

# Excessive Consumption -- America's Real Addiction

Contributed by Chris Clugston  
20 October 2007

Editor's note: Chris Clugston presents here a "part two" to his article in Culture Change in September on our society's "Overextension." This new installment begins carefully and logically, but do not assume you know what he's going to offer, or that some concepts have already been said and can be sloughed off. His basic premise is disturbing and most challenging: "Terminating our addiction to excessive consumption would involve painful withdrawal symptoms: significant living standard disruptions -- material living standard degradation and/or population level reductions, which we consider to be 'unacceptable.'" Chris does his numerical homework on these issues. - JL

America is overextended, ecologically and economically -- we have exceeded the capacity of our habitat to sustainably support our existing population at our current standard of living. Our overextended condition is caused by our addiction to excessive consumption -- living beyond our means in order to perpetuate our American way of life.

Unfortunately, neither our addiction to excessive consumption nor our American way of life is sustainable. As the evidence presented in the following article clearly demonstrates, we, both individually and collectively, are the problem; we must be the solution.

"What we've got going here are the elements of a perfect storm, a potent mix of ignorance, apathy, and inaction throughout large parts of American society. Our current indifference to fiscal discipline and these other major challenges can't continue. If it does, a crisis isn't a matter of 'if' but 'when' and 'how bad.'" - David M. Walker, Comptroller General of the United States, 2006.

## Excessive Consumption

We have chosen to "live better today" at the expense of our tomorrows, and our children's tomorrows, by depleting our reserves, borrowing imprudently, deferring critical investments, and relying excessively on foreign resources.

Our cherished American way of life is enabled by excessive consumption, the dysfunctional behavior through which we live beyond our means in order to perpetuate our inflated lifestyles. Excessive consumption does not mean that we are consuming more than we need, which is probably also true in most cases; it means that we are consuming at levels that are NOT sustainable.

Excessive consumption is a self-induced societal disorder -- a societal addiction. Every American is addicted to excessive consumption; we are all living beyond our means -- most of us individually, all of us collectively, as the beneficiaries of the excesses perpetrated on our behalf by our political and economic representatives.

We became addicted to excessive consumption by permitting ourselves to be seduced by seemingly unlimited supplies of cheap and abundant fossil fuels and other critical natural resources; a seemingly endlessly forgiving planet; a continuous barrage of "institutional misinformation"; easy credit; and seemingly infinite supplies of cheap foreign consumer goods, labor, and financing.

We remain addicted to excessive consumption because upon experiencing the euphoria associated with living beyond our means, continuously "spending more than we earn", we have been unwilling to "kick our habit" and revert to living sustainably within our means. Terminating our addiction to excessive consumption would involve painful withdrawal symptoms: significant living standard disruptions -- material living standard degradation and/or population level reductions, which we consider to be "unacceptable".

## Indiscretions

The physical manifestations associated with excessive consumption are the ecological and economic indiscretions that

enable us to live, for now, beyond our means.

Our blind adherence to our American way of life creates ongoing conflicts between our insatiable wants and expectations (demand), and the limited natural resources and economic purchasing capacity available to satisfy our wants and expectations (supply). The resulting demand/supply imbalances negatively impact our "current" consumption level -- that is, our desired consumption level at any given time always exceeds the consumption level available to us by living sustainably within our means.

### Indiscretions Enable Elevated Consumption

Throughout our country's history, but increasingly over the past several generations, we have chosen to resolve these demand/supply imbalances by committing ecological and economic indiscretions -- unsustainable expedients that elevate our "current" consumption level at the expense of our future wellbeing.

Indiscretions have enabled Americans to elevate our consumption levels since the earliest European settlers appropriated land from the Native Americans and imported African slaves. Ecological indiscretions soon followed as American pioneers and their successors exploited, then over-exploited, our abundant -- and perceived-to-be-limitless -- fossil fuel deposits, mineral deposits, forests, fisheries, air, land, and water.

During the 20th century, economic indiscretions increasingly supplemented our ecological indiscretions, as our population and its insatiable appetites continued to expand unabated and our once-thought-limitless natural resource reserves proved to be otherwise.

### Ecological Indiscretions

Ecological indiscretions enable us to elevate our current consumption level by degrading our environment and by drawing down our renewable and nonrenewable natural resource reserves. Specifically:

**Environmental Degradation:** disposing of our wastes into the air, water, and land, thereby avoiding the costs associated with their proper disposal.

**Renewable Natural Resource Drawdown:** consuming our renewable natural resource reserves at rates that exceed those at which they can be replenished.

**Nonrenewable Natural Resource Drawdown:** consuming our finite and irreplaceable natural resource reserves -- that can never be replenished.

### Economic Indiscretions

Economic indiscretions enable us to elevate our current consumption level by creating "phantom" purchasing capacity -- incremental financial resources that enable us to obtain additional goods and services today, at the expense of our future wellbeing. Specifically:

**Asset Reserve Depletion:** depleting our financial asset reserves at rates that exceed those at which we are willing or able to replenish them.

**Imprudent Debt:** incurring unsecured and questionably secured debt against our future and our children's future.

Deferred Debt Repayment: incurring debts at levels that exceed those at which we are willing or able to discharge them.

Deferred Critical Investments: postponing financial investments critical to our future wellbeing until some unspecified time in the future.

Foreign Reliance: depending upon foreign entities, some potentially adversarial, to enable an increasingly larger portion of our day-to-day existence.

### Specific Indiscretions

Following are specific examples of the ecological and economic indiscretions that we have committed and continue to commit -- individually and collectively -- in order to perpetuate our American way of life.

### Ecological Indiscretions

"Human activity is putting such strain on the natural functions of Earth that the ability of the planet's ecosystems to sustain future generations can no longer be taken for granted." [United Nations "Millennium Ecosystem Assessment", 2005]

"Despite the wealth of technologies, human resources, policy options, and technical and scientific information at our disposal, humankind has yet to break decisively with unsustainable and environmentally unsound policies and practices." [Kofi Annan, Secretary General of the United Nations, 2003]

### Environmental Degradation and Renewable Resource Drawdown

#### Air Pollution

- Greenhouse Gas Emissions -- total US greenhouse gas emissions increased from 6.1 billion metric tons in 1990 to 7.1 billion metric tons in 2005 -- about the same weight as 2.4 billion Hummers, over 50,000 pounds per US citizen (of gas!). (EIA, 2005)
- Carbon Dioxide Emissions -- total US carbon dioxide emissions increased from 5 billion metric tons in 1990 to 5.9 billion metric tons in 2004, and are projected to increase to 8 billion metric tons by 2030 -- the Kyoto goal is to achieve 1990 emission levels. (EIA, 2007)
- Air Pollution Deaths -- 2% of all US deaths can be attributed to air pollution. (UN, 2003)

#### Water Pollution and Depletion

- Water Quality -- approximately 40% of US streams, 45% of US lakes, and 50% of US estuaries are not clean enough to support uses such as fishing and swimming. (EPA, 2000)
- Water Quantity -- during the 20th century, approximately 200 trillion gallons of groundwater were depleted from US aquifers -- enough to fill over 8.3 billion backyard in-ground swimming pools. (Konikow and Kendy, 2005)

#### Land Erosion, Depletion, Loss, and Contamination

- Soil Erosion -- water and wind erosion on US soils during 2003 totaled over 1.7 billion tons -- roughly equivalent to 350 million truckloads; 28% of US cropland was eroding above soil loss tolerance rates. (DOA, 2003)

- Land Loss -- rural US land lost to development between 1982 and 1997 was approximately 39,000 square miles—about the size of Maine and New Hampshire combined. (NumbersUSA, 2007)
- Soil Depletion -- soil on the average US farm is 85% depleted in essential nutrients as compared to 100 years ago. (Clark, 2006)
- Wetlands -- during the past four centuries, over half of all US fresh and saltwater wetlands -- more than 110 million acres (an area larger than California -- have been lost to development. (US Commission on Ocean Policy, 2004)
- Toxic Wastes -- the number of US sites requiring soil clean up exceeds 200,000 -- at a cost of \$10,000 to several \$million per site. (Wikipedia, 2007)

#### Fishery Loss and Contamination

- Overfishing -- of the 267 major US fish stocks, 20% are either overfished, experiencing overfishing, or are approaching an overfished condition. (Grinning Planet, 2005)
- Fishery Quality -- approximately 23% of US estuarine areas are impaired for swimming, fishing, or supporting marine species. (US Commission on Ocean Policy, 2004: 2)

#### Forest Degradation

- Forest Loss -- the US lost over 4,100 square miles of primary forest per year between 2000 and 2005 -- an area larger than Delaware and Rhode Island combined; and ranks number 7 worldwide in annual primary forest loss -- worst among developed nations. (FAO, 2005)

#### Nonrenewable Natural Resource Drawdown

##### Fossil Fuel Depletion

- Oil Usage -- with less than 5% of the world's population, the US consumes approximately 7.6 billion barrels of "oil" (total liquids) per year—25% of the world total; 2/3 of which is imported. (EIA, 2007)
- Oil Production Peak -- US oil production peaked in 1970; world crude oil production may have peaked in May 2005. (Morton, 2007) [Editor's note: 2006 is the latest assessment circulated in Germany and the U.K. for global peak of oil extraction]
- Natural Gas Usage -- the US consumes nearly 23 trillion cubic feet of natural gas per year -- 22% of the world total; 15% of which is imported. (EIA, 2007:2)
- Natural Gas Production Peak -- US natural gas production has peaked; world natural gas production peak is likely to occur by 2030. (Exxon, 2005; Laherrere, 2004)
- Coal Production Peak -- world coal production peak could occur by 2030. (Vaux, 2004; EWG, 2007)

#### Ore and Mineral Depletion

- Critical Mineral Supplies -- of the 40 minerals considered essential to adequate US defense and a strong US economy, we import at least half of over 20 of these minerals -- chromium, cobalt, manganese, the platinum group, and titanium have been labeled "the metallurgical Achilles' heel of our civilization". (Gaston, 2001; MII, 1996)
- Critical Mineral Suppliers -- of the 47 major non-fuel minerals imported by the US, 12 are not available from countries in the Western Hemisphere. (Eulenstein, 1979)
- Mineral Production Peak -- approximately 3/4 of the metals produced in the US are past their production peaks; the

same is true for 1/4 of the metals produced worldwide. (Roper, 1976)

## Economic Indiscretions

"...the long term fiscal outlook remains essentially the same and is clearly unsustainable -- ever-larger deficits lead to a federal debt burden that ultimately spirals out of control." - US Government Accountability Office; "The Nation's Long Term Fiscal Outlook; August 2007 Update"

"...the basic principle still holds that if a country lives significantly beyond its means now, it is likely to have a lower standard of living in the future than would otherwise have been attainable. In recent years, we in the United States have arguably been spending beyond our means." - Federal Reserve Bank of Boston 2004 Annual Report: "Living Beyond Our Means"

## Asset Reserve Depletion

- Negative Personal Savings Rate -- for the first time since the Great Depression, American personal savings rates have been negative for two years in a row -- historical US savings rates have averaged 8+% of disposable personal income. (Federal Reserve, 2007)
- Home Equity Drawdown -- the average percentage of equity held by American home owners has declined from 64%-69% historically to 52% in 2006. (Federal Reserve, 2007:2)

## Imprudent Debt

### Historically Unprecedented US Debt Levels

- Total US Debt -- total American credit market debt at the end of 2006 exceeded \$44 trillion -- 3.4 times the size of the US economy (GDP -- nearly \$150,000 per US citizen. (Federal Reserve, 2007:3)
- Total Household Sector Debt -- total American household sector debt stood at \$12.9 trillion at the end of 2006 -- nearly 3 times its 1995 level. (Federal Reserve, 2007:4)
- Credit Card Debt -- total American credit card debt was \$876 billion at the end of 2006 -- two times its 1995 level. (Federal Reserve, 2007:5)
- Home Equity Debt -- total American home equity loans outstanding stood at \$1.1 trillion at the end of 2006 -- four times the 1995 level. (Federal Reserve, 2007:6)

### Historically Unprecedented US Government Debt Levels

- State and Local Government Debt -- American state and local government debt stood at over \$2 trillion at the end of 2006 -- almost twice the 1995 level. (Federal Reserve, 2007:7)
- Federal Government Debt -- American federal government debt exceeded \$9 trillion at the end of September -- approximately \$30,000 per US citizen. (Treasury Direct, 2007; US Debt Clock, 2007)

## Deferred Critical Investments

- Underfunded "Big 3" Federal Entitlement Programs -- US GAO estimates regarding the total unfunded obligation associated with Social Security, Medicare, and Medicaid ranged from \$31 trillion to \$54 trillion at the end of 2006 -- \$100,000 to \$180,000 per US citizen -- up nearly 200% since 2000. (GAO, 2007)
- Underfunded Government and Corporate Pensions -- the total unfunded obligation associated with US federal, state, and corporate pension plans was approximately \$5 trillion in 2006. (Wyss, 2006)

## Foreign Dependence

- Negative US Trade Balance -- America imported \$762 billion more goods and services than we exported in 2006 -- up from a \$92 billion differential in 1995. (Federal Reserve, 2007:8)
- Foreign US Asset Ownership -- foreigners owned \$2.5 trillion more in US assets than Americans owned in foreign assets at the end of 2006 -- five times greater than the 1995 differential; Amerika is now the largest debtor nation in the world. (BEA, 2007)

## Implications Associated with Our Addiction to Excessive Consumption

Should we fail to reconcile voluntarily the "infiniteness" associated with our material wants and expectations with the "finiteness" associated with the earth's natural resources and derivative economic resources -- thereby remaining addicted to excessive consumption -- we will reach one or more limits. That is, either the sources of our ecological and economic indiscretions will no longer be willing or able to support our continued profligacy, or the consequences associated with our indiscretions will simply overwhelm us.

Upon reaching one or more limits, we will experience a contraction, which will cause significant and unavoidable disruptions to our American way of life -- material living standard degradation, population reduction, and possible loss of sovereignty.

## Contraction

To date, we have been unwilling to acknowledge our perilous and unsustainable situation; much less have we been willing to take meaningful action to address it, even in the face of overwhelming evidence regarding the disastrous consequences associated with inaction -- as the window of opportunity, during which the resources required to take meaningful action are still available, continues to close.

While the specific scenario associated with our impending contraction cannot be known with certainty, it is safe to say that in the likely event of an apocalyptic contraction, American life will approximate a Hobbsian state of nature: "solitary, poor, nasty, brutish and short".

\* \* \* \* \*

## References

EIA (2005). "Emissions of Greenhouse Gases in the US 2005", page x.

<ftp://ftp.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/ggrpt/057305.pdf>

EIA (2007). "International Energy Outlook 2007".

[eia.doe.gov/oiaf/ieo/excel/ieoreftab\\_10.xls](http://eia.doe.gov/oiaf/ieo/excel/ieoreftab_10.xls)

UN (2003). "United Nations Environmental Programme, "Global Environmental Outlook-3; North America Fact Sheet", page 3.

[grid.unep.ch/geo/pdfs/GEO-3%20Fact%20sheet%20N%20America.pdf](http://grid.unep.ch/geo/pdfs/GEO-3%20Fact%20sheet%20N%20America.pdf)

EPA (2000). "National Water Quality Inventory 2000 – Fact Sheet", page 1.

[epa.gov/305b/2000report/factsheet.pdf](http://epa.gov/305b/2000report/factsheet.pdf)

Konikow, L.F. and Kendy, E. (2005). "Groundwater depletion: A global problem"; Hydrogeology Journal, v. 13, p. 317-320. h

[water.usgs.gov/nrp/proj.bib/Publications/konikow.kendy.2005intro.html](http://water.usgs.gov/nrp/proj.bib/Publications/konikow.kendy.2005intro.html)

DOA (2003). "Natural Resource Inventory, 2003 Annual NRI".

[nrcs.usda.gov/Technical/land/nri03/nri03eros-mrb.html](http://nrcs.usda.gov/Technical/land/nri03/nri03eros-mrb.html)

NumbersUSA (2007). "Farmland"; from Natural Resources Conservation Service (NRCS).