

# STRATEGIC ASIA 2013–14

---

## ASIA IN THE SECOND NUCLEAR AGE

*Edited by*

Ashley J. Tellis, Abraham M. Denmark, and Travis Tanner

### Indicators

---

#### Strategic Asia by the Numbers

**RESTRICTIONS ON USE:** This PDF is provided for the use of authorized recipients only. For specific terms of use, please contact <[publications@nbr.org](mailto:publications@nbr.org)>. To purchase the print volume *Strategic Asia 2013–14: Asia in the Second Nuclear Age*, in which this chapter appears, please visit <<http://www.nbr.org>> or contact <[orders@nbr.org](mailto:orders@nbr.org)>.

© 2013 The National Bureau of Asian Research



THE NATIONAL BUREAU of ASIAN RESEARCH  
Seattle and Washington, D.C.

---

TABLE OF CONTENTS

**Politics**

Table 1: Political leadership . . . . . 304

Table 2: Political rights, corruption, and democracy. . . . . 305

**Economics**

Table 3: Gross domestic product . . . . . 306

Table 4: GDP growth and inflation rates . . . . . 307

**Trade and Investment**

Table 5: Trade flow and trade partners . . . . . 308

Table 6: Flow of foreign direct investment . . . . . 309

**Energy and the Environment**

Table 7: Primary energy consumption . . . . . 310

Table 8: Primary energy consumption by fuel type . . . . . 311

**Security Challenges**

Table 9: Armed forces . . . . . 312

Table 10: Total defense expenditures . . . . . 313

**Nuclear Arms and Nonproliferation**

Figure 1: Nuclear warhead stockpiles by country and year . . . . . 314

Figure 2: Nuclear weapons-capable platforms  
and delivery systems by country . . . . . 314

Table 11: Nonproliferation treaties . . . . . 315

Table 12: WMD-export control regimes . . . . . 315

# Strategic Asia by the Numbers

The strategic dynamics of the Asia-Pacific have evolved significantly in the past year as the global geopolitical center of gravity continues to shift eastward. China's rise still generates concern among neighboring states despite a growing level of regional economic integration. As the United States "rebalances to Asia," a dual regional structure is emerging whereby many Asian nations are increasingly dependent on China economically yet continue to rely on the United States for the maintenance of regional security.

In the second year of the U.S. rebalance, the focus of the strategy has shifted to place greater emphasis on economic and political engagement. Diplomatic and trade initiatives, such as the Trans-Pacific Partnership, have received greater attention, building on the military aspects of the rebalance announced in its first year.

The Asia-Pacific continues to be plagued by several long-term sources of tension, most notably on the Korean Peninsula. Early on in her administration, new South Korean president Park Geun-hye was confronted by North Korean provocations, including nuclear threats. Despite President Park's attempts to recast inter-Korean relations through a policy of *trustpolitik*—aimed at strengthening deterrence while renewing dialogue with the North—progress has been stymied by Pyongyang's belligerence.

Disputes over territorial and historical issues also intensified in 2012 and early 2013, resulting in several armed confrontations. These clashes highlighted the persistent and growing distrust and antagonism among many of Asia's leading powers and may be emblematic of the rising influence of nationalism within the region.

The following pages contain tables and figures drawn from a broad array of sources. These charts cover politics, economics, trade and investment, energy and the environment, security challenges, and nuclear arms and nonproliferation. The data sets summarize the critical trends in Asia and changes underway in the regional balance of power.

## Politics

Late 2012 and early 2013 saw change as well as continuity in the political dynamics of the Asia-Pacific. Discouragingly, a growing strategic distrust has come to characterize many of the bilateral relationships between Asia's most prominent powers over the past year.

- U.S. president Barack Obama hosted visits with leaders from Japan, the Philippines, Afghanistan, Singapore, South Korea, Myanmar, Vietnam, and Brunei in Washington, D.C., and met with Chinese president Xi Jinping in California. In November 2012, Obama took his fifth trip to the Asia-Pacific as president, visiting Bangkok and Rangoon before attending the East Asia Summit in Phnom Penh.
- A number of political transitions took place in the Asia-Pacific in 2012–13. U.S. president Barack Obama was elected to a second term, as was Taiwan president Ma Ying-jeou. In China, South Korea, Japan, Pakistan, Russia, and Iran, new leaders assumed power.
- In Myanmar the military has continued to relinquish political control, creating a platform for improved relations with the United States and the international community.

TABLE 1 Political leadership

	Head of state	Head of government
<b>Australia</b>	Queen Elizabeth II	Prime Minister Kevin Rudd
<b>China</b>	President Xi Jinping	Premier Li Keqiang
<b>India</b>	President Pranab Mukherjee	Prime Minister Manmohan Singh
<b>Indonesia</b>	President Susilo Bambang Yudhoyono	
<b>Iran</b>	Supreme Leader Ali Khamenei	President Hassan Rouhani
<b>Japan</b>	Emperor Akihito	Prime Minister Shinzo Abe
<b>Myanmar</b>	President Thein Sein	
<b>North Korea</b>	Eternal President Kim Il-sung (deceased)	First Chairman Kim Jong-un
<b>Pakistan</b>	President Mamnoon Hussain	Prime Minister Mohammed Nawaz Sharif
<b>Russia</b>	President Vladimir Putin	Premier Dmitri Medvedev
<b>South Korea</b>	President Park Geun-hye	Prime Minister Chung Hong-won
<b>Taiwan</b>	President Ma Ying-jeou	Premier Jiang Yi-huah
<b>Thailand</b>	King Phumiphon Adunyadet	Prime Minister Yingluck Shinawatra
<b>United States</b>	President Barack Obama	
<b>Vietnam</b>	President Truong Tan Sang	Prime Minister Nguyen Tan Dung

SOURCE: Central Intelligence Agency (CIA), *The World Factbook*, 2013; and "North Korea Profile," BBC, June 7, 2013.

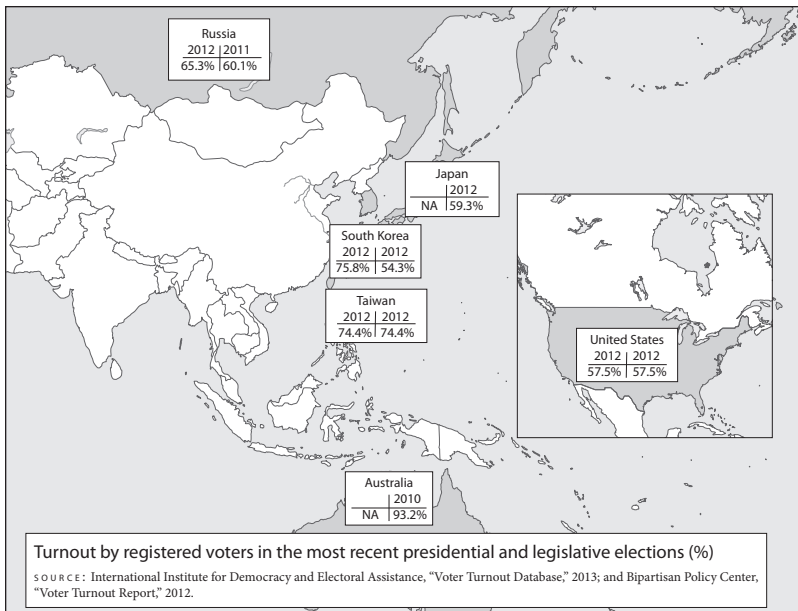


TABLE 2 Political rights, corruption, and democracy

	Political rights score		Corruption index		Democracy index	
	2005	2012	2005	2012	2006	2012
<b>Australia</b>	1	1	8.8	8.5	9.1	9.2
<b>China</b>	7	7	3.2	3.9	3.0	3.0
<b>India</b>	2	2	2.9	3.6	7.7	7.5
<b>Indonesia</b>	2	2	2.2	3.2	6.4	6.8
<b>Iran</b>	6	6	2.9	2.8	2.9	2.0
<b>Japan</b>	1	1	7.3	7.4	8.2	8.1
<b>Myanmar</b>	7	6	1.8	1.5	1.7	2.4
<b>Pakistan</b>	6	4	2.1	2.7	3.9	4.6
<b>Russia</b>	6	6	2.4	2.8	5.0	3.7
<b>Singapore</b>	5	4	9.4	8.7	5.9	5.9
<b>South Korea</b>	1	1	5.0	5.6	7.9	8.1
<b>Taiwan</b>	1	1	5.9	6.1	7.8	7.6
<b>Thailand</b>	3	4	3.8	3.7	5.7	6.6
<b>United States</b>	1	1	7.6	7.3	8.2	8.1

SOURCE: Freedom House, "Freedom in the World," 2006 and 2013; Transparency International, "Corruption Perceptions Index," 2005 and 2012; and Economist Intelligence Unit, "Democracy Index," 2006 and 2012.

NOTE: Political rights score = a people's ability to participate freely in the political process (1 = most free / 7 = least free). Prior to 2011, corruption index = degree to which public official corruption is perceived to exist (1 = most corrupt / 10 = most open); from 2012, corruption index = how corrupt the public sector is perceived to be (0 = highly corrupt / 100 = very clean). NBR has standardized the data for consistency. Democracy index = level of democratization (0 = least democratic / 10 = most democratic).

## Economics

GDP growth in the world's developed countries occurred at a rate of about 1.3% in early 2013, compared with a rate of 7.1% in Asia's developing economies. Rising domestic consumption in Southeast Asia was a key driver of GDP growth in East and South Asia and was enough to overcome reduced consumer demand in India, China, the United States, and Europe.

- In the United States, GDP growth continued to improve and unemployment to slowly recede. The International Monetary Fund (IMF) predicts that U.S. GDP will grow 1.7% in 2013 and 2.7% in 2014.
- The IMF forecasts that in 2013 the GDP of Asia's two rising powers, India and China, will grow by 5.7% and 8.0% respectively.
- The Asian Development Bank anticipates that by 2035 Asia's GDP will more than quadruple.
- Improvement in Central Asia's economic performance was largely attributable to growth in the energy sector, with Turkmenistan and Uzbekistan at the front of a boom in oil and natural gas production.

TABLE 3 Gross domestic product

	GDP (\$bn)				Rank	
	1990	2000	2012	2012 annual growth (%)	1990	2012
<b>United States</b>	5,800.5	9,951.5	15,684.8	2.1%	1	1
<b>China</b>	390.3	1,198.5	8,227.0	7.8%	3	2
<b>Japan</b>	3,103.7	4,731.2	5,964.0	1.9%	2	3
<b>Russia</b>	516.8	259.7	2,022.0	3.9%	8	4
<b>India</b>	323.5	476.4	1,824.8	3.2%	5	5
<b>Australia</b>	323.8	399.6	1,541.8	3.4%	6	6
<b>South Korea</b>	270.4	533.4	1,155.9	2.0%	4	7
<b>Indonesia</b>	113.8	165.0	878.2	6.2%	9	8
<b>Iran</b>	85.0	96.4	548.9	-1.9%	10	9
<b>Taiwan</b>	165.0	326.2	474.0	1.3%	7	10
<b>Malaysia</b>	43.4	93.8	303.5	5.6%	12	11
<b>Singapore</b>	38.8	94.3	276.5	1.3%	11	12
<b>Pakistan</b>	48.6	74.1	231.9	3.7%	13	13
<b>Kazakhstan</b>	26.9	18.3	196.4	5.0%	15	14
<b>Vietnam</b>	6.5	31.2	138.1	5.0%	14	15
<b>World</b>	22,195.9	32,331.3	71,707.3	2.2%	N/A	N/A

SOURCE: International Monetary Fund (IMF), "World Economic Outlook Database," 2013; and World Bank, "World Development Indicators," 2013.

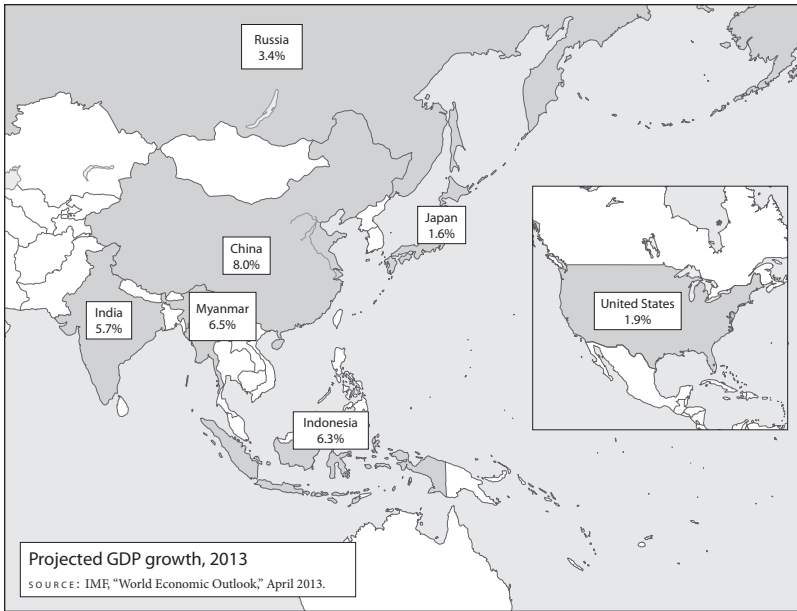


TABLE 4 GDP growth and inflation rates

	Average GDP growth (%)			Average inflation rate (%)		
	2001–5	2006–10	2012	2001–5	2006–10	2012
<b>Australia</b>	3.3	2.8	3.6	2.9	2.9	1.8
<b>China</b>	9.8	11.2	7.8	1.3	2.9	2.7
<b>India</b>	6.4	8.4	4.0	3.9	8.4	9.3
<b>Indonesia</b>	4.7	5.7	6.2	9.2	7.8	4.3
<b>Iran</b>	6.1	4.6	-1.9	13.6	15.7	30.6
<b>Japan</b>	1.2	0.4	2.0	0.0	0.0	0.0
<b>Malaysia</b>	4.8	4.5	5.6	1.7	2.6	1.7
<b>Myanmar</b>	12.9	7.8	6.3	26.4	19.0	6.1
<b>Pakistan</b>	5.3	4.2	3.7	4.8	10.8	11.0
<b>Russia</b>	6.1	3.7	3.4	14.9	10.2	5.1
<b>Singapore</b>	4.8	6.7	1.3	0.7	2.6	4.6
<b>South Korea</b>	4.6	3.8	2.0	3.3	3.0	2.2
<b>Taiwan</b>	3.6	4.2	1.3	0.7	2.9	1.9
<b>United States</b>	2.4	0.7	2.2	2.5	2.2	2.1
<b>Vietnam</b>	7.6	7.0	5.0	4.6	10.9	9.1

SOURCE: IMF, "World Economic Outlook," April 2013.

## Trade and Investment

The Trans-Pacific Partnership has become the cornerstone of U.S. trade policy in the region and a key component of the Obama administration's rebalance to Asia. The multilateral free trade agreement has the potential to revolutionize the region's economic architecture, particularly with Japan—whose GDP still exceeds that of ASEAN—joining the negotiations in July 2013.

- In 2012, China surpassed the United States to become the world's largest trading nation, measured by trade volume.
- China accounted for 14% of total U.S. trade and is the world's largest holder of U.S. Treasuries, with \$1.2 trillion in U.S. debt, while Japan ranks second with \$1.1 trillion.
- Despite FDI outflows from East Asia decreasing by \$17 billion dollars from 2011, 24% of world outflows in 2012 originated in the region. FDI inflows to East Asia saw a moderate \$4 billion increase from the previous year. Meanwhile, FDI inflows and outflows to South Asia in 2012 decreased by \$10 billion and \$4 billion, respectively.

TABLE 5 Trade flow and trade partners

	Trade flow (\$bn constant 2005)		2010–11 growth (%)	Top export partner, 2012	Top import partner, 2012
	2000	2011			
<b>Australia</b>	210.8	364.4	6.6%	China (29.5%)	China (18.2%)
<b>China</b>	578.1	2,958.8	7.1%	U.S. (17.2%)	Japan (9.8%)
<b>Hong Kong</b>	459.6	918.0	4.3%	China (54.1%)	China (46.9%)
<b>India</b>	158.8	724.8	18.6%	U.S. (12.7%)	China (11.0%)
<b>Indonesia</b>	126.5	275.7	13.5%	Japan (15.9%)	China (15.3%)
<b>Iran</b>	73.4	–	–	China (22.1%)	UAE (32.2%)
<b>Japan</b>	990.1	1,372.7	2.5%	China (18.0%)	China (21.3%)
<b>Malaysia</b>	223.2	352.3	5.1%	Singapore (13.6%)	China (15.1%)
<b>North Korea</b>	–	–	–	China (67.2%)*	China (61.6%)*
<b>Pakistan</b>	24.3	43.5	1.1%	U.S. (13.3%)	China (19.8%)
<b>Russia</b>	246.2	620.2	10.7%	Netherlands (14.4%)	China (15.5%)
<b>South Korea</b>	419.9	1,011.0	8.2%	China (24.4%)*	China (16.5%)*
<b>Thailand</b>	190.4	344.2	11.4%	China (11.7%)	Japan (20.0%)
<b>United States</b>	2,826.1	3,961.8	5.6%	Canada (18.9%)	China (19.0%)
<b>Vietnam</b>	32.9	117.3	7.4%	U.S. (17.0%)	China (27.2%)

SOURCE: World Bank, "World Development Indicators," 1990–2013; and CIA, *The World Factbook*, 2013.

NOTE: A dash indicates that no data is available. An asterisk indicates that data is from 2011.



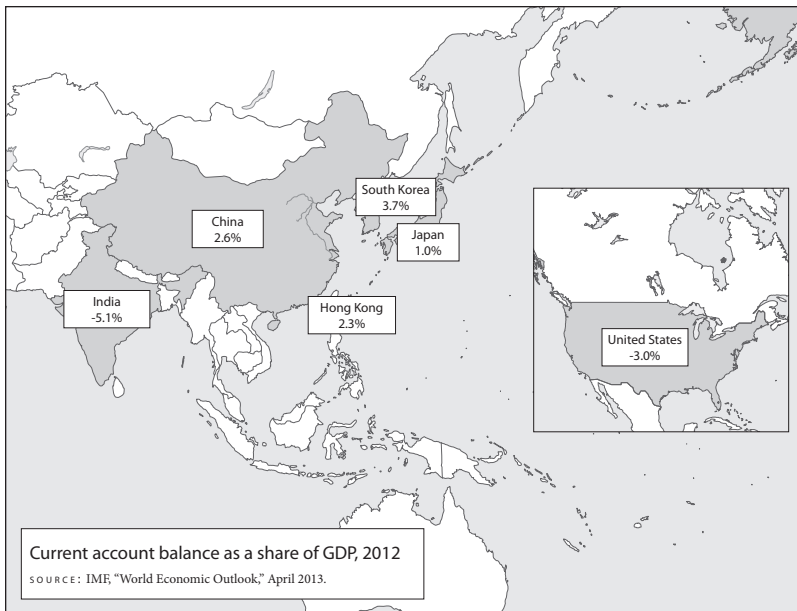


TABLE 6 Flow of foreign direct investment

	FDI inflows (\$bn)			FDI outflows (\$bn)		
	2000–2010 annual avg.	2012	2011–12 growth (%)	2000–2010 annual avg.	2012	2011–12 growth (%)
<b>Australia</b>	23.2	57.0	-12.8%	13.0	16.1	13.0%
<b>China</b>	72.8	121.1	-2.3%	23.6	84.2	12.8%
<b>Hong Kong</b>	45.6	74.6	-22.4%	47.2	84.0	-12.4%
<b>India</b>	16.5	25.5	-29.4%	8.7	8.6	-31.1%
<b>Indonesia</b>	3.8	19.9	3.2%	2.3	5.4	-29.7%
<b>Iran</b>	2.3	4.9	17.3%	0.2	0.4	19.4%
<b>Japan</b>	8.4	1.7	198.6%	53.7	122.6	13.9%
<b>Kazakhstan</b>	6.5	14.0	0.9%	1.3	1.6	-65.8%
<b>Malaysia</b>	4.6	10.1	-17.4%	5.8	17.1	12.2%
<b>Pakistan</b>	2.3	0.8	-36.2%	0.1	0.1	17.7%
<b>Russia</b>	25.9	51.4	-6.7%	25.2	51.1	-23.6%
<b>South Korea</b>	7.5	9.9	-3.3%	11.5	33.0	13.7%
<b>Thailand</b>	6.7	8.6	10.6%	1.6	11.9	45.0%
<b>United States</b>	177.2	167.6	-26.1%	212.6	328.9	-17.1%
<b>Vietnam</b>	3.9	8.4	12.6%	0.4	1.2	26.3%
<b>World</b>	1,179.5	1,350.9	-18.2%	1,186.1	1,391.0	-17.1%

SOURCE: United Nations Conference on Trade and Development (UNCTAD), *World Investment Report*, 2004, 2005, 2007, and 2013.

## Energy and the Environment

Asia's energy consumption continues to grow, with experts estimating that demand will increase annually by 2.7% on average over the next two decades. The United States, meanwhile, is reducing its reliance on energy sources outside North America. Asian nations that have free trade agreements with the United States could begin to import U.S. LNG by 2016.

- As gas, oil, and coal consumption has grown to fuel Asia's expanding economies, carbon emissions are on the rise, which could heighten the political impetus for multilateral cooperation to combat climate change.
- Nuclear power figures prominently in the future energy portfolios of many Asian nations, most notably South Korea, China, and Taiwan. Even Japan, despite the March 2011 disaster, has not abandoned nuclear power. In 2013, Prime Minister Abe pledged to reopen idled plants and signed nuclear technology deals with France and India.
- A majority of Asian states still struggle to provide their citizens with safe water, a problem that contributes to malnutrition and outbreaks of disease. This problem is particularly salient in India, where more than half of households lack access to basic plumbing.

TABLE 7 Primary energy consumption

	Primary energy consumption (million ton oil equivalent)				Rank	
	1990	2000	2012	2011–12 growth (%)	1990	2012
<b>China</b>	664.6	980.3	2,735.2	7.4%	3	1
<b>United States</b>	1,968.4	2,313.7	2,208.8	-2.8%	1	2
<b>Russia</b>	863.8	619.4	694.2	-0.6%	2	3
<b>India</b>	180.7	295.8	563.5	5.1%	5	4
<b>Japan</b>	434.1	518.2	478.2	-0.9%	4	5
<b>South Korea</b>	90	189.4	271.1	1.0%	6	6
<b>Iran</b>	72.9	123.9	234.2	2.9%	8	7
<b>Indonesia</b>	52.4	99.1	159.4	0.2%	9	8
<b>Australia</b>	87.5	107.1	125.7	-0.9%	7	9
<b>Thailand</b>	30.7	63.7	117.6	5.5%	11	10
<b>Taiwan</b>	49.7	87.1	109.4	-0.6%	10	11
<b>Singapore</b>	23.4	37.7	74	-0.2%	13	12
<b>Pakistan</b>	27.8	44.3	69.3	1.4%	12	13
<b>Hong Kong</b>	11.8	16.1	28.1	-2.0%	14	14
<b>World</b>	8,110.1	9,339.2	12,476.6	1.8%	N/A	N/A

SOURCE: BP plc, "BP Statistical Review of World Energy," June 2013, 41.

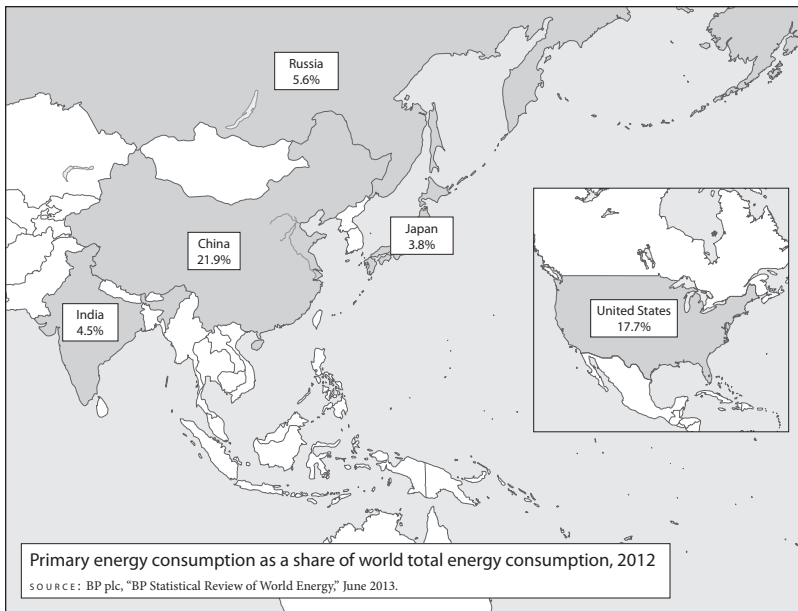


TABLE 8 Primary energy consumption by fuel type

	2012 energy consumption by fuel type (%)					
	Oil	Gas	Coal	Nuclear	Hydro	Renewables
<b>China</b>	17.7%	4.7%	68.5%	0.8%	7.1%	1.2%
<b>Hong Kong</b>	3.2%	0.4%	1.3%	–	–	1.9%
<b>India</b>	30.5%	8.7%	52.9%	1.3%	4.6%	1.9%
<b>Indonesia</b>	44.9%	20.2%	31.6%	–	1.8%	1.4%
<b>Iran</b>	38.3%	60.0%	0.4%	0.1%	1.2%	<
<b>Japan</b>	45.6%	22.0%	26.0%	0.9%	3.8%	1.7%
<b>Kazakhstan</b>	22.0%	14.6%	60.2%	–	3.1%	–
<b>Malaysia</b>	39.1%	39.3%	18.7%	–	2.4%	–
<b>Pakistan</b>	28.9%	53.8%	6.2%	1.9%	9.2%	<
<b>Philippines</b>	43.0%	10.3%	31.1%	–	8.3%	7.6%
<b>Russia</b>	21.2%	54.0%	13.5%	5.8%	5.4%	0.0%
<b>Singapore</b>	89.5%	10.1%	–	–	–	0.4%
<b>South Korea</b>	40.1%	16.6%	30.2%	12.5%	0.3%	0.3%
<b>Taiwan</b>	38.6%	13.4%	37.6%	8.3%	1.1%	1.0%
<b>Thailand</b>	44.6%	39.2%	13.6%	–	1.7%	1.0%
<b>United States</b>	37.1%	29.6%	19.8%	8.3%	2.9%	2.3%
<b>Vietnam</b>	31.9%	16.3%	28.7%	–	22.9%	<

SOURCE: BP plc, "BP Statistical Review of World Energy," June, 2013.

NOTE: Due to rounding, some totals may not add up to exactly 100%. Dash indicates that no data is available. Angle bracket indicates that value is less than 0.05%.

## Security Challenges

Asia's nominal defense expenditures rose from \$268.4 billion in 2011 to \$287.4 billion in 2012, exceeding European defense spending for the second consecutive year. IHS Jane's anticipates that Asia's combined defense expenditures will outpace U.S. defense spending by 2021.

- U.S. forces increased cooperation with allies and partners. The Philippines agreed to reopen Subic Bay and Clark Air Force Base to U.S. rotational deployments, while Australia welcomed a second detachment of marines to Darwin. The first forward-deployed littoral combat ship, the USS *Freedom*, arrived in Singapore in April 2013.
- China announced a defense budget of \$114 billion for 2013, a 10.7% nominal increase over 2012's figure. The U.S. Department of Defense estimates that China's actual military spending in 2012 was between \$135 and \$215 billion.
- Sequestration requires the U.S. Department of Defense to reduce FY2013 spending by \$41 billion, or 6.5%. Over ten years, sequestration will cut about \$500 billion from the defense budget, on top of the scheduled \$487 billion in spending cuts over the next decade.

TABLE 9 Armed forces

	Armed forces (th)				Rank	
	1990	2000	2013	2012–13 change (th)	1990	2013
<b>China</b>	3,030	2,470	2,285	2,229	2	1
<b>United States</b>	2,118	1,366	1,520	-765	3	2
<b>India</b>	1,262	1,303	1,325	135	4	3
<b>North Korea</b>	1,111	1,082	1,190	888	5	4
<b>Russia</b>	3,988	1,004	845	322	1	5
<b>South Korea</b>	750	683	655	407	7	6
<b>Pakistan</b>	550	612	642	533	8	7
<b>Iran</b>	504	513	523	117	9	8
<b>Vietnam</b>	1,052	484	482	-677	6	9
<b>Myanmar</b>	230	344	406	-236	14	10
<b>Indonesia</b>	283	297	396	-561	11	11
<b>Thailand</b>	283	301	361	288	11	12
<b>Taiwan</b>	370	370	290	-365	10	13
<b>Japan</b>	249	237	247	-43	13	14
<b>Singapore</b>	55	60	73	-1,253	16	15
<b>Australia</b>	68	50	57	-425	15	16

SOURCE: International Institute of Strategic Studies, *The Military Balance*, various editions.

NOTE: Active duty and military personnel only. Data value for Russia in 1990 includes all territories of the Soviet Union.

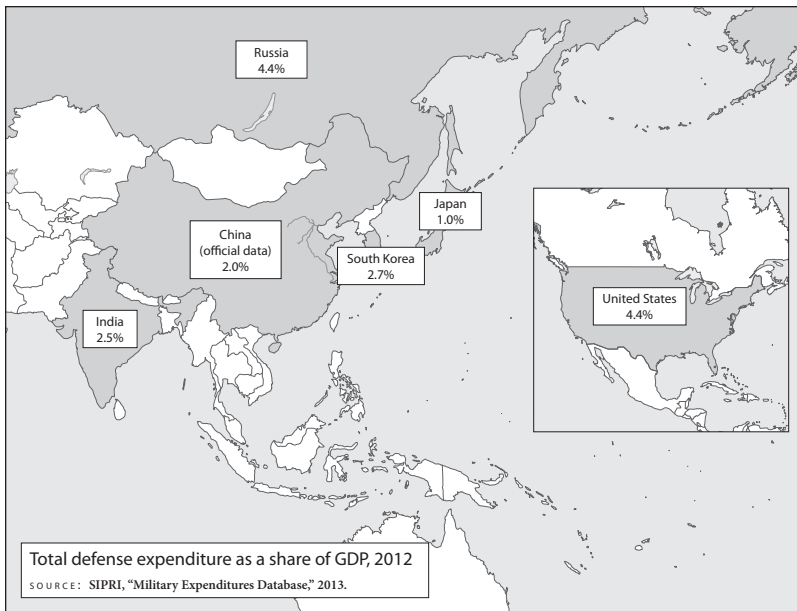


TABLE 10 Total defense expenditures

	Expenditure (\$bn)				Rank	
	2000	2011	2012	2011–12 growth (%)	2000	2012
<b>United States</b>	394.2	711.4	668.8	-6.0%	1	1
<b>China (official)</b>	37.0	91.5	106.0	11.2%	3	2
<b>China (DoD estimate)</b>	–	120–80	135–215	12.9%–19.4%	–	2
<b>Russia</b>	32.5	78.3	90.6	15.7%	4	3
<b>Japan</b>	60.3	59.6	59.2	-0.6%	2	4
<b>India</b>	27.7	49.6	48.3	-2.8%	5	5
<b>South Korea</b>	20.0	30.9	31.5	1.9%	6	6
<b>Australia</b>	18.0	26.6	25.6	-4.0%	7	7
<b>Taiwan</b>	10.4	10	10.5	5.2%	8	8
<b>Singapore</b>	7.3	9.2	9.2	0.3%	9	9
<b>Indonesia</b>	–	5.7	7.0	23.5%	–	10
<b>Pakistan</b>	4.6	6.5	6.6	1.3%	10	11
<b>Thailand</b>	3.2	5.5	5.3	-3.4%	11	12
<b>Malaysia</b>	2.4	4.8	4.7	-3.0%	12	13
<b>Vietnam</b>	–	2.7	3.4	26.5%	–	14
<b>Philippines</b>	2.2	2.7	2.8	4.2%	13	15

SOURCE: Stockholm International Peace Research Institute (SIPRI), "Military Expenditures Database," and Office of the Secretary of Defense (OSD), *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China*, various editions.

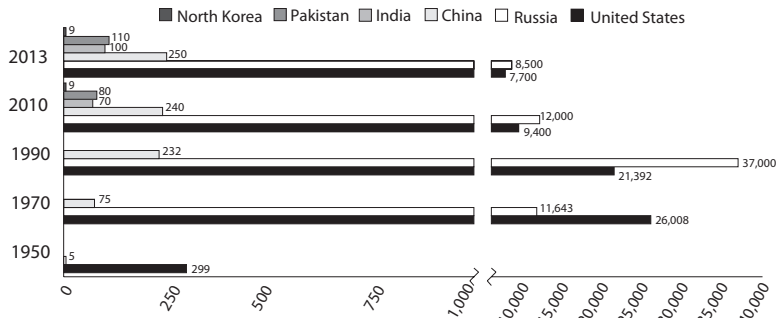
NOTE: Dash indicates that no data is available.

## Nuclear Arms and Nonproliferation

In a June 2013 speech, President Obama reiterated his commitment to a nuclear-free future. However, Russia, China, India, Pakistan, and North Korea are all expanding or modernizing their nuclear capabilities.

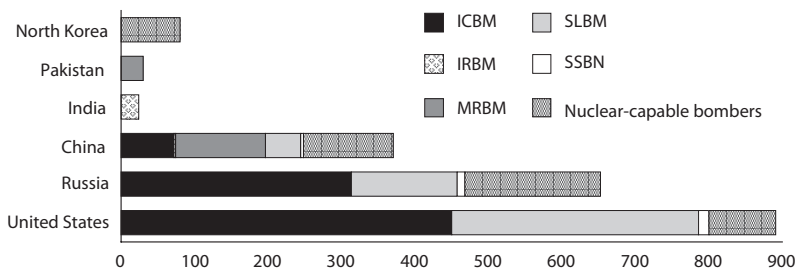
- North Korea conducted its third nuclear weapons test in February 2013. The device's yield was estimated to be 6–7 kilotons—roughly twice that of its last tested device in 2009.
- According to the International Atomic Energy Agency, although Iran has boosted its uranium-production capabilities, it has not yet crossed Israeli prime minister Benjamin Netanyahu's 2012 “red line.”
- In April 2013, within five days of each other, India and Pakistan successfully tested intermediate-range ballistic missiles capable of carrying nuclear or conventional warheads.
- Russia's first new Borei-class ballistic missile submarine (SSBN), the *Yury Dolgoruky*, was commissioned in January 2013. Russia intends to field ten Borei-class SSBNs by 2020, each capable of carrying sixteen to twenty nuclear missiles.

FIGURE 1 Nuclear warhead stockpiles by country and year



SOURCE: Robert S. Norris and Hans M. Kristensen, “Global Nuclear Weapons Inventories, 1945–2010,” *Bulletin of the Atomic Scientists* 66, no. 4 (2010): 77–83; and Federation of American Scientists, “Status of World Nuclear Forces,” 2013.

FIGURE 2 Nuclear weapons–capable platforms and delivery systems by country



SOURCE: IISS, *The Military Balance*, 2013; “North Korea's Nuclear and Ballistic Missile Programs,” Center for Arms Control and Non-Proliferation, July 2013; and OSD, *Annual Report to Congress* (2012).

NOTE: North Korea has working MRBMs but has not created a nuclear device capable of missile delivery. China's SLBMs are not thought to be operational. India and Pakistan are both testing IRBM-range missiles. All the countries in Figure 2 except India possess nuclear-capable cruise missiles.

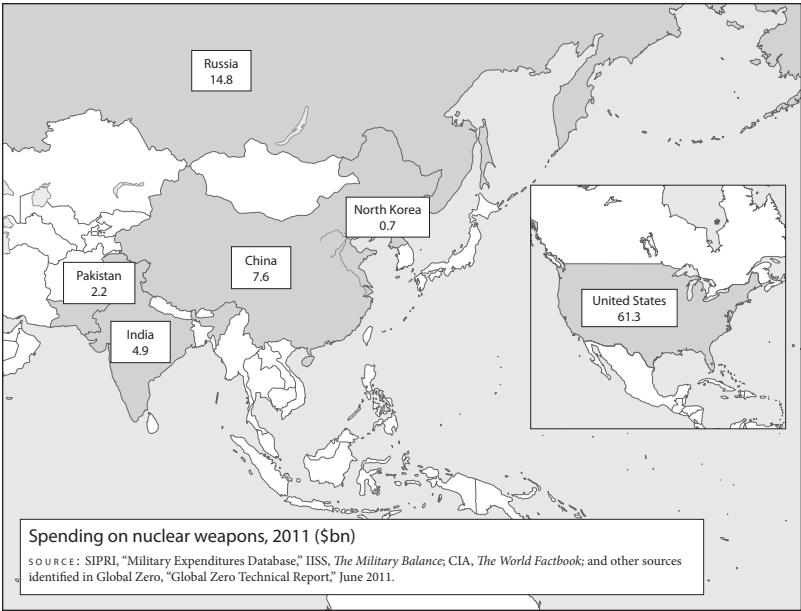


TABLE 11 Nonproliferation treaties

	NPT	Additional Protocol	CTBT	CWC	BTWC
<b>Russia</b>	Ratified	In force	Ratified	Ratified	Ratified
<b>United States</b>	Ratified	In force	Signatory	Ratified	Ratified
<b>China</b>	Acceded	In force	Signatory	Ratified	Acceded
<b>India</b>	–	Signatory	–	Ratified	Ratified
<b>Pakistan</b>	–	–	–	Ratified	Ratified
<b>North Korea</b>	Withdrew	–	–	–	Acceded

SOURCE: International Atomic Energy Agency; United Nations Office of Disarmament Affairs; Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization; and Organisation for the Prohibition of Chemical Weapons.

NOTE: NPT = Nuclear Non-Proliferation Treaty. Additional Protocol = IAEA Additional Protocol. CTBT = Comprehensive Nuclear-Test-Ban Treaty. CWC = Chemical Weapons Convention. BTWC = Biological and Toxic Weapons Convention. Dash indicates nonparticipation.

TABLE 12 WMD-export control regimes

	Nuclear Suppliers Group	Australia Group	Wassenaar Arrangement	Zangger Committee	MTCR
<b>United States</b>	Member	Member	Member	Member	Member
<b>Russia</b>	Member	–	Member	Member	Member
<b>China</b>	Member	–	–	Member	–
<b>India</b>	–	–	–	–	–
<b>Pakistan</b>	–	–	–	–	–
<b>North Korea</b>	–	–	–	–	–

SOURCE: Nuclear Threat Initiative; and Monterey Institute of International Studies.

NOTE: Dash indicates nonparticipation.