

Hysteria Over Iran and a New Cold War with Russia: Peak Oil, Petrocurrencies and the Emerging Multi-Polar World

By William Clark

December 22, 2006

Introduction: [Hegemony](#)

[Pursuit of Global Hegemony and Imperial Overstretch](#)

Part I. [Why Petrocurrencies Matter: Macroeconomic Effects of a Monopoly Petrodollar](#)

[1. Petrodollar Recycling and the Funding of the US Current Account Deficit](#)

[2. US versus Global Currency Risk for Imported Oil](#)

[3. US versus Global Gasoline Taxation Levels](#)

[4. Net Effect of the Monopoly Petrodollar Recycling System](#)

[The EU and OPEC on Petroeuros](#)

[Critics of the Petroeuro Challenge to the Petrodollar Supremacy](#)

Part II. [Manifest Subterfuge Déjà Vu: Unfolding Disinformation Campaign against Iran](#)

[Iran's Oil Bourse and Washington's Economic War to Undermine It](#)

Part III. [Russia's Geopolitical Posturing for Energy Superstate Status](#)

[Cold War Part II: Introducing Russian Petrorubles](#)

Part IV. [Asia: An Emerging Pole of Global Power](#)

[Shanghai Petroleum Bourse Re-opens: China Enters the Fray](#)

Part V. [Recommended Reforms: Escaping the Destiny of Empires](#)

[Conclusion](#)

[References](#)

Hysteria Over Iran and a New Cold War with Russia: Peak Oil, Petrocurrencies and the Emerging Multi-Polar World

Hegemony, \He*gem`o*ny\, noun \Greek hegemonia, fr. [Hegemonia leader, fr. Hegeisthai to lead] – preponderant influence or authority especially of one nation over others

— Webster's Ninth New Collegiate Dictionary

Who controls the food supply controls the people; who controls the energy can control whole continents; who controls money can control the world.

— Henry A. Kissinger [1]

It is crucial to the dollar's dominant role as a reserve currency that dollar pricing of oil should continue.

— Stephen Lewis, economist at London-based Monument Securities,
February 2005 [2]

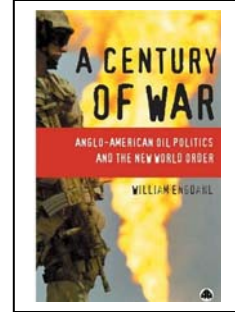
The 21st century will likely be defined by three overarching forces: climate change, Peak Oil, and macroeconomics. The twin issues of climate change and Peak Oil are intertwined variables, and each represent extremely important phenomena that have slowly gained some public awareness. However, the third issue, macroeconomics, and more specifically the global trends regarding petrocurrencies, remains essentially unreported by the five US corporate media conglomerates. Nonetheless, from Washington to Caracas, from London to Moscow, and from Beijing to Tehran, in order to fully appreciate contemporary geopolitics, it is important to recognize the underlying momentum towards multiple petrocurrencies — and the growing challenge to US dollar supremacy.

The hypothesis outlined in my book, *Petrodollar Warfare; Oil, Iraq and the Future of the Dollar*, is that the geopolitical landscape of this century is increasingly being driven by escalating competition for energy supplies before global oil production peaks, and the erosion of dollar hegemony and emergence of new petrocurrency alignments. [3] The tragic war in Iraq is in many ways the first oil-depletion and oil-currency war of the 21st century.

This essay explores disparate energy and economic alignments that are poised to produce a multi-polar world order manifestly different from the post-World War II era (i.e., bi-polar Cold War period followed by a uni-polar world order). What is not yet clear is whether today's unfolding energy, geopolitical, and macroeconomic alignments will ultimately produce a tri-polar distribution of global power or perhaps a quadri-polar world order. This deduction is based on multiple dynamics in the global political economy that are still somewhat fluid — but the underlying fissures are growing.

The principles of scientific research and empirical analysis tell us not to look for a single, isolated factor when studying the origins of any major change within a given environment. As noted by Jared Diamond in *Collapse: How Societies Choose to Fail or Succeed*, rarely is a major societal crisis triggered by a single isolated factor. [4] Likewise, contemporary geopolitically derived crises of the past century were most often the result of multiple but often disparate forces that coalesced to produce a conflict — with the underlying factors often involving strategic control of natural resources.

World War I provides a historical example of this universal law. The assassination in 1914 of Archduke Ferdinand does not adequately explain the multiple factors precipitating that War. As revealed in William Engdahl's *A Century of War: Anglo-American Oil Politics and the New World Order*, the rationale for England declaring war against Austria-Germany was rooted in the economics of a declining British empire and London's desperate desire to prevent Germany from gaining direct overland access via the Berlin-to-Baghdad railroad of the petroleum resources in what is now Iraq. [5] Other 20th century examples of multiple forces colliding to produce global crises include the Great Depression, World War II, and the twin oil shocks of the 1970s.



Turning to today's complex geopolitical tensions, readers should not ascribe a one-dimensional perspective to the geopolitics surrounding the "Iranian nuclear crisis." While the overt causes of this particular conflict are politically derived and thus are largely manufactured, the underlying forces driving geopolitical tensions between the US and Iran should more properly be viewed from the perspective of debt-based monetary policies and the immutable laws of geophysics.

The structural imbalances in the global economy, which are being exacerbated by the weak US dollar, mounting US trade deficits, and the emerging liquid fuel energy crisis that will inexorably follow the peak in global oil production, are not exceptions to the universal law that multiple independent factors can and will interact to produce new and unpredictable crises. The hypothesis outlined in this essay is that the post-World War II status of the US dollar as premier world reserve currency is quietly but assuredly eroding. There are three key variables to analyze concerning the changing status of the dollar's reserve role in the global financial system:

1. Central banks may shift their reserves out of dollars (e.g. into euros, Asian currencies, etc.)
2. The Asian currencies could end their pegs to the US currency (e.g. China circa July 2005)
3. We could witness a breakdown in the pricing of commodities in dollars (e.g. a "basket of currencies" for global oil trade including the dollar, euro, ruble, renminbi and perhaps rial).

All three of these trends have become evident. Regarding the third item, the most important globally traded commodity is oil, and this is where erosion of the dollar's world reserve currency status is significant. This segues into the larger issue of geopolitics, and corresponding attempts by Washington to retain its hegemonic status as the world's sole superpower. Unfortunately, current US geostrategy is at odds with the interests of global stability: the two greatest challenges facing the world today are the need for global energy reform and monetary reform. The success or failure to create multilateral accords towards these two colossal undertakings will be the drivers of war and peace, and thereby define the human condition during the opening decades of the 21st century.

Pursuit of Global Hegemony and Imperial Overstretch

The thrust is clear: Once it has seized the oil wells of west Asia, the US will determine not only which firms would bag the deals, not only the currency in which oil trade would be denominated, not only the price of oil on the international market, but even the destination of the oil.

— "Behind the Invasion of Iraq," *Aspects of India's Economy*, 2002 [6]

Great Powers in relative decline instinctively respond by spending more on 'security,' and thereby divert potential resources from 'investment' and compound their long-term dilemma.

— Historian Paul Kennedy describing “imperial overstretch” in *The Rise and Fall of Great Powers* (1989) [7]

The opening years of this young century have exhibited a manifest weakening of US hegemony along the three dimensions of power: economically, politically, and militarily. On the economic front, the huge tax cuts of 2001 and 2003 have created unprecedented fiscal deterioration of the long-term budget solvency of the United States treasury. Within the Bush administration's first term the country went from a 10-year projected surplus of \$5.6 trillion in 2000 to a projected 10-year deficit in 2004 of \$5.9 trillion. [8] Nothing in world history compares to this \$11.5 trillion dollar reversal — yet Americans remain naively unaware of this unmitigated fiscal catastrophe.

On the domestic political front, the 2006 mid-term elections show that America is suffering from the divisive politics of the Bush/Cheney administration, and on the international front regarding both allies and adversaries; worldwide polling indicates the sharpest decline of US prestige in the post-War War II period [9]. The acrimony witnessed during the September 2006 UN conference in New York and followed by North Korea's decision to test a nuclear weapon in October 2006 are just two recent examples of the profound deterioration of US power and influence.

It is painfully clear that US military power and prestige has also become severely diminished due to the tragic quagmires of Iraq and Afghanistan. [10] In addition to the \$11.5 trillion reversal of long-term US budget solvency, the Congressional Budget Office has forecast that “staying the course” in Iraq will increase the deficit by an additional \$1.3 trillion over the next decade. [11]

Historians may record that it was the political climate following the September 11, 2001, terrorist attacks that allowed the Bush administration to overtly pursue such reckless and costly foreign policies. [12] Regrettably, the corporate US media has still failed to offer much-needed analysis that informs the American people of the imperial policies espoused by Project for a New American Century (PNAC), and the resulting international blowback in Europe and elsewhere that stems directly from the doctrine of overt US global domination. [13, 14]

Rather than review the rise of the neoconservatives and their exploitation of the 9/11 tragedy, this essay will outline their unembellished modus operandi — stripped of its Orwellian sloganeering about a “global war on terrorism” and the “spreading of democracy” via military force. The harsh reality driving the Bush/Cheney administration is a changing global energy landscape and macroeconomic developments that are converging to produce a multi-polar world. In an effort to reverse these global trends and thereby maintain US supremacy, the neoconservatives have aggressively pursued three intertwined goals, regardless of the massive cost in lives and treasure:

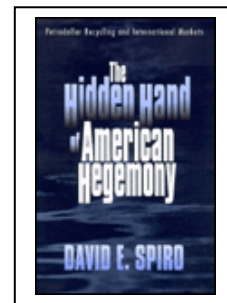
1. *Military control of the world's remaining oil and gas reserves, their associated pipelines, and the sea and land transit routes for these resources.* [15] The September 11 attacks provided the public pretext for an integrated US military-energy strategy manifested by the rapid expansion of new American military bases throughout the Middle East, Central Asia and West Africa and the establishment of NATO-friendly governments via so-called “color revolutions” on the periphery of Russia in an effort to gain strategic influence over the energy resources and pipelines in the Caspian region that feed Western Europe and East Asia. [16] In *The Sorrows of Empire*, Chalmers

Johnson describes the US as an “empire of bases,” including over 725 overseas military outposts in 120 countries, and military operations in 130 of the 189 nations listed by the UN. [17] In addition, the neoconservatives have a stated goal of militarizing and controlling outer space. They refer to this strategy as “Full Spectrum Dominance.”

2. *Financial control of the global economy.* US control of the world’s economy can be maintained only if the dollar remains the world’s premier reserve currency — a position strongly underpinned by its monopoly petrocurrency status and the attending macroeconomic benefits. The European Union and its euro currency pose the primary threat to dollar supremacy, so a strong and united EU with the euro as an alternative world reserve currency is incompatible with the neoconservatives’ stated goals of US global domination, which they refer to in their Orwellian phraseology as “American global leadership.” [18] However, recent developments portend the erosion of the dollar’s world reserve status with the emergence of a “basket of petrocurrencies” via international oil bourses in Iran, Russia and China.

3. *Maintenance of the petrodollar-recycling system.* The petrodollar-recycling system allows the Federal Reserve to effortlessly expand global credit to enforce US financial control and continue massive debt-financing to pay for US military control. If petrodollar-recycling begins to break down, then financial and military control will also begin to decline. Ergo, petrodollar recycling can not be allowed to diminish as it will undermine US supremacy. The major oil-producers that have expressed interest in petroeuros or a “basket of currencies” for oil transactions and thus pose the greatest threat have been Iraq (under Saddam), Iran, Venezuela and Russia. Iraq received regime change via a military invasion; Iran is the current target for economic and geostrategic reasons, Venezuela was subjected in April 2002 to an unsuccessful coup d’état with covert US backing, while Russia’s political establishment remains relatively insulated from US interventions. But Russia’s peripheral states are, however, subject to US meddling via “color revolutions” as part of Washington’s encirclement strategy. China remains in the background as an interested but somewhat enigmatic actor.

The significance of the petrodollar system, why it was implemented, how it has been enforced by US policymakers, and how it continues to affect the US economy are poorly understood by most, including some popular economic commentators. The most authoritative account is given by former Cornell economist Dr. David Spiro. His 15-year research project culminated in his surprisingly obscure but important book, *The Hidden Hand of American Hegemony: Petrodollar Recycling and International Markets* (1999). [19]



Spiro’s meticulous research of the petrodollar recycling period from 1973 to 1981, including Freedom of Information Act Requests (FOIA) of various internal US Treasury Department and CIA memos reveal that both Democratic and Republican administrations undertook extraordinary measures to enforce the dollar’s role as the monopoly pricing and transaction currency for global oil sales. For example, OPEC considered switching oil prices and transactions to a “basket of currencies” around 1973 and again in 1978, which resulted in the Treasury Secretaries under President Nixon and President Carter, flying to Saudi Arabia to thwart these proposals. According to Spiro, this resulted in some interesting *quid pro quos* for Saudi Arabia, including preferential treatment for the Saudi Arabia Monetary Authority in 1974 to purchase \$2.5 billion in US Treasury issues “outside the normal auction process.” Incidentally, that year Saudi investments in the US were

classified Top Secret by the CIA. In addition, after Treasury Secretary Blumenthal met with the Saudi Finance minister in 1978 to dissuade him of an OPEC proposal to transact oil sales in a basket of three currencies (dollar, yen and German mark) — in return the US awarded the Saudi monarchy with a remarkable 350 percent increase in voting power within the International Monetary Fund. [20]

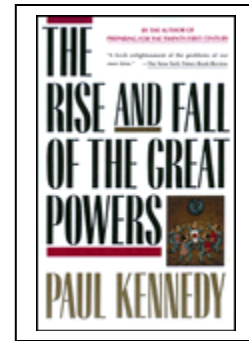
Broadly speaking, global tensions stemming from the imminent arrival of Peak Oil, and the emergence of multiple petrocurrencies, are poised to become the principal variables driving geopolitical divisions. If these dynamics become manifest, they will cause a commensurate decline in America's economic and military supremacy. While there is a small chance that the US could regain its status as the world's only superpower and, with it, a comparative advantage for the realization of its geostrategic and monetary policies, this appears less and less likely.

Indeed, that outcome would require a set of policies radically different from those pursued by the Bush administration and its ideological followers in Congress. Regrettably, the executive branch and far too many members of Congress are effectively acting as fully-owned subsidiaries of the military-industrial-petroleum-banking conglomerate. Without drastic reform of our corrupt corporate campaign finance system, a dramatic course correction appears remote. The more probable scenario is a continued slow drift towards multi-polarism — a drift most evidenced by the emerging trends in global energy and currency re-alignments. The Shanghai Cooperative Organization (SCO) and its plans for a strategic “SCO Energy Club” represents the former, while non-dollar-denominated international oil bourses opening up in Iran, Russia, and China represent the later. [21, 22, 23]

The Bush administration has forcefully attempted to reverse these trends, but its misguided domestic tax, economic, and energy policies, in conjunction with a destructive unilateralist geostrategy, have served only to deepen them. The most disastrous outcome of this imperial governing philosophy is the intractable US and UK-led conflict in the Persian Gulf. The Iraq War was designed to prop-up US energy and economic hegemony, but instead has revealed to the world community the limits and vulnerabilities of US political, economic, and military power. [24]

It is the height of hubris for neoconservatives in Washington to think that the US can build and maintain 14 huge and permanent American military bases inside Iraq — designed to *permanently* station 100,000 US troops in order to “project American power” in the Persian Gulf — while attempting to occupy a country 80 percent of whose people say they have “no confidence” in our involvement, 60 percent support insurgent attacks on US troops in the country, and would feel safer if the US occupiers left immediately. [25, 26] How much longer can we borrow \$5.8 billion per month (\$11 million per hour) from China, Japan, and other countries to fight a nationalist war in which even the Pentagon has documented that we have lost the Iraqi people's “hearts and minds” [27, 28]

In his classic study of empires, *The Rise and Fall of Great Powers: Economic Change and Military Conflict from 1500 to 2000*, Yale historian Paul Kennedy observes that when great powers begin to decline, they almost invariably resort to war and belligerency, thereby accelerating their demise as they waste their national treasuries on military spending to the detriment of their economies and their peoples. Kennedy described this pattern as “overstretch.” The United States is not immune to these historical patterns — the ultimate legacy of the 2003 invasion of Iraq, a failed experiment in American unilateralism — may in time be viewed by future historians as the pivotal event that solidified our own classical “imperial overstretch.”



Individuals sympathetic to the idea of never-ending US global supremacy will ignore the relevant facts and mindlessly repeat their arguments regarding Tehran's long-standing nuclear energy program, which in their view is a "clandestine weapons program." In addition, many will continue to ignore the documented history of Washington's enforcement of the petrodollar system within OPEC, and downplay the macroeconomic effects of the monopoly petrodollar-recycling system while simultaneously attempting to dismiss all challenges to the status quo from other petrocurrencies.

Likewise, powerful vested interests will continue their attempts to confuse the public about global climate change, while individuals who worship contemporary economic theorems predicated on unlimited economic growth supported by bottomless fossil-fuel consumption will no doubt continue to ignore the evidence pointing to an imminent peak in global oil production. [29] Despite these attempts at denial, in the end I predict this type of faith-based reasoning and its underlying cognitive dissonance will ultimately be overruled by the realities of macroeconomics, climatology, and geology.

A careful analysis of the macroeconomic, geopolitical, and geological trends indicates that between now and 2015 we will witness a continued decline of US dollar hegemony and see a peak in global oil production. Mitigating these trends before they become a *fait accompli* should be the focal point of every major policy-maker in both the domestic and international realms.

Part I. Why Petrocurrencies Matter: Macroeconomic Effects of a Monopoly Petrodollar

Confidence in the dollar remains fragile. Recent and more frequent news reports regarding OPEC's growing disenchantment with use of [the] dollar for oil pricing further disturb the market. *If OPEC changed the unit of accounting for oil pricing it could precipitate a major market reaction which would be in the interest neither of the Saudis, other OPEC members, nor the US.* [emphasis added]



— Internal U.S. Treasury memo from Assistant Treasury Secretary C. Fred Bergsten to Treasury Secretary W. Michael Blumenthal (pictured), entitled, "Briefing for Your Meeting with Ambassador to Saudi Arabia, John C. West", 10 March 1978 [30]

There were only two credible reasons for invading Iraq: control over oil and preservation of the dollar as the world's reserve currency.

— John Chapman, "The Real Reasons Bush Went to War," *Guardian*, 2004 [31]

Oil is currently denominated in dollars around the globe...But if one day the world's largest oil producers allowed, or worse demanded, euros for their barrels, *"it would be the financial equivalent of a nuclear strike....If OPEC decided they didn't want dollars anymore, it would signal an end of American hegemony by signaling an end to the dollar as the sole reserve currency status."* [emphasis added]

— Bill O'Grady, A.G. Edwards commodities analyst, 2006 [32]

On August 15, 1971, the Nixon administration was forced to abandon the post-WWII Bretton Woods Agreement in which the US dollar was backed by gold (\$35 per ounce of gold). The result was a "floating" dollar, massive inflation, and a dollar crisis that was shrewdly remedied in 1974 when Washington persuaded Saudi Arabia to enforce dollar-only pricing and transactions within OPEC. [33] For 30 years the defense of the dollar as the world's reserve currency and monopoly petrocurrency has been a primary concern of the elite political-petroleum-banking conglomerate.

Moreover, it is abundantly clear that the neoconservatives in power (or, more accurately, the neoimperialists) will go to extreme measures to maintain this system, including the use of unilateral military force. The issue of Saddam Hussein's switch to the petroeuro in the autumn of 2000 has remained effectively censored by the US corporate media for the past six years, but this fact has been disseminated around the globe via the Internet and alternative media outlets. [34]

Just as I hypothesized in 2002, upon toppling the government of Iraq in April 2003, the Bush administration immediately re-denominated Iraq's oil-transaction currency from the euro back to the dollar. [35] The administration did this despite the adverse impact on profits from Iraq's oil sales. (In May 2003 the euro was valued 17% higher than the dollar). The majority of goods imported into the Middle East continue to come from the European Union, and this policy negatively impacted Iraq's ability to use present and future oil proceeds to rebuild its infrastructure.

Even though two thirds of world trade is conducted in US dollars, the US Gross Domestic Product (GDP) is only about one third of the global GDP. In other words, from a theoretical perspective, the dollar is over-represented in the global economy by a factor of two. This phenomenon is due partly to the fact that most of the world's commodities are priced in dollars, which helps drive the international demand for the dollar that would not otherwise exist. These dollar-denominated transactions are a major source of demand for the currency.

The dollar's status as the world's reserve currency is underpinned by its petrodollar role, and facilitated by New York and the City of London, which offer only dollar-denominated pricing for global oil trades via the New York Mercantile Exchange (NYMEX) and the Intercontinental Commodities Exchange (ICE, formerly the IPE). No other hard currency guarantees access to the most valuable commodity on earth — oil. Furthermore, no other hard currency possesses the unique “storage of wealth” that is realized by the dollar as the monopoly currency for international oil trades.

The old rules for valuation of the dollar and its economic power were based on America's flexible market, high per-worker productivity, healthy manufacturing output, trade surplus, government oversight of securities trading by the Securities and Exchange Commission, robust infrastructure, education system, and total cash flow and profitability. Superior US military power afforded additional confidence in the dollar. While many of these safe-harbor economic fundamentals remain in place, over the past few decades the US has diluted some of these factors under the mantra of “free trade.”

Since the mid-1970s the petrodollar system has created new rules for the dollar, allowing the Federal Reserve to dramatically increase debt-financing via expansion of the global supply of dollars held outside the US that would *not* have been possible under the original Bretton Woods Agreement. Over the past three decades, while US manufacturing capability has been systemically outsourced to cheaper overseas markets, policymakers in Washington and their cohorts at the Federal Reserve have become overly reliant on the petrodollar-recycling system to fund US economic expansion via debt-financing from foreign lenders.

Petrodollar recycling works quite simply because oil is an essential commodity for every industrialized and developing nation, and the petrodollar system demands the buildup of huge trade surpluses in order to accumulate dollar surpluses. Because 65% of international trade today is conducted in dollars, other countries must engage in active trade relations with the US to obtain the means of payment (or “petrocurrency”) for their “oil bill” that they cannot themselves issue.



Because of the dollar's monopoly transaction status as established by OPEC in 1975, all oil-importing nations need to obtain highly liquid dollar-denominated instruments with which to purchase oil. This means their trade targets are countries that use the dollar, with the US consumer being the main target for export products of any nation seeking to build dollar reserves. To keep this process going, the US has arranged to be importer and consumer of last resort. The central banks of Japan, China, South Korea, and numerous other countries buy US Treasury securities with their dollars to facilitate the \$5+ billion dollar per day international oil trade. This ensures the dollar's international liquidity, which in turn allows the US to have a stable dollar and lower interest rates relative to the rest of the world, while running a \$400 billion to \$800 billion annual balance-of-payments deficit. Most countries are forced to control their trade deficits or face either currency devaluation or even currency collapse. Such is not the case in the US, whose number one export product is now the *dollar itself*.

The US political-petroleum-banking elites realized long ago that if international oil trades are priced only in dollars and can only be transacted on the international markets with US petrodollars, then the demand and liquidity of dollar-denominated debt instruments will be solidified while the currency risk for domestic oil prices within the US remains minimized. After all, oil is the essential natural resource for every industrialized nation. Oil trades are the basic enablers of a manufacturing infrastructure, and the basis of 98 percent of the global transportation system, and oil is the primary energy source for 40 percent of the industrial economy.

Until Saddam Hussein made his decision in the autumn of 2000 to switch to a petroeuro arrangement, efforts by the US and UK to maintain the global petrodollar system were very successful, due in large part to the “special relationship” between Washington and the Saudi monarchy. Just as in the past, the Saudis are reportedly “holding the line” by thwarting proposals within OPEC regarding euro-based oil trades and propping up the dollar as the monopoly pricing and transaction currency. [36] A major policy change such as a formal transition to euro-based transactions for all OPEC members would require a unanimous vote within the cartel — an unlikely event under the present circumstances.



However, unfolding developments in Iran, Russia, and China, indicate that a currency basket for international oil trade will begin to unfold in earnest during 2007, thus decreasing the dollar's liquidity.

Some economic commentators view the dollar–oil nexus from a one-dimensional “transactional” perspective, and argue that what really matters is where the oil proceeds are invested. While this may apply from the oil buyers' and sellers' viewpoint, importantly, it does not reflect the *issuer's* perspective regarding the monopoly currency for international oil trades — the Federal Reserve. The incremental global demand for oil, and thus demand for *monopoly* petrodollars to complete the transactions with OPEC et al, provides the Fed with an automatic demand for US dollars that today approaches \$1.8 trillion annually, regardless of the dollar's valuation relative to other currencies.

The next four subsections of this essay will outline the *multi-dimensional* effects of petrodollar recycling, which include the petrodollar's unique storage of wealth that underpins its status as the world reserve currency, international demand and liquidity, US currency risk regarding imported-oil prices vis-à-vis the rest of the world, and its effects on taxation levels of gasoline sales in the US compared with the other highly industrialized G7 nations. Most importantly, this system is currently funding approximately \$1 billion per day of the \$2.2 billion per day US current account deficit, a significant macroeconomic benefit that allows the United States to borrow far more than it produces.

1. Petrodollar Recycling and the Funding of the US Current Account Deficit

The propping up of the dollar's international demand by its monopoly petrocurrency status is illustrated by the huge increase in the price of oil from 2002 to 2005 and the commensurate huge increase in dollar holdings by foreign banks (most often Treasury bills) despite the Federal Reserve's abnormally low interest rates during most of that period. In 2006, international investment analyst Jephraim P. Gundzik noted this important macroeconomic phenomenon in the *Asia Times*:

As of mid-2005, foreign investors, including foreign central banks, held an estimated \$6.6 trillion worth of US bonds and equities, up from less than \$4 trillion in mid-2002. About 60% of this money is parked in long-term US Treasury, agency and corporate bonds. *The rapid and sustained increase of international oil prices is the main factor behind the growth in foreign holdings of US securities and the external supply of dollars used to purchase these securities.* [37] [emphasis added]

Thus it was the huge demand for petrodollars due to high oil prices — and certainly not high yield spreads — that allowed the Federal Reserve to dramatically expand the credit supply by over \$2 trillion during recent years. (Note: the Federal Reserve did not begin to increase the abnormally low overnight interest rates until June 2004). This correlation between high oil-prices and international demand for the dollar-denominated instruments such as Treasury bills is rarely mentioned in the mainstream US economic commentary, but a March 2006 issue of *Business Week* confirmed the decades-long connection. Most importantly however, is the crucial fact that petrodollar flows currently plug almost half of the US's \$805 billion current account deficit:

[Unlike during the 1970s oil boom] Arab states are now major buyers of goods from Japan, China, and the rest of Asia, where they sell the bulk of their oil. So these petrodollars get recycled as Japanese yen or Chinese yuan – which the Japanese and Chinese governments convert into US Treasuries. *Indirectly, then, oil money is bankrolling US deficit spending.* Paul Donovan, a global economist for UBS Investment Bank in London, estimates that *petrodollars, mostly channeled through Asia and Europe, are funding up to 45% of the US current account deficit.* [38] [emphasis added]



Assuming Donovan's calculations are correct, as of 2006 petrodollar flows are supporting about \$1 billion per day of the US current account deficit (\$805 billion x .45 = \$362 billion per year, or approximately \$1 billion per day). If a basket of currencies begins to be used for international oil transactions involving bourses in Iran, Russia, and China, it is highly doubtful that Japan and the other East Asian nations will be able to step into the fray and keep propping up the dollar. In actual fact, some of these countries are in the process of diversifying their currency reserves in order to "maximize performance," a diplomatic term for moving away from the weak dollar.

A colleague who works for the US Treasury mentioned his concern that if the petrodollar flows begin to recede, there might not be enough *global savings* to support a US current account deficit that could approach \$1.1 trillion or more annually. In other words, diminishing demand for petrodollars via a basket of petrocurrencies will have an adverse effect on the US balance-of-payments. This may require the Federal Reserve to significantly increase the interest rates in an attempt to attract foreign capital, but unlike the 1979-1981 period when this strategy was employed, today the US government, many US corporations, and most US consumers are heavily indebted. Will the Federal

Reserve try instead to inflate the US out of this situation? No one knows for certain, but it is disconcerting that the Fed inexplicably discontinued reporting the aggregate M3 money supply statistic in March 2006. In theory, this omission could facilitate an ill-advised strategy in which the Federal Reserve temporarily hides an inflationary monetary strategy from the public.

In summary, the Federal Reserve controls the dollar printing presses, and the world needs dollars as the transaction currency when paying its “oil bill.” As long as global demand for oil increases incrementally (approximately 2 percent per year, with petrodollar flows in 2006 of about \$1.8 trillion), the demand for monopoly petrodollars to conduct these transactions will also increase, regardless of the performance of the US currency or the American economy. Given today’s absence of scaleable substitutes for liquid fuels, in economic terms, the global demand for oil is relatively inelastic.

2. US versus Global Currency Risk for Imported Oil

Another benefit for the US is that, when oil is priced in a monopoly currency, the nation that issues that petrocurrency (i.e., petrodollar) greatly minimizes the “currency risk” or “currency exposure” for its imported-oil and energy purchases. In other words, as long as OPEC priced a barrel of oil in the \$22-\$28 range, US consumers and industry enjoyed very steady oil prices, regardless of whether the dollar was highly valued or highly devalued against other major currencies.

Until the dollar’s devaluation relative to the euro which began in 2002 and continues today, OPEC’s pricing band generally reflected the price of international oil trades, and the US enjoyed a stable oil bill. Under OPEC’s historical \$22-\$28/barrel pricing band for international oil trades, a US petrodollar was worth 1.5 and 1.9 gallons of sweet crude, respectively. (Note: 42-gallon production barrel.) This pricing band disintegrated in 2002 because of the emerging lack of spare capacity in global oil production, and the steadily devaluing of the US dollar relative to other major currencies.

3. US versus Global Gasoline Taxation Levels

The lack of currency risk is one reason why taxes on gasoline purchases are much lower in the US than every other industrialized nation. The average world price for a gallon of gasoline in 2004 was about \$5, or nearly 60% higher than typical US prices. Higher gasoline taxes in the EU and other countries provide a ‘cushion’ for those nations’ currency risks for imported oil. Without this cushion, a country could experience wild swings in daily prices at the gas pump due to fluctuations in its domestic currency’s valuation relative to the dollar on the volatile international currency market. Fear of this currency risk and currency exposure partly explains why some developing countries who import oil peg their domestic currency to the US dollar/petrodollar, and why every other non-US member of the G7 industrialized nations adds a substantial tax its gasoline prices.

An example of this issue became painfully evident for Western Europe during September 2000. That autumn American motorists only saw a 10%-12% rise in gas prices, but European drivers experienced a 35%+ price increase that created a full-blown societal crisis. This caused truckers, farmers, and fisherman to unite in protests throughout European capitals. (picture is truckers’ blockade in Berlin)

The eurozone’s oil price spike was partly due to a then strong US dollar against a *weak pound* and *very weak euro*. (the euro had fallen to just 82 cents to the dollar). In order to stem the growing social discord, many European parliaments quickly lowered their petrol/gasoline taxation levels to restore domestic prices



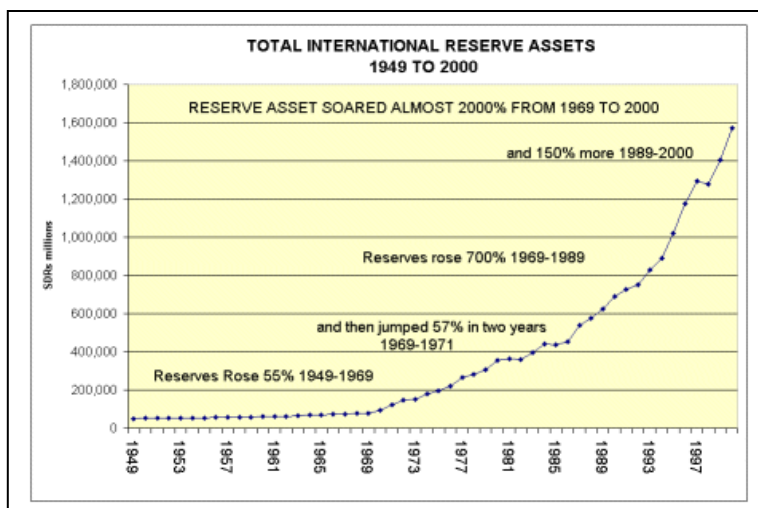
to their previous level and calm the social unrest. For example, France lowered fuel taxes by 15%. [39] This eurozone 'petrol crisis' was related to the simple fact that international oil trade is priced in US dollars, and it also explains why the EU Parliament has requested euro-denominated transactions from OPEC and non-OPEC producers. (e.g. Russia and Norway)

However, if oil transactions in the future should migrate to a basket of currencies, US policymakers would then likely have to implement policies similar to other industrialized nations that import oil, including tax increases on gasoline to mitigate potential fluctuations in oil prices due to currency risk. This important economic phenomenon/taxation issue is often overlooked by stateside commentators when discussing the benefits stemming from the petrodollar-pricing system.

4. Net Effect of the Monopoly Petrodollar-Recycling System

In essence, the net effect of the petrodollar-recycling system has been a mechanism that provided the Federal Reserve with an unparalleled ability to create credit and expand the money supply in a way that was impossible under the post-war Bretton Woods Agreement. Due in part to the enormous debts of the Vietnam War, the Bretton Woods system began to unravel from 1968–1971. After the Nixon administration ended the dollar-gold link in August 1971, a massive shift from gold to dollar reserve assets quickly took place. (See graph by Richard Duncan, author of *The Dollar Crisis*). [40]

In 1970 gold represented approximately 50 percent of the International Reserve assets, but after 1971 gold was rapidly replaced by foreign exchange currencies, which now represent about 95 percent of central bank reserve assets. Under this process US dollars became the major reserve currency for most nations, while beginning in 1974 OPEC's petrodollar flows were channeled to help finance the emerging US trade deficits.



The petrodollar-recycling strategy was a successful attempt by America's ruling establishment to secure its geopolitical station as a hegemonic power in the Cold War era. Moreover, this system prevented many developing nations in our hemisphere from achieving economic independence, and kept US banks and the dollar afloat following the collapse of the Bretton Woods Agreement and dollar crisis of the 1970s. In addition, it has allowed the US to dramatically increase its debt levels while simultaneously reducing its domestic savings, thereby fostering an unhealthy dependency on the "kindness of strangers." Referring again to Spiro's astute analysis of petrodollar recycling:

So long as OPEC oil was priced in U.S. dollars, and so long as OPEC invested the dollars in US government instruments, the US government enjoyed a double loan. The first part of the loan was for oil. *The government could print dollars to pay for oil, and the American economy did not have to produce goods and services in exchange for the oil until OPEC used the dollars for goods and services.* Obviously, the strategy could not work if dollars were not a means of exchange for oil.

The second part of the loan was from all other economies that had to pay dollars for oil but could not print currency. Those economies had to trade their goods and services for dollars in order to pay OPEC. Again, so long as OPEC held the dollars rather than spending them, the U.S. received a loan. It was therefore important to keep OPEC oil priced in dollars at the same time that the government officials continued to recruit Arab funds. [41] [emphasis added]

In his research, Spiro also noted that if OPEC nations had not invested their currency surplus of petrodollars due to the high oil prices of the 1970s, it is unclear whether the US could have attracted sufficient foreign savings to finance the emerging US trade deficits. [42] Relying on the largess of OPEC's oil wealth, the petrodollar-recycling system (or "Bretton Woods II" era) helped transformed the US from the world's largest creditor nation to the largest debtor nation by 1985. Lastly, as long as oil was priced only in dollars, and OPEC agreed to a pricing band in dollars only, US consumers did not have to worry about the dollar's valuation relative to other major currencies — thus for decades the US has been largely immune to currency risk for its purchases of foreign oil.

The EU and OPEC on Petroeuros

The European Parliament ... calls on the EU, in dialogue with the OPEC and non-OPEC countries, to prepare the way for payment for oil in euros.

— European Parliament resolution on the Communication from the Commission on the European Union's oil supply, June 14, 2001 [43]

...From the EU's point of view, it is clear that Europe would prefer to see payments for oil shift from the dollar to the euro, which effectively removes [sic] the currency risk...In the long-term one question that comes to mind is could a dual system operate simultaneously? Could one pricing system apply to the Western Hemisphere in dollars and for the rest of the world in euros?....Should the euro challenge the dollar in strength, which essentially could include it in the denomination of the oil bill, it could be that a system may emerge which benefits more countries in the long-term. Time may be on your side. [emphasis added]

— Javad Yarjani, Head of OPEC's Petroleum Market Analysis Department, in a speech to Spanish officials, April 2002 [44]

The primary *raison d'être* of the euro is to serve as an alternative world reserve currency. That status will require its "storage of wealth" to be commensurate with the US dollar, and that can be solidified only if and when the euro becomes an alternative oil-transaction currency. Not surprisingly, EU policy makers are pursuing this goal. Immediately after the euro was officially launched, the EU and Russia began discussing the possibility of adopting the euro for oil and gas sales. During the Russia-European Union summit of May 1999, the EU proposed an "audacious" arrangement:

EU leaders on Thursday made an audacious bid to lure Russia away from its reliance on the greenback, calling on Moscow to start accepting euros instead of dollars for its exports, dangling the attractive carrot of a boom in investment and trade. Russia currently receives US dollars for its European oil and gas exports, but the EU wants to switch to euros instead. A joint communique has been signed by both sides agreeing to discuss the issue in further detail. [45]

As an incentive to pursue euro-based oil trade, the EU leaders renewed a pledge at this conference to back Russia's bid to join the World Trade Organization. As noted above, the EU Parliament also formally requested that OPEC and non-OPEC "prepare the way" for euro-based oil trades. In response, OPEC suggested a dual dollar-euro system might be warranted "should the euro challenge the dollar in strength." The euro's value has remained above the dollar since July 2002.

On June 16, 2003, Loyola de Palacio, the European Energy Commissioner, stated, "In the future the euro is [going to be] taking a place in the international markets in general as the money of exchange." [46] When she was asked about a possible switch in oil pricing to euros, she replied, "Of course, in the oil market and in any market. It's a stable and a strong currency, the role of the euro is going to be increased step by step. It's normal."

The political leadership within the EU views the emergence of a petroeuro as both desirable and natural, but the US response on the following day was dismissive. On June 17, 2003, Guy Caruso, director of the United States Energy Information Administration (EIA), was asked to comment on Palacio's statements about a future petroeuro option. Caruso stated, "I don't see any particular merit in [pricing oil in euros] for the average oil producing country. It really is question of which currency (oil producers) feel most comfortable with over the long run — and the dollar's always won out." [47]

Caruso's faith-based reasoning notwithstanding, this dichotomy between EU versus US viewpoints alludes to an unspoken conflict between the world's two largest economic blocks. In October 2003, the former president of the European Central Bank (ECB), William Duisenberg, stated that Russian pricing of oil in euros was "sensible." Oil-Industry *Alexander's Gas & Oil* reported:

European Central Bank (ECB) President William Duisenberg said that it might make sense for Russia to sell oil in euros to certain EU customers, entering a debate sparked that has big implications for currency markets. Asked to comment on remarks by President Vladimir Putin that he did not rule out switching Russia's oil pricing from dollars to euros, Duisenberg said this could particularly suit the nations currently lining up to join the common currency block.

[Duisenberg] was quoted as saying: "It would be in their interest to pay for imports in their future domestic currencies....We are worried about the situation in countries that depend on imports of oil from Russia." Russia is the world's second-largest exporter of oil after Saudi Arabia and the world's top gas exporter. A switch would be a powerful symbolic victory for the euro and might accelerate its growing role as an international reserve currency to challenge the dominance of the dollar. [48]



Thus, OPEC executives, the EU Parliament, the EU energy commissioner, and the former head of the European Central Bank have all publicly acknowledged the logic and desirability of making the euro an alternative oil-transaction currency. Unbiased analysts have noted that the EU has a bigger share of world trade than the US, its oil import bill from OPEC is larger than that of the US, it is the main trading partner of the Middle East, the ECB offers higher interest rates than the US, and perhaps most importantly, the EU does not run a trade deficit and does not have a huge foreign debt like the United States. [49] Considering these facts, from a purely monetary and trade perspective, the euro serves as a logical world reserve currency and alternative oil pricing/transaction currency.

Critics of the Petroeuro Challenge

Some commentators have argued that petroeuros are not capable of displacing the petrodollar system. One common argument is that the total money supply of euros in circulation is not large enough. This “shortage-of-euro” critique would be true only in the unlikely event that OPEC and Russia made a sudden collective switch to *monopoly* petroeuros for *all* international pricing and transactions. Obviously any scenario involving a sudden, collective switch of the \$1.8 trillion annual flow of petrodollars is extremely unlikely. Consequently, the money supply argument against the viability of petroeuro serving as an *alternative* oil transaction currency relies upon flawed logic, and requires the conceptualization of a false dilemma.

We may further raise three fundamental counter-arguments to deconstruct the “shortage-of-euro” critique. First, with *de facto* petrocurrency status; the ECB could print more euros to accommodate increased demand. Second, EU banks could extend euro-denominated credit to accommodate increasing demand for “petroeuros.” Finally, the value of the euro could rise sharply to accommodate oil trade; this would induce EU trade deficits and surplus euros on the foreign market, at least temporarily to further accommodate higher international demand for the euro. The fact of the matter is that the arbitrary limitations established by the ECB may be arbitrarily altered just as easily as they were selected, and this is certainly true if and when the euro attains petrocurrency status.

Additionally — and setting aside the previously documented facts to the contrary — some commentators have also suggested that the ECB is not interested in a petroeuro system for its oil trade given its potential inflationary effects. Again, this criticism relies on flawed logic. Printing more euros would not add noticeable inflation within the EU *if* the increase in the money supply was absorbed by *external* demand for euros outside of the eurozone. Of course this strategy can best be accomplished if the underlying “storage of wealth” of a given currency *guarantees* access to oil.

Perhaps most peculiar, some commentators appear to assume that the current state of stark global imbalances might maintain itself *indefinitely* or at least throughout the foreseeable future. In my view, this is an incorrect assessment of the global political economy. According to some candid analysts, the establishment of the euro as an alternative oil-pricing and transaction currency would pose a significant threat to dollar hegemony, and could under certain economic and/or geopolitical circumstances, result in unmanageable dislocations within the US economy (or, in the language of an internal US Treasury memo from 1978, create a “major market reaction.”) To be sure, the current structure of the US economy relies heavily on the dollar's hegemonic status as a means of securing foreign investment to finance yearly US current account deficits. Without this status, the dollar and the US economy might experience what many Latin American countries suffered during the 1980s — a currency crisis coupled with crushing price inflation.

Most importantly, US leaders have a fundamental objective to maintain the dollar's hegemony and thereby set policies accordingly. Similarly, EU policymakers have a fundamental objective to strengthen the euro's international stature as a rival to the dollar standard. In other words, whether the petrodollar faces genuine opposition from the petroeuro or not, the US behaves as if it does, and the EU behaves as if it should. Despite the occasional critiques that I have read, I believe the euro poses a paramount threat to the dollar, and many reputable observers in the US and the EU have regarded it so since its advent. [50] Even Alan Greenspan, the former chairman of the Federal Reserve, has noted that that globally, dollar reserves are being actively replaced by euros. In October 2006, Greenspan stated: “We’re beginning to see some move from the dollar to the euro, both from the private sector...but also from monetary authorities and central banks.” [51]

In addition, the Bank for International Settlements (BIS) published a working paper in October 2006 entirely focused on the dollar versus euro reserve currency issue, and concluded: “We find that the liquidity and breadth of euro financial markets are fast approaching those of dollar markets, and as a result the euro is eroding some of the advantages that have historically supported the pre-eminence of the US dollar as a reserve currency.” [52] Perhaps most indicative of future trends was the December 2006 Quarterly report by the BIS, which confirmed that the major oil producers (OPEC and Russia) have reduced their exposure to dollars to the lowest level in two years, and shifted oil income into euros, yen and sterling, which is placing “new pressure on the ailing US currency.” [53]

Indeed, I see no reason for these global trends to abate, and my projected timeframe for the solidification of petroeuros for international oil trade is the 2008-2012 period, preceded by a gradual, orderly shift away from the dollar standard, toward a mixed dollar-euro standard, and possibly toward a basket of three or four world reserve currencies/petrocurrencies. This however is a nightmare from the Washington-Federal Reserve perspective, because *encroachment* of petroeuros in the global oil trade will certainly diminish a key facilitator of US deficit spending. As outlined in *Petrodollar Warfare*, a careful analysis of the available evidence makes it clear that Washington is attempting to undermine the recalcitrant nations that threaten the petrodollar’s monopoly role. Following operation “Iraqi Freedom,” the other Persian Gulf oil exporter threatening to undermine US supremacy is Iran.

Part II. Manifest Subterfuge Déjà Vu: The Disinformation Campaign against Iran

We are very close today to taking the first major step in the Security Council to deal with Iran’s nearly 20-year old clandestine nuclear weapons program.

— John Bolton, US ambassador to the UN, March 2006 [54]

Nobody has the right to punish Iran for [uranium] enrichment...We have not seen nuclear material diverted to a nuclear weapon but we are not saying that the programme is used exclusively for peaceful purposes because we still have work to do....Sanctions are a bad idea. We are not facing an imminent threat. We need to lower the pitch...I work on facts, we fortunately were proven right in Iraq, we were the only ones that said at the time that Iraq did not have nuclear weapons and I hope this time people will listen to us.



— UN nuclear watchdog chief Dr. Mohamed ElBaradei, March 2006 [55]

Concern for pricing oil only in dollars helps explain our willingness to drop everything and teach Saddam Hussein a lesson for his defiance in demanding Euros for oil. And once again there’s this urgent call for sanctions and threats of force against Iran at the precise time Iran is opening a new oil exchange with all transactions in Euros.

— US Representative Ron Paul, (R-Texas), March 2006 [56]

Similar to the hysteria that the world witnessed in the run-up to the Iraq War, we are once again seeing that “intelligence and facts are being fixed around the policy.” [57, 58] Despite the propaganda campaign carried out by John Bolton and his neoconservative cronies in Washington, no substantive evidence has ever been found by the International Atomic Energy Agency (IAEA) suggesting that Iran has a covert nuclear weapons program. I propose that, despite the ongoing subterfuge, the US and the UK establishment are far more concerned about Iran’s upcoming Internet-based oil exchange, or “oil bourse,” which over time could undermine the global supremacy of the petrodollar.

This assertion is based on the fact that Washington is quietly but actively engaged in economic warfare against Tehran. The goal is to undermine the proposed oil bourse via “smart sanctions.” Should this strategy fail, it appears that a military option is under serious consideration by the Bush administration. Investigative reporter Seymour Hersh, and US military/intelligence analysts, have leaked reports that the hawkish neoimperialists in Washington have made preparations for a potential unilateral aerial assault on Iran’s nuclear facilities — regardless of the facts, consensus agreement by the UN Security Council, or adherence to international law. [59]

Conversely, the Iranian leadership believes that as long as they abide by the Nuclear Non-Proliferation Treaty, they should be allowed to do what 30 other nations are allowed to do: produce domestic nuclear power. The Nuclear Proliferation Treaty (NPT), Article IV(1), states: “Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty.”

Under the NPT, all Iran is required to do is allow inspections of its nuclear facilities to ensure that no weapons-grade nuclear material is being produced. Any further demands expressed by the US and the UK via the UN are related to geopolitics and are not surprisingly, being rejected by Iran. Just as is the case with Iraq, the US and UK military-industrial-petroleum-banking conglomerate have economic and strategic interests at stake and are attempting to manipulate the UN Security Council in an effort to pursue an agenda that is mostly hidden from the American and British people, and from other UN members. Despite the ongoing obfuscation, the three important issues to consider concerning this largely manufactured “crisis” are as follows:

- 1) Despite three years of inspections by the IAEA, no factual evidence that Iran is developing a clandestine nuclear weapons program has ever been uncovered. In addition, a classified CIA assessment from 2006 described by reporter Seymour Hersh also found “no conclusive evidence...of a secret Iranian nuclear-weapons program.” [60]
- 2) According to the NPT, Iran and any other signatory nation has an “unalienable right” to nuclear technology, including the enrichment process. In 2003 two small uranium samples were found by the IAEA that were enriched to 36 percent (these samples are well above the 4 to 5 percent purity needed for nuclear power, but far below the 90 percent purity required for nuclear weapons). [61] Following this discovery and subsequent investigation period, Iran agreed to suspend enrichment and to the voluntary aspects of the Additional Protocol. After it was determined that the enriched uranium samples found in Iran originated from a discarded Pakistani-sourced centrifuge, Iran considered the IAEA investigation complete and re-started its small enrichment program. Iran remains in compliance with the NPT, despite US media reporting to the contrary.
- 3) Even if Iran sought to build nuclear bombs, and a clandestine weapons project was initiated in secrecy, the consensus of the US intelligence agencies as outlined in the 2005 National Intelligence Estimate is that Iran could not make enough highly enriched uranium (HEU) fissile material for a bomb until the middle of the next decade (2015). [62] This is likely due to the fact that Iran’s uranium ore is contaminated with molybdenum, a heavy metal that must be removed for HEU production, lest the molybdenum will crash the uranium enrichment cascades. [63] Reportedly only a few advanced nuclear powers, such as the US, Russia, and China have the infrastructure to undertake this process.

The propaganda campaign being waged against Iran's nuclear energy program by the White House has been quite effective. The hawkish elements in the House of Representatives have also engaged in the hysteria: a recent committee report on Iran's nuclear capability attempted to make a case that Tehran's program is geared toward making weapons, but the report was strongly criticized by a senior official of the UN nuclear watchdog as being "outrageous and dishonest." [64] Reminiscent of the Iraq disinformation campaign of 2002-03, the subservient US media are again displaying their biases by uncritically "catapulting the propaganda" of the Bush-Blair administrations.

Of course another fact missing from the debate over Tehran's long-standing desire to develop nuclear energy is that Iranian oil production peaked in 1974. In fact, in August 1974 the late Shah of Iran envisioned a time when the world's oil supply would run out, and declared: "Petroleum is a noble material, much too valuable to burn...We envision producing as soon as possible, 23,000 megawatts of electricity using nuclear plants." [65] (see U.S. nuclear energy advertisement from the mid-1970s).

Realizing that Iran's oil supply was finite and that maintaining the standard of living of its people would require the construction of nuclear power plants, the Shah asked Washington if US companies could assist Iran in building 20 nuclear power plants by the year 2000. Ironically, a couple of young men in the Ford administration, Dick Cheney and Donald Rumsfeld, formally approved Iran's plans — including full domestic enrichment of Iran's large uranium ore deposits. Thus, Iran's nuclear program began 30 years ago under the autocratic dictatorship of the Shah, which had the full blessing of the Ford administration. In one of the few examples of honest US reporting on this subject, a March 2005 article in *Washington Post* revealed today's hypocrisy towards Iran's long-standing nuclear energy ambitions:

Mohammad Saeidi, a vice president of the Atomic Energy Organization of Iran, told the conference that *Iran was determined to develop nuclear power since [its] oil and natural gas supplies were limited.*

Using arguments identical to those made by the shah 30 years ago, Iran says its nuclear program is essential to meet growing energy requirements, and is not intended for bombs. *Tehran revived the program in secret, its officials say, to prevent the United States from trying to stop it.* Iran's account is under investigation by the International Atomic Energy Agency, which is trying to determine whether Iran also has a parallel nuclear weapons program.

Since the energy program was exposed, in 2002, the Bush administration has alternately said that Iran has a secret nuclear weapons program or wants one. *Without being able to prove those claims, the White House has made its case by implication, beginning with the point that Iran has ample oil reserves for its energy needs.* [66] [emphasis added]

GUESS WHO'S BUILDING NUCLEAR POWER PLANTS.



The Shah of Iran is sitting on top of one of the largest reservoirs of oil in the world.

Yet he's building two nuclear plants and planning two more to provide electricity for his country.

He knows the oil is running out — and time with it.

But he wouldn't build the plants now if he doubted their safety. He'd wait. As many Americans want to do.

The Shah knows that nuclear energy is not only economical, it has enjoyed a remarkable 30-year safety record. A record that was good enough for the citizens of Plymouth, Massachusetts, too. They've approved their second nuclear plant by a vote of almost 4 to 1. Which shows you don't have to go as far as Iran for an endorsement of nuclear power.

NUCLEAR ENERGY. TODAY'S ANSWER.

NUCLEAR ENERGY. TODAY'S ANSWER. BOSTON REGION: EASTERN UTILITIES ASSOCIATES. NEW ENGLAND POWER COMPANY. PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE. NEW ENGLAND GAS AND ELECTRIC COMPANY.

According to a *Washington Post* interview with Gary Sick, who handled nonproliferation issues under presidents Ford, Carter, and Reagan, the original Iranian nuclear program was based on “trust.” Sick acknowledged that the same rationale used by the Shah — Iran’s finite and declining oil resources in conjunction with its growing population — logically necessitated the development of nuclear power in order to preserve Iran’s valuable oil resources for cash-earning exports. Sick stated:

[In the 1970s] “The shah made a big convincing case that Iran was going to run out of gas and oil and they had a growing population and a rapidly increasing demand for energy...The mullahs make the same argument today, but we don't trust them.” [67]

Although Iran does retain a tremendous amount of natural gas ready for export, its oil production is in permanent decline. In fact, Washington-based PFC Energy recently reported that Iran’s oil production is declining by 500,000 b/d per year, and without drastic changes, it will become a *net importer of oil by 2016*. [68] While one can reasonably doubt the intentions of some Iranian officials, I propose that Washington’s real goals regarding Iran are effectively the same as Iraq: (1) regime change, with the installation of a pliant-puppet regime that will give US/UK multinational oil and gas companies lucrative production sharing agreements of Iran’s oil and gas reserves, (2) further expanding the US empire of bases and thereby gaining strategic control of the vital pipeline routes from Iran into Central and East Asia, and (3) thwart Iran’s international oil bourse that could threaten the status quo of the petrodollar system. Of course neither Russia nor China will approve this plan, nor will they approve of punitive UN sanctions concerning Tehran’s nuclear energy program.

This underlying currency conflict has been addressed in the foreign press, but the lack of reporting by the US corporate media conglomerates is erringly reminiscent of the censorship surrounding Saddam’s switch to the petroeuro in November 2000. Regardless of this assertion, it is clear that the neoconservatives have long-sought regime change in Iran — even during the previous ‘pro-reformist’ Khatami government. Indeed, the adjacent map shows American flags on the eleven nations that Washington has used to establish over 25 new military bases, thereby encircling Iran on every border. Moreover, the recent deployment of a second US carrier battle group to the Persian Gulf has prompted some military and intelligence experts to suggest that Bush and Cheney may be preparing the groundwork for a unilateral aerial assault against Iran’s nuclear facilities. [69, 70]



Given the disastrous situation in Iraq and the results of the 2006 mid-term elections, many observers are incredulous to the idea of a US military strike against Iran. Nevertheless, warnings from various military and intelligence experts should not be dismissed. One of the more notable warnings came from retired US Air Force Colonel Sam Gardiner, a National War College instructor who has conducted extensive war gaming exercises against Iran over the past three years. In September 2006, Gardiner stated, “I think the plan’s been picked: bomb the nuclear sites in Iran. It’s a terrible idea, it’s against US law and it’s against international law, but I think they’ve decided to do it.” [71]

President Bush’s declaration of Iran as part of an “axis of evil” in his 2002 state of the union speech damaged the US-Iranian relationship while paradoxically facilitating Iran’s trade relations with Russia and China. Regrettably, this irrational antagonism towards Tehran from 2002 to present day

weakened the pro-reform movement within Iran. During Iran's June 2005 election, Intelligence Minister Ali Yenesi, sarcastically "thanked" President Bush for motivating the Iranians "to vote in retaliation," thereby helping elect Mahmoud Ahmadinejad as their new hard-line president. [72] Like the neoconservatives in Washington, some of the Iranian mullahs also hard-liners, but they are not suicidal, especially considering the riches that Iran sits on.

Iran's Oil Bourse and Washington's Economic War To Undermine It

We (can only blame) ourselves for promoting the economies of the enemies and letting them impose pressure on us whenever they wish....Today, a big economic war is underway. *The political war is obvious to all but there is an economic war that goes on undetected.* [emphasis added]



— Iranian President Mahmoud Ahmadinejad, January, 2006 [73]

Iran [has] filed a complaint with the International Monetary Fund against a U.S. Treasury department ban on a leading Iranian bank...Iran lodged the complaint after the United States imposed sanctions this month on Bank Saderat...U.S. officials allege the Iranian government uses the bank to transfer millions of dollars to terrorist groups, including Hezbollah and Hamas.... Iran's central bank chief Ebrahim Sheibani says the ban is politically motivated and the United States has not provided any evidence for its claim.

— VOA News/AP, September, 2006 [74]

Geopolitical tensions between the United States and Iran extend beyond the publicly stated concerns about Iran's nuclear intentions and likely include Iran's proposal to facilitate international oil trades with a basket of currencies. Perhaps President Ahmadinejad's cryptic statement about an "economic war that goes on undetected" refers to the underlying conflict regarding non-dollar de-nominated petrocurrencies. A more candid appraisal of the situation was offered by Jerome Corsi, who wrote an essay in May 2006 entitled, "Iran Signs It's Own Death Warrant." Although Corsi is an apologist for the Bush administration (Corsi wrote *Unfit for Command: Swift Boat Veterans Speak Out Against John Kerry*), at least he admits that a major reason for the US invasion of Iraq was in fact the oil-for-euros policy of Saddam Hussein. Corsi states the following with regard to Tehran's oil bourse:

If Iran wants also to seriously threaten the dollar's position as a dominant foreign reserve currency, a war becomes almost certain. The Iranian oil bourse may never be mentioned by U.S. policymakers as an official reason the United States decides to go to war with Iran, but it may end up being the straw that broke the camel's back. [75]

Iran's strategy to remove itself from the dollar system is driven by economic considerations, but also in part by the unnecessary political blowback created when President Bush declared Iran as part of an "Axis of Evil." Revenue from Iran's daily crude sales is transferred through a series of intermediary banks, mostly European. According to international bankers, all transactions involving large amounts of dollars are cleared through master accounts held in New York, and the New York Federal Reserve has access to information about such transfers. [76]

Apparently after being labeled "evil," Tehran became concerned that the Bush administration would interfere with Iran's oil revenue transfers and perhaps even attempt to block these critical proceeds. In 2002 *Alexander Oil & Gas* interviewed an Iranian oil industry source who explained why Tehran was increasingly interested in avoiding the US banking system:

As a precaution, the Central Bank of Iran is looking into a switch away from dollar payments — with the euro a favoured alternative...The US is keen to know who is sending and receiving dollars and they may make it difficult to transfer our money, especially when they know it is for Iran. [77]

A senior banker interviewed in this *Alexander Oil & Gas* article acknowledged that “after September 11, US authorities were chasing terrorist funds and they were questioning a lot of things...There were many wild goose chases.” [78] Apparently some bankers have felt hassled by Washington’s ‘war of words’ against Tehran. This rhetoric encouraged Tehran to increase the pace of its ongoing plans regarding non-dollar denominated oil transactions, initially with the euro as the logical alternative.

In May 2004 a feasibility study was undertaken to analyze the viability of an international oil bourse on Kish Island, a free-trade zone off Iran’s southern coast. Iran subsequently announced that it would seek to open The Kish International Oil, Gas and Petrochemical Bourse (KIOB), originally scheduled to start with the Iranian New Year, March 21, 2006. (pictured). However, the bourse has been postponed several times. The reason is unclear, but Chris Cook, former director of the London International Petroleum Exchange (IPE), suggests this was due to internal Iranian politics. [79] The political aspects were apparently resolved in mid-2006 with the appointments of Kazem Vaziri-Hamaneh as Iran’s new oil minister, and Mehdi Karbasian as the chairman of the oil bourse. [80]

Despite the delays, Iranian news outlets in September 2006 describe the opening the KIOB as “under way.” [81] For Iran, the oil bourse would provide multiple benefits. For example, Kamal Daneshyar, who heads the Majlis Energy Commission, believes that once the oil bourse becomes operational, some \$10 billion in commissions will be added to Iran’s annual revenues. [82] From a macro perspective, KIOB proponents have also listed the dollar’s devaluation as an additional incentive for oil producers in the Middle East and Caspian region to use the oil bourse:

Proponents of the Oil Bourse believe that oil producing countries need to take such an important initiative notwithstanding the risks and barriers....*They believe that OPEC member-states have lost 72 percent of their nominal revenues on the fall in the value of the dollar and their declining purchasing power.*



....One thing to remember is that OPEC countries receive dollars for their oil exports and will have to spend the same dollars in trade transactions with countries whose currencies are rivaling the greenback all the time....Iranian authorities are optimistic that the Oil Bourse will provide many countries with an opportunity to trade oil with currencies other than the US dollar...*This optimism also applies to the European Union, which is one of the largest energy consumers in the world and whose currency the euro is the proposed alternative to the dollar.* [83] [emphasis added]

Iran appears interested in establishing a Persian Gulf price benchmark, or “oil marker” as it is referred to in the industry. Iranians argue that, as long as 60% of global oil and 25% of natural gas needs are met by Persian Gulf states, “oil dealing in either New York or London [makes] no sense.” [84] (The current major oil markers are all US dollar-denominated: West Texas intermediate crude, UK Brent crude, and UAE Dubai crude. This list excludes Russia and China’s new oil bourses, which will be addressed separately in this essay).

The most surprising news regarding the proposed Kish International Oil Bourse was Tehran's announcement on September 23, 2006 that the Iranian Rial (IRR) will be the "main" currency for use on their oil trades, with the dollar and euro offered "concurrently." [85] It is not yet clear how the use of this basket of currencies would be implemented, but it appears that Iran is following the Russian example of using its domestic currency as an official petrocurrency. By offering oil in a basket of three currencies, Iran is shrewdly attempting to hedge its bets. Moreover, by offering trades in the Iranian rial as a petrocurrency, Iran is attempting to isolate itself from potential economic warfare, while perhaps hoping that China and India might purchase Iran's oil and gas in Iranian rials, thereby bypassing US-influenced banking institutions that could block Iran's oil revenue transactions.

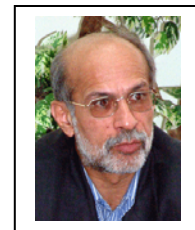
It is unpredictable what volume of trade will take place on this oil bourse in the early stages, but the project is intended to be an international mechanism designed to compete with the other two major oil trading exchanges; New York's NYMEX, and London's ICE. Much of the success of the oil bourse will depend on participation from other producers in the Middle East and the Caspian Sea region, as has been acknowledged by Iran's Economics and Finance Minister. In May 2006 the South African Press reported that:

The [Kish International Oil Bourse] exchange will have a positive impact on oil sales, not only in Iran but in the wider Gulf region and is slated to replace the current dollar-based oil exchange with one based on the euro. Iran argues as long as 60% of global oil and 25% of natural gas needs are met by Gulf states, oil dealing in either New York or London made no sense... Iran also wants to circumvent dollar-based oil exchanges to avoid being impacted by the United States economy. [86]

Numerous commentators have incorrectly suggested that the oil trades and associated economic effects of the Iranian bourse would be limited to Iran's oil exports (Iran accounts for about 4.2 percent of global oil production). This peculiar claim belies a fundamental misunderstanding (or intentional 'disinformation') about international oil trades and oil markets. It is true that if Iran's oil bourse were limited only to its own oil exports, the attending macroeconomic effects would be fairly limited.

However, it is important to realize that the KIOB is by design an *international* oil bourse, and its operations will not be limited to Iran's oil exports of 2.5 million barrels per day (m/b/d). In January 2006, Mohammad Asemipur (pictured), the executor of the oil exchange project, and Ali Salehabadi, the secretary-general of Iran's stock exchange, discussed the oil bourse with the Iranian parliament, with the following reported by *ISNA* and *BBC*:

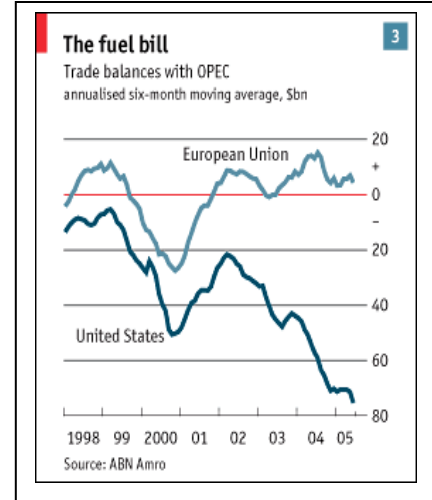
The structure has to be defined in a way in which it is not limited to Iran's 2.5m barrels of oil but should bring the oil of the regional countries into the exchange and to present up to a ceiling of 25m barrels. [87]



Only time will tell, but Tehran has clearly stated that other oil-exporters in the Middle East and the Caspian states are welcome to trade their oil and gas exports via their oil bourse. Iran's long-term plans for oil trade on the Kish oil bourse are ambitious: 25 m/b/d is approximately 29% of the world's oil production of 85 m/b/d. This, however, is a long-term goal: it would take years of steady trade and confidence building to produce such an outcome.

Nonetheless, there are strong monetary and trade incentives suggesting that the KIOB will become attractive to the European Union. [88] Reasons include — the majority of trade imports into

the Middle East are from the eurozone; the EU typically runs a positive trade balance with OPEC (graph source: *The Economist* [89]), the EU imports more oil from OPEC than the US, and most importantly, the euro maintains a 20% to 25% higher valuation, and is more stable than the depreciating US dollar; all of these factors suggests that many oil-exporting countries may ultimately seek the long-term macroeconomic advantages of oil transactions in the euro. In fact, during December 2006 the *Tehran Times* and *Iran Daily* reported that Iran has started to substitute euros for dollars in its oil sales. [90]



Should other OPEC members also make a gradual shift towards the euro as an alternative oil pricing and transaction currency via contracts on the Iranian oil bourse, the sell-off of various US dollar-denominated debt instruments will almost certainly accelerate, further precipitating the dollar's fall in value and increasing demand for euros and other potential petrocurrencies. Other US debt holders would have to sell their US treasury holdings and bid for euro-denominated short-term fixed-income instruments, while trading a rapidly devaluating US currency against euros, pounds, and yen (and perhaps in Asian countries against the Chinese renminbi, which is seen as a potential regional substitute before a euro-like Asian Currency Unit, or ACU, is introduced). Non-eurozone members would have to trade a devaluating currency for a stronger one, leading to large asset losses. As a result, the euro's value would increase substantially, potentially panicking the capital and oil markets, with the price of oil possibly spiking.

To avoid that type of dislocation, we should expect China and Japan to remove their support of the US dollar over time, regardless of whether OPEC changes its formal policy on the use of a basket of currencies for oil-pricing and transactions. While it is still too early to gauge the potential effects from the three new oil bourses on US petrodollar supremacy, the momentum towards multiple petrocurrencies is well under way, and I see no reason for these trends to subside.

The challenge to dollar hegemony is whether other *regional* or international oil exporters seek to transact oil trades via the Kish Bourse, and/or if Russian oil contracts to the EU were traded in euros by migrating to the Iranian bourse. Of course there is also a political dimension to this issue based upon the blowback of the Bush administration's policies. Following the reportedly CIA-backed unsuccessful coup attempt in April 2002 aimed at regime change in Venezuela, Hugo Chavez and his oil minister have welcomed the idea of euro-denominated oil transactions. During June 2006, Venezuela's oil minister confirmed that Caracas backs Iran's idea of selling oil in euros instead of US dollars. Oil Minister Rafael Ramirez (pictured) who is also the president of the state oil company Petroleos de Venezuela SA, candidly stated Venezuela's position on petroeuros:

Iran has an initiative that we support. They are going to start to do oil transactions in euros....If a market in euros is created, with the euro as a reference, we could send our supplies so they are sold under this (currency). [91]



Assuming the launch of Iran's oil bourse is "under way," it appears that by 2007 international buyers will have a choice of buying a barrel of oil for around \$60 on the NYMEX or ICE or for €45 euros or 530,000 rial on the Iranian bourse (assuming the euro maintains its current valuation relative to the US dollar — and that 'interventions' are not undertaken to disrupt the oil exchange). To be certain,

petrocurrency hedging could become prevalent, with an unpredictable outcome. With a strong euro, potentially hundreds of billions of former petrodollars could be repatriated back into the US economy, causing a huge increase in inflation, a sharp rise in the US current account to over \$1 trillion annually, and even more devaluation pressures on the dollar. A successful Iranian oil-trading platform would introduce global petrocurrency hedging and fundamentally new dynamics to the biggest commodities market in the world, that of oil and gas. The problem for the Washington Consensus in this scenario is obvious — who will fill the gap to fund the \$2.2 billion per day deficit in the US current account?

For the average American, the most immediate effect would be increased oil currency risk, perhaps evidenced by the price of oil ratcheting upward. This raises an interesting hypothetical: Would OPEC change its unit of account, or pricing currency, if a barrel of oil on the Iranian bourse ultimately cost €60 euros instead of \$100 dollars in London or New York? In order to prevent any such scenario — and largely unreported by the US corporate media — Washington is currently engaged in all-out economic warfare that is precisely designed to *undermine* the Iranian oil bourse.

Specifically, the US is pressuring Japan and Europe to block any financial transaction with Iran that involves the dollar, euro, yen and pound. The effect of these “smart sanctions” is to potentially embargo Iran's oil export revenue obtained via its proposed multiple-currency oil bourse. During the early months of 2006 some ambiguous reports suggested that Washington was trying to circumvent the UN Security Council in an attempt to implement such sanctions against Iran, but details were lacking. Finally, during the summer of 2006 the *Washington Post* delivered the crucial facts confirming my suspicions that the Bush administration is working to undermine the KIOB.

The *Post* article acknowledged that US policymakers had originally discussed plans for sanctions through the UN Security Council, but that tactic has proved more difficult than convincing a handful of allies. So the US is currently pursuing a legally dubious strategy outside the Security Council's authority that is not dependent on “recalcitrant” countries that have strategic interests and/or energy contracts with Iran (e.g., Russia and China). In May 2006 the *Washington Post* revealed that the current economic warfare against Iran requires Japanese acquiesce, reporting that:

Despite months of pressure from Washington, Japan has become increasingly reluctant to join a Bush administration plan for sanctions against Iran if negotiations fail to resolve concerns over the country's nuclear program...[Japan] may not join in punitive measures unless there is a broad international consensus along the lines of a UN Security Council resolution or other measure backed by nations now reluctant to impose sanctions, such as China. The White House had hoped instead to bring Japan into a “coalition of the willing” that avoided dealing with “recalcitrants” such as Russia and China.

The administration's fallback plan if talks with Iran fail — tough financial measures imposed by a small group of like-minded countries — depends strongly on Japanese participation. Without it, administration officials have calculated, the impact would significantly decrease. [92]

It remains unclear if Japan will acquiesce to US demands for financial sanctions against Iran. Obviously Washington's plans for barring financial transactions with Iran would have negligible, if any, effect on Iran's nuclear program; rather, these stealthy sanctions are targeted at Iran's proposed oil bourse. The key element of this plan was revealed by a follow-up article in the *Washington Post*:

At a meeting of finance ministers of the Group of Eight major industrial powers in Russia last Friday, Treasury Secretary John W. Snow asked Japan to consider sanctions,

including barring financial institutions from conducting transactions in Iran....Initial sanctions under consideration against Iran would largely spare the global trade in Iranian crude oil. But the most severe sanctions — including cutting Tehran off from access to the dollar, euro, British pound and yen — would be a step "potentially imperiling European and Japanese trade, including the oil trade," according to a Treasury Department task force report. [93]

It seems doubtful that this strategy will work in a world with effectively no spare oil capacity. To be sure, the Japanese government may be concerned that its own economic well-being would become jeopardized if they go along with Washington's desperate and legally questionable plans to embargo financial transactions to and from Iran completely outside the UN framework. The *Washington Post* article alludes to this tension, stating that Japanese officials have set a "high bar" for any action:

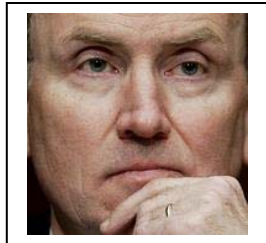
"We would not do anything without the full support of the international community," a senior Japanese government official said, speaking on condition of anonymity because of the issue's sensitivity. "For example, we would need a vote of the UN Security Council or a similar measure that would have to include China and Russia. Otherwise, Japan might end up moving out of Iran only to see someone else's oil companies rush in." [94]

The *Washington Post* article noted that the price for some US allies for going along with Washington would be very steep. According to this article, the Treasury Department predicted that Britain, which does not import Iranian oil, faces a low level of financial risk if it agrees to implement the sanctions plan. [95] Germany, which imports 1 percent of its oil from Iran, and France, which gets 6 percent, are deemed at medium financial risk, whereas the largest risks would be Italy, which imports 9 percent from Iran, and Japan who imports 12 percent.

If Beijing and Moscow did not participate in the "coalition of the coerced," they would also be spared any financial burden and be free to pick up lost European business with Iran and, in the case of China, additional opportunities for more of Iran's oil and gas exports. Undoubtedly, a world with effectively no spare oil production capacity may confound Washington's plans for unilateral sanctions against Iran, and thus it remains unclear if Washington can create a "coalition of the coerced."

From the Iranian perspective, Washington's attempts to cut-off financial transactions utilizing the dollar, euro, yen and pound sterling may have pushed Iran to make the unusual decision to offer oil sales in its own domestic currency. The long-anticipated petroeuro option is far more attractive from a monetary and international trade perspective, since the money supply and liquidity of the Iranian rial is rather limited. On the other hand, from Tehran's perspective there is logic to this decision, as Iran is trying to circumvent the US dollar and associated banking apparatus. Using the rial as a petrocurrency is likely a purposeful strategy designed to insulate Iran from US attempts to seize its oil revenue by clandestine efforts outside the framework of the UN Security Council.

The US is attempting to counter this stratagem by blacklisting Iran's largest bank, Bank Saderat. Washington claims this is necessary to prevent Iran from "abusing" the global banking system, including providing financial support to Hezbollah and Hamas. In an October 2006 article, US Deputy Secretary of the Treasury Robert Kimmitt (pictured) was interviewed by Germany's *Der Spiegel*, where he warned European banks to "Be very, very careful with Iran." [96] The inherent difficulty of Washington's ongoing strategy supposedly based on Iran's support of "terrorism and weapons proliferation" was acknowledged in the *Der Spiegel* article with a quote by the president



of the Association of German Banks, Klaus-Peter Muller, who stated: "one can hardly expect banks to terminate long-cultivated business relationships based on vague-suspicions." [97]

Indeed, this strategy to remove Iran from the international financial community appears frantic. In December 2006 the *Independent* revealed that the US Treasury Department was also intimidating UK-based banks with the "full legislative wrath of the US government unless they bow to Washington's pressure to shut their operations in Iran." [98] The US has even threatened that bankers found to have breached these unilateral restrictions face a fine of up to \$250,000 and 20 years in jail. The hypocrisy of Washington's strategy is that the Treasury Department has formally testified that Saudi Arabia has long been the "epicenter" of terrorist financing. [99] Notably, the Bush administration has not engaged in similar punishment towards Saudi Arabia, despite its primary role in funding international terrorism as practiced by Osama bin Laden and the al-Qaeda network.

It is too early to know if this smart sanctions plan will work, but it should be noted that futures exchanges assume a free flow of capital across national borders, and this may not be possible if Iran is put under sanctions or the threat thereof. Of course, the US may also wish to create the impression of a looming war against Iran, therefore hindering Iran's ability to attract foreign capital or promote foreign participation on its oil exchange. In addition, futures exchanges require an efficient banking system. The Iranian currency is not fully convertible, and the establishment of an exchange that trades international contracts would likely require that the rial become fully convertible.

In any event, these proposals by Washington would have a negligible effect on Iran's nuclear energy program, but as I have discussed, that is not their purpose. Because of Washington's efforts to stifle Iran's economy, during December 2006 the Iranian central bank began to use euros for all of its foreign transactions and convert the state's dollar-denominated assets held abroad into the euro currency. Bankers in Iran reported that it was becoming increasingly difficult to receive Iranian-held money denominated in dollars from European bank accounts. Gholam Hossein Elham, Iran's government spokesman, stated, "Foreign income sources and oil revenues will be calculated in euros and we will receive them in euros in order to put an end to our dependence on the dollar." [100]

Despite the delays in opening the bourse, millions have been spent on the project, and international interest is evident. News reports indicate that various European banks have set up branches on Kish Island where the bourse is located. [101] Several European oil and gas companies have also opened offices there: Total (France), Shell (Anglo-Dutch) and Agip (Italy). [102] International interest in the bourse also comes from Asia, as evidenced by meetings between the Iranians and Chinese on energy opportunities and the establishment of "Iran-China Kish Energy Industries." [103] Presumably these European and Asian banking/energy firms have established themselves on Kish Island in order to participate on the oil bourse once it commences operations. In January 2006, Martin Walker, the editor for United Press International, suggested that the Europeans may be carefully hedging their strategic energy and financial interests regarding Iran. Walker wrote:

Mohammad Javad Asemipour, the technocrat and former deputy petroleum minister who has been charged with launching the bourse, has made a number of discreet scouting trips to London, Frankfurt, Moscow and Paris....*Asemipour is an elusive type, but one who seems convinced that Iran can play off the European against the Americans, the euro against the dollar...*he was quoted in the quasi-official *Iran Daily* saying that the Europeans have played "a beautiful game" with the United States during the years of sanctions, when they actively participated in economic projects, particularly in the energy sector, across Iran.

"In this game, the Europeans have pretended to be siding with America, whereas they got involved in business here and developed a sort of competition with the Americans," [Asemipour] said. "But in practice, they (the Europeans) have pursued their own interests." [104] [emphasis added]

The impact of Iran's oil bourse will likely be quite small at first, given that trade volumes will be low, but Tehran's long-term goal is being treated as a threat to continued US economic hegemony. As previously noted, Iran's proposed ceiling for oil trades via the KIOB is 25 m/b/d. This suggests that Iran ultimately wants to process almost one-third of the world's oil trade. That is a long-term goal that would take years to achieve, but as long as the euro remains highly appreciated relative to the US dollar, and the EU continues to be OPEC's largest trading partner, the incentive of oil producers in the Middle East and elsewhere to maintain their purchasing power will remain ever present.

Interest in the Iranian bourse will be strongest in countries whose main trading partners are within the eurozone, and migration of some Russian oil futures to a euro-denominated contract via the Iranian bourse appears inevitable. Selling oil via the KIOB with a petroeuro option will attract at once those countries using the euro, such as France, Germany and Italy. At face value the Iranian rial would not seem like an attractive option for many oil importing nations, but it is conceivable that it could offer nations that detest US foreign policies in the Middle East an alternative "Islamic" currency, thus bypassing the dollar for largely political purposes.

Summarizing, by offering oil trading in three currencies, the Iranian exchange is bound to diminish dollar hegemony, and the Iranian leadership is apparently willing to undertake this risk despite the treatment that Iraq received when it transitioned to petroeuros 28 months before Saddam was overthrown. Iran's oil bourse could effectively introduce currency risk to US oil imports, causing the price of oil in dollars to increase — but this time there would be *no* compensating increase in the global demand for dollars. In essence, if Iran's oil bourse becomes even moderately successful, Iran and other oil-exporting nations will be able to circumvent the petrodollar system that facilitates US deficit spending. Moreover, if they can set their own price via a Persian Gulf oil marker, they could potentially undercut oil prices set by London and/or New York. Lastly, by offering oil trades in a more valuable and stable currency such as the euro, Iran could siphon off customers from the New York and London exchanges and make them far less powerful in the global political economy.

Although not discussed by the US corporate media, as the world's spare oil capacity evaporates before the onset of Peak Oil, the economic bargaining power of the major oil and gas exporters is inexorably increasing, opening the door to yet other non-dollar petrocurrencies. Russia is actively pursuing this option. It is unclear if the Washington-London nexus can counter this development.

Part III. Russia's Geopolitical Posturing for Energy Superstate Status

Russia has found the Achilles' heel of the US colossus. In concert with its oil-producing partners and the rising powerhouse economies of the East, Russia is altering the foundations of the current US-led liberal global oil-market order, insidiously working to undermine its US-centric nature and slanting it toward serving first and foremost the energy-security needs and the geopolitical aspirations of the rising East.

— W. Joseph Stroupe, author, *Russian Rubicon: Impending Checkmate of the West*, as quoted in the *Asia Times*, November 22, 2006 [105]

One of the simmering geopolitical rifts that became public during 2006 was the deteriorating relationship between Washington and Moscow. In May 2006 Vice President Cheney criticized Russia's dispute with the Ukraine regarding natural gas prices by stating, "No legitimate interest is served when oil and gas become tools of intimidation of blackmail, either by supply manipulation to attempts to monopolize transportation." Shortly thereafter, Vladimir Putin countered with his own critique of US energy consumption by obliquely referring to America as a "voracious wolf." [106]

Not to be outdone, the UK-based *Economist* engaged in the strongest 'war of words.' In the lead-up to the G8 summit of July 2006, the *Economist* criticized Vladimir Putin's Russia as "assertive, oil-fired and authoritarian," and after the summit the magazine has described Russia as "fascist" with energy policies that "border on gangsterism." [107,108] Why have the political-banking-petroleum elites of the US and the UK suddenly engaged in a new verbal Cold War against Russia? Simply stated: mounting tensions over future energy supplies and shifting geostrategic and economic alliances.



Following the collapse of the Soviet Union in 1991, the IMF extended various loans to Russia, and the Washington Consensus implemented inept privatization schemes that resulted in the rapid sell-off of Russia's tremendous oil and gas resources for a pittance. Overnight, young men like Mikhail Khodorkovsky of Yukos Oil became Russia's new billionaires and oligarchs. Not everyone was pleased with this whole-sale liquidation of Russia's most valuable natural resources. In the late 1990s, before becoming president, Vladimir Putin wrote a PhD dissertation at the St. Petersburg Mining Institute entitled: "Toward a Russian Transnational Energy Company." In his thesis he noted:

In the early stages of pro-market reforms in Russia the state temporarily lost strategic control over the mineral resources industry. This led to the stagnation and disintegration of the geological sector built over many decades.... However, today the market euphoria of the early years of economic reform is gradually giving room to a more balanced approach that... recognises the need for a regulatory role of the state. [109]

Since becoming president in 2000, Putin has methodically sought to implement his basic thesis: Russia should use its vast energy reserves to uphold its economic and political independence. The first step in using the "regulatory role of the state" was to reverse, to the degree possible, the disorderly privatization policies implemented under Russia's former president, Boris Yeltsin. Over the past three years, Russia's oil and gas resources have slowly been re-organized and transformed via nationalization policies. In fact, one of the more impressive policies that Putin has implemented as president has been to use Russia's elevated oil revenue of the past few years to pay off the dollar-denominated IMF loans that were extended to Russia during the 1990s.

As for Khodorkovsky, he was arrested in October 2003 and is currently serving a nine-year jail sentence, ostensibly for tax evasion (pictured). However, Engdahl and others argue that his imprisonment is probably due much less to tax issues, and far more to the fact that he made the critical mistake of going to Washington that autumn where he agreed to a deal where Exxon-Mobile would gain a 30 to 40 percent stake in Yukos Oil. [110]



It does not require much imagination to see that Putin, a firm nationalist who seeks Russia's re-emergence as an "energy superstate," would be fundamentally opposed to Khodorkovsky's plans that would have allowed much of Russia's most valuable energy resources to fall under the control of US-

based Exxon-Mobile. From Putin's viewpoint, this was apparently unacceptable, and he decided to restore state control over Yukos Oil and rein the country's oil tycoon. Some analysts have suggested, probably correctly, that Khodorkovsky's imprisonment was a veiled message to Washington and its cadre of petroleum elites: Russia's strategic energy resources will *not* fall under the control of US multinationals and instead will be used to revitalize Russia economy — and to pay off its IMF debt.

In addition to the stunning Khodorkovsky arrest, a lesser known but perhaps more important news story in October 2003 was Putin's comments about conducting future oil trades in the euro. After a meeting in which former German Chancellor Gerhard Schroeder and Putin agreed that Germany could conduct future gas trades with Russia in the euro, Putin also mentioned that Russian oil sales could potentially be redenominated as well. The *Moscow Times* reported:

"We do not rule out that it is possible. That would be interesting for our European partners," Putin said.....A move by Russia, as the world's second largest oil exporter, to trade oil in euros, could provoke a chain reaction among other oil producers currently mulling a switch and would further boost the euro's gradually growing share of global currency reserves. [111]



The *Moscow Times* further quoted Yosef Ibrahim, managing director of the Strategic Energy Investment Group in Dubai and a member of the US Council on Foreign Relations, as stating that Saddam's switch to the euro for Iraqi oil trades "was another reason [why the US attacked]. There is a great political dimension to this. Slowly more power and muscle is moving from the United States to the EU, and that's mainly because of what happened in Iraq." [112] Yevgeny Gavrilenkov, chief economist at Troika Dialog, one of Russia's leading asset management companies, stated that debate was growing on a move toward the euro as Russia mulls siding with the EU: "Such an idea is really possible. Why not? More than half of Russia's oil trade is with Europe. But there will be great opposition to this from the United States." [113]

The proposition that a switch to non-dollar denominated oil transactions by Russia, currently the largest oil producer in the world, would be met with "great opposition" from the US is an understatement. Despite this opposition, Putin has forged ahead with his plans for a "petroruble." Moreover, given his desire to enhance Russian-EU relations, it would not be surprising if some of Russia's oil trades migrated to euro-based transactions via the anticipated Iranian oil bourse.

While 2003 marked the beginning of the open deterioration between Moscow and Washington, the situation became more contentious in 2006 when Washington blocked Russia's ascension to the WTO, followed by Moscow's landmark energy proposals at the G8 summit held in St. Petersburg. Although conspicuously missing from US media reports, Russia used this opportunity to present its "revolutionary agenda" outlining how it seeks to build new strategic alliances in an effort to achieve what I describe as energy superstate recognition. The most candid analysis of this dynamic was outlined in an *Asia Times* article by John Helmer, "Russian Energy Model Challenges OPEC":

In the lead-up to the St Petersburg [G8] summit...Russia presented a revolutionary agenda that leaders of the developing states in Africa and Asia should have every reason to support. This is a new Russian scheme for supplying, consuming and pricing energy — principally oil and gas, but also coal and uranium — to the world.

Because this is meant to supersede the traditional arrangement for supplying and pricing crude oil through the Organization of Petroleum Exporting States, those who benefit most

from OPEC, led by the United States, have orchestrated a drumbeat of criticism of the Russian model, calling it an unreliable source of energy, and attacking Putin for using energy exports as a political weapon.

Media coverage of the G8 summit agenda, especially the "energy security" priority Russia has introduced, reflects this fight. The media have been (and will continue to be) a weapon for both sides. *From the Russian point of view, however, the new energy-supply model is not negotiable.* [emphasis added]

The emergence of this new strategy has been swift, but clumsy. Countries, international corporations, and their public relations and media networks, which supported the OPEC model for Russia in the past — those, for example, who backed such Russian oligarchs as Boris Berezovsky and Mikhail Khodorkovsky, and who currently oppose Gazprom and Rosneft — are hostile to the new Russian energy strategy because, if it succeeds, it neutralizes the chances of long-term regime change inside the Kremlin. [114]

In the coming years we can expect the US corporate media conglomerates, especially the highly biased and hawkish FOX News media machine, to re-cast Russia as the 'Evil Empire Redux.' Russia's emerging energy-driven geostrategy will take years to implement and will be "clumsy" at times. However, given the potential geopolitical importance of this strategy, which is producing a New Cold War with the US, an extended excerpt from Helmer's *Asia Times* article is warranted:

From the Russian perspective, the Saudi role and OPEC model have benefited the United States, which can pressure Saudi Arabia into opening the spigot to deal with supply emergencies; the US also pressures other oil producers, such as Libya, Iraq, Iran, Venezuela, and Indonesia, by military methods, diplomacy, and economic sanctions. *In the Russian alternative, the US will be far less influential, and have fewer levers, commercial or military, to effect pressure on the energy suppliers.* Russian arms and defense-industry partnerships are on offer to relatively weak, intervention-prone energy producers in Africa and Latin America to offset US pressure.

In the OPEC model, the benchmark is Brent crude, priced in US dollars. *In the Russian model, the discount and disadvantage between the Brent and Urals benchmarks will be reduced, and pricing will evolve toward a currency basket, including the ruble.*

In the OPEC model, suppliers hold much of their cash and government securities in US-controlled institutions. *In the Russian model, cash is held in the form of a currency basket; conversion from cash is sought into non-US assets, particularly in the European market.*

In the OPEC model, investment in new energy reserves should be open to, and may be controlled by, US corporations. *In the Russian model, strategic reserves should be controlled by national companies, state-controlled champions, or joint ventures in which Russian interests are in the majority....*

The Russian model also extends to energy-convertible coal, uranium, and other mineral resources. Through negotiations for Russian accession to the World Trade Organization (WTO), the US, Australia, Canada and other resource-exporting states have sought to gain unlimited access to search and development of Russian minable resources. The

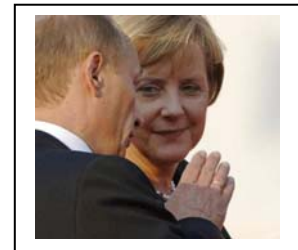
Russian model rejects this, and instead assigns priority and equity control of domestic resources to national resource companies. The model proposes tradeoffs and partnerships in resource exploitation in third countries, especially the developing states.

The US-backed OPEC model assigns international priority to the Arab states. *The Russian model assigns priority to the Central Asian alliance, including China, India, and Iran; secondarily to Latin America and ultimately Africa.* [115] [emphasis added]

The last item in this list alludes to Washington's concerns regarding the Shanghai Cooperative Organization (SCO). If the SCO evolves into a geostrategic energy alliance — dubbed the "SCO Energy Club" by Putin — the US would undoubtedly stand to lose its influence over not only Central Asia, but Western Europe as well. The changing global energy landscape is already increasing the EU's energy dependence on Russia and decreasing US leverage in the transatlantic relationship.

If Putin's revolutionary energy agenda at the G8 summit was not disconcerting enough from Washington's perspective, perhaps worse was the momentous announcement in mid-October 2006 that Russia's huge gas company, Gazprom — would send most of its gas from the massive Arctic Shtokman field to Europe — rather than to the US. The significance of this decision should not be underestimated, as it represents a complete *reversal* of Russian energy policy: North America was intended to be the project's main destination. (The Shtokman gas deposit has enough natural gas for 50 years of deliveries to the US). This fact was not lost on Putin, who stated the following while meeting with German chancellor Angela Merkel (pictured) and French president Jacques Chirac:

You can imagine what kind of quantities we are talking about here, and what this would mean for the European economy and for the German economy. This deposit has enough reserves to ensure supplies for 50-70 years. This creates an absolutely stable and sustainable situation in the economy and on the European energy market, above all in the energy sector in Germany. [116]



This was a tremendous blow to US energy prospects and a boon to the EU. Putin underlined the strategic significance of the Russian-German partnership by stating in the presence of Merkel,

We are linked by the common goals of building a unified and prosperous Europe, dedication to the principles of building a just world order, and the aim of effectively countering international challenges and threats...Judging from all appearances, our [Russian-German] *cooperation could be even more large-scale, as a result of which Germany could turn from a simple consumer of Russian gas and oil to a large center for the European distribution of these products.* [117] [emphasis added]

During previous decades Washington could exert strategic leverage on Western Europe because of America's own energy resources, but that is simply no longer the case as the world's surplus oil and gas capacity shrinks to mostly Russia, central Asia and the Middle East. By 2020 the EU's dependence on imported natural gas will grow from its present imports of 40% to perhaps 70-80%, with Russian gas exports to the EU during this same period scheduled to increase from current imports of 26% of EU consumption to approximately 40-50%. The EU's heavy dependence on Russian energy sources will compel EU countries to enhance their political interaction with Russia. Clearly, we are entering a multi-polar world where geographically concentrated yet diminishing reserves of hydrocarbons will increase the power of nations who remain net energy exporters.

Cold War Part II: Introducing Russian Petrorubles

The Rouble must become a more widespread means of international transactions. To this end, we need to open a stock exchange in Russia to trade in oil, gas, and other goods to be paid for in Roubles. Our goods are traded on global markets. Why are not they traded in Russia?

— President Vladimir Putin, Speaking before the full Russian parliament, Cabinet and international reporters, May 2006 [118]



The first chapter of *Petrodollar Warfare* illustrates that in the post-WWII era, hegemonic power was derived principally via channeling of oil wealth and the issuance of a world reserve currency. For most of the 20th century the principal benefactor of this oil wealth was the United States — despite the fact that its own domestic oil supplies peaked in 1971. However, at the beginning of the 21st century Russia apparently having learned from some of its past mistakes, is seeking to deploy an integrated energy-currency nexus to regain some of its lost strategic influence.

One lesson Russia appears to have learned is that the ability to issue a petrocurrency for international oil transactions is an effective method to build international demand for one's currency and enhance one's economic status — assuming one has the requisite leverage to introduce such a dynamic to the global markets. Under the policies of Vladimir Putin, Russia has begun to challenge US hegemony by pursuing an "energy superstate" strategy while simultaneously undermining the dollar as the world's reserve currency.

In May 2006 Putin announced his intention to implement ruble-based oil trading via the Russian Trading System (RTS). Although the US corporate media seem not to have recognized it, these developments pose a direct challenge to Anglo-American economic supremacy. Oil trade via the new RTS began in July 2006; while trading volumes are initially low, the long-term potential economic impact of Russia's new oil bourse could become very significant.

An oil-industry report stated that, "starting from 2007 prices of Russian oil and petroleum products will be determined on this marketplace," [119] This source suggests that oil from the Ural region will become an oil price "marker," denominated in the ruble. (The Ural price marker will likely be discounted from the Brent crude marker because of the Ural's heavier grade oil). This announcement portended the birth of a new petrocurrency: the petroruble. Russia's central bank has even launched a publicity campaign to find a "catchy" new symbol for the ruble, with initial polling favoring a Latin "R" with two euro-like horizontal lines across the upper-left vertical line. In addition, a new 5000 ruble note has also been introduced to facilitate purchases of high-value items.



Rather than ruble-only trading on the RTS, a more logical policy would involve a basket of currencies including the ruble and the euro, especially given the latter's greater stability and liquidity relative to the Russian currency. Regardless of the dollar-oil nexus, it is clear from Russian monetary decisions that the euro is increasingly viewed as an alternative reserve currency to the dollar. The trends are apparent: In 2000 the Russian Central Bank held the vast majority of its reserves in US dollars and only 5% in euros, but by mid-2006 Sergei Ignatyev, chairman of the central bank, said that 50% of Russia's foreign-exchange reserves were in US dollars, 40% in the euro, and the remainder in the pound sterling — a mirror image of Russia's oil revenue-based Stabilization Fund. [120] It has been suggested by anonymous sources that Russia wants to further reduce its dollar holdings to only 30%, with the majority in euro holdings, along with some sterling and yen reserves.

In June 2006, Alexei Kudrin (pictured), Russia's finance minister, surprised his American guests when he openly questioned the dollar's status at the annual meeting of the World Bank and International Monetary Fund in Washington DC. Kudrin stated that the widening US budget and trade deficits were "definitely causing concern with regard to [the dollar's] reserve currency status...the international community can hardly be satisfied with this instability." [121]



While the dollar will not lose its unique status overnight, these remarks by Russia, currently the world's largest oil producer, continue to fuel speculation that central banks will increasingly diversify their holdings away from dollars. The pivotal issue that would underlie any such transition relates to petrocurrency issues. The UK-based *Telegraph* noted that Russia is in a unique position to strategically undermine the monopoly petrodollar system:

Kudrin's statement followed news that Sweden has cut its dollar holdings, from 37 per cent of central bank reserves to 20 percent, with the euro's share rising to 50 percent. Central banks in some Gulf states have also lately mooted a shift into the euro.

But Russia's intervention will have raised eyebrows in Washington because the backbone of the dollar's reserve currency status — the main guarantee that status continues — is the fact that oil is traded in dollars. And that is something the likes of Kudrin can directly affect. [122] [emphasis added]

From purely monetary and trade perspectives, allowing Russian oil sales to be denominated in non-dollar currencies, whether petrorubles or petroeuros, appears logical (Approximately two-thirds of Russia's oil exports go to the EU). The 2006 appointment of former German chancellor Gerhard Schroeder as chairman of Russia's Gazprom appears to suggest that using a basket of currencies (e.g., rubles and euros) for energy trade between Russia and the EU's largest economy is plausible.

Currently Russia's oil production is about 9.2 to 9.4 m/b/day. Assuming the RTS eventually captures most of Russian oil exports, and the oil bourse utilizes rubles for these oil trades, the projected annual drop in the demand for petrodollars would be approximately \$88 billion dollars. [123] In other words, customers of Russia's oil exports (principally the EU) would not need to accumulate the 88 billion petrodollars they are currently using for the same oil transactions. Along with the renewed nationalism, the Russian people will probably soon be "encouraged" to trade in their US dollars and euros for rubles.

Iran's oil exports are only about half of Russia (2.4 to 2.5 m/b/d), so assuming the Kish International oil bourse is operational by 2007, the drop in demand for petrodollars could easily be another \$44 billion. It should be noted that in addition to the Russian and Iranian exports totaling 17% of the global production, various Caspian oil exporters and other OPEC producers such as Venezuela may also seek to utilize a euro-based oil transaction option. The calculations cited above involving the potential impact on dollar-denominated petroleum based products are quite conservative. An analyst for the *Asia Times* forecasted a much greater impact:

Interestingly, Iran and Venezuela are OPEC's most vociferous supporters of non-dollar oil trade. Iran is expected to launch its own euro-denominated oil futures exchange in 2006. Both Iran and Venezuela intend to increase China's share of their crude oil exports above 40 percent by about 2010...

Russia, Iran and Venezuela, which combined control about 25 percent of the world's oil exports, could easily forge an agreement to direct new oil trade with China to Moscow's ruble-denominated energy exchange. *By 2008, as much as 10 percent of the world's crude oil trade could be conducted in rubles. By 2012, 20 percent of this trade could be ruble-denominated.* The shift toward ruble-denominated oil trade will



strengthen the ruble's exchange rate over the long-term as foreign central banks add rubles to their reserves to cover payments for oil imports.[emphasis added]

The ruble's gain will be the dollar's loss as central banks jettison dollars from their reserves in the process. Moscow's increasingly strong stance against Washington's global foreign and economic policy dominance will lead to a further reduction in global oil supplies, forcing international oil prices ever higher. High energy prices could eventually trigger a US economic recession forcing oil prices lower. However, declining global oil supplies and tight production control in Russia, Iran and Venezuela will create strong support for oil prices, preventing a price collapse. [124]

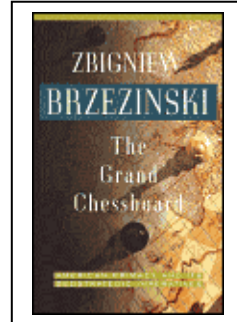
It is difficult to forecast the macroeconomic effects that would unfold if the majority of Russia's oil exports switched to petrorubles via the RTS, or petroeuros via the Iranian oil bourse. There is general agreement that central banks in Europe and elsewhere would begin to hold fewer dollars and associated US debt instruments, the international demand/liquidity value of the dollar would fall, and the inflow of surplus capital dollars into the Federal Reserve would rise. This in turn would cause a real rise in both inflation and interest rates within the US, along with greater currency risk for domestic US gasoline prices, while the global economy would begin to shift with the euro sharing a "co-hegemonic" role as the *de facto* second world reserve currency. Plans for a fully convertible Russian ruble are the 2008 to 2010 period. [125] Obviously the liquidity of a "quasi-convertible" ruble does not pose the same threat to the dollar's role as the far more stable and highly-appreciated euro.

As the Russian currency becomes more convertible and Russian oil trade migrates to the RTS, and Iranian oil exports move to euro-based transactions: what foreign nations will be willing to loan the Federal Reserve an extra \$88 billion to \$132 billion annually in 2007 and beyond in order to prop up a potential \$1 trillion plus US current account deficit? China's total purchases of US Treasuries in 2005 were \$200 billion; it is doubtful that China or Japan could make up such a shortfall. In fact, Russia and China have reportedly begun discussions to gradually do away with dollar-based transactions in their bilateral trade. [126]

The problem for the Washington and London Consensus is that if approximately 15% of the world's oil trade is conducted in a currency other than petrodollars, the US current deficit will certainly balloon to over \$1 trillion. Furthermore, it appears that monetary movements within East Asia, such as China's decision to open its own international petroleum exchange, are set to accelerate the decline of international demand for the dollar, thus adversely impacting Washington's ability to service US deficits. The net effect would require the US to earnestly reduce its twin deficits and once again begin living more within its means from tax, trade, and energy perspectives. Considering the ramifications, US policy makers should immediately begin multilateral negotiations with the EU, Russia, and OPEC regarding a controlled, graduated implementation of oil trades in a basket of currencies. Regrettably, the ideologically rigid neoimperialists in the White House appear unwilling to alter their stance on these crucial energy and petrocurrency issues.

The sometimes overwrought Moscow daily *Pravda* described these developments by asserting that Putin is creating a "new axis in Europe to oppose US hegemony...It is an open secret that Russia, France and Germany stand against the establishment of the unipolar world structure." [127] In effect, Russia and, to a lesser degree, China are attempting to organize the Shanghai Cooperation Organization (SCO) into a regional strategic-energy powerhouse. Russia and Iran have the largest natural gas deposits in the world, and an energy alliance that also included Algeria, Libya, the Caspian states, along with the associated pipelines in Central Asia, gives the SCO the leverage to become the world's "natural gas OPEC." With global Peak Oil on the horizon, these natural gas deposits will bring enormous economic, political, and strategic importance to Eurasia.

This is precisely the situation that Zbigniew Brzezinski said the US must contain in his renowned book on geostrategy, *The Grand Chessboard*. [128] Washington is attempting to block this development by funding and organizing the various "color revolutions" in Central Asia in the hope of strategically installing pro-US, pro-NATO governments around Russia's periphery. [129]



In October 2006 the *Asia Times* reported that a document was circulating among members of the Russian duma (parliament), entitled "On the Probable Scenario of Actions of the United States in Relation to Russia in 2006-2008."

[130] In this 35-page document, Valentine Fallin, a prominent Soviet historian-diplomat and formerly secretary of the Communist Party Central Committee, and Gennadiy Yevstafsyev, retired general of the Foreign Intelligence Service, claim that Washington is conspiring to stage a "color revolution" in Russia during the transition from the Putin presidency. According to the *Asia Times*, this analytical report "judges that if the Bush administration's hostile policies toward Russia have remained frustrated so far, that is because of the Kremlin's energy diplomacy and political independence; the popular Russian mood; the reevaluation of values by the Russian political elite in relations with the West; and the search for a new [national] identity...defending Russian national interests." [131]

Assuming the veracity of this report, it is highly doubtful that the Russian political elites and their increasingly nationalistic citizenry would be receptive to attempts by the US to covertly interfere in their upcoming presidential election. Indeed, if such a covert strategy was attempted and subsequently failed, it would likely unleash terrible political and economic blowback against the US.

Part IV. Asia: An Emerging Pole of Global Power

Something surprising is happening to China's currency.

— "The Renminbi Zone," *Asia Times*, 2003 [132]

The US dollar is no longer ... in our opinion [seen] as a stable currency, and is devaluating all the time, and that's putting troubles all the time. So the real issue is how to change the regime from a US dollar pegging ... to a more manageable reference, say euros, yen, dollars — those kind of more diversified systems.

— Fan Gang, director of China's National Economic Research Institute, quoted at the World Economic Forum in Davos, Switzerland, January 26, 2005 [133]

It is no secret that Asia — especially China — is becoming a major pole of world power. While it may take several more years for China's economy and banking system to make the reforms necessary to enable China to compete on the world stage, its regional influence seems assured. The eventual

emergence of the Chinese renminbi (RNB), currently being re-valued, as a major currency is likely. The *Asia Times* in 2003 described how China's currency is becoming a *de facto* convertible currency in the Asian Pacific economies, a development that has the tacit support of Beijing.

Something surprising is happening to China's currency. Although not fully convertible, the renminbi, the "people's money," is growing in use as a hard currency outside China — the first sign of its potential role as "Asia's money." In Hong Kong and along China's borders with Southeast Asia, an emerging renminbi zone can be traced, fueled by burgeoning Chinese trade and tourism. [134]



China's membership in the World Trade Organization can only accelerate the emergence of a strong, unified Chinese currency. This in turn will increase the desirability of a fully convertible renminbi, both as a way of smoothing the integration of China's economy into the world economy and as a way for China to exercise its economic might more directly. Full convertibility is a stated goal, but no fixed timetable has been publicly stated.

China's central bank began diversifying away from the dollar when it re-valued the renminbi in July 2005. However, the small 2% revaluation was not nearly as important as its decision to divorce its currency from a dollar peg and move toward a basket of currencies. [135] The Chinese government has not listed the specific mixture of currencies, but it is generally assumed that the dollar, euro, and yen are the three largest currencies in the basket, with various East Asian currencies as the likely remainder.

Moreover, in January 2006 the Chinese government's foreign exchange regulator released a statement indicating that it sought to "improve the currency structure and asset structure of our foreign exchange reserves." [136] Stephen Green, an economist for Standard Chartered in Shanghai, was quoted in a *Financial Times* article as saying this was a "subtle but clear signal that they are interested in moving away from the US dollar into other currencies, and are interested in setting up some kind of strategic commodity fund, maybe just for oil, but maybe for other commodities." [137]

The same article noted that during 2005 China purchased on average \$15 billion in US Treasuries per month and that any diversification away from the dollar will have significant implications for the global financial and commodity markets, including the dollar's valuation relative to the euro. There is growing concern in Asia that the twin US trade and budget deficits may begin to unhinge the dollar's status. In March 2006, the *Asia Times* published a disconcerting article entitled: "Asia Must Prepare for Dollar Collapse." [138] Masahiro Kawai (pictured), the Asian Development Bank's head of regional economic integration, and the former deputy vice minister in Japan's Ministry of Finance, was quoted as warning East Asian countries about a possible dollar collapse:

Any shock hitting the US economy or the global market may change investors' perceptions given the existing global current account imbalance...Our suggestion to Asian countries is: Don't take this continuous financing of the US current account deficit as given. If something happens then East Asian economies have to be prepared...The possibility of a US dollar collapse or sharp decline may be small at this point but it would generate very significant turmoil so East Asian economies...ought to be ready for that. [139]



An analysis of the monetary trends in the East Asian countries shows that they are preparing themselves to be less reliant on the US dollar. The most important developments that presage the erosion of dollar hegemony are monetary movements under way in China, Japan, and South Korea that may create the basis for an eventual common regional currency for Asia, similar to the euro. Although a formal union of Asian currencies is still a distant goal, the Asian Development Bank has been pushing the idea of an Asian currency unit, or ACU. In May 2006, finance ministers from China, Japan, and South Korea announced tentative steps to coordinate and “harmonize” regional monetary policies. [140] In a joint statement, ministers from the three nations agreed to “immediately launch discussions on the road map for the system to coordinate foreign exchange policy....We agreed on further study of related issues, including the usefulness of regional currency units.” [141]

Haruhiko Kuroda, Japanese president of the Asian Development Bank, and a vocal supporter of a prospective ACU currency reported that Washington was opposed to Asian monetary union. The *New York Times* quoted Volker Ducklau, the Asian Development Bank's executive director for Germany and Britain, as stating that: "From the Americans there was an outcry, seeing [the ACU] as a danger to the dollar." [142] Similar to the launch of the common euro currency in 1999, Washington views these recent developments in Asia as a significant threat to US dollar hegemony.

Shanghai Petroleum Bourse Re-opens: China Enters the Fray

On August 18, 2006, China re-opened its oil bourse in Shanghai after a 12-year hiatus. (pictured) The Shanghai Petroleum Exchange is China's first bourse for spot transactions involving oil and gasoline products and in the future will begin trading other petroleum and chemical products, including crude oil, refined oil, and liquefied natural gas. The Chinese media reported that “two overseas oil giants have set up branches in China to trade on the Shanghai Petroleum Exchange but their identities have not been disclosed.” [143]



The most interesting statements regarding this oil bourse came from Ma Weifeng, a researcher at the Shanghai-based Tongji University, who stated that “China is getting prepared to fix oil prices on it own.” [144] Apparently the renminbi (RNB) is the transaction currency for the Shanghai bourse, thereby giving Beijing the flexibility of pursuing a potential basket of currencies for oil trades, just as China began last year to peg the renminbi to a basket of currencies.

The same week that the Shanghai oil bourse opened, a thought-provoking article appeared on a website run by the Swiss-based Center for Security Studies, warning of a “Chinese threat” to US economic supremacy:

A senior researcher at Brookings asserted that the US would lose out if and when China becomes the center of Asian trade, as this would result in huge losses for the US financial center: every financial transaction of US\$100 in international currency trading in the US results today in at least a US\$3 commission for US banks. According to him, if China should become the center of trade in Asia, financial services could shift from the United States, resulting in net job losses for its financial services sector and make a decisive dent in US GDP, of which financial services constitute some 22 percent. [145]

Currently New York's NYMEX and the City of London's ICE conduct the vast majority of the world's oil trade — a lofty position neither US nor UK political-petroleum-banking elites will want to share with the Russians, Iranians, and Chinese. Nonetheless, China, and to a lesser extent Japan, are increasing their exports to countries outside of the United States, especially to Europe and the Middle East, but mostly notably to other Asian states. This trend extrapolated over the next decade, will result in a significant reduction in dependence on American purchasing power — and a commensurate reduction in purchases of US Treasuries and other dollar-related debt obligations.

The long-term structural problems of the US economy and the decline in the dollar's value since 2002 were exacerbated by the Bush's administration's flawed tax-cut policies, which created trillions in new debt while enriching a tiny fraction of the population. It is possible that economic historians may note that it was the passage of the 2001 tax cuts that most weakened the US dollar relative to the euro, yen, and other major currencies. The 2003 tax cuts foolishly passed during the early phase of the Iraq War further hastened international flight away from the US dollar.

In the wake of these massive tax cuts, the European Central Bank warned the US administration of its “unsustainable” economic policies. [146] Russia significantly increased its euro holdings while divesting itself of dollars. [147] China in 2005 divorced itself from the dollar peg, and in 2006 began to diversify its reserve holdings. [148] Leaks from internal OPEC meetings reveal deliberations about euro-based oil transactions. [149] Even Japan warned Bush of “enormous capital flight” if his administration did not reverse its fiscal policies that were weakening the dollar. [150] The Bush administration did not heed these warnings, and today global movement away from the dollar as the world reserve currency is briskly accelerating. [151]



With China entering the fray with its own oil bourse, the tectonic shift toward a basket of currencies for global oil trade appears inevitable. Given their oil export volumes, the oil bourses in Iran and Russia have the greater potential to impact the dollar's relative value, and, more important, erode global confidence in the dollar. Further loss of confidence in a currency that is backed by its central role in global oil transactions will bring uncertainty in capital and commodity markets.

Washington's fear is that any decline of the dollar's monopoly position in oil trading might open the floodgates in other commodity markets in which the dollar is the medium of exchange but the US has only a minority market share (e.g., steel, gold, etc). The same fate befell the former world reserve currency, the pound sterling, whose reserve commodity pricing status began to wane in the 1920s and 1930s due to encroachment of the dollar.

The ill-fated unilateral invasion of Iraq that was designed to maintain US dominance of the global oil supply and enforce petrodollar supremacy has had the ironic effect of encouraging momentum toward petroeuros, as well as new geopolitical and energy alignments unfavorable to the US. In the meantime, the American military is trapped in a tragic and expensive quagmire inside Iraq, even as the Bush-Blair propaganda campaign is being waged against Iran. However, the EU, Russia, and China may not be so passive this time if Iran becomes the next target of US military action. [152]

As a former KGB officer, Vladimir Putin appears to be playing a far more sophisticated and effective game of geopolitical chess than his neoimperial counterparts in Washington and London. While it is too early to predict who will prevail in this contest between the Washington/London/OPEC alliance and the emerging Moscow/Beijing/“SCO Energy Club” nexus, the end result could be a far more multi-polar world than what was witnessed during the post-World War II period.

Part V. Recommended Reforms: Escaping the Destiny of Empires

In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist. We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted. Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.



— President Dwight Eisenhower, Farewell Address, January 1961

To save the American experiment and stop our slide toward an authoritarian state, we must create a divided government following the 2006 mid-term elections and elect an enlightened president in 2008. Nothing less than revolutionary changes are needed of the political landscape, including a federal mandate requiring voter-verified, auditable paper records of balloting in our elections. Information Security experts are unanimous in their analysis that the unauditable “e-voting” machines used in the US are easily compromised and represent a profound risk to our democracy. [153]

Regrettably, the two major parties have become different factions representing the same richest two percent of the population, and both espouse an imperial agenda. Their prime constituency is the elite that funds their political campaigns, which is of course the powerful and unaccountable military–industrial–petroleum–banking conglomerate. This is the natural result of a structurally flawed campaign finance system that renders much of Congress and the president incapable of voicing the concerns and interests of the other 98 percent of Americans. Just as President Eisenhower warned us 45 years ago about what might happen; our government now embodies the essence of a proto-fascist political system that is operating contrary to the welfare of the general citizenry.

There is no easy way out, and I do not envy the arduous journey that awaits the 44th president, who will likely face a combined economic and energy crisis. Global monetary reform, including a compromise with the EU regarding the world reserve/petrocurrency issues, implies that the US will have to forfeit its superpower status and revert to being one nation among equals. Many Americans do not want to hear this message, but unless this bitter pill is swallowed, the US economy may experience a disorderly decline, inducing far more pain than would be experienced via multilateral compromises for controlled contraction. Regardless, we may not have the luxury of choice for much longer, as the dictates of the global economy and physics will soon come to the forefront.

The only solution is international cooperation, real leadership, implementation of a phased strategy to adjust to oil and gas depletion, reform of the global monetary system, and behavioral changes to reduce our gluttonous addictions to oil and debt. The five US media conglomerates that control 90% of the information flow in the US are not serving the public's interest and should be broken up by anti-trust legislation. Comprehensive campaign finance reform and the rejection of ‘corporate personhood’ may be the only way for the US to enact the required energy reforms.

To save the American experiment from the shared destiny of all empires — military overextension and subsequent economic decline — I recommend the following six measures.

1. Disavow the Preventive War Doctrine. The unrealistic neoconservative goal of global domination must be quickly discarded by any new US administration if it hopes to relieve current and future geopolitical tensions. The concept of the United States openly violating international law with unilateral “preventive wars” in the oil-rich regions of the world will simply not be tolerated by other industrialized nations. One of the first official acts of the next president should be to officially disavow the “Bush doctrine” and state a desire for a multilateral approach to international relations, including a revamped anti-terrorism campaign utilizing INTERPOL. These are critical gestures needed in order to diffuse the tensions between Iran and US. Such a gesture would let the world community breathe a collective sign of relief and extend to the new administration much-needed political capital.

2. Launch International Energy Projects. Washington should propose to the UN that it form an international consortium of energy scientists and engineers to develop alternative fuels for transportation. IHS Energy has estimated that 90 percent of the world’s known oil deposits are already in production. [154] In April 2006 a Saudi Aramco spokesman stated that despite all efforts to maintain production, they expect on average a 2 percent annual decline from Saudi’s mature oil fields, presumably including Ghawar, the world’s largest oil field. [155] If true, world oil production will simply *not* be able to expand enough to meet projected demand by 2010 and beyond. If alternative fuels for transportation cannot be developed and implemented over the next decade, disaster will follow, including major disruptions in global food supplies. Ideally, the G8 nations plus China and India would immediately advocate the investment of hundreds of billions of dollars in UN-coordinated international energy programs with the urgency of the Manhattan and Apollo projects. The following technologies pursuant to energy reconfiguration should be vigorously developed and implemented:

Short-term “bridge technologies” and other energy reforms (present day to 2020)

- Ultra fuel-efficient gasoline and diesel engines (vehicles exceeding 60 mpg).
- Clean-coal technology with mitigation of carbon dioxide emissions to power electricity-based transportation systems (light rail systems, plug-in hybrids, etc).
- Massive light-rail projects, including using land currently used by the Interstate Highway System (preferably driven by electrical power generated with renewable energy).
- Aggressive agricultural programs to reduce fossil-fuel inputs (fertilizers and pesticides) and dramatically increase localized, organic food production.
- Wind power (rapid deployments in both small and large-scale settings).
- Massive solar-energy/photo-voltaic retrofitting of residential and commercial buildings.

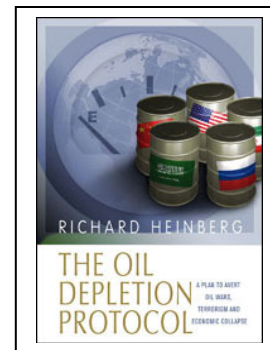
Intermediate to long-term energy projects utilizing renewable energy (2010 to 2030)

- Large-scale deployments of Geothermal and ground-source heat pumps (retrofitting both commercial and residential buildings).
- Biomass and biodiesel limited to localized, agriculture-based farm production and food distribution (technology is non-scalable for public transit due to low energy return on energy invested or EROEI, and should be limited to food production and distribution).
- Wave and tidal power systems for electricity generation in the coastal regions.

Research & Development for Long-Term Energy Systems (2020 and beyond)

- Ocean Thermal Energy Conversion (OTEC) (e.g., fleet of 50 to 100-megawatt floating “plant-ships” producing liquefied ammonia for hydrogen fuel cells and potable water).
- Hydrogen/ammonia fuel cells for mass transit via non-fossil fuel-based energy systems
- Thermal depolymerization (new technology that warrants more R&D).
- Holistic EROEI analysis of improved breeder reactors that recycle uranium by-products and continued R&D on nuclear fusion (still unproven technology).

3. Implement the Oil Depletion Protocol. The UN should immediately convene an international group of scientists and engineers to study fossil-fuel depletion. Under UN supervision, the global community should devise a methodology and formal agreements regarding the distribution of hydrocarbons based on the global depletion rate. Richard Heinberg's newest book on Peak Oil, *The Oil Depletion Protocol: A Plan to Avert Oil Wars, Terrorism and Economic Collapse*, provides a blueprint explaining the necessity of implementing a global oil-depletion treaty, and how such an accord would be implemented to produce a graduated worldwide reduction of oil consumption while preserving some level of oil price stability. [156] Colin Campbell, a petroleum geologist and retired oil industry executive, founded the Association for the Study of Peak Oil and Gas (ASPO). Campbell and his colleagues devised the idea of the Oil Depletion Protocol, which incorporates two difficult, but completely logical, recommendations:



- No country shall produce oil at above its current Depletion Rate, such being defined as annual production as a percentage of the estimated amount left to produce;
- Each importing country shall reduce its imports to match the current World Depletion Rate, deducting any indigenous production. [157]

Successful implementation of such a worldwide treaty would seem miraculous; yet the incentive to abide by such an accord is the inescapable fact that the alternatives are either global oil-depletion warfare or economic warfare in the international foreign-exchange markets. These adverse events can be avoided, but only if the international community can agree to such an energy treaty while also transforming the current economic and monetary systems and advocating humane measures to stabilize and then gradually reduce global population levels.

It is essential that the US use less fossil-fuel energy and immediately improve its infrastructure before the full effects of Peak Oil make any energy reforms unbearably painful and expensive. Given that the US consumes 25 percent of all hydrocarbons, Americans have the most to lose if energy reforms are not implemented while we still have the ability to pursue a gradual “Powerdown” scenario. [158] Michael Meacher, former member of Parliament and UK environment minister from 1997 to 2003, stated the obvious in his article, “Bottom of the Barrel”:

The conclusion is clear: if we do not immediately plan to make the switch to renewable energy — faster, and backed by far greater investment than currently envisaged — then civilisation faces the sharpest and perhaps most violent dislocation in recent history. [159]

On a positive note, the implementation of the Oil Depletion Protocol has the potential to facilitate the goals of the Kyoto Treaty and slowly begin mitigating global climate change by systemically decreasing levels of CO₂ production that result from burning petroleum-based hydrocarbon fuels.

4. Restore Fiscal Discipline. Washington must restore some semblance of fiscal responsibility if it wants to save the dollar. The Iraq conflict has cost almost \$600 billion by 2006, with the true long-term cost of the conflict reaching up to \$2 trillion. [160] Similar to the draining of US gold reserves during the Vietnam War, the devaluation of the dollar from 2002 to 2006 reflects the world's lack of faith in US economic and foreign policies. The creditworthiness of a currency is based on the ability of the government to collect tax revenue from its citizens. China, the largest holder of US debt, decided in 2005 to de-peg its currency from the dollar, and in 2006 began diversifying its foreign exchange holdings. These are policies designed to protect some of China's capital from a potential

dollar crash and are indicative of lost faith stemming from the reckless tax-cut and debt-financing policies of President Bush and the Republican Party. At a minimum, repealing large portions of the clearly unaffordable 2001 and 2003 tax cuts could facilitate a balanced cash budget and restore a sense of fiscal discipline. Sustained balanced budgets and fiscal discipline will require a substantial scaling back of money currently wasted on our unproductive global military superstructure.

5. Revitalize the US Manufacturing Base with Energy Reconfiguration. Alan Greenspan, the former chairman of the Federal Reserve, gave Americans the peculiar impression that it does not matter where American products are made, as long as people can continue to buy them. Nothing could be further from the truth. The loss of over 3 million US manufacturing jobs since 2000 has led to decreased real income, growing personal debt, and record numbers of personal bankruptcies. A superpower that loses its manufacturing base will not be a major power for long. The US must substantially invest in alternative/sustainable-energy technologies, and other export sectors to gradually but earnestly move the economy from a trade deficit back to a trade account surplus. This will take decades, but the imperative for large-scale domestic energy reconfiguration projects and the deployment of alternative energy would provide the US with new employment opportunities that would be safe from overseas outsourcing, while also enhancing long-term security.

6. Reform the Global Monetary System. The main problem with the current global economy is that excess levels of credit creation (i.e. credit/derivative bubble) have facilitated the building of supply capacity that is well beyond the requirements of global aggregate demand. Conventional economic theory suggests that a period of deflationary contraction would permit a decline of supply capacity until growth in demand initiates a new expansionary cycle. Economists like Richard Duncan, author of *The Dollar Crisis* have argued that excessive growth in global credit and subsequent structural problems of the US dollar may unleash a deflationary contraction of the global economy. [161] A depression accompanied by steep devaluation of the dollar could follow, and the downturn could last until global aggregate demand, particularly in the EU and East Asian economies, finally increased again, a process that might take many years.

Therefore it seems imperative that the US government begin discussions with the G8 nations plus China to reform the global monetary system, ideally to allow for a controlled expansion of markets in Europe and East Asia. The global economy will be more balanced and better off with three engines of global growth: the US, the EU, and Asia/India. The great challenge will be to implement a gradual, controlled decrease in the growth of the US money supply while attempting to minimize dislocations in the US and global economies. The first reform should be to make the euro the second international reserve currency, at parity with the dollar for oil transactions, thereby allowing a dual OPEC oil-transaction currency standard.

While these reforms are necessary to create a more balanced global economy, any broad transition from a dollar to a euro or euro-dollar standard, with subsequent enormous capital-market reorientation will be forcefully opposed by the US political and business establishments. Nevertheless, given US trade and fiscal imbalances, the ascendance of the euro, followed within a few years by a fully convertible Russian ruble, and perhaps, within a decade a fully convertible Chinese renminbi, seems inevitable. The US consumer cannot go into indefinite debt as the single engine for global growth, nor can the Federal Reserve continue to re-inflate bubbles forever. Both the EU and East Asia will have to recognize that the "party is over" and that they cannot ride the American consumer in perpetuity. Whether or not they wish to confront the challenges of this transition voluntarily, it will ultimately be imposed on them by brutal economic realities.

Conclusion

The occasion is piled high with difficulty, and we must rise — with the occasion. As our case is new, so we must think anew, and act anew. We must disenthrall ourselves, and then we shall save our country.

I am a firm believer in the people. If given the truth, they can be depended upon to meet any national crisis. The great point is to bring them the real facts.

— Abraham Lincoln, US President 1861–1865

In the end, the choice [between] these two alternatives — Grab the Oil or Energy Reconfiguration — this decision is much bigger than oil alone. It is a choice about the fundamental ethos and, in fact, the very nature of the country. Most immediately, it is about democracy versus empire. In economic terms, it is about prosperity or poverty. In engineering terms, it is a matter of efficiency over waste. In moral terms this is the choice of sufficiency or gluttony. From the standpoint of the environment, it is a preference for stewardship over continued predation. In the ways the US deals with other countries it is the choice of co-operation versus dominance. And in spiritual terms, it is the choice of hope, freedom and purpose over fear, dependency and despair. In this sense, this is truly the decision that will define the future of America and perhaps the world.

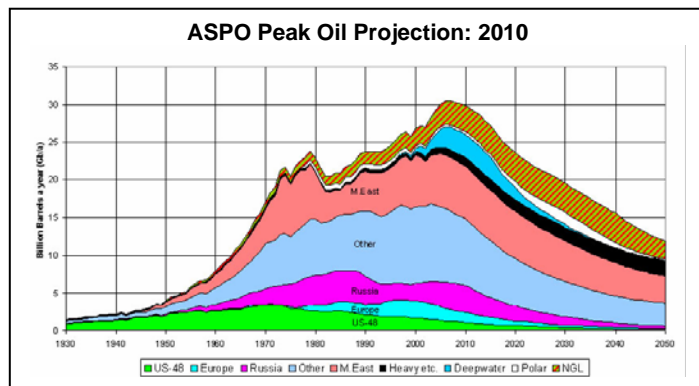
— Robert Freeman, “Will the End of Oil Mean the End of America?,” 2004 [162]

This essay is intended to inform others of the challenges and choices that are directly ahead. Three decades of wasteful US fiscal and energy policies have placed the US at risk for an economic downturn of considerable depth and duration, and we are woefully unprepared as a nation to reduce our fossil-fuel consumption. Unfortunately, recent US foreign policies are exacerbating global tensions and could lead to even worse warfare than the Bush years have already wrought. Their must be no misunderstanding — global resource warfare *will* ultimately leave even the so-called “winner” in a ruined state of energy deprivation along with economic and moral bankruptcy.

This need not be the case, but Peak Oil is undoubtedly the test that will define the human condition in this new century. As Robert Freeman observed, the destiny of the US will be decided by how willing the American people are to adjust to the realities of hydrocarbon depletion (see graph). The reduction of fossil-fuel consumption and the transition to a more sustainable energy paradigm will be decades long and difficult, but our generation can not escape these facts.

The US Department of Energy’s (DOE) National Energy Technology Laboratory commissioned a report on the risks of Peak Oil and strategies to mitigate them; Robert Hirsch of Science Applications International Corporation and his colleagues submitted the report to the DOE in February 2005. [163] This landmark document has yet to generate any official comment by the Department of Energy, the executive branch, or the

corporate media, but its conclusion unequivocally concludes that effective mitigation of Peak Oil requires global “crash action programs” that are implemented at the maximum possible rate,



preferably started 20 years *before* the peak in oil production. [164] Considering that the Association for the Study of Peak Oil (ASPO), and Gas and the Oil Depletion Analysis Center (ODAC), both predict global Peak Oil around 2010 or 2011 — mitigating Peak Oil requires *immediate* action.

As Abraham Lincoln once stated: “We can not escape history....As our case is new, we must think anew, and act anew.” This is especially true with regard to mitigating the global Peak Oil crisis. The mindset of market fundamentalism is inappropriate for making energy policy. The Hirsch report explicitly noted that “market price signals” will occur too late because the lead times required to change our liquid fuel infrastructure will be measured not in years, but in *decades*. Importantly, Hirsch and his colleagues conclude that “Intervention by governments will be required, because the economic and social implications of oil peaking would otherwise be chaotic” and that *trillions* of dollars will be required to develop alternative transportation fuels and associated infrastructure. [165]

If US policymakers and other world leaders commit the mistake of letting the “invisible hand of the market” decide this issue, they may ultimately be condemning millions of people across the globe to an unnecessarily brutal life of poverty, desperation, and premature death from starvation or global resource warfare over oil and natural gas. Simply put, too much of US infrastructure is dependent on oil and natural gas to allow for a market-based correction. The resulting market failure would create huge escalations in the price of virtually everything, and certain critical items, such as food, might soon become prohibitively expensive for a large segment of society.

Remarkably, in September 2005 the US Army Corps of Engineers published an 86-page report offering a realistic assessment of the Peak Oil crisis. Once again, like the “infamous Hirsch report,” neither the US corporate media nor any US government official has commented on this document. Nevertheless, considering its surprisingly candid conclusions, an extended excerpt is warranted:

Throughout the 20th Century, the United States has been a profligate energy consumer. The rapid and expansive growth of the economy was based on cheap and abundant energy. *Little thought and planning have been given to how to transition to the realities of the 21st Century when petroleum and natural gas resources will become depleted.* The U.S. economy uses 50 percent more energy per unit of GDP than the other developed nations of the world (EIA 2004). *The fossil fuel-based, automobile-centered, throw-away economy is not a viable model for the United States or the rest of the world over the long term. It is not sustainable.*



...In the mid-term the world market for natural gas is limited by demand, not by supply. The natural gas markets will reach an equilibrium in 10 years or so, but at higher prices due to higher costs of production and transportation. *In the long run, natural gas will reach a peak of worldwide production and decline as a resource starting in the 2030-2035 time range.*

The oil market will remain fairly stable, but with steadily increasing prices as world production peaks. Demand now exceeds production and we are seeing that effect on prices. *After the peak is reached, geopolitics and market economics will result in significant price increases above what we have seen to date.* Security risks will also rise. To guess where this is all going to take us would be too speculative. *Oil wars are certainly not out of the question.* Any disruption of world oil markets may also affect world natural gas markets.

...We must act now to develop the technology and infrastructure necessary to transition to other energy sources. Policy changes, leap ahead technology breakthroughs, cultural changes, and significant investment is requisite for this new energy future. *Time is essential to enact these changes. The process should begin now.* [166] [emphasis added]

The imperatives of energy reconfiguration and monetary reform require that the overblown US military expenditures of over \$450 billion per year be reduced by at least 50 percent; even \$200 billion per year is comparable to the combined military expenditures of the EU, Russia, and China. Alternatively, energy reconfiguration would require trillions in new investment, but with the benefit of creating new domestic jobs that will be safe from overseas outsourcing.

Logically, the US should apply what is left of its capital and tax base to this goal — and certainly not to tax cuts for the wealthiest or to expanding the global network of US military bases. Unfortunately, it is not hyperbole to advocate the immediate full-scale reallocation of hundreds of billions of tax dollars towards essentially draconian policies of restructuring our energy infrastructure. Of course, achieving a much less energy-intensive society will depend on Americans' willingness to make sacrifices similar to those during WWII (i.e., rationing, "victory gardens," etc). With increasingly limited choices, the US must seek policies that could mitigate this transition into a graduated approach where possible, and a rapid approach where needed. Peak Oil will affect everyone, and given that reality — multilateralism rather than unilateralism — is the only way to create a peaceful outcome.

It is too soon to tell if the recent Democratic takeover of the Congress will have any meaningful impact on US energy policy over the next two years, but nothing less than a *revolutionary* course correction is required. For starters, Congress should follow Germany's lead by legislating a bold "25 by 25 plan" (i.e., 25 percent renewable electrical energy by the year 2025). [167] Concerning the 2008 election, it is critical that the next US president abandon unilateral military force and covert operations as our national energy strategy, and instead pursue massive national energy projects utilizing all forms of renewable (non-fossil fuel-based) energy, while advocating international peace through multilateral accords.



Americans are largely blinded by government propaganda and a pervasive corporate media bias, unaware that terrorism and other international frictions are the natural result of 50 years of US meddling overseas, including the overt or covert replacement of governments with puppet regimes and dictators. In truth, US tensions with Iran for the past three decades are directly attributable to operation 'Ajax' — where in 1953 the CIA overthrew Iran's first secular democracy — and installed a dictator. The CIA's after-action report of Ajax even predicted this coup would produce "blowback," or retaliation, by the Iranian people. [168] America's uncritical support of Israel's policies is also not in the interest of anyone's long-term national security. This combination of foreign policies, as practiced under both Republican and Democratic administrations, has produced increasingly painful levels of blowback. The fomenting of anti-American sentiments by the unilateralist Bush administration has been particularly harmful and may result in further diplomatic and economic backlash.

Regrettably, the US electoral system has broken down under its current funding mechanisms, and the corporate media conglomerates have become the docile handmaidens who excessively filter the daily news to favor the status quo and the interests of the elite. As a result both political parties are incapable of initiating the needed reforms. Too many Americans are ruled more by fear and lies than by reason and truth. For nearly four years, we have allowed our government to wage an illegal,

and costly war in Iraq, while refusing to acknowledge the evidence showing that Saddam Hussein, although a despot, did not pose an imminent security threat to the US or to its neighboring states. Our military is occupying a country that has devolved into a Civil War, with public health researchers estimating that the civilian death toll from the past 3.5 years is in the hundreds of thousands. [169]

We have apathetically stood by while John Bolton, the former US representative to the UN, blatantly lied about Iran's nuclear energy program and the president stated that "all options are on the table" regarding a potential attack on Iran. A second US carrier battle group has converged on the Persian Gulf, suggesting that preparations for a second illegal war of aggression may be under consideration. If an unprovoked aerial attack were to occur, the United States would be condemned as the world's most dangerous rogue nation. It is conceivable that other industrialized nations could then move in tandem to disrupt our economy — perhaps with China dumping tens if not hundreds of billions of dollar-denominated assets — thereby causing a disorderly collapse of the US economy.

Above all, the American people — especially those in Congress — must not allow the executive branch to cynically use the "war on terror" as a tool of fear to gain our complicity for more unprovoked resource wars. The US military should not and cannot be used to enforce the petrodollar system. Current US-led antagonism toward Iran should be replaced by negotiations regarding its nuclear power program and a compromise with the EU, Russia, and OPEC regarding a graduated implementation of a multiple-petrocurrency global economy. Failure to pursue multilateral reforms will result in increasing levels of societal disorder, endless war that requires military conscription, increased levels of political deception and repression at home, and moral and economic bankruptcy. The only rational strategy is to compromise our hegemonic status and pursue multilateral treaties. This would require politicians to disavow today's imperial conquests and focus instead on managing our decline. Unfortunately, I am quite skeptical that the reforms I have proposed will happen until a global crisis occurs, thereby forcing these monetary and energy issues to the negotiating table.

The real struggle for the United States is internal. Can we return to our republican origins and restrain ourselves from empire building? Can we rejoin the community of industrialized nations? The ultimate test for the American experiment: *Can we once again begin living within our means from both fiscal and energy perspectives?* Do we have the will and the wisdom to reduce our oil and gas consumption and engage in what Heinberg calls "powerdown"? [170] If the US could rise to that level of enlightenment, our problems with anti-Americanism and terrorism would quickly subside.

This analysis proffers that six difficult challenges await the next US administration: (1) developing a national energy strategy; (2) negotiating global monetary reform, (3) broadly reorganizing US fiscal policies, (4) repairing damaged foreign relationships with the UN, the EU, the Middle East, Russia, and Latin America by realigning foreign policies with American principles and human rights, (5) reigning in the unwarranted power of the military-industrial-petroleum-banking consortium through comprehensive campaign finance reform, and (6) massive reallocation of public funds from military spending towards energy reconfiguration utilizing renewable energy sources in an attempt to mitigate both Peak Oil and Global Warming. Sadly, the next President will have to undertake these colossal challenges from a weakened position both economically and diplomatically. I do not envy the arduous journey that awaits the 44th President of the United States.

The beginning of the 21st century will be an epochal moment in history; either a disastrous period of resource-related military and economic warfare or an unprecedented and noble effort at international cooperation. Either way, maintaining the status quo will not be possible much longer due to both physics and macroeconomics, nor is it desirable if we wish to preserve our humanity.

Our political, social, and economic choices in the next few years will decide which path we take. Will America succumb to an endless “war on terror,” increased militarism, and economic ruin in a desperate attempt to remain the sole superpower, or will it rejoin the community of nations as an equal to collectively work on future challenges? Will future historians write that America was just another reckless, selfish empire that collapsed due to imperial overstretch? Or will they sing praises of a long-lived, enlightened democratic republic that finally resisted the temptations and follies of empire — and compromised for peace, justice, and the rule of law as it entered the 21st century?

“The care of human life and happiness, and not their destruction, is the first and only legitimate object of good government....All tyranny needs to gain a foothold is for people of good conscience to remain silent....I have sworn upon the altar of God eternal hostility against every form of tyranny imposed upon the mind of man.”

— Thomas Jefferson, United States Founding Father

References:

1. Henry A. Kissinger, http://en.wikiquote.org/wiki/Henry_Kissinger
2. D Matthew Lynn, “Dollar may lose its reserve status,” *The Sunday Business Post*, February 06, 2005, <http://archives.tcm.ie/businesspost/2005/02/06/story2097.asp>
3. William Clark, *Petrodollar Warfare: Oil, Iraq and the Future of the Dollar*, New Society Publishers, (2005), <http://www.amazon.com/Petrodollar-Warfare-Iraq-Future-Dollar/dp/0865715149>
4. Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed*, Penguin Books (2005), <http://www.amazon.com/Collapse-Societies-Choose-Fail-Succeed/dp/0670033375>
5. William F. Engdahl, *A Century of War: Anglo-American Oil Politics and the New World Order*, (1993). Reprinted by Pluto Press 2004, <http://www.amazon.com/Century-War-Anglo-American-Politics-Order/dp/074532309X>
6. “Behind the Invasion of Iraq,” *Aspects of India’s Economy*, Nos. 33 & 34, December 2002, <http://www.rupe-india.org/34/contents.html>
7. Paul Kennedy, *The Rise and Fall of Great Powers: Economic Change and Military Conflict from 1500 to 2000*, Vintage, (1989), pg. xxiii, <http://www.amazon.com/Rise-Fall-Great-Powers-Vintage/dp/0679720197>
8. John S. Irons, “Beyond the Baseline: 10 year Deficits Likely to Reach \$5.9 Trillion,” *OMB watch*, August 26, 2003.
9. “Polls: World Not Pleased with Bush,” *AP*, March 4, 2004, <http://www.cbsnews.com/stories/2004/03/04/world/main604135.shtml>
Also see: Will Lester, “Many Think US Wants World Domination,” *AP/Guardian*, March 16, 2004.
10. Thomas Ricks, *Fiasco: An American Adventure in Iraq*, Penguin Press HC, 2006, <http://www.amazon.com/Fiasco-American-Military-Adventure-Iraq/dp/159420103X> Also see: Peter Symonds, “The quagmire deepens in Afghanistan,” *wsws.org*, November 14, 2006.
11. “CBO Forecasts ‘Staying the Course’ in Iraq Would Increase Deficit by \$1.3 Trillion Over the Next Decade,” *thinkprogress.com*, August 17, 2006, <http://thinkprogress.org/2006/08/17/iraq-deficit/>
12. Neil Mackay, “Bush Planned Iraq ‘Regime Change’ Before Becoming President,” *Sunday Herald* (Scotland), September 15, 2002, <http://www.sundayherald.com/27735>
13. “Rebuilding America’s Defenses: Strategies, Forces and Resources for a New Century,” Project for a New American Century (PNAC), September 2000, <http://www.newamericancentury.org/RebuildingAmericasDefenses.pdf>.
14. Bernard Weiner, “How We Got into This Imperial Pickle: A PNAC Primer,” *The Crisis Papers*, May 26, 2003, <http://www.crisispapers.org/Editorials/PNAC-Primer.htm>
15. Michael Klare, “Transforming the American Military into a Global Oil-Protection Service,” *Global Policy Forum*, www.tomdispatch.com, October 7, 2004, <http://www.globalpolicy.org/empire/economy/2004/1007oilprotection.htm> Also see: *Blood and Oil: The Dangers and Consequences of America’s Growing Dependency on Imported Petroleum*, Metropolitan Books, (2004).
16. F. William Engdahl, “America’s Geopolitical Nightmare and Eurasian Strategic Energy Arrangements,” *Globalresearch.ca*, May 7, 2006, <http://www.globalresearch.ca/index.php?context=viewArticle&code=%20EN20060507&articleId=2401>

17. Chalmers Johnson, *Sorrows of Empire: Militarism, Secrecy, and the End of the Republic*, Metropolitan Books, (2004), <http://www.amazon.com/Sorrows-Empire-Militarism-Republic-American/dp/0805070044>
18. Paul Isbell, "The Shifting Geopolitics of the Euro," El Cano Institute, September 28, 2002, <http://www.realinstitutoelcano.org/analisis/70.asp>
19. David Spiro, *The Hidden Hand of American Hegemony: Petrodollar Recycling and International Markets*, Cornell University Press, (1999), <http://www.amazon.com/Hidden-Hand-American-Hegemony-International/dp/080142884X>
20. *ibid*, pgs. 104-105 and 109-112.
21. "Oil Bourse Closer to Reality: Articles of Association Finalized," *Iran-Daily*, June 9, 2006, <http://iran-daily.com/1385/2581/html/economy.htm#s150576>
22. "Putin pushed for convertible ruble, innovation economy," *RIA Novosti*, May 10, 2006.
23. "China opens oil bourse in Shanghai," *China Daily*, August 18, 2006, http://www.chinadaily.com.cn/china/2006-08/18/content_668446.htm
24. Emmanuel Todd, *After the Empire: The Breakdown of the American Order*, Columbia University Press, (2004), <http://www.amazon.com/After-Empire-Breakdown-Perspectives-Criticism/dp/023113102X>
25. Joshua Hammer, "Digging in: If the US Government Doesn't Plan to Occupy Iraq for Any Longer than Necessary, Why Is It Spending Billions of Dollars to Build 'Enduring' Bases?," *Mother Jones Magazine*, March/April 2005 issue, http://www.motherjones.com/news/outfront/2005/03/enduring_bases_iraq.html
26. Michael Hirsh, "Grim Numbers: A US-sponsored Poll Shows Iraqis Have Lost Confidence in the Occupying Authorities — and That the Majority of Iraqis Want Coalition Troops out of the Country," *msnbc.com*, June 15, 2004. Also see: "New Survey: Iraqis Want a Speedy U.S. Exit -- and Back Attacks on Our Forces," *Editor & Publisher*, November 21, 2006, http://www.editorandpublisher.com/eandp/news/article_display.jsp?vnu_content_id=1003410658
27. "The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11," CRS Report for Congress, order code RL33110, updated September 22, 2006, www.fas.org/sfp/crs/natsec/RL33110.pdf
28. Neil Mackey, "US Admits the War for 'Hearts and Minds' in Iraq Is Now Lost," *Sunday Herald*, December 5, 2004, Archived at truthout.org, http://www.truthout.org/docs_04/120704V.shtml
29. Association for the Study of Peak Oil and Gas, "Revision of the Depletion Model, Newsletter #58, October 2005, http://www.peakoil.ie/downloads/newsletters/newsletter58_200510.pdf The 2005 model projects a peak of all liquids in 2010. Also see: Commentary: Prominent CERA official - "Peak Oil theory is garbage." ASPO-USA, September 11, 2006, http://www.aspo-usa.com/index.php?option=com_content&task=view&id=49&Itemid=9
30. David Spiro, *op cited* p. 123. For background on Mr. Blumenthal see: http://en.wikipedia.org/wiki/W._Michael_Blumenthal
31. John Chapman, "The Real Reasons Bush Went to War," *Guardian* (UK), July 28, 2004, <http://www.guardian.co.uk/comment/story/0,3604,1270414,00.html>
32. Brad Foss, "Iran wants oil market in Euros," *Associated Press*, archived at *Globe and Mail*, May 5, 2006, <http://www.theglobeandmail.com/servlet/story/RTGAM.20060505.wiraneuro0505/BNStory/Business/home>
33. David Spiro, *Ibid*, pgs. 121-126.
34. Charles Recknagel, "Iraq: Baghdad Moves to Euro," *Radio Free Europe*, November 1, 2000. Also see: Peter Phillips, *Censored 2004: The Top 25 Censored Stories*, "U.S. Dollar vs. the Euro: Another Reason for the Invasion of Iraq," Seven Stories Press, (2003).
35. Carol Hoyos and Kevin Morrison, "Iraq Returns to the International Oil Market," *Financial Times*, June 5, 2003.
36. Faisal Islam, "When Will We Buy Oil in Euros?" *Observer*, February 23, 2003, <http://observer.guardian.co.uk/business/story/0,6903,900867,00.html>
37. Jephraim P. Gundzik, "Upswings and Downfalls," *Asia Times*, January 6, 2006, http://www.atimes.com/atimes/Global_Economy/HA06Dj01.html
38. Stanley Reed, "The New Middle East Oil Bonanza," *Business Week*, March 13, 2006, p. 36, online: http://www.businessweek.com/magazine/content/06_11/b3975001.htm
39. "European fuel protests escalate," *cnn.com*, September 16, 2000, <http://archives.cnn.com/2000/WORLD/europe/09/16/europe.fuel.01/>
40. Richard Duncan, *Dollar Crisis: Causes, Consequences, Cures*, John Wiley & Sons, 2003 (updated 2005), pgs. 8-9. <http://www.amazon.com/Dollar-Crisis-Consequences-Revised-Updated/dp/0470821701>
Graph source: "The Dollar Crisis Interview with Richard Duncan," *prudentbear.com*, November 8, 2003, http://www.prudentbear.com/archive_comm_article.asp?category=Guest+Commentary&content_idx=27975

41. David Spiro, op cited, pgs. 121-122.
42. ibid, p. 156.
43. European Parliament resolution on the Communication from the Commission on the European Union's oil supply, COM(2000) 631 - C5-0739/2000 - 2000/2335(COS), June 14, 2001, <http://www.europarl.europa.eu/activities/expert.do?language=en> Click on "words in title or text" under "Texts adopted by Parliament," and search for "oil supply"
44. "The Choice of Currency for the Denomination of the Oil Bill," speech delivered in Spain by Javad Yarjani, head of OPEC's Petroleum Market Analysis Dept., on the International Role of the Euro, April 14, 2002.
45. Robin Newbold, "EU Urges Russia to Swap Dollar for Euro," *Asia Times*, May 19, 2001, <http://www.atimes.com/c-asia/CD19Ag01.html>
46. "Euro Set to Be Currency of Oil Pricing?" *Scotsman*, June 17, 2003, <http://thescotsman.scotsman.com/business.cfm?id=666132003>
47. Irene Kwek, "EIA Says Oil Price Switch to Euro from Dollar Unlikely," *Dow Jones Newswire*, June 17, 2003.
48. "European Central Bank believes pricing oil in euros is sensible," *Alexander's Gas & Oil*, October 14, 2003, <http://www.gasandoil.com/goc/news/nite34420.htm>
49. Waleed Mohsin Malik and Syed Arif Rehman, "Towards a multiple currency system," *dawn.com*, March, 21 2005, <http://www.dawn.com/2005/03/21/abr5.htm> Also see: Paul Isbell, "The Shifting Geopolitics of the Euro," op cited.
50. "EMU and International Conflict," *Foreign Affairs*, November/December 1997, (see comments by Martin Feldstein, former head of the President's Council of Economic Advisors, 1997, pp. 2, 21) Excerpt: The monetary integration of Europe could alter 'the political character of Europe in ways that could lead to confrontation with the United States' and could lead to a world that was 'very different and not necessarily a safer place.' Also see: William Drozdiak, "Even Allies Resent US Dominance: America Accused of Bullying World," *Washington Post*, November 4, 1997. Excerpt of then German chancellor Helmut Schmidt, who stated in 1997, "Americans do not yet understand the significance of the euro, but when they do it could set up a monumental conflict, it will change the whole world situation so that the United States can no longer call all the shots."
51. "Greenspan says dollar now sharing stage with euro," *Reuters*, October 26, 2006.
52. Gabriele Galati and Philip Woolridge, "The euro as a reserve currency: a challenge to the pre-eminence of the US dollar?," Bank for International Settlements (BIS) Working Paper No 218, October 2006, <http://www.bis.org/publ/work218.pdf>
53. Haig Simonian, Javier Blas, Carola Hoyas, and Peter Garnham, "Oil producers shun dollar," *Financial Times*, December 10, 2006, http://www.ft.com/cms/s/277471c2-8889-11db-b485-0000779e2340_i_nbePage=9e03725e-e742-11da-9046-0000779e2340.html
54. "Rice: World United Against Iran in Dispute," *Associated Press*, March 30, 2006.
55. IAEA's ElBaradei says Iran sanctions 'Bad Idea'," *The Epoch Times*, March 30, 2006.
56. Ron Paul, "The End of Dollar Hegemony," speech given in the US House of Representatives, February 15, 2006, <http://www.house.gov/paul/congreccongrec2006/cr021506.htm>
57. "The Secret Downing Street Memo," *The Sunday Times*, May 1, 2005, <http://www.timesonline.co.uk/article/0,,2087-1593607,00.html>
58. Bill Van Auken, "US Spy agencies pressed for 'intelligence' to justify war against Iran," *wsws.org*, August 28, 2006, <http://www.wsws.org/articles/2006/aug2006/iran-a28.shtml>
59. Seymour Hersh, "Last Stand: The Military's problem with the President's Iran policy," *The New Yorker*, July 10, 2006 issue, posted online July 3, 2006, www.newyorker.com/fact/content/articles/060710a_fact Also see: Ray Close, "Why Bush will Choose War Against Iran," *Informationclearinghouse.com*, August 25, 2006, <http://www.informationclearinghouse.info/article14694.htm>
60. Seymour Hersh, "The Next Act: Is a damaged Administration less likely to attack Iran, or more?," *The New Yorker*, November 27, 2006 Issue, posted online November 20, 2006, http://www.newyorker.com/fact/content/articles/061127fa_fact
61. Dafna Linzer and Julie Tate, "No Proof Found of Iran Arms Program: Uranium Traced to Pakistani Equipment," *Washington Post*, August 23, 2005; Page A01, <http://www.washingtonpost.com/wp-dyn/content/article/2005/08/22/AR2005082201447.html>
62. Dafna Linzer, "Iran Is Judged 10 Years From Nuclear Bomb," *Washington Post*, August 2, 2005; Page A01, http://www.washingtonpost.com/wp-dyn/content/article/2005/08/01/AR2005080101453_pf.html
63. Richard Stone, "Iran's Trouble With Molybdenum May Give Diplomacy a Second Chance," *Science*, January 13, 2006: Vol. 311. no. 5758, p. 158 Also see: David Adam, "Fuel grade - not weapons grade," [UK] *Guardian*, April 12, 2006, <http://www.guardian.co.uk/international/story/0,,1752042,00.html>
64. George Jahn, "IAEA: US Report on Iran 'Dishonest'," *The Associated Press/Washington Post*, September 15, 2006, <http://www.washingtonpost.com/wp-dyn/content/article/2006/09/15/AR2006091500177.html>

65. Dafna Linzer, "Past Arguments Don't Square With Current Iran Policy," *Washington Post*, March 27, 2005; Page A15, <http://www.washingtonpost.com/wp-dyn/articles/A3983-2005Mar26.html>
66. *ibid.*
67. *ibid.*
68. Kate Dorian, "Iran could be net oil importer by 2016: PFC," *Platt's Oilgram News*, Volume 84, Issue 209, October 31, 2006. Also see: Stanley Reed, "Surprise: Oil Woes in Iran," *Business Week*, December 11, 2006 issue, pgs. 48-49.
69. Scott MacLeod, "What Would War with Iran Look Like," *Time*, September 25, 2006, pgs. 32-42.
70. Dave Lindorff, "War Signals: Is An 'October Surprise' Attack On Iran Imminent?," *The Nation*, <http://www.thenation.com/doc/20061009/lindorff>
71. Sam Gardiner, Colonel, USAF (Ret.), "The End of the 'Summer of Diplomacy': Assessing US Military Options on Iran," *The Century Foundation*, September 18, 2006, <http://www.tcf.org/list.asp?type=PB&pubid=578>
72. Brian Murphy, "Bush Remarks May Have Spurred Iran Voters," *Associated Press*, June 20, 2005.
73. "'Final war' between Muslims, West – Ahmadinejad," *aljazeera*, January 22, 2006, http://www.aljazeera.com/me.asp?service_ID=10517
74. "Iran Lodges Complaint With IMF Against US Treasury Department," reported by *VOA News*/sourced by *AFP* and *AP*, September 25, 2006, <http://www.voanews.com/english/2006-09-25-voa22.cfm>
75. Jerome Corsi, "Iran signs its own death warrant," *worldnetdaily.com*, May 8, 2006, http://worldnetdaily.com/news/article.asp?ARTICLE_ID=50100
76. "Economics Drive Iran Euro Oil Plan, Politics Also Key," *IranExpert*, August 23, 2002, <http://www.iranexpert.com/2002/economicsdriveiraneurooil23august.htm> Also see: "Economist: Dollar replacement not problematic for Iran," *IRNA*, December 4, 2006, <http://www.irna.ir/en/news/view/menu-234/0612062483175035.htm>
77. *ibid*
78. *ibid*
79. Chris Cook, "What the Iran 'nuclear issue' is really about," *Asia Times*, January 21, 2006, http://www.atimes.com/atimes/Middle_East/HA21Ak01.html Also see: Chris Cook, "The Iran oil bourse - a new direction?", originally published on *Islamic Finance News*, December 10, 2006, archived at: <http://www.energybulletin.net/23458.html>
80. "Karbassian Takes Charge of Iran's Oil Bourse," *Iran International Magazine*, May 2006, No 50, http://www.iraninternationalmagazine.com/issue_40/text/karbassian.htm
81. "Iran oil bourse launch underway," *Persian Journal*, September 16, 2006, http://www.iranian.ws/iran_news/publish/article_17773.shtml
82. "Oil Bourse Closer to Reality: Articles of Association Finalized," *iran-daily.com*, June 9, 2006, <http://iran-daily.com/1385/2581/html/economy.htm#s150576>
83. Azam Mohebbi, "Ending \$ Monopoly," *iran-daily.com*, March 6, 2006, <http://iran-daily.com/1384/2515/html/economy.htm#s131169>
84. *ibid.*
85. "Iranian Rial main currency at oil bourse," *iranmania.com*, September 23, 2006, <http://www.iranmania.com/News/ArticleView/Default.asp?NewsCode=45877&NewsKind=Current%20Affairs>
86. "Iran oil bourse plans to begin," *South African Press Association (SAPA-DPA)*, May 7, 2006, http://www.fin24.co.za/articles/companies/display_article.asp?Nav=ns&lvl2=comp&ArticleID=1518-1783_1963115
87. "Iran's plans for an oil exchange," *BBC Monitoring the Middle East*, February 28, 2006.
88. Krassimir Petrov, "The Proposed Iranian Oil Bourse," *energybulletin.com*, January 17, 2006, <http://www.energybulletin.net/12125.html>
89. "Recycling the petrodollars, from *The Economist* print edition, graph data source listed as ABN Arno, Nov 10th 2005.
90. "Iran plans to reduce use of dollar in trade," *financialexpress.com*, December 7, 2006, http://www.financialexpress.com/fe_full_story.php?content_id=148236
91. "Venezuela Backs Plan to Sell Oil in Euros" *Associated Press*, June 1, 2006, <http://www.chron.com/disp/story.mpl/ap/fn/3920101.html>
92. Dafna Linzer, "US Urges Financial Sanctions On Iran," *Washington Post*, May 29, 2006; A01, <http://www.washingtonpost.com/wp-dyn/content/article/2006/05/28/AR2006052800999.html>

93. Anthony Faiola and Dafna Linzer, "Japan Wary of Plan for Sanctions against Iran," *Washington Post* Foreign Service, June 13, 2006; A14, <http://www.washingtonpost.com/wp-dyn/content/article/2006/06/12/AR2006061201504.html>
94. Dafina Linzer, "US Urges Financial Sanctions on Iran," op cited.
95. *ibid.*
96. "US to Banks: 'Be Very, Very Careful with Iran,'" *Spiegel*, October 2, 2006, <http://www.spiegel.de/international/0,1518,440374,00.html>
97. *ibid.*
98. Andrew Murray-Watson, "US tells banks to shut down Iran operations," *The Independent*, December 3, 2006, archived at [informationliberation.com](http://www.informationliberation.com), <http://www.informationliberation.com/?id=18471>
99. Written testimony of David D. Aufhauser, General Counsel Department of the Treasury, before the Committee on Banking, Housing and Urban Affairs, United States Senate, JS-760, September 25, 2003, <http://www.ustreas.gov/press/releases/js760.htm>
100. "Iran to replace dollar with euro in foreign deals," *AFP/yahoo*, December 18, 2006, http://news.yahoo.com/s/afp/20061218/wl_mideast_afp/iranforexbank_061218100958
101. Chairman & Managing Director of Kish Free Zone Org.: "Kish can turn into the Trade Hub of the Region," (Press release: January 13, 2006), <http://62.193.31.6/enews.asp>
102. *ibid.*, see: "Vice-president of Kish Free Zone Organization Declared: Emphasis on Launching Oil Bourse," in Kish Public Relations & Int'l Affairs, Kish Free Zone Organization (K.F.Z.O.), (Press release: December 25, 2005).
103. *ibid.*, see: "Cooperation between Iran and China in Oil Industry discussed on Kish Island," (Press release: Feb 20, 2006).
104. Martin Walker, "Walker's World: Iran's really big weapon," *United Press International*, January 23, 2006, archived: <http://www.globalresearch.ca/index.php?context=viewArticle&code=WAL20060123&articleId=1783>
105. W. Joseph Stroupe, "The New World Oil Order: Russia attacks the West's Achilles' heel (Part I)," *Asia Times*, November 22, 2006, http://www.atimes.com/atimes/Central_Asia/HK22Ag01.html Also see: "The New World Oil Order: Russia tips the balance (Part II)," *Asia Times*, November 23, 2006, http://atimes.com/atimes/Central_Asia/HK23Ag01.html
106. Richard Heinberg, "Energy Geopolitics 2006", *Energy Bulletin*, May 25, 2006, <http://www.energybulletin.net/16393.html>
107. "Richer, bolder-and sliding back," *The Economist*, July 15, 2006, p. 23.
108. "The Hardest Word," *The Economist*, October 14, 2006, p. 55. and "Don't Mess with Russia," *The Economist*, December 16, 2006.
109. Vladimir Radyuhin, "An oligarch's fall," *Frontline*, Volume 22 - Issue 13, Jun 18 - Jul 01, 2005, <http://www.hinduonnet.com/fline/fl2213/stories/20050701000405700.htm>
110. F. William Engdahl, "The Emerging Russian Giant Plays its Cards Strategically," *globalresearch.ca*, October 7, 2006, www.globalresearch.ca/index.php?context=viewArticle&code=WIL20061007&articleId=3408
111. Catherine Belton, "Putin: Why Not Price Oil in Euros?" *Moscow Times*, October 10, 2003, archived, <http://www.globalpolicy.org/soecon/crisis/2003/1010oilpriceeuro.htm>
112. *ibid.*
113. *ibid.*
114. John Helmer, "Russian energy model challenges OPEC," *Asia Times*, July 18, 2006, http://www.atimes.com/atimes/Central_Asia/HG18Ag01.html
115. *ibid.*
116. M.K. Bhadrakumar, "Russia's Energy: Europe's pride, US's envy," *Asia Times*, October 14, 2006, http://www.atimes.com/atimes/Central_Asia/HJ14Ag01.html
117. *ibid.*
118. "Putin proposes creation of ruble-denominated oil, gas exchange," *RIA Novosti*, May 10, 2006, <http://en.rian.ru/russia/20060510/47915635.html> Also see: Mike Whitney, "Vladimir Putin and the rise of the petro-ruble," *InformationClearingHouse.com*, May 22, 2006, <http://www.informationclearinghouse.info/article13141.htm>
119. "Russia May Create A Strategic Oil & Gas Reserve," *WPS Media Monitoring Agency: Russ. Oil & Gas Rep. Issue 53*, June 7, 2006, (Pg. Unavail. Online) Excerpt: "Trade at the Russian oil exchange will begin in 2006 and starting from 2007 prices of Russian oil and petroleum products will be determined on this marketplace."
120. Gary Duncan, "Russia to diversify foreign exchange reserves," *The Times*, October 17, 2006, <http://business.timesonline.co.uk/article/0,,16849-2407160,00.html>

121. Russian Official Urges New World Financial System Without Dominating Currencies," *MosNews*, June 13, 2006, <http://www.mosnews.com/money/2006/06/13/newworldorder.shtml>
122. Liam Halligan, "The threat to a fistful of petrodollars," (UK) *Telegraph*, April 23, 2006, <http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2006/04/23/ccliam23.xml>
123. Approx. calculations of Russian oil exports (5.1 m/b/d): 5,100,000 mb/d x \$70 dollars (2007-08 futures pricing) = \$357,000,000 x 45 days (contract life) = \$16,065,000,000 per cycle of Russian oil exports. Assuming approx. 250 trading days per year (5.5 cycles) = \$88,357,500,000 per year in Russian oil sales. These figures are conservative, and do not include other petroleum products, etc.
124. Jephraim P. Gundzik, "More Conflict than Camaraderie Between Moscow and Washington," *The Power and Interest News Report (PINR)*, July 11, 2006, http://www.pinr.com/report.php?ac=view_report&report_id=524&language_id=1
125. "Russian ruble to be freely exchanged abroad in 2-4 years – MP," *RIA/Novosti*, June 5, 2006, <http://en.rian.ru/russia/20060605/49082337.html>
126. "Russia, China might consider giving up dollar in Bilateral Trade," *moscownews.com*, August 29, 2005, <http://www.mosnews.com/money/2005/08/29/chinacurrency.shtml>
127. M.K. Bhadrakumar, op cited.
128. Zbigniew Brzezinski, *The Grand Chessboard: American Primacy and Its Geostrategic Imperatives*, Basic Books, 1998, p. 40, <http://www.amazon.com/Grand-Chessboard-American-Geostrategic-Imperatives/dp/0465027261>
129. F. William Engdahl, "The Emerging Russian Giant Plays its Cards Strategically," op cited.
130. M.K. Bhadrakumar, op cited.
131. *ibid.*
132. Michael Vatikiotis and Bertil Lintner, "The Renminbi Zone," *Asia Times*, May 29, 2003.
133. Edith M. Lederer, "Economist: China Loses Faith in Dollar," *Associated Press*, January 26, 2005.
134. Michael Vatikiotis and Bertil Lintner, op cited.
135. Richard S. Appel, "The Repercussions from the Yuan's Revaluation," *kitco.com*, July 27, 2005, <http://www.kitco.com/ind/appel/jul272005.html>
136. Geoff Dyer and Andrew Balls, "China signals reserves switch away from dollar," *Financial Times*, January 5, 2006 / Last updated January 6, 2006, <http://news.ft.com/cms/s/f39fa8e4-7e25-11da-8ef9-0000779e2340.html>
137. *ibid.*
138. "Asia must prepare for dollar collapse," *aljazeera.net*, March 28, 2006,
139. *ibid.*
140. "Asian Finance Ministers Seek Common Currency," *The New York Times*, May 5, 2006.
141. *ibid.*
142. *ibid.*
143. "China opens oil bourse in Shanghai," op cited.
144. *ibid.*
145. "US's growing Insecurity About China," *ISN/CSS*, August 16, 2006, <http://www.isn.ethz.ch/news/sw/details.cfm?ID=16532>
146. Lewis Crofts, "ECB blasts Bush economy," *eupolitix.com*, October 30, 2003, <http://www.eupolitix.com/EN/News/200310/1947cbee-bbfc-4804-aa90-46521fa785e8.htm>
147. Gary Duncan, op cited.
148. "China PBOC advisor warns forex reserves face US dollar risks – report," *Forbes*, April 27, 2006, <http://www.forbes.com/business/feeds/afx/2006/04/27/afx2701304.html>
149. Patrick Brethour, "OPEC Mulls Move to Euro for Pricing Crude Oil," *Globe and Mail*, January 12, 2004, <http://www.theglobeandmail.com/servlet/story/RTGAM.20040112.wopec0112/BNStory/Business/>
150. Heather Stewart, "Japan Threatens Huge Dollar Sell-off," *Observer*, December 5, 2004, <http://observer.guardian.co.uk/business/story/0,6903,1366578,00.html>

151. "The falling dollar," *The Economist*, December 2, 2006 issue, pgs. 13 and 75-76.
152. William Rivers Pitt, "Attack on Iran: A Looming Folly," *truthout.org*, January 6, 2006, <http://www.truthout.org/cgi-bin/artman/exec/view.cgi/48/16812>
153. Aviel Rubin, *Brave New Ballot: The Battle to Safeguard Democracy in the Age of Electronic Voting*, Morgan Road Books, 2006, <http://www.bravenewballot.org/>
154. "The end of oil is closer than you think," *Guardian*, April 21, 2006, <http://www.guardian.co.uk/oil/story/0,11319,1464119,00.html>
155. Glen Carey, "Saudi Aramco boosts drilling efforts to offset declining fields," *Platts Oilgram News*, April 11, 2006.
156. Richard Heinberg and Colin Campbell (Forward), *The Oil Depletion Protocol: A Plan to Avert Oil Wars, Terrorism and Economic Collapse*, New Society Publishers, (2006), <http://www.amazon.com/Oil-Depletion-Protocol-Terrorism-Economic/dp/0865715637>
157. The Rimini Protocol: An Oil Depletion Protocol: Proposed at the 2003 Pio Manzu Conference by The Association for the Study of Peak Oil & Gas (ASPO of Ireland), <http://www.peakoil.ie/protocol>
158. Richard Heinberg, *Powerdown, Options and Actions for a Post-Carbon World*, New Society Publishers, (2004).
159. George Monbiot, "Bottom of the Barrel: The World is Running out of Oil — So Why Do Politicians Refuse to Talk about It?" *Guardian* (UK), December 2, 2003, <http://www.guardian.co.uk/comment/story/0,3604,1097622,00.html>.
160. Tom Regan, "Report: Iraq war costs could top \$2 trillion," *The Christian Science Monitor*, January 10, 2006, <http://www.csmonitor.com/2006/0110/dailyUpdate.html>
161. Richard Duncan, *Dollar Crisis: Causes, Consequences, Cures*, John Wiley & Sons, (2003), p. 168.
162. Robert Freeman, "Will the End of Oil Mean the End of America?" *commondreams.org*, March 1, 2004, <http://www.commondreams.org/views04/0301-12.htm>
163. Robert L. Hirsch, et al, "Peaking of World Oil Production: Impacts, Mitigation and Risk Management," Science Applications International Corporation (SAIC), February, 2005, http://www.odac-info.org/assessments/documents/hirschreport_002.pdf
164. *ibid.* Also see the follow-up report by Roger Bezdek, Robert Wendling and Robert Hirsch, "Economic Impacts of Liquid Fuel Mitigation, *mis-net*, May 2006, " <http://media.globalpublicmedia.com/RM/2006/05/hirsch2.pdf> Also see interview with Roger Bezdek on the Hirsch follow-up," *globalpublicmedia.com*, May 14, 2006, <http://www.globalpublicmedia.com/interviews/713>
165. Robert L. Hirsch, *op cited*.
166. Donald F. Fournier and Eileen T. Westervelt, "Energy Trends and Their Implications for U.S. Army Installations," US Army Corps of Engineers: Engineer Research and Development Center, September 2005, pgs. 53-57. <http://www.energybulletin.net/13737.html>
167. John J. Fialkan, "Renewable Fuels May Provide 25% of U.S. Energy by 2025," *Wall Street Journal online*, November 13, 2006; Page A10, <http://online.wsj.com> For details about a "25 by 25" agenda, readers should review: <http://www.25x25.org/>
168. Chalmers Johnson, "Blowback," *The Nation*, posted online September 27, 2001 (October 15, 2001 issue) <http://www.thenation.com/doc/20011015/johnson> All see: Stephen Kinzer, *All the Shah's Men: An American Coup and the Roots of Middle East Terror*, John Wiley & Sons, (2004) <https://www.cia.gov/csi/studies/vol48no2/article10.html>
169. "Study estimates 600,000 Iraqis dead by violence," *USA Today*, updated October 11, 2006, http://www.usatoday.com/news/world/iraq/2006-10-10-iraq-dead_x.htm
170. Richard Heinberg, defined "Powerdown" in the opening page of his book of the same title. **Power-down** \ n. 1. the energy famine that engulfed industrial nations in the early 21st century 2. the deliberate process of cooperation, contraction, and conversion that enabled humanity to survive.

About the author: William Clark is the author of *Petrodollar Warfare: Oil, Iraq and the Future of the Dollar* (New Society Publishers, 2005). He has received two Project Censored awards, first in 2003 for his ground-breaking research on the Iraq War, oil currency conflict, and US geostrategy, and again in 2005 for his research on Iran's proposed euro-denominated oil bourse (*Censored 2006: The Top 25 Censored Stories*, Seven Stories Press). He is an Information Security Analyst and guest lecturer in the U.S. and abroad. He holds a Master of Business Administration (MBA) and Master of Science in Information and Telecommunication Systems (MS/ITS) from Johns Hopkins University. He lives near Bethesda, Maryland. Website: www.petrodollarwarfare.com



Copyright © 2006 William Clark
Reprinted for Fair Use Only