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The Trends That Are Shaping Our Future

Economy and Strain on Environment Both Grow

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In 2006, the gross world product (GWP)—the aggregated total of all finished goods and services produced worldwide—increased 3.9 percent to $65.1 trillion (in 2006 dollars).[1] (See Figure 1.) This estimate reflects real purchasing power in countries (that is, in purchasing power parity or PPP terms). The market exchange rate GWP, which is based on actual monetary terms, reached $47.8 trillion in 2006, an increase of 4.7 percent.[2] Growth of GWP (PPP) in 2006 was slightly less than the 4.0-percent increase in 2005 but about 0.4 percent higher than the average growth seen since 1971.[3]

China accounted for over one third of the $2.5 trillion in growth in 2006.[4] The Chinese economy was once again the fastest growing in the world, with its gross domestic product (GDP) jumping 8.8 percent, driven mainly by high levels of investment and exports.[5] Yet analysts increasingly question whether China can sustain this growth, as the benefits have been distributed unequally and have also created significant environmental problems.[6] In 2006, accidents triggering pollution that the Chinese government considered "serious" occurred almost every other day on average.[7]

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Sub-Saharan Africa, the Middle East, and Russia and the former states of the Soviet Union also grew at a fast clip, of 5.1 percent, 4.2 percent, and 5.1 percent respectively.[8] This growth primarily stemmed from strong net exports of commodities, particularly oil and natural gas and, in sub-Saharan Africa, metals.[9]

The U.S. economy, accounting for 20 percent of GWP, grew 2.7 percent in 2006.[10] The United States thrived in the first quarter, but high fuel prices, sluggish job growth, and a weakening housing market slowed economic expansion later.[11] With continued cooling of the housing market, consumer demand and economic growth are expected to slow further in 2007.[12]

The European Union also accounted for 20 percent of GWP in 2006.[13] Its economy grew 1.5 percent, primarily driven by domestic spending and investment.[14] Job growth in the United Kingdom and consumer demand in Germany contributed to this increase.[15] Japan grew at 1.3 percent in 2006, with strong domestic demand offset by a reduction in public investment and net exports.[16]

Per capita GWP also increased in 2006, to $9,975.[17] This is a growth of 2.7 percent—less than total GWP growth because world population increased by 77 million people.[18] Yet GWP per capita does not reflect the vast disparity in GDP per person—even when these figures are in purchasing power parity terms. In the United States GDP is $43,356 per person and in Japan it is $31,924, for example, while in China the figure is $8,005 and in India it is $3,546.[19]

GDP is a poor measure of economic progress, as it counts all monetary expenditures as positive—whether the money is spent on useful goods, such as food or durables, or on mitigating social ills that could have been prevented. The U.S. nongovernmental organization Redefining Progress designed the Genuine Progress Indicator (GPI), a measure that better analyzes economic progress by subtracting out pollution and resource degradation, crime, and other economic ills while adding in unmeasured benefits like volunteer work and parenting.[20] While U.S. GDP per capita has nearly doubled since 1970, the GPI grew just 15 percent.[21] (See Figure 2.)

Clearly, economic priorities must change, as over 60 percent of ecosystem services are being degraded or used unsustainably.[22] The "ecological footprint" of global society—a measurement that calculates the amount of land and sea area needed to produce resources, absorb wastes, and provide space for infrastructure, such as roads and buildings—is also increasing each year, with a jump of 2.5 percent in 2003.[23] (See Figure 3.)

This most recent measurement shows that humans currently use the resources of 1.25 Earths and are thus depleting the ecological capital on which future populations will depend.[24] As economic growth accelerates in both high-income and low-income countries, so does the depletion of ecological capital. Indeed, at the current consumption levels of high-income countries, the world could only sustainably support 1.75 billion people, not the 6.5 billion living on Earth today.[25]

Figure 1. Gross World Product, 1970–2006

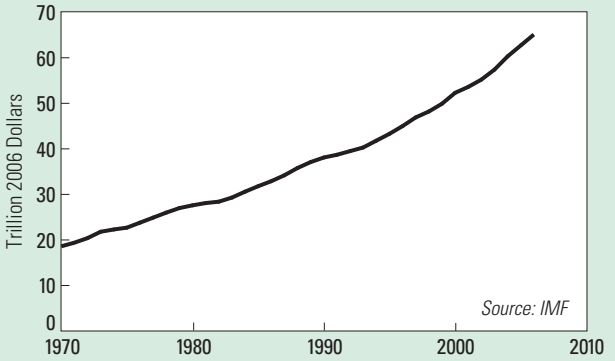


Figure 2. GDP and GPI Per Person, United States, 1950–2004

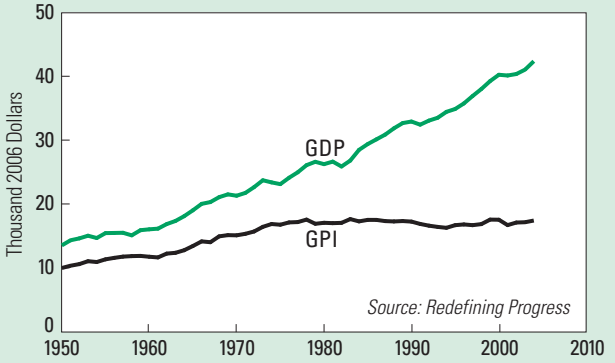
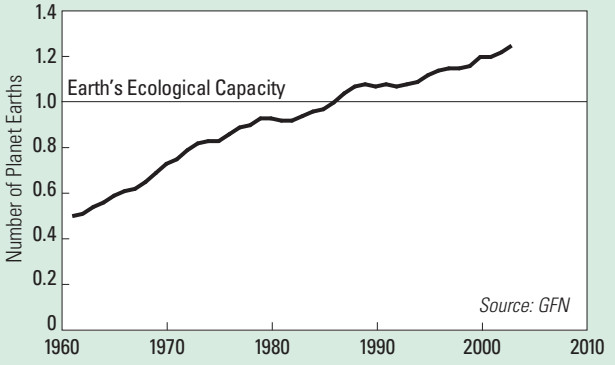


Figure 3. Humanity's Ecological Footprint, 1961–2003



Gross World Product, 1970–2006

Year	Total	Per Capita
	(trill. 2006 dollars)	(2006 dollars)
1970	18.6	5,006
1971	19.4	5,124
1972	20.4	5,281
1973	21.8	5,530
1974	22.3	5,568
1975	22.7	5,561
1976	23.8	5,731
1977	24.9	5,881
1978	26.0	6,049
1979	27.0	6,167
1980	27.6	6,200
1981	28.1	6,223
1982	28.4	6,176
1983	29.3	6,252
1984	30.6	6,434
1985	31.8	6,561
1986	32.9	6,683
1987	34.2	6,821
1988	35.8	7,016
1989	37.1	7,151
1990	38.1	7,225
1991	38.7	7,220
1992	39.5	7,255
1993	40.3	7,306
1994	41.8	7,458
1995	43.3	7,614
1996	45.0	7,814
1997	46.9	8,034
1998	48.2	8,141
1999	49.9	8,327
2000	52.3	8,611
2001	53.6	8,719
2002	55.2	8,873
2003	57.4	9,110
2004	60.3	9,452
2005	62.7	9,712
2006 (prel)	65.1	9,975

Source: IMF.

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