent the most per capita on pharmaceuticals and New Zealand spent the least.
- Pharmaceutical spending per capita increased approximately 1 to 7 percentage points faster than inflation between 1990 and 2000 in all eight countries.
- The public share of pharmaceutical spending varied from 18 percent in the United States to 71 percent in New Zealand in 2000.

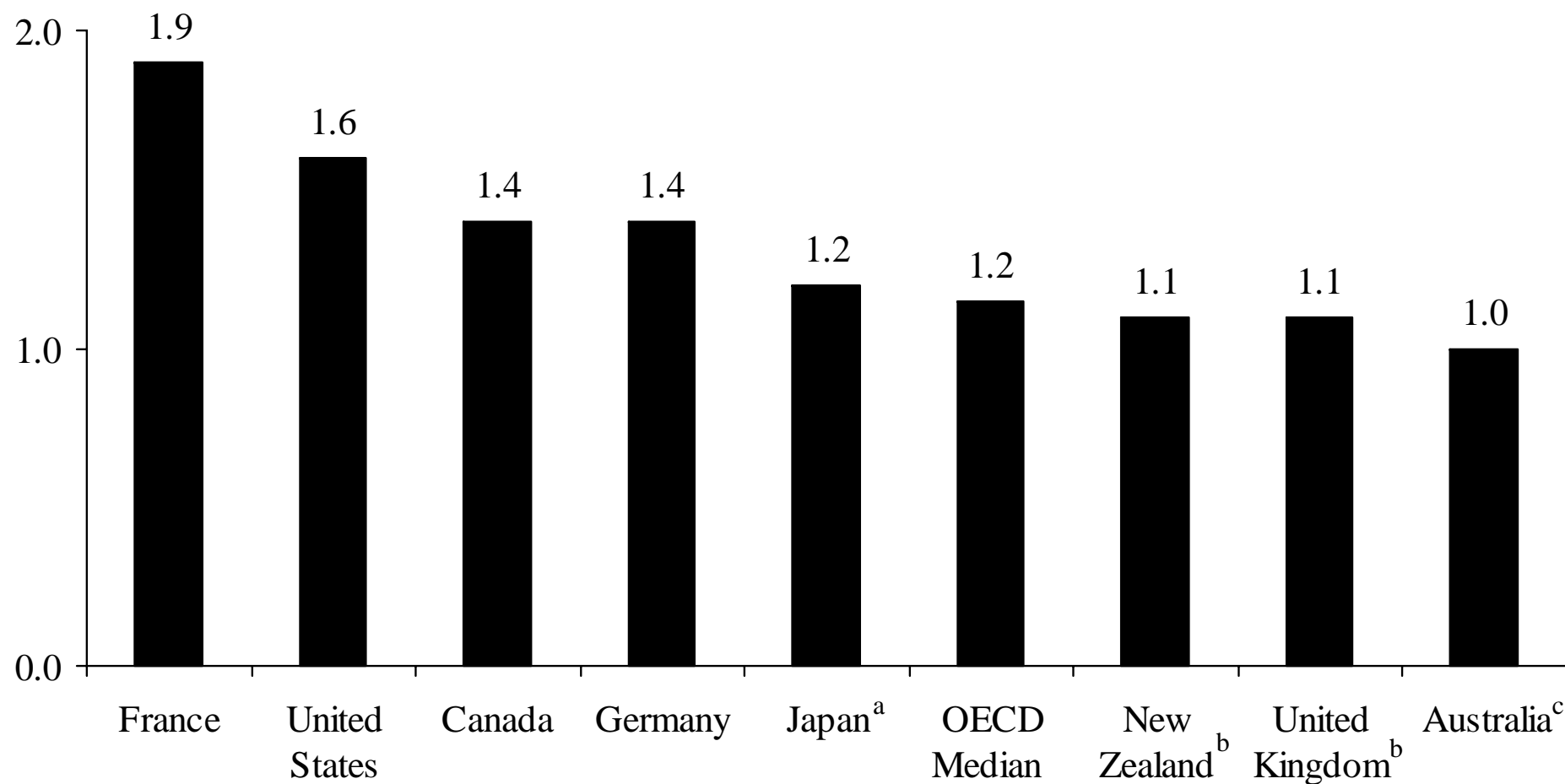


Chart VI-1  
**Percentage of Total Health Care Spending  
 on Pharmaceuticals**



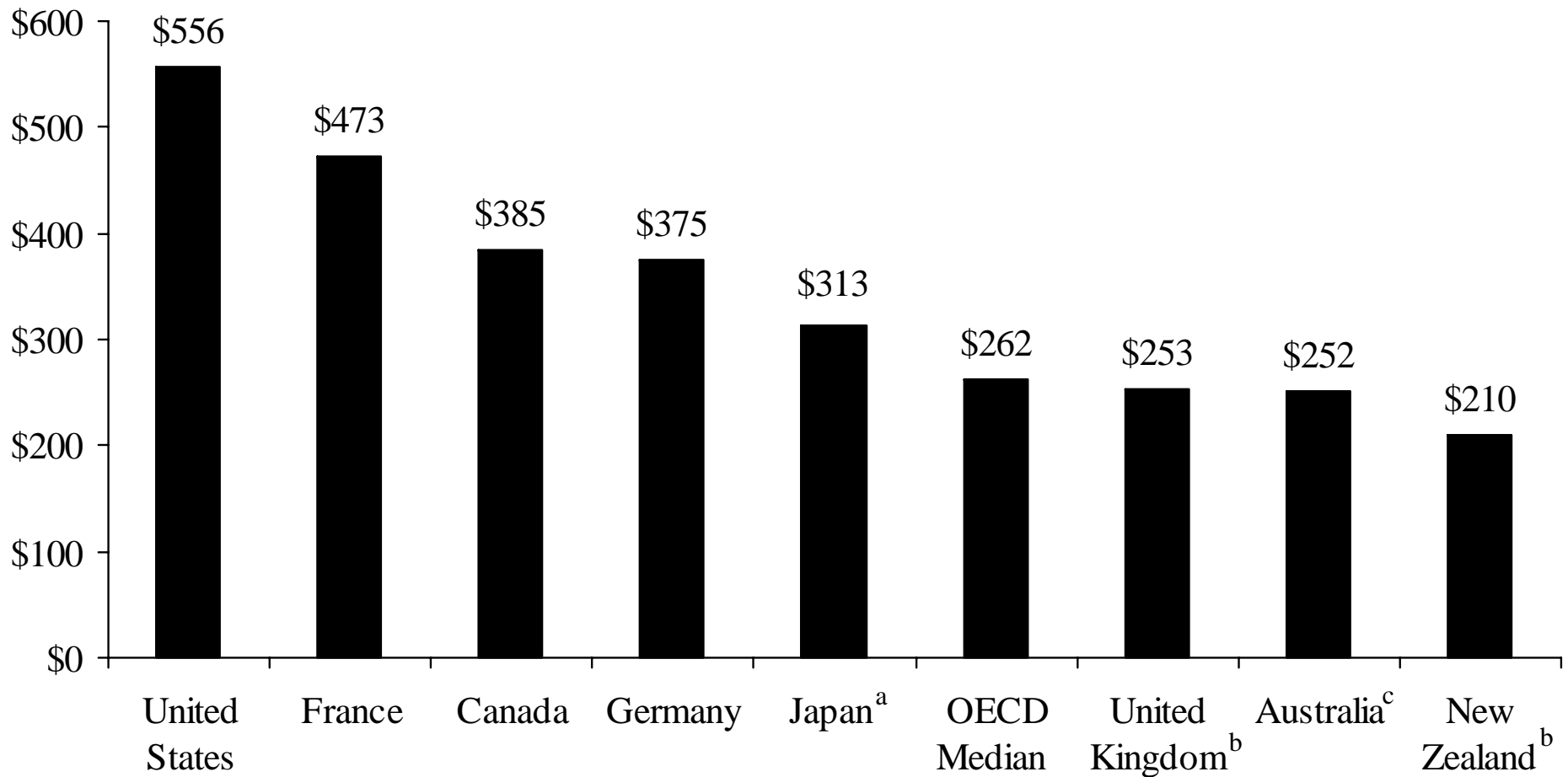
<sup>a</sup> 1990–1999  
<sup>b</sup> 1990–1997  
<sup>c</sup> 1992–2000  
<sup>d</sup> 1990–1998

Chart VI-2  
**Percentage of GDP Spent on Pharmaceuticals in 2000**



<sup>a</sup> 1999  
<sup>b</sup> 1997  
<sup>c</sup> 1998

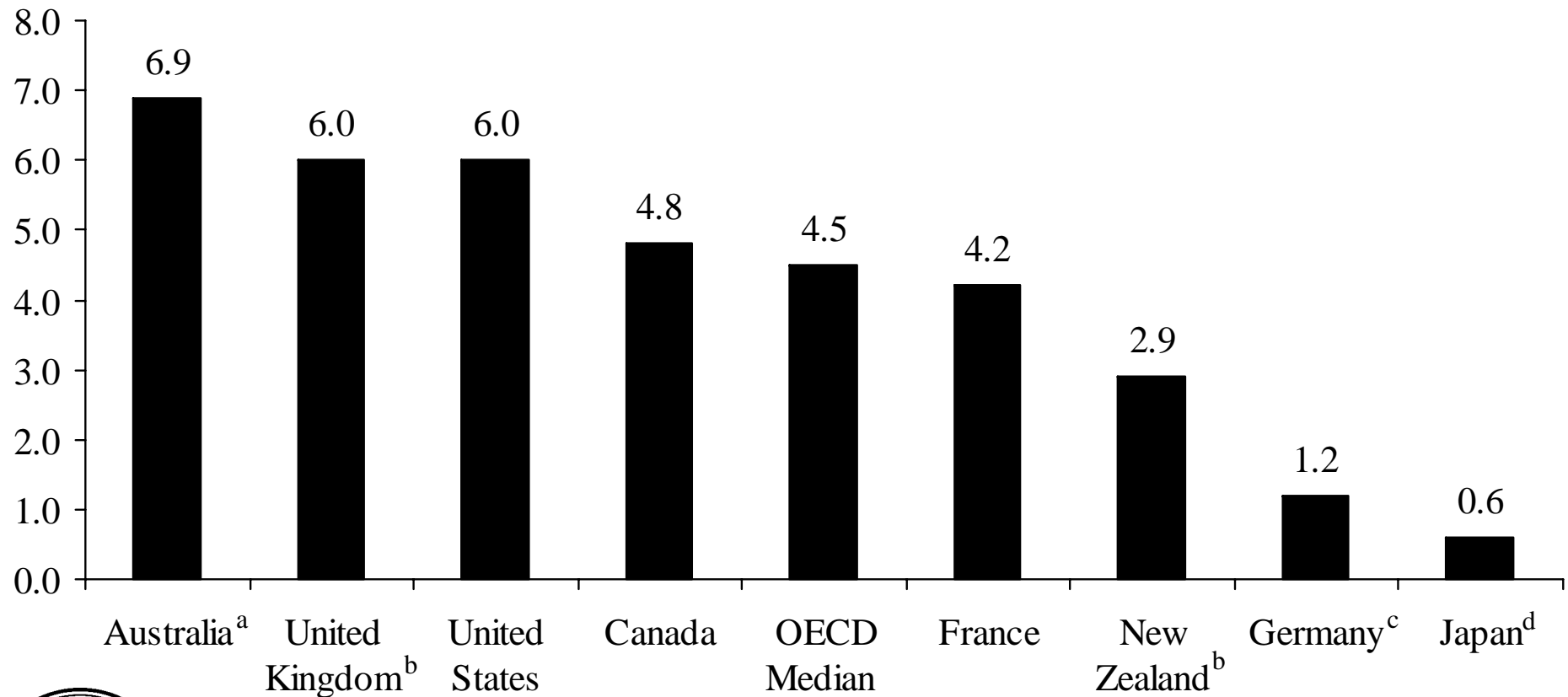
**Chart VI-3**  
**Spending per Capita on Pharmaceuticals in 2000**  
 Adjusted for Differences in the Cost of Living<sup>13</sup>



<sup>a</sup> 1999  
<sup>b</sup> 1997  
<sup>c</sup> 1998

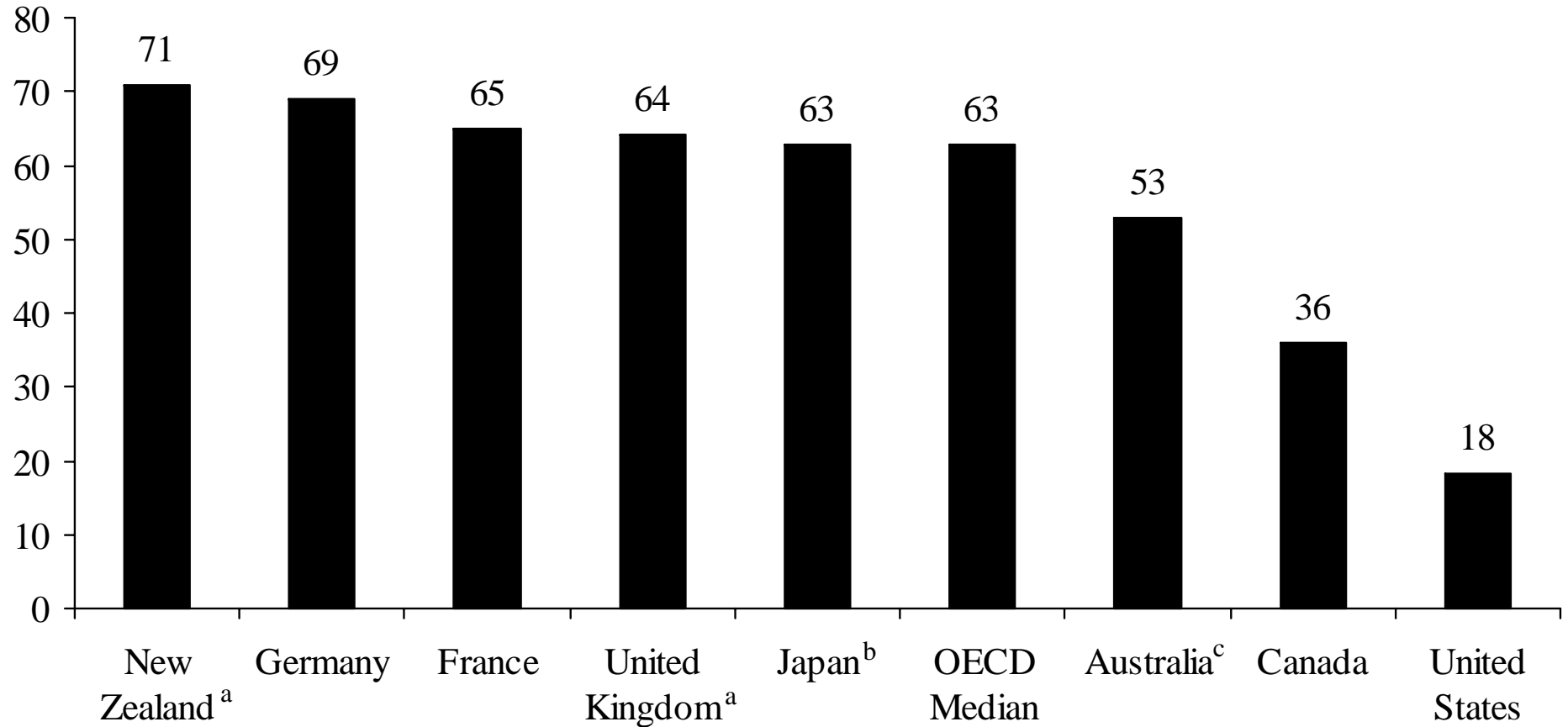
**Chart VI-4**  
**Average Annual Growth Rate of Real Spending**  
**per Capita on Pharmaceuticals Between 1990 and 2000**

Percent



<sup>a</sup> 1990–1998  
<sup>b</sup> 1990–1997  
<sup>c</sup> 1992–2000  
<sup>d</sup> 1990–1999

**Chart VI-5**  
**Public Financing of Pharmaceuticals as a Percentage of**  
**Total Pharmaceutical Spending in 2000**



<sup>a</sup> 1997  
<sup>b</sup> 1999  
<sup>c</sup> 1998



## VII. Spending on Physician Services<sup>24</sup> and Health Care Workforce

- Physician services were the second largest component of health care spending after hospital services in three of the eight countries (Australia, Japan, and the United States) in 2000 (see Appendix).
- The percentage of health care spending on physician services ranged from 10 percent in Germany to 27 percent in Japan in 2000.
- Between 1.0 percent (Germany) and 2.9 percent (United States) of GDP was spent on physician services in 2000.
- Per capita spending on physician services in 2000 ranged from \$271 in Germany to \$1,041 in the United States.



## **Practicing Physicians<sup>25</sup>**

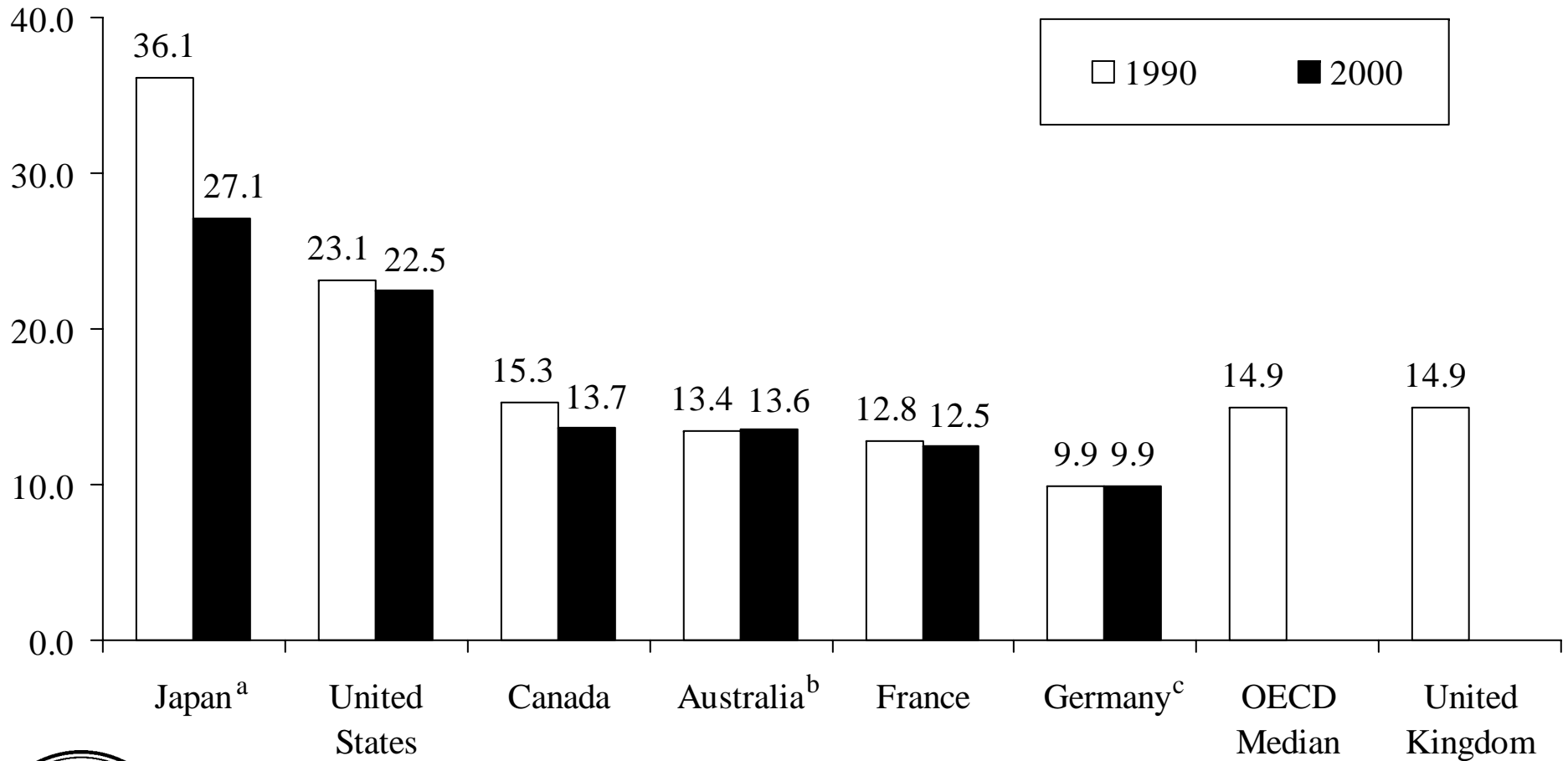
- In all countries except Canada, the physician-to-population ratio increased between 1990 and 2000.
- In the United Kingdom, there was one practicing physician per 556 people, and in Germany, there was one practicing physician per 278 people in 2000.
- All countries had approximately the same number of physician visits per capita except Japan, which had more than twice as many visits.

## **Practicing Nurses<sup>26</sup>**

- In all countries except Australia and Canada, the nurse-to-population ratio increased between 1990 and 2000.
- The number of nurses varied considerably across the countries. New Zealand and Germany had a substantially higher number of practicing nurses per capita than France in 2000.
- The number of nurses per acute care hospital bed remained steady or increased between 1990 and 1999.
- Nurse staffing ratios for acute care in hospitals varied considerably across the eight countries, suggesting different roles for nurses in each country.



Chart VII-1  
**Percentage of Total Health Care Spending  
 on Physician Services**

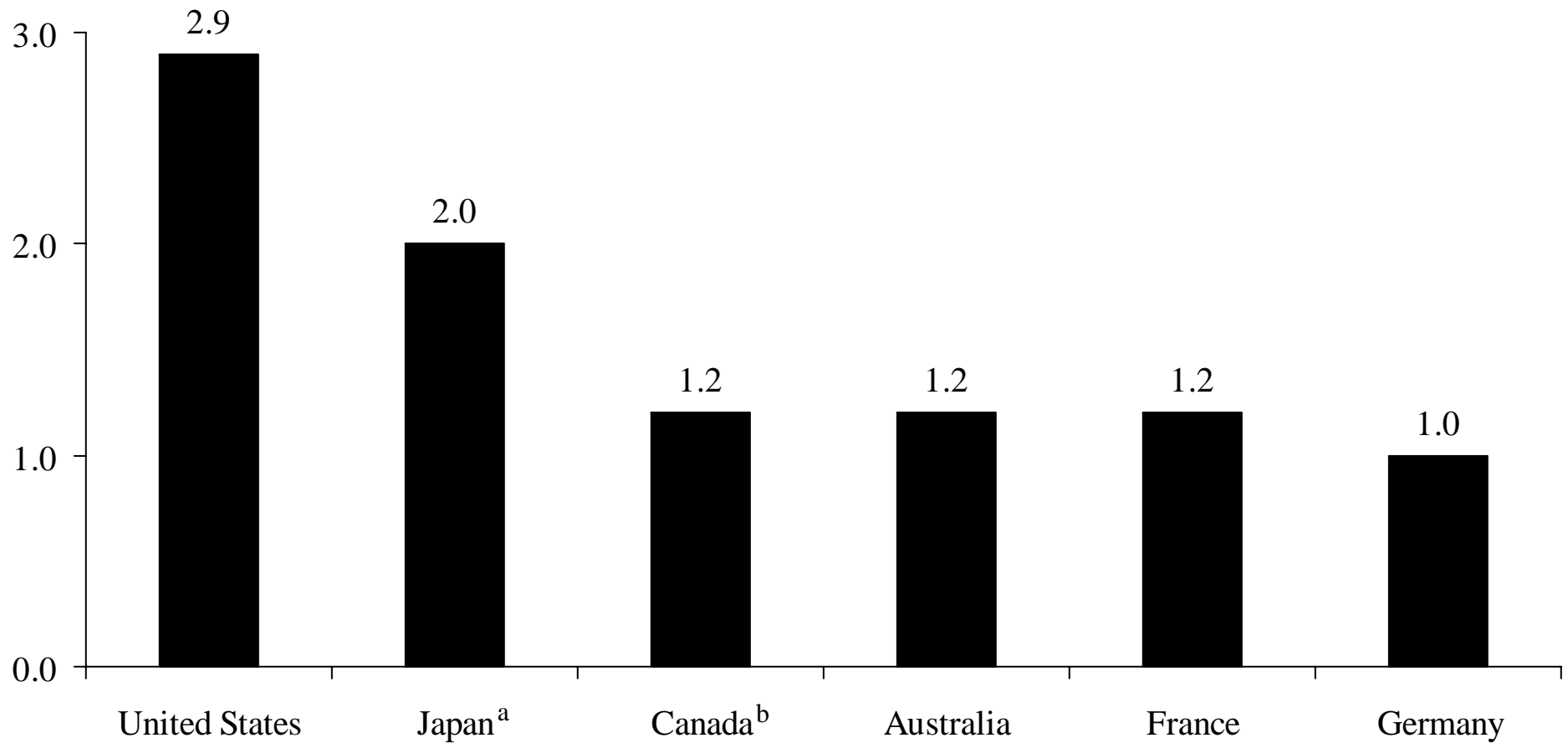


<sup>a</sup> 1990–1999

<sup>b</sup> 1990–1998

<sup>c</sup> 1992–2000

Chart VII-2  
Percentage of GDP Spent on Physician Services in 2000

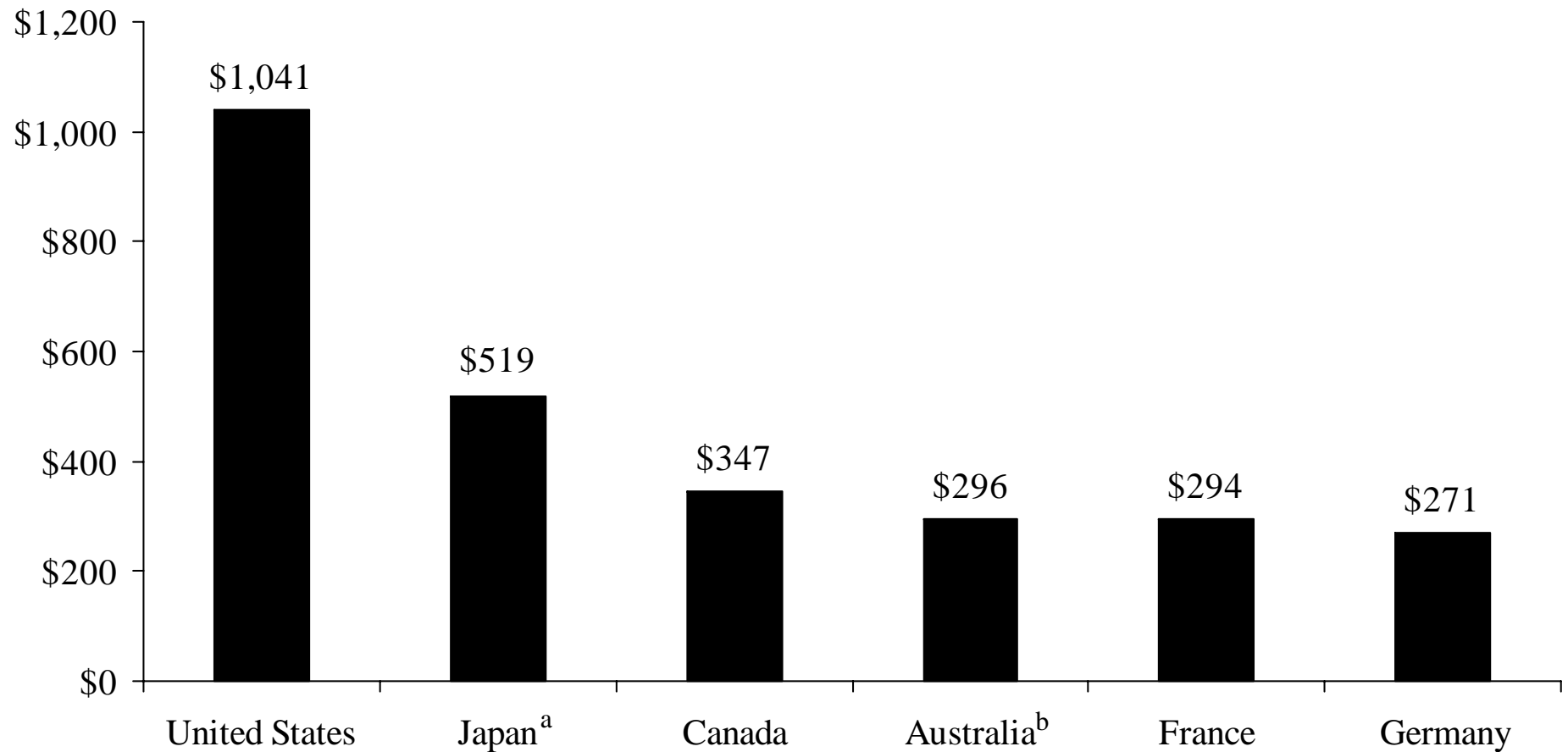


<sup>a</sup> 1999

<sup>b</sup> 1998

# Chart VII-3 Per Capita Spending on Physician Services in 2000

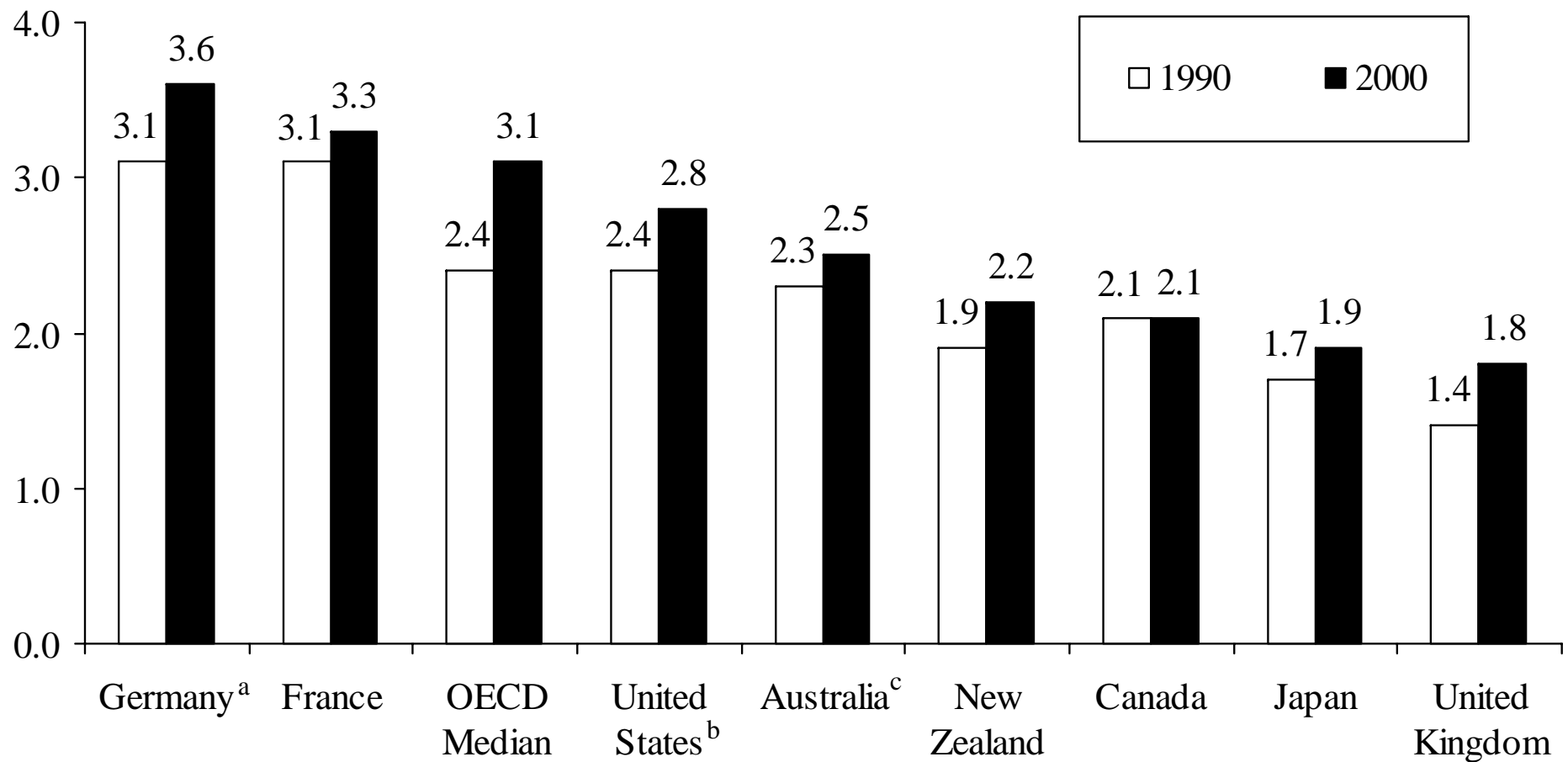
Adjusted for Differences in the Cost of Living<sup>13</sup>



<sup>a</sup> 1999

<sup>b</sup> 1998

Chart VII-4  
**Number of Practicing Physicians per 1,000 Population**

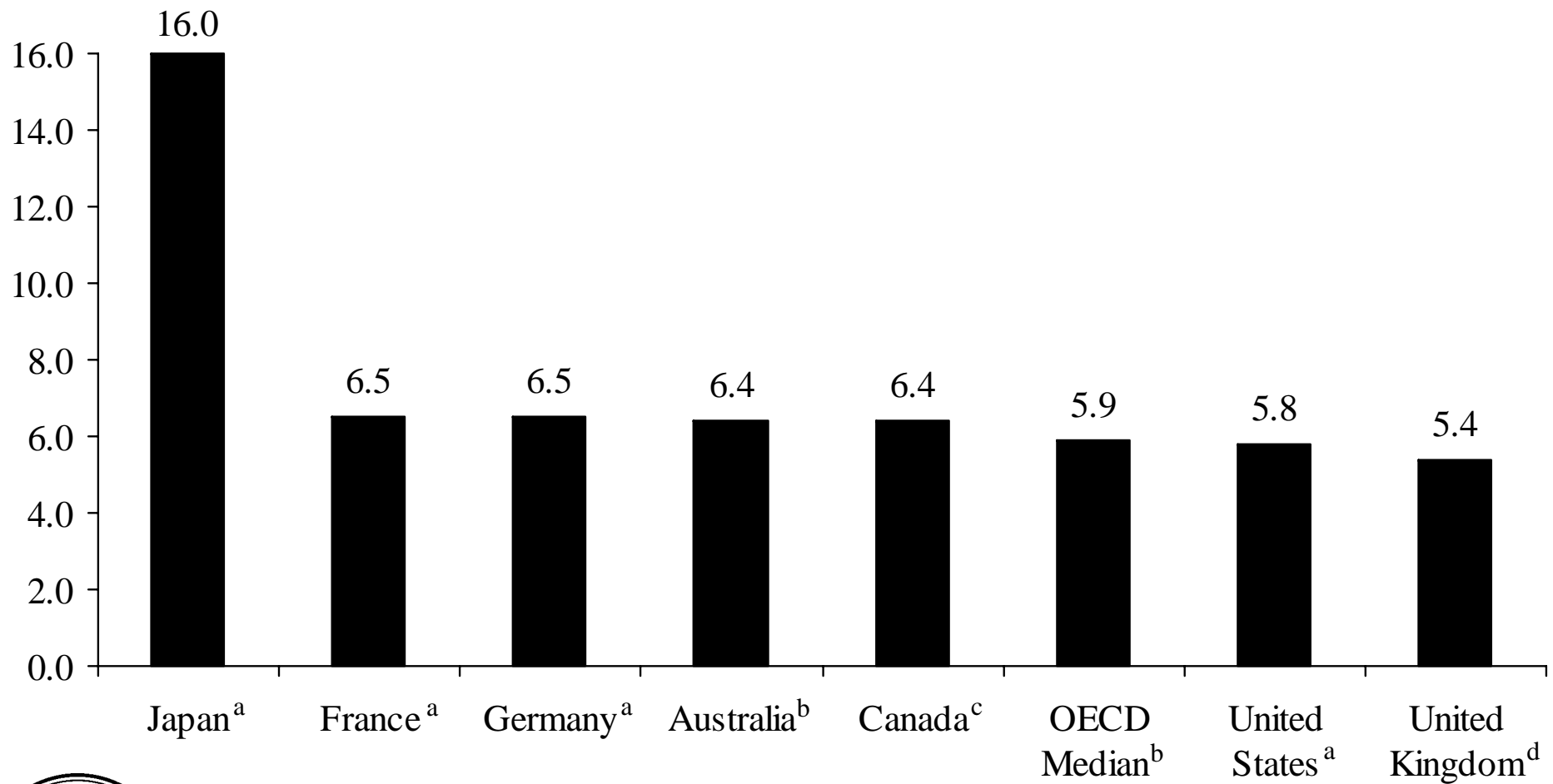


<sup>a</sup> 1992–2000

<sup>b</sup> 1990–1998

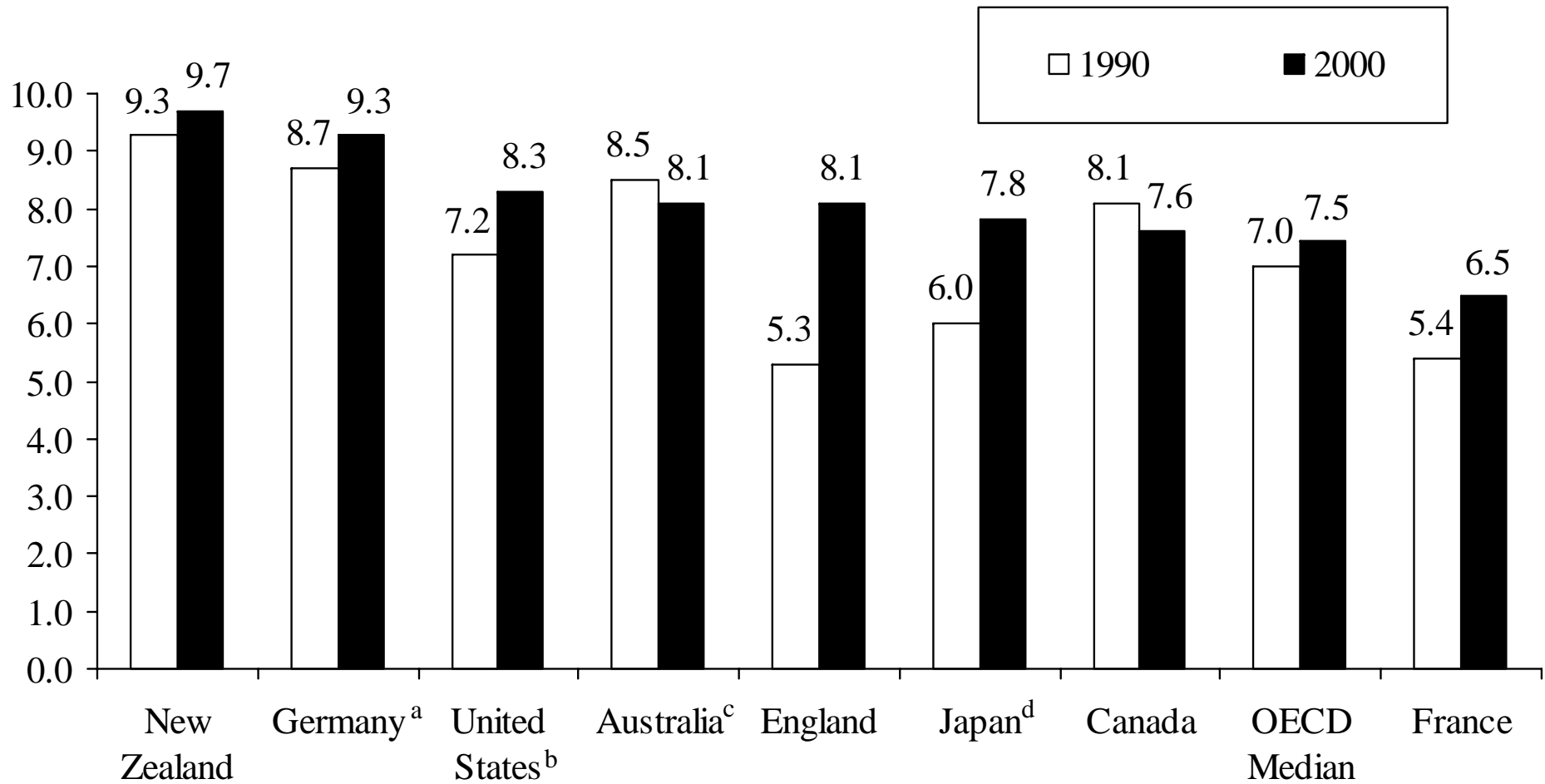
<sup>c</sup> 1991–1998

Chart VII-5  
**Annual Number of Physician Visits per Capita<sup>27</sup>**



<sup>a</sup> 1996  
<sup>b</sup> 2000  
<sup>c</sup> 1999  
<sup>d</sup> 1998

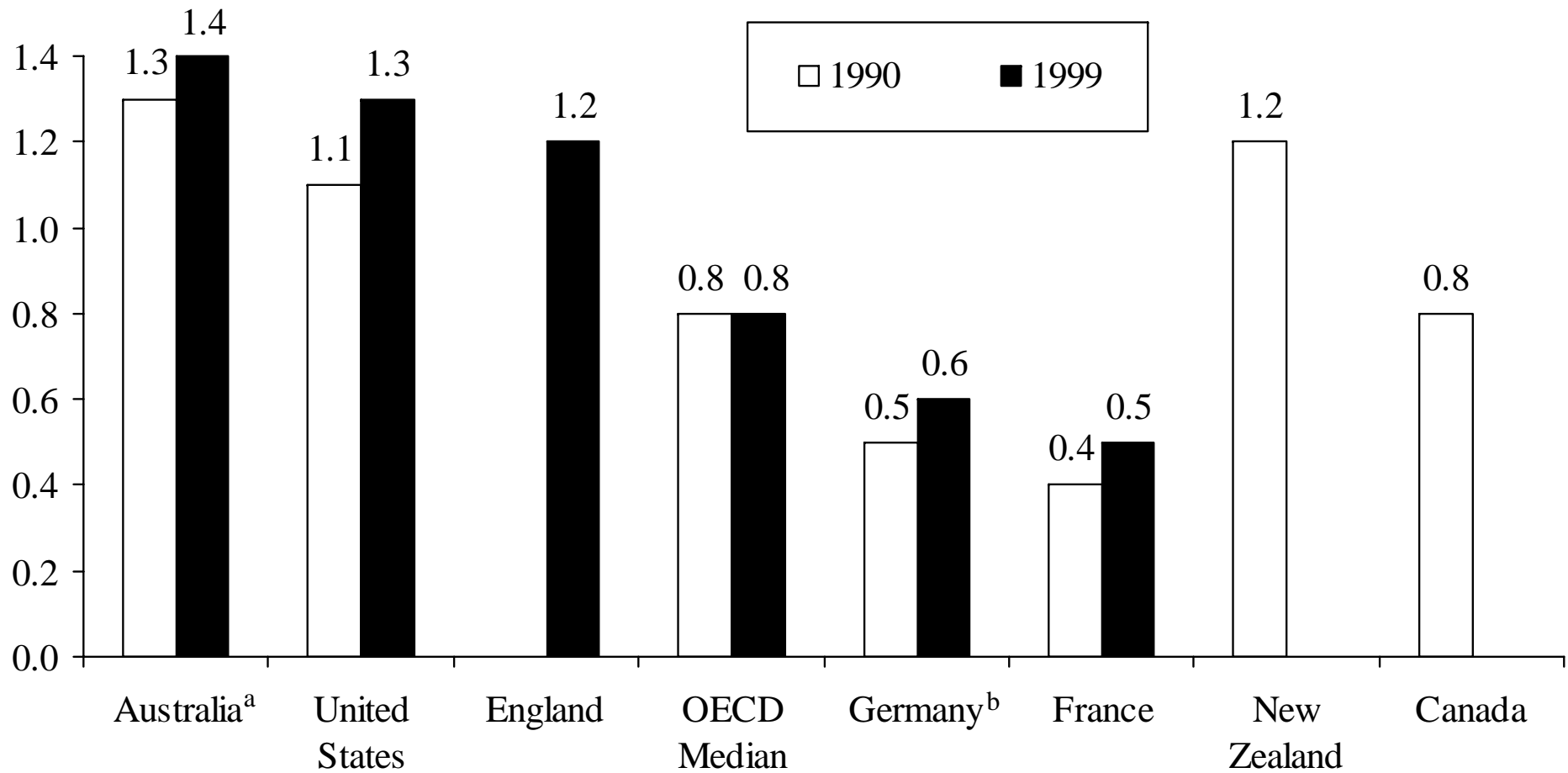
Chart VII-6  
**Number of Practicing Nurses per 1,000 Population<sup>26</sup>**



<sup>a</sup> 1993–2000  
<sup>b</sup> 1990–1999  
<sup>c</sup> 1991–1997  
<sup>d</sup> 1990–1998



Chart VII-7  
**Number of Nurses per Acute Care Hospital Bed<sup>28,29</sup>**



<sup>a</sup> 1991–1999

<sup>b</sup> 1992–1999

## **VIII. Medical Procedures Involving Sophisticated Technology**

### **Access to Technology**

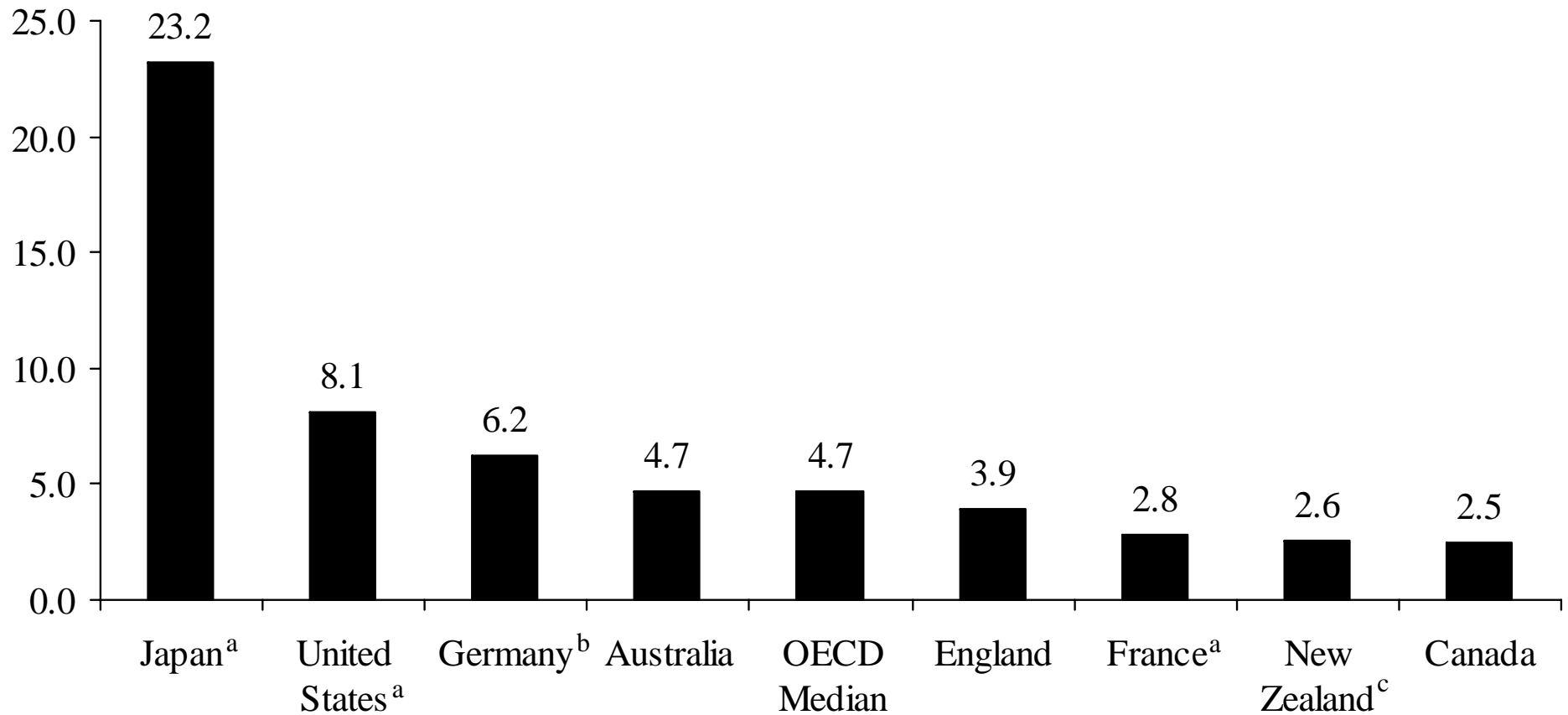
- Japan had nearly three times as many magnetic resonance imaging (MRI) units per capita as the United States and nearly 10 times as many as Canada, New Zealand, and France in 2000.
- Japan had four times as many computer tomography (CT) scanners per capita as Australia and over 10 times as many as Canada and the United Kingdom.

### **Utilization**

- The number of coronary angioplasty procedures performed in the United States was more than twice that reported in Germany and over seven times that in England.
- The number of patients undergoing dialysis in Japan was nearly twice that in the United States and 6 times that in the United Kingdom in 2000. Unlike the other countries with active transplant programs, virtually all end-stage renal disease (ESRD) treatment in Japan is delivered using dialysis.

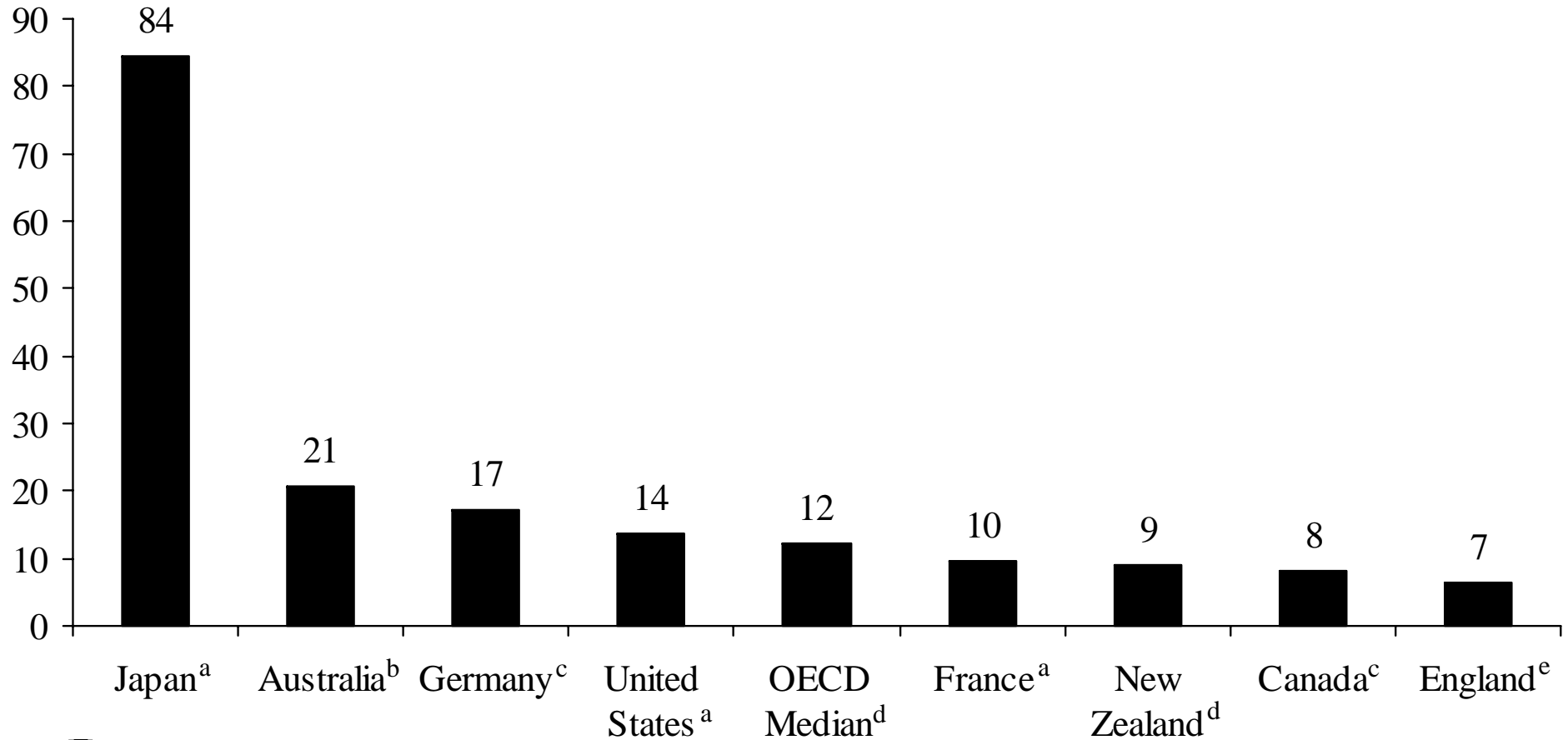


Chart VIII-1  
**Magnetic Resonance Imaging (MRI) Units  
 per One Million Population in 2000<sup>30</sup>**



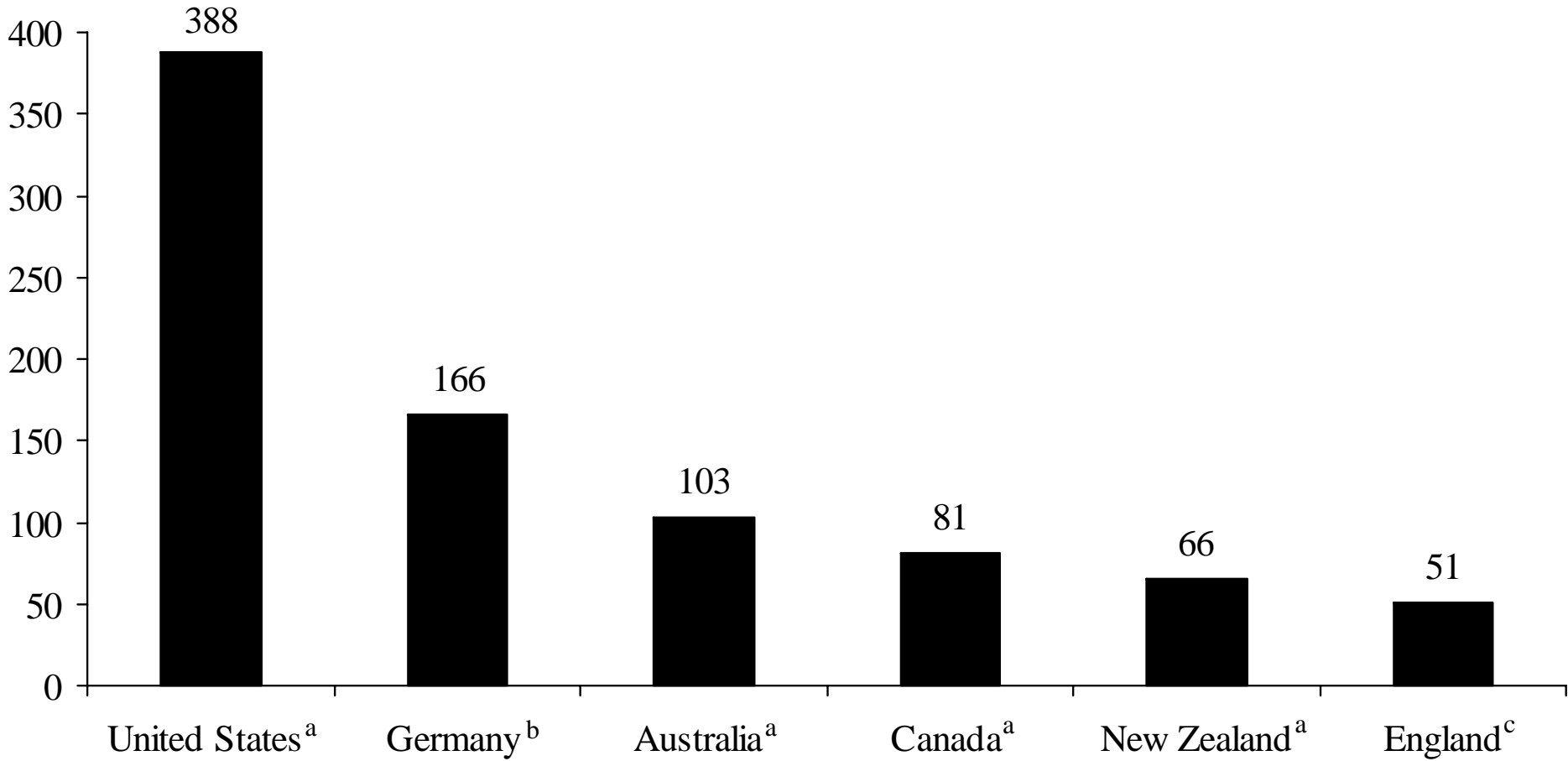
<sup>a</sup> 1999  
<sup>b</sup> 1997  
<sup>c</sup> 1998

Chart VIII-2  
**Computer Tomography (CT) Scanners  
per One Million Population<sup>30</sup>**



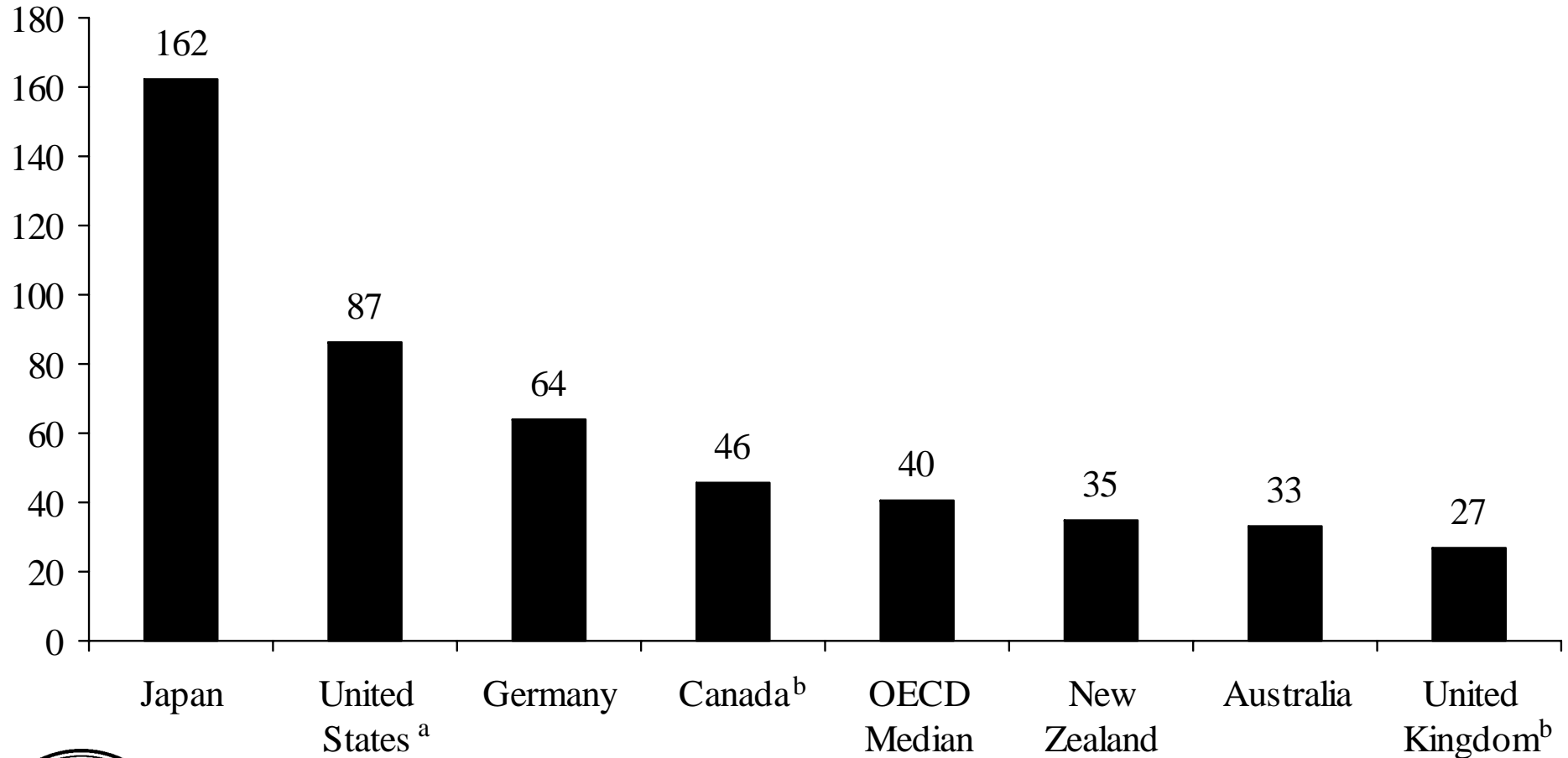
<sup>a</sup> 1999  
<sup>b</sup> 1995  
<sup>c</sup> 1997  
<sup>d</sup> 2000  
<sup>e</sup> 2001

**Chart VIII-3**  
**Coronary Angioplasty Procedures per 100,000 Population<sup>31</sup>**



<sup>a</sup> 1999  
<sup>b</sup> 1997  
<sup>c</sup> 2000

Chart VIII-4  
**Number of Patients Undergoing Dialysis  
 per 100,000 Population in 2000<sup>32</sup>**



<sup>a</sup> 1998  
<sup>b</sup> 1999

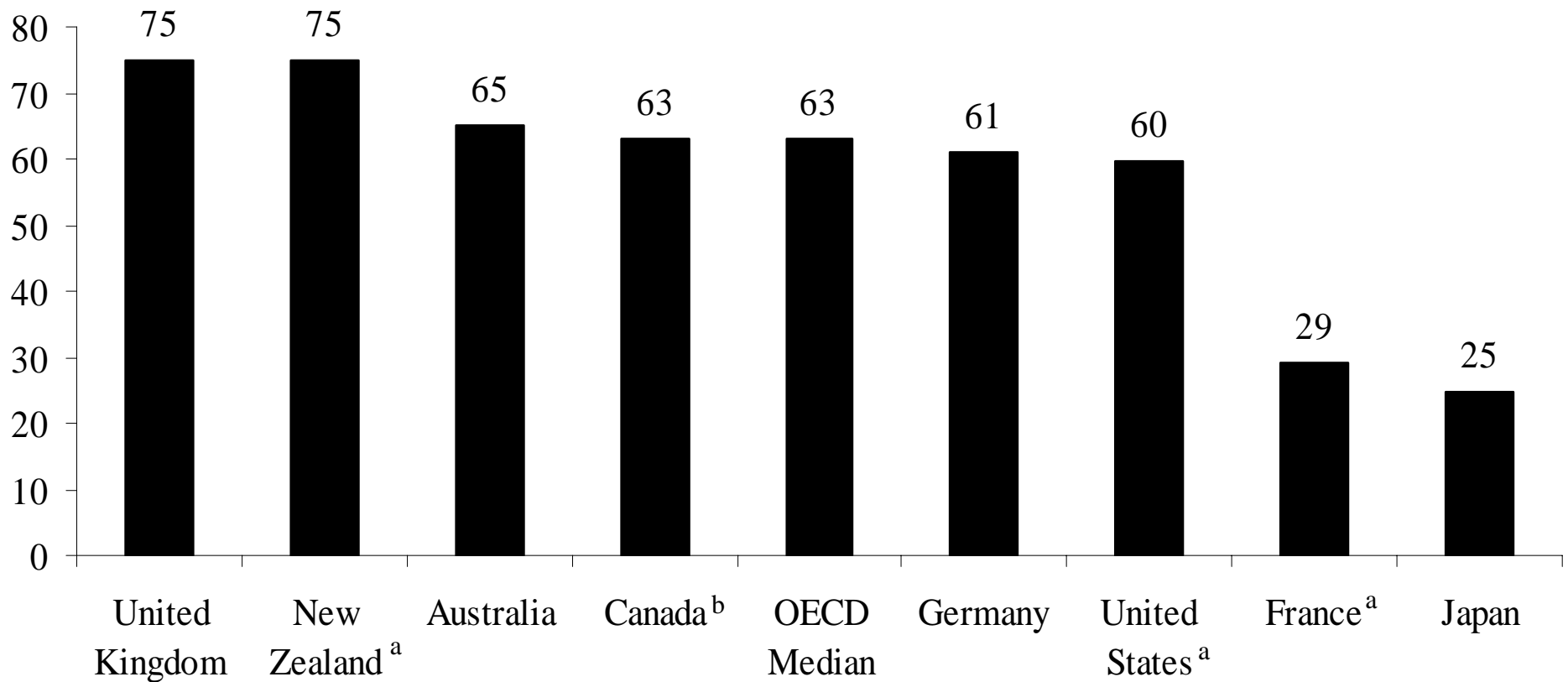
Sources: OECD Health Data 2002; The Australia and New Zealand Dialysis and Transplant Registry ([www.anzdata.org.au](http://www.anzdata.org.au)). 54

## IX. Health Status<sup>33</sup>

- People were three times more likely to die of a heart attack in the United Kingdom and New Zealand compared with Japan in 1999.
- The diabetes mellitus mortality rate was the highest in the United States and nearly three times higher than in the United Kingdom and Japan in 1999.
- The breast cancer incidence rate was highest for U.S. women in 1999.
- The mortality rate for breast cancer among women was much lower in Japan than in the other countries in 1999.
- Although the United Kingdom had the lowest incidence of breast cancer after Japan in 1999, the U.K. breast cancer mortality rate was the highest.
- The incidence rate of colon cancer was twice as high in the United States as in the United Kingdom.
- The colon cancer mortality rate was higher in New Zealand than in the other countries in 1999.
- The incidence rates of lung cancer in the United States and Canada were nearly three times higher than in Japan.
- The lung cancer mortality rate was highest in the United States in 1999.



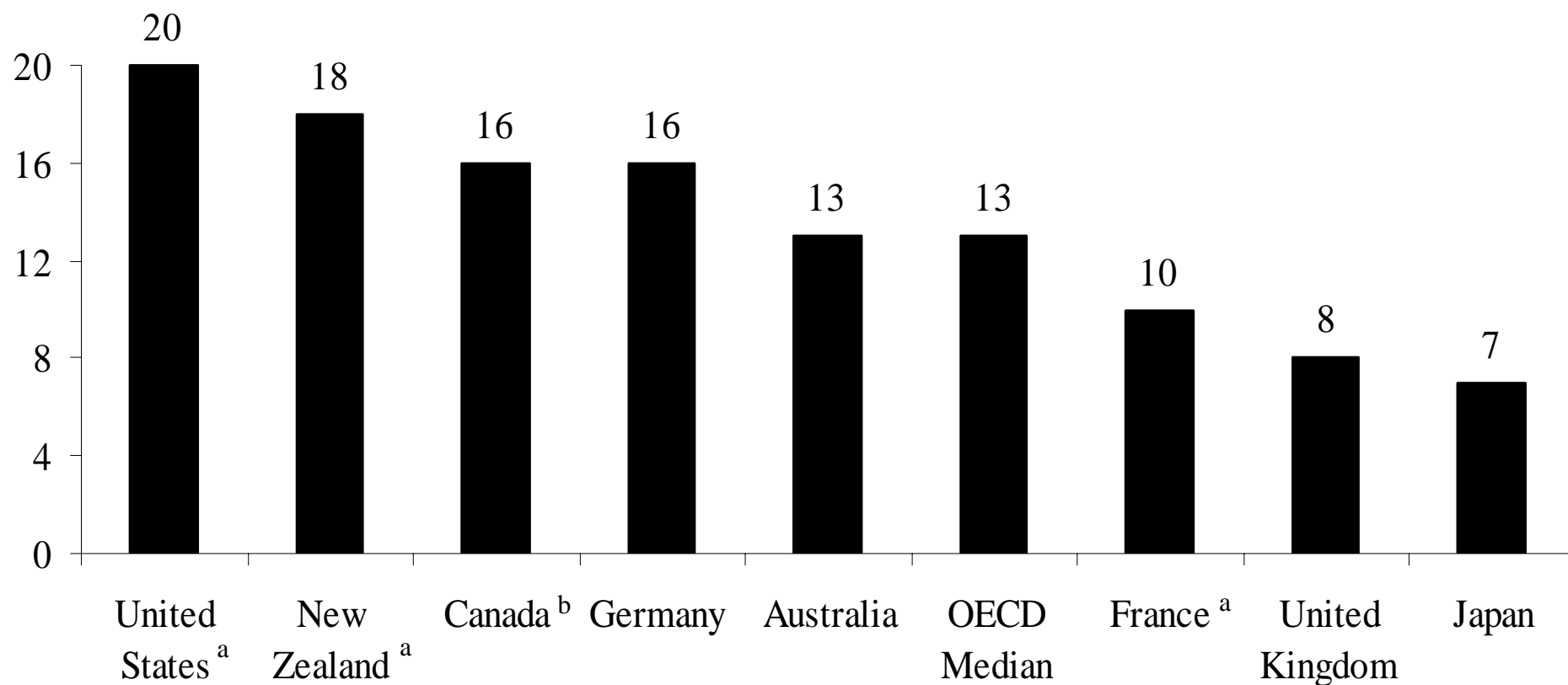
**Chart IX-1**  
**Age-Standardized Mortality Rates for Acute Myocardial  
 Infarction per 100,000 Population in 1999**



<sup>a</sup> 1998  
<sup>b</sup> 1997

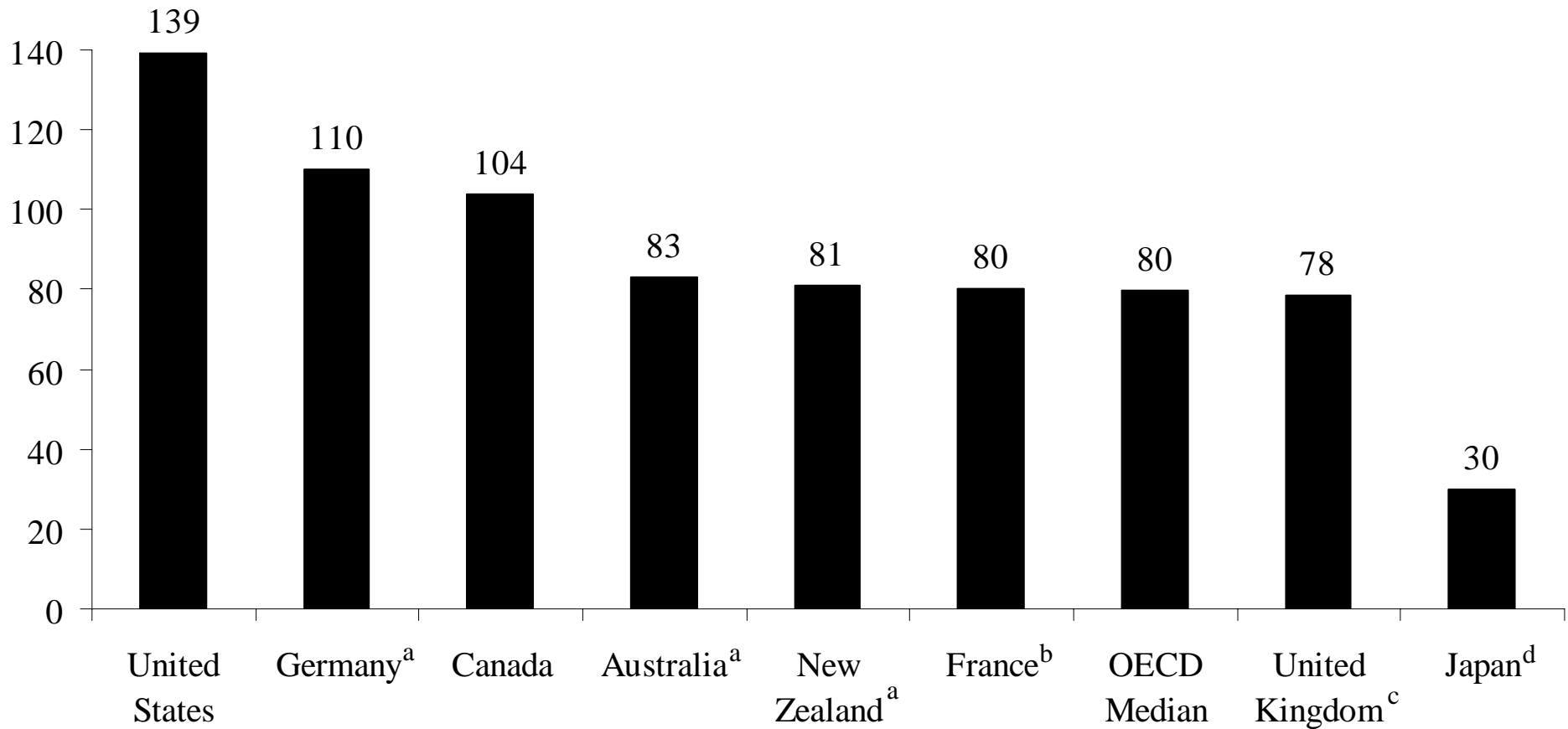


**Chart IX-2**  
**Age-Standardized Mortality Rates for Diabetes Mellitus**  
**per 100,000 Population in 1999<sup>34</sup>**



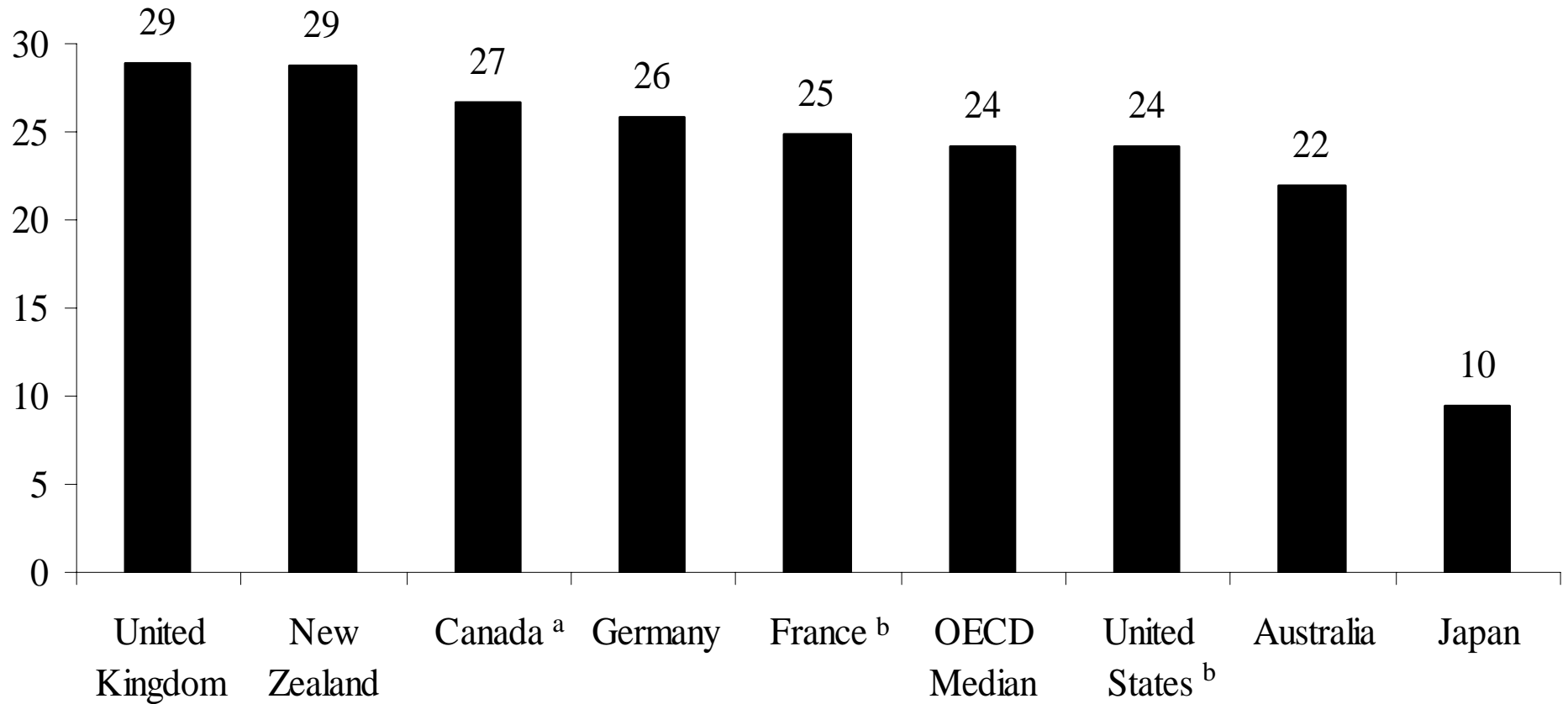
<sup>a</sup> 1998  
<sup>b</sup> 1997

**Chart IX-3**  
**Incidence Rates for Breast Cancer**  
**per 100,000 Females in 1999**



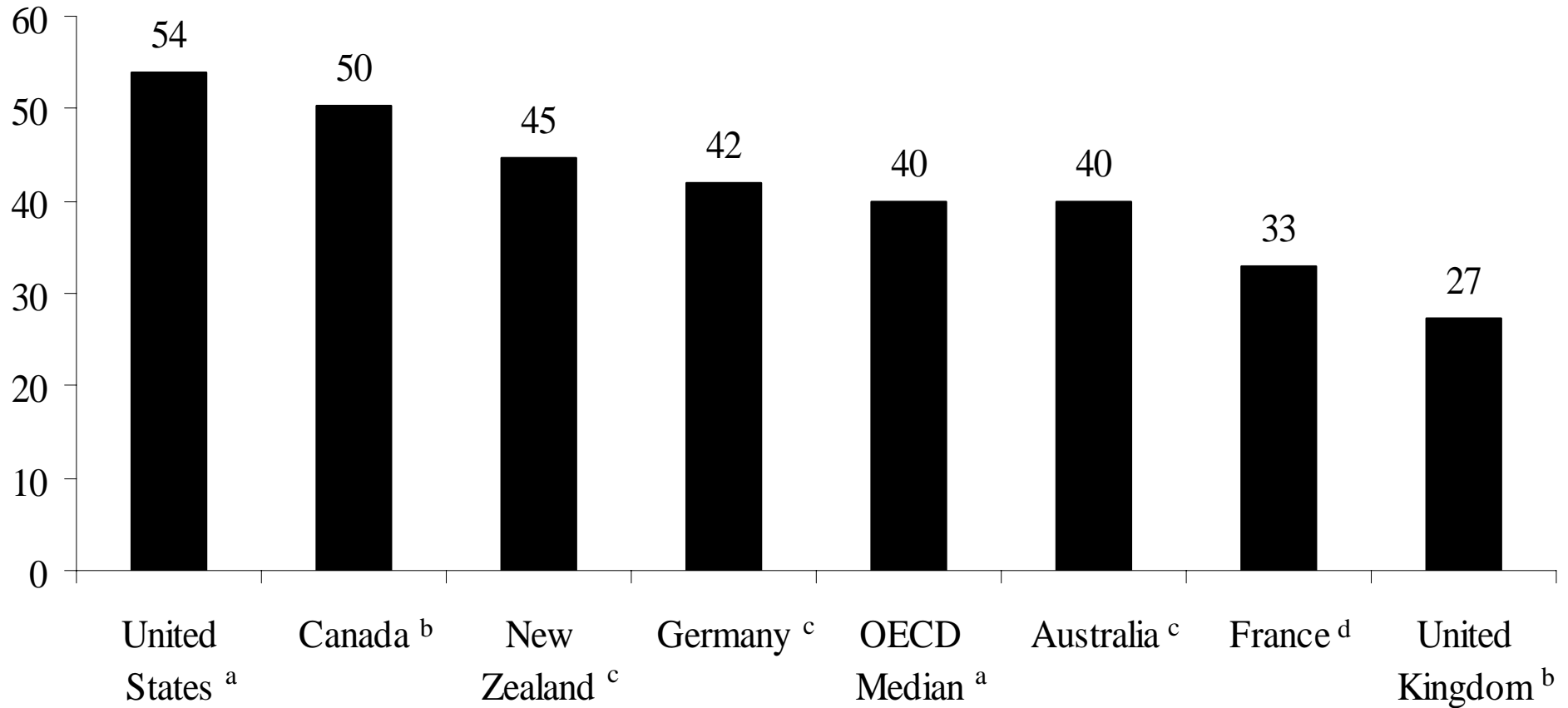
<sup>a</sup> 1998  
<sup>b</sup> 1995  
<sup>c</sup> 1997  
<sup>d</sup> 1996

**Chart IX-4**  
**Age-Standardized Mortality Rates for Breast Cancer**  
**per 100,000 Females in 1999**



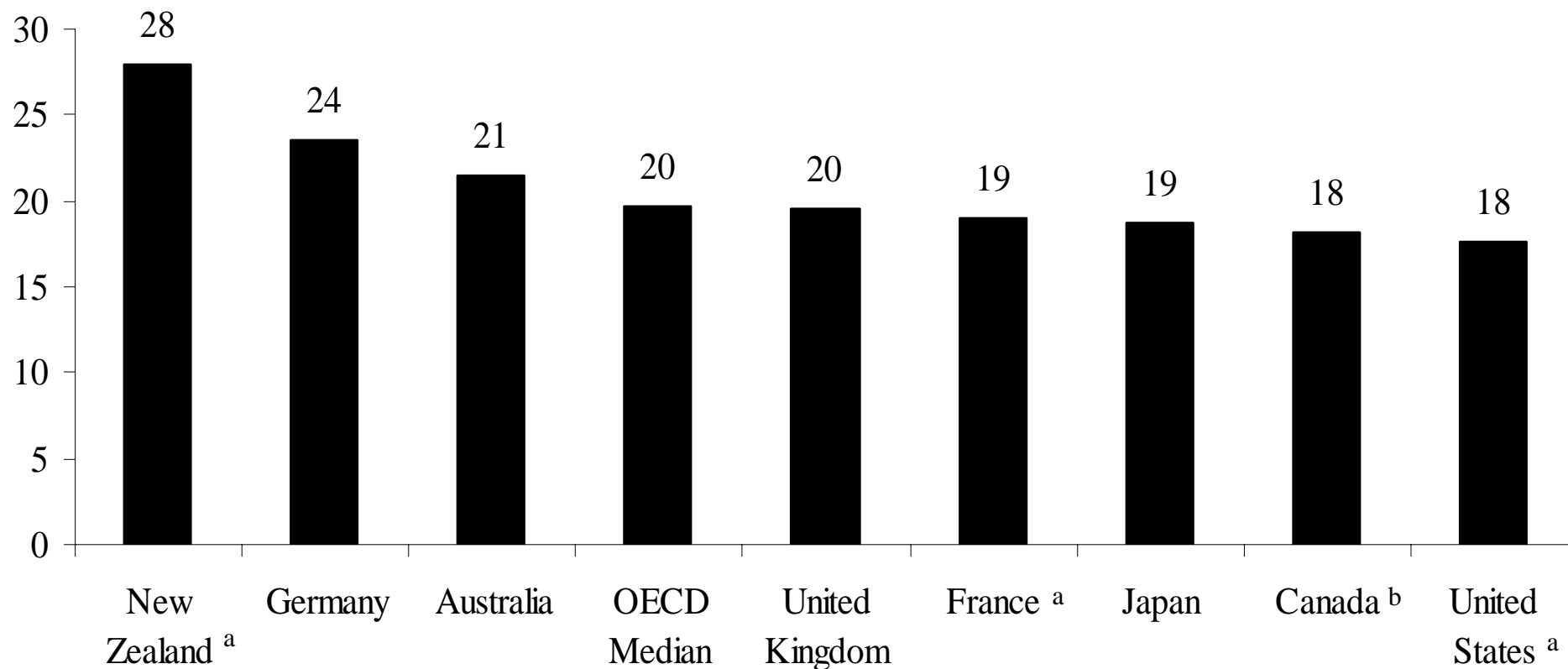
<sup>a</sup> 1997  
<sup>b</sup> 1998

**Chart IX-5**  
**Incidence Rates for Colon Cancer per 100,000 Population**



<sup>a</sup> 1999  
<sup>b</sup> 1997  
<sup>c</sup> 1998  
<sup>d</sup> 1995

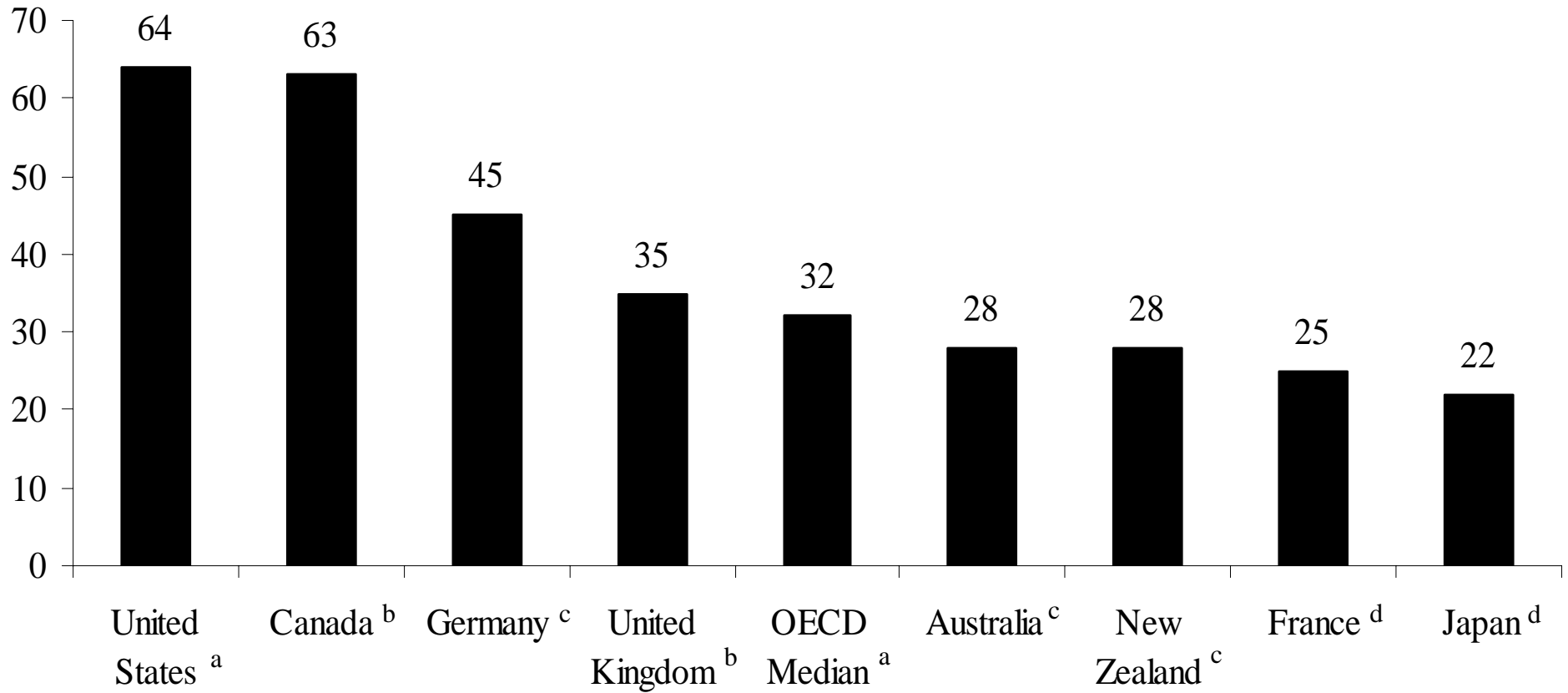
**Chart IX-6**  
**Age-Standardized Mortality Rates for Colon Cancer**  
**per 100,000 Population in 1999**



<sup>a</sup> 1998

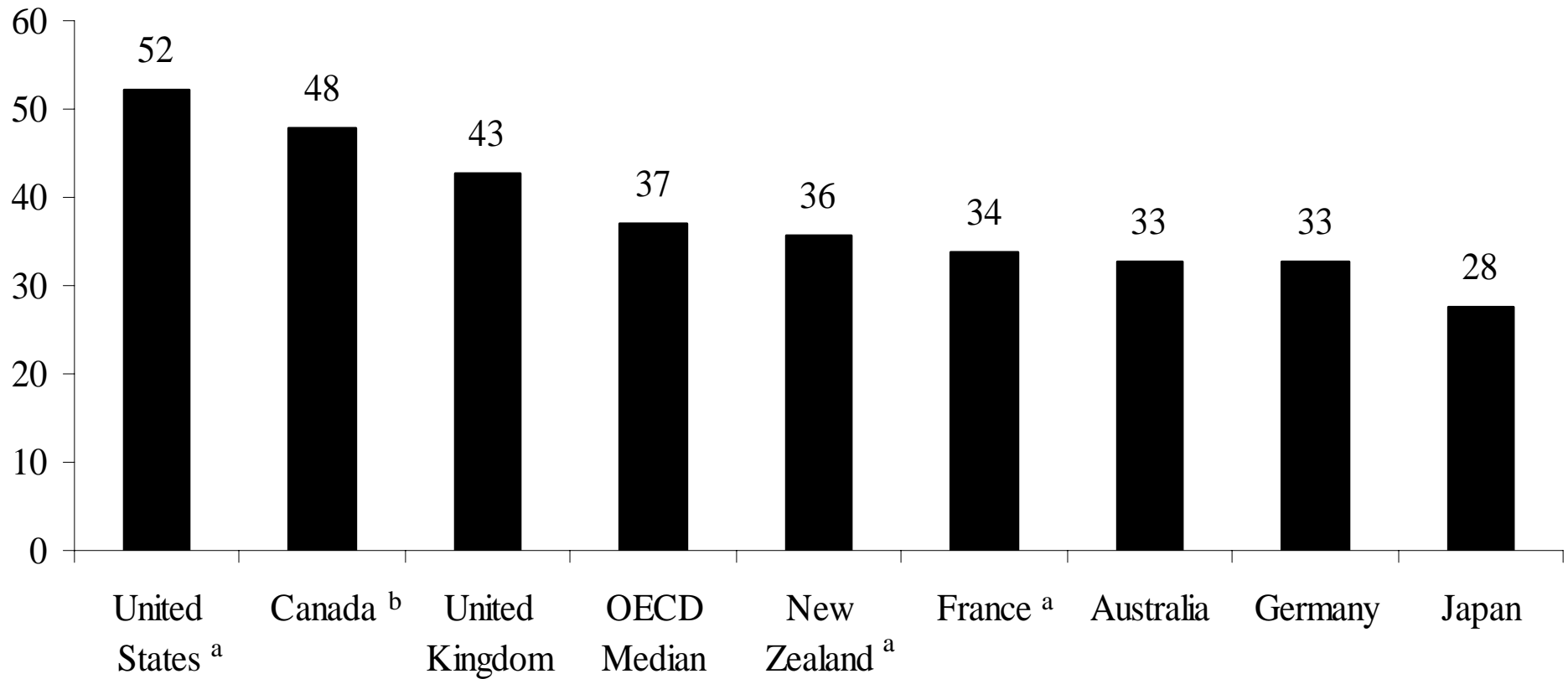
<sup>b</sup> 1997

**Chart IX-7**  
**Incidence Rates for Lung Cancer per 100,000 Population**



<sup>a</sup> 1999  
<sup>b</sup> 1997  
<sup>c</sup> 1998  
<sup>d</sup> 1995

**Chart IX-8**  
**Age-Standardized Mortality Rates for Lung Cancer**  
**per 100,000 Population in 1999**



<sup>a</sup> 1998  
<sup>b</sup> 1997

## **X. Nonmedical Determinants of Health**

### **Tobacco Consumption**

- The prevalence of smoking decreased between 1990 and 2000 in all the countries except Germany.
- The percentage of people who reported being daily smokers was the highest in Japan and the lowest in the United States in 2000.
- The United States had relatively low smoking rates in 1990 and 2000 but the highest lung cancer mortality rate in 1998.

### **Obesity**

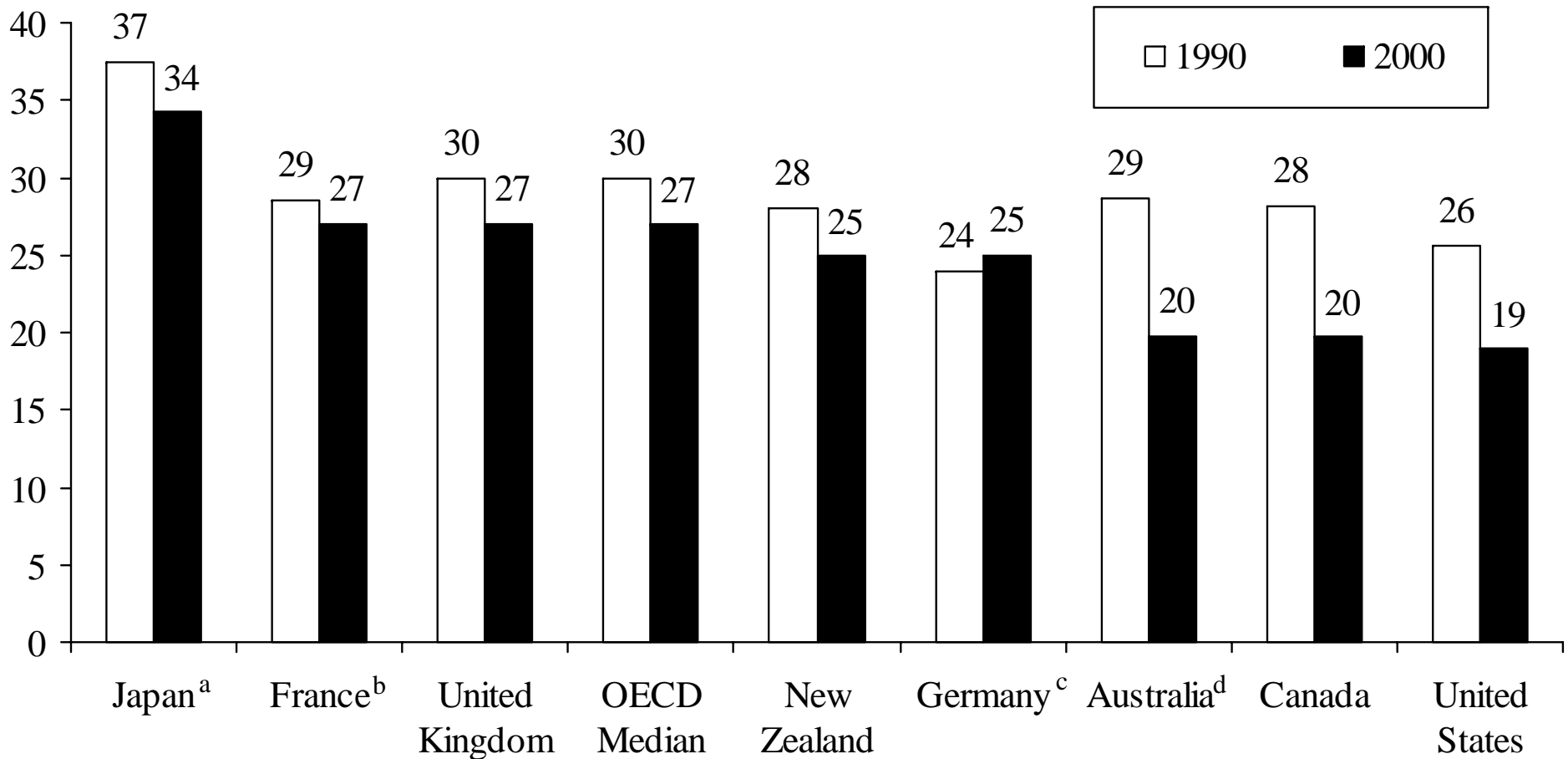
- Over 20 percent of the population in the United States and Australia was obese (body mass index greater than 30) in 1999.





Chart X-1

# Percentage of Adults Who Reported Being Daily Smokers<sup>35</sup>



<sup>a</sup> 1990–1999

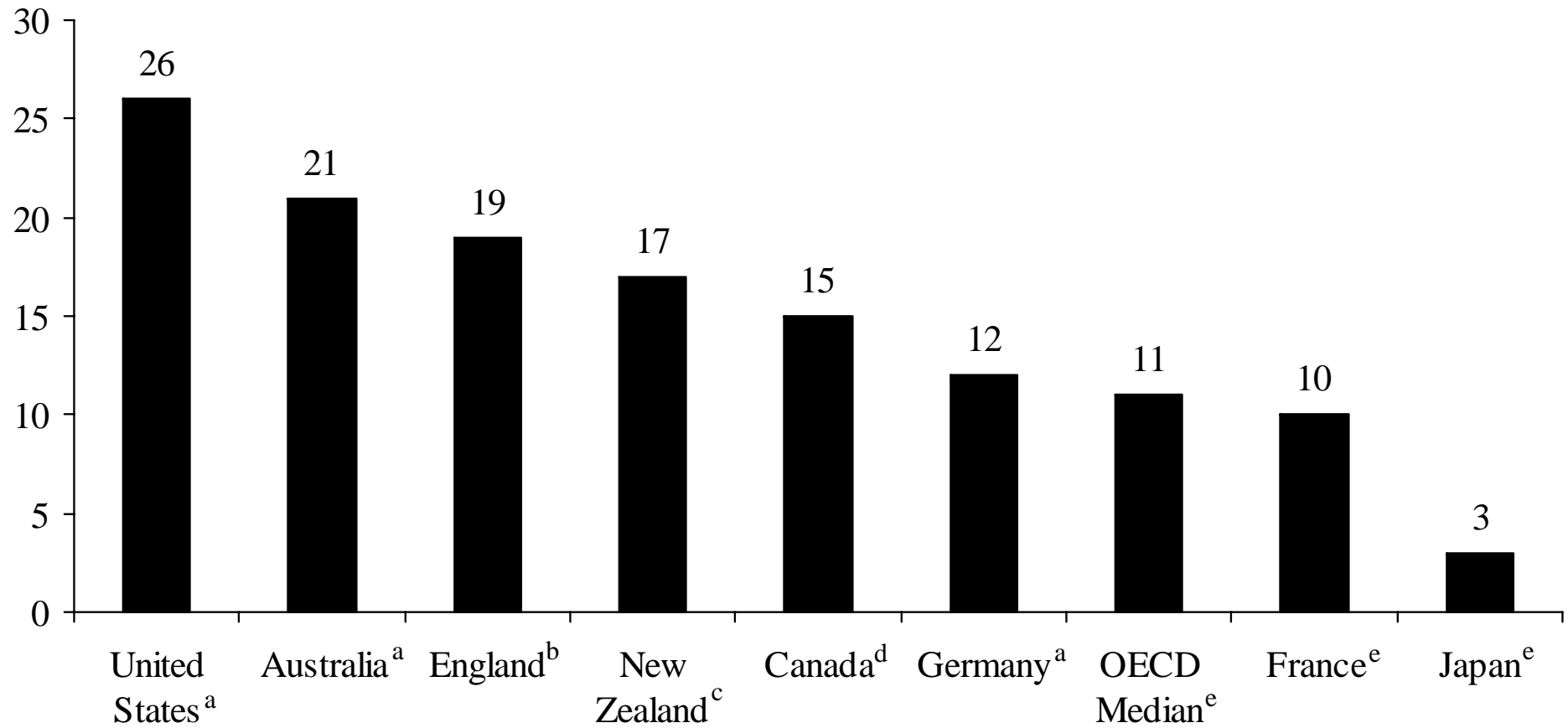
<sup>b</sup> 1990–2001

<sup>c</sup> 1992–1999

<sup>d</sup> 1989–2001

Chart X-2  
**Obesity (BMI > 30) Prevalence<sup>36</sup>**

Percent



<sup>a</sup> 1999  
<sup>b</sup> 1998  
<sup>c</sup> 1997  
<sup>d</sup> 2001  
<sup>e</sup> 2000

