



How International Monetary Trends Affect Real Estate Values

John Lifflander

The statements made or opinions expressed by authors in Fair & Equitable do not necessarily represent a policy position of the International Association of Assessing Officers.

In Shakespeare's *Hamlet*, Polonius is considered by some to be a fellow full of platitudes and trite ideas. But his suggestion to Hamlet that he “neither a borrower nor a lender be” would be good advice for governments around the world, considering their current situations. Nevertheless, although lending and borrowing have produced a myriad of international problems, they are only part of the total picture.

To understand how monetary policies of various countries in the world can affect real estate values, this article first considers the evolution of modern currency from an historical perspective. This is followed by a description of the debt load of the United States as well as other countries around the world. Finally, the impact of these factors on real estate values is discussed.

The Origins of Modern Currency

The invention of money was a major advancement for civilization. Instead of bartering (trading) for everything, using a common currency made transactions more efficient and easier to complete. One of the earliest historical records for using money was the code of Ur-Nammu, king of Ur of the Chaldees (2050 BC). In this code, as well as in the better-known Code of Hammurabi, which came several hundred years later (1760 BC), the use of money was formalized in civil law (Horne 1915).

The use of metals for currency was most common, but other commodities were also used. However, the difference between these historic currencies and modern currency is that the currency itself had value, or it was guaranteed by the issuer to be convertible to a commodity—it was not simply a token or promise of value. Almost all modern currencies use what is called fiat money, which could be defined as, “money that has no intrinsic value, and is

not redeemable for any commodity, but has a declared value by government decree” (author's definition). In other words, fiat money is money that can float in value and can become valueless under certain circumstances. Normally fiat money is thought of as only paper money, but metals can also be used for fiat money. In recorded history, Rome is a good example of a government that used metal fiat money.

Roman Fiat Money

In the first century, the Romans had no paper money, and their most common coin, the denarius, was pure silver. However, in AD 54 Emperor Nero took power and began to reduce the silver content until it was down to about 85 percent by AD 100. Succeeding emperors followed suit, because the practice enriched them personally and also gave the empire more money to spend. The debasement continued, and in AD 218 the denarius was about 43 percent silver; by AD 244 the silver content was down to a measly .05 percent. When Rome collapsed, the denarius reached the final low of .02 percent silver and was considered worthless.

Chinese Fiat Money

Historians disagree on the exact time, but sometime during the tenth century paper money was introduced to China in the Song Dynasty. It began as promissory notes issued by private parties but ended up with the government printing and formalizing the currency. The advent of such mass printing was made possible by new printing technology developed in China. About AD 1040, the first known movable type system was created by Bi Sheng and was made out of porcelain. Thus it became practical and economical to print money. The paper money replaced iron coins and was quickly accepted, because it was exchangeable for gold, silver, or silk.



In his book *The Travels*, Marco Polo was impressed with this new system, as it seemed fantastic before it failed:

The emperor's mint then is in this same city of Cambaluc, and the way it [money] is wrought is such that you might say he has the secret of alchemy in perfection, and you would be right... The Khan causes every year to be made such a vast quantity of this money, which costs him nothing, that it must equal in amount to all the treasure of the world. (WorldCent Forum 2009)

Alchemy was known for turning iron into gold, which was impossible. This version was similarly impossible—the turning of paper into gold. By the eleventh century, China was funding a war against the Mongols, and as it ran out of resources to back the money, eventually the paper money was no longer redeemable for these commodities and finally collapsed.

Germany and War Reparations

In the Weimar Republic after World War I, Germany was pressured by France and other countries to make war reparations, while at the same time the country was trying to rebuild. Hyperinflation resulted until the German mark became worthless. However, the war reparations could not be paid off with the inflated paper marks; instead, gold marks or foreign currencies were required, so the inflation did not alleviate the debt. But the reparation demands did add to the pressure on the devaluation of the paper marks. Their drop in value, as

Table 1. Value of German paper marks per U.S. dollar 1922–1923

Date	Value of German Paper Marks
April 1919	12
November 1921	263
January 1923	17,000
August 1923	4.621 million
October 1923	25.26 billion
December 1923	4.2 trillion

Source: Jones 2009.

compared to the U.S. dollar, is shown in table 1; figures 1 and 2 depict this drop graphically.

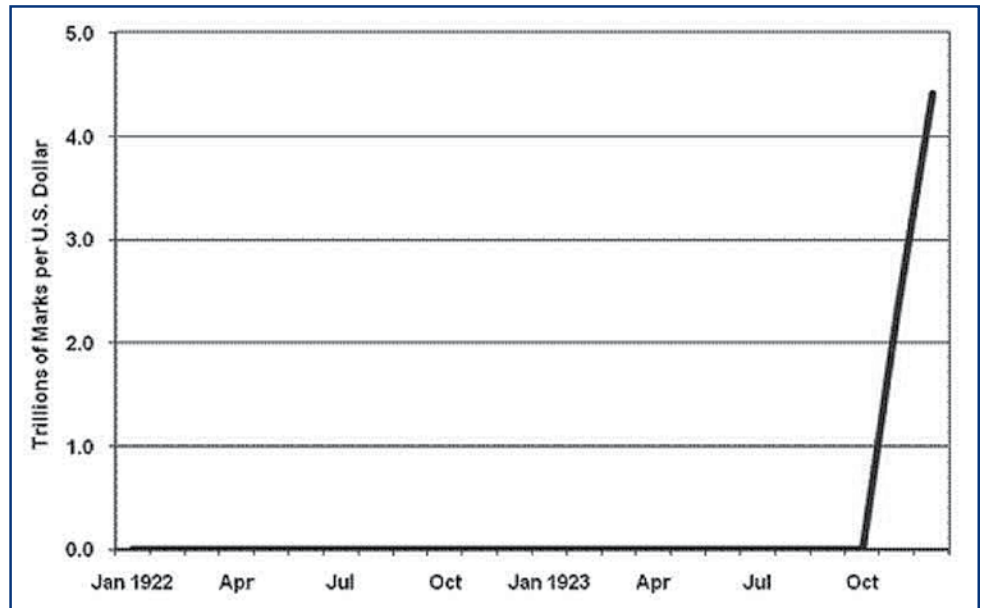
Evidently, this loss of value in the currency happened very quickly, for a former Harvard law professor who lived through it remembers it this way:

It was horrible. Horrible! Like lightning it struck. No one was prepared. You cannot imagine the rapidity with

which the whole thing happened. The shelves in the grocery stores were empty. You could buy nothing with your paper money. (Foster 2008)

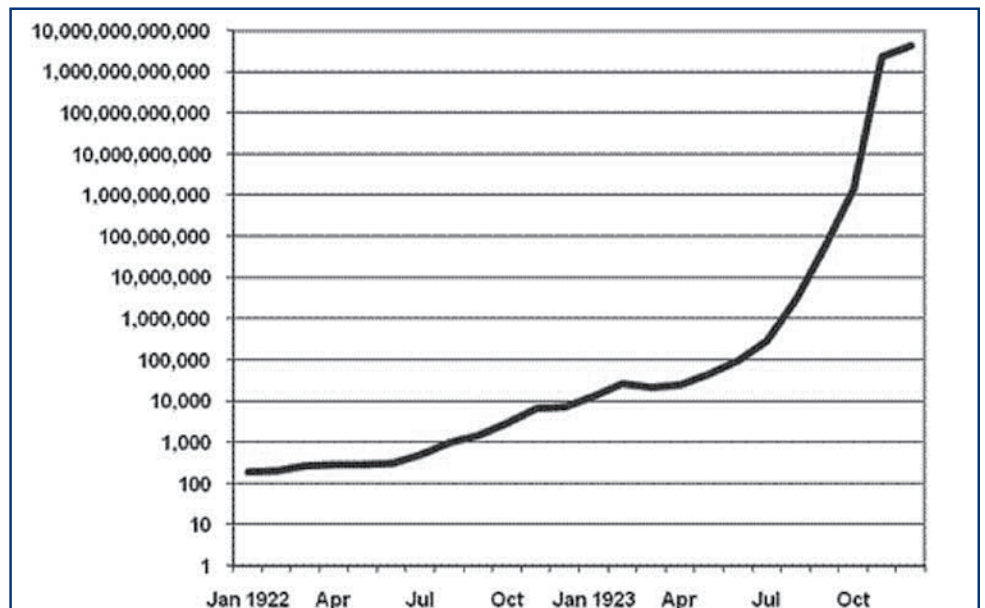
Hitler reneged on the debt agreement in the Treaty of Versailles when he came into power, but West Germany paid most of it after World War II. There was a provision that if West and East Germany combined again, interest on the money owed would come due, so when they were reunited, more money was owed. The final

Figure 1. German paper marks per U.S. dollar 1922–1923: Monthly average



Source: Shadow Government Statistics 2011; courtesy of ShadowStats.com.

Figure 2. German paper marks per U.S. dollar 1922–1923: Logarithmic scale (base 10) monthly average



Source: Shadow Government Statistics 2011; courtesy of ShadowStats.com.

debt was paid off in 2010, 93 years later (TradeSystem uru.com 2009).

Modern Currency

The Germans of the Weimar Republic era had to cancel their worthless Reichbank marks; they replaced them with the Rentenmark, which did not have the same fate. The Rentenmark did not inflate as the former currency had, because it was backed by bonds indexed to the market price of gold. In other words, the value could not float freely. The assurance that a paper currency is backed by such an index, or is in some way convertible to a commodity, is the key to stabilization.

Table 2 shows the vacillation for the U.S. dollar between the gold standard and fiat currency.

Because other currencies are still effectively pegged to the U.S. dollar, it remains the reserve currency of the world. Moreover, oil is purchased in dollars, so when dollars fluctuate, the price of oil for other countries fluctuates with it, since they must purchase their oil in dollars. This places the United States in a unique position compared to every other country in

the world, because it has the advantage of being able, to some extent, to issue fiat money internationally.

The United States is now the largest debtor nation in the world—not because it directly borrows from other countries, but because they buy its bonds (also known as Treasuries).

United States and International Debt

The United States is now the largest debtor nation in the world—not because it directly borrows from other countries, but because they buy its bonds (also known as Treasuries). Table 3 shows the reported debt of all nations. Because there are many hidden debts, these published numbers are not the whole story. In the last column the debt is compared to the gross domestic product (GDP), which is normally defined as the market value of all goods and services produced in a country in a given year.

The debt of Japan is actually a higher ratio than any other country, but it borrows internally from its own people, so it is reported differently. Nevertheless, that debt is becoming a major problem for the Japanese economy, especially since it has suffered recent costly disasters. Japan is also the second-largest holder of U.S. debt, after China. Figure 3 shows the holders of U.S. debt.

However, the recent disasters in Japan, which are estimated to cost about \$300 billion, may become a real disaster for the United States as well. As noted in figure 3, Japan is a major buyer of U.S. bonds, and if Japan reduces its bond purchases, the United States will have to find the funding elsewhere. In order to do this, interest rates may need to be increased, because buyers are now concerned that the interest rates on U.S. Treasuries are not keeping up with inflation. China is also concerned that the United States may try to “engineer a stealth default by allowing inflation to creep up” (Evans-Pritchard 2009).

In other words, if the United States allows inflation to increase, the dollar investment of many nations would decline in value. And the more debt the United States gets into, the more likely it is that the value of the dollar will be diminished.

The Euro versus the Dollar

Many economists thought that with the advent of the euro, the dollar would no longer be the reserve currency of the world. When the euro was first introduced, the rate was about \$0.70 to 1 euro. Now the rate is about \$1.32 to 1 euro, a huge decrease in value for the dollar. Nevertheless, the decrease could have been greater and the euro might be on its way to becoming the world’s new reserve currency if the Europeans had not broken their own rules on the euro. They decided to bail

Table 2. History of the U.S. dollar

Date	Event
1785–1861	Tied to value of gold, 76 years
1862–1879	Fiat currency, 7 years
1880–1914	Tied to value of gold, 34 years
1915–1925	Fiat currency 10 years; change occurred to pay for World War I costs, because there was not enough gold in the treasury to back it.
1926–1931	Tied to value of gold, 5 years
1931–1945	Fiat currency, 14 years
1944	Bretton Woods agreement: After World War II, nations gathered and agreed to tie the value of their currency to the U.S. dollar.
1945–1968	Tied to value of gold, 26 years
1963	New Federal Reserve notes are no longer backed by silver.
1965	Silver is eliminated from all coins except the Kennedy half-dollar.
June 24, 1968	President Johnson issues a proclamation formalizing the Fed’s statement in 1963 that the dollar cannot be redeemed for silver.
1971	Fiat currency, 5 months
August 1971	President Nixon takes the United States off the gold standard.
1971–1973	Tied foreign currencies to dollar standard (the Smithsonian Agreement)
1973–present	U.S. dollar and all major currencies are fiat currencies.

Sources: Kwaves.com undated.



Table 3. List of countries by external debt

Rank	Country	External Debt ^[2] (U.S. Dollars)	Date	Per Capita ^{[3][4]} (U.S. Dollars)	% of GDP ^[5] [6]
—	World	59,090,000,000,000	31 Dec. 2010 est.	8,731	95%
1	United States	14,392,451,000,000	30 Sep. 2010 ^[7]	46,577	97%
—	Eurozone	14,166,135,000,000	3rd qtr 2010 ^[8]	43,110	120%
—	European Union	13,720,000,000,000	30 June 2010 ^[9]	27,382	83%
2	United Kingdom	8,981,000,000,000	30 June 2010	144,757	398%
3	Germany	4,713,000,000,000	30 June 2010	57,646	143%
4	France	4,698,000,000,000	30 June 2010	74,410	188%
5	Netherlands	2,344,296,360,000	3rd qtr 2010 ^[10]	226,503	344%
6	Japan	2,246,000,000,000	30 June 2010	42,714	51%
7	Norway	2,232,000,000,000	30 June 2010 ^[11]	113,174	861%
8	Italy	2,223,000,000,000	30 June 2010 est.	39,234	124%
9	Spain	2,166,000,000,000	30 June 2010	52,588	157%
10	Ireland	2,131,000,000,000	30 June 2010 ^[12]	515,671	1224%
11	Luxembourg	1,892,000,000,000	30 June 2010 ^[13]	4,028,283	4636%
12	Belgium	1,275,601,020,000	3rd qtr 2010 ^[14]	126,188	322%
13	Switzerland	1,190,000,000,000	30 June 2010	182,899	364%
14	Australia	1,169,000,000,000	31 Dec. 2010 est.	42,057	131%
15	Canada	1,009,000,000,000	30 June 2010	24,749	75%
16	Sweden	853,300,000,000	30 June 2010	72,594	241%
17	Austria	755,000,000,000	30 June 2010	97,411	226%
—	Hong Kong	754,631,000,000	3rd qtr 2010 ^[15]	92,725	233%
18	Denmark	559,500,000,000	30 June 2010	110,216	274%
19	Greece	532,900,000,000	30 June 2010	49,525	165%
20	Portugal	497,800,000,000	30 June 2010	47,632	201%
21	Russia	480,200,000,000	30 Nov. 2010 est.	2,611	21%
22	People's Republic of China	406,600,000,000	31 Dec. 2010 est.	7,000	4%
23	Finland	370,800,000,000	30 June 2010	68,180	200%
24	Korea, South	370,100,000,000	31 Dec. 2010 est.	29,842	25%
25	Brazil	310,800,000,000	31 Dec. 2010 est.	1,129	14%
26	Turkey	270,700,000,000	31 Dec. 2010 est.	3,884	45%
27	Poland	252,900,000,000	31 Dec. 2010 est.	5,279	47%
28	India	237,100,000,000	31 Dec. 2010 est.	187	18%
29	Mexico	212,500,000,000	31 Dec. 2010 est.	1,646	20%
30	Indonesia	155,900,000,000	31 Dec. 2010 est.	651	28%
31	Hungary	134,600,000,000	31 Dec. 2010	11,667	70%
32	Argentina	128,600,000,000	31 Dec. 2010 est.	2,706	35%
33	United Arab Emirates	122,700,000,000	31 Dec. 2010 est.	26,202	56%
34	Iceland	124,090,000,000	3rd qtr 2010 ^[16]	10,670	35%
35	Romania	108,900,000,000	31 Dec. 2010 est.	4,459	59%
36	Ukraine	97,500,000,000	31 Dec. 2010 est.	2,275	90%
37	Kazakhstan	94,440,000,000	31 Dec. 2010 est.	5,987	85%
38	Republic of China (Taiwan)	91,410,000,000	31 Dec. 2010 est.	3,452	21%
39	Israel	89,680,000,000	31 Dec. 2010 est.	11,649	43%
40	Czech Republic	86,790,000,000	31 Dec. 2010 est.	7,318	39%
42	Chile	84,510,000,000	31 Dec. 2010 est.	3,586	38%
43	Saudi Arabia	82,920,000,000	31 Dec. 2010 est.	2,839	20%
44	Thailand	82,500,000,000	31 Dec. 2010 est.	990	25%
45	South Africa	80,520,000,000	30 June 2010	1,497	26%
46	Qatar	71,380,000,000	31 Dec. 2010 est.	51,856	75%
47	New Zealand	64,330,000,000	31 Dec. 2010 est.	13,636	50%
48	Malaysia	62,820,000,000	31 Dec. 2010 est.	1,738	25%

Rank	Country	External Debt ^[2] (U.S. Dollars)	Date	Per Capita ^{[3][4]} (U.S. Dollars)	% of GDP ^[5] [6]
49	Philippines	61,850,000,000	31 Dec. 2010 est.	576	33%
49	Colombia	61,777,400,000	3rd qtr 2010 ^[17]	1,052	21%
50	Croatia	59,700,000,000	31 Dec. 2010 est.	13,390	94%
51	Slovakia	59,330,000,000	30 June 2010	9,706	55%
52	Pakistan	57,210,000,000	31 Dec. 2010 est.	318	31%
53	Kuwait	56,810,000,000	31 Dec. 2010 est.	9,191	29%
54	Venezuela	55,610,000,000	31 Dec. 2010 est.	1,517	13%
55	Iraq	52,580,000,000	31 Dec. 2010 est.	1,610	76%
56	Slovenia	51,570,000,000	30 June 2010	27,282	112%
57	Malta	41,020,000,000	30 June 2010	9,080	45%
58	Sudan	37,980,000,000	31 Dec. 2010 est.	927	66%
59	Latvia	37,280,000,000	31 Dec. 2010 est.	16,811	145%
60	Bulgaria	36,150,000,000	31 Dec. 2010 est.	6,511	105%
61	Lebanon	34,450,000,000	31 Dec. 2010 est.	5,473	63%
62	Vietnam	33,450,000,000	31 Dec. 2010 est.	355	34%
63	Peru	33,290,000,000	31 Dec. 2010 est.	1,032	24%
64	Cyprus	32,860,000,000	31 Dec. 2008 est.	41,648	129%
65	Serbia	32,310,000,000	31 Dec. 2010 est.	4,297	74%
66	Egypt	30,610,000,000	31 Dec. 2010 est.	371	15%
67	Lithuania	27,600,000,000	31 Dec. 2010 est.	10,924	98%
68	Belarus	24,800,000,000	31 Dec. 2010 est.	3,007	57%
69	Bangladesh	24,460,000,000	31 Dec. 2010 est.	141	25%
70	Morocco	22,690,000,000	31 Dec. 2010 est.	633	22%
71	Estonia	22,125,000,000	31 Dec. 2010 est.	16,510	114%
72	Singapore	21,660,000,000	31 Dec. 2010 est.	4,042	11%
73	Cuba	19,750,000,000	31 Dec. 2010 est.	1,698	34%
74	Tunisia	18,760,000,000	31 Dec. 2010 est.	1,500	39%
75	Monaco	18,000,000,000	2000 est.	565,043	
76	Angola	17,980,000,000	31 Dec. 2010 est.	741	19%
77	Sri Lanka	17,970,000,000	31 Dec. 2010 est.	961	47%
82	Uruguay	13,390,000,000	31 Dec. 2010 est.	3,770	40%
83	Dominican Republic	13,090,000,000	31 Dec. 2010 est.	1,312	25%
84	Iran	12,840,000,000	31 Dec. 2010 est.	166	3.7%
85	Jamaica	12,660,000,000	31 Dec. 2010 est.	4,260	97%
86	Korea, North	12,500,000,000	2001 est.	582	
87	Cote d'Ivoire	11,600,000,000	31 Dec. 2010 est.	565	54%
88	El Salvador	11,450,000,000	31 Dec. 2010 est.	1,976	55%
89	Nigeria	11,020,000,000	31 Dec. 2010 est.	64	6%
90	Costa Rica	9,126,000,000	31 Dec. 2010 est.	1,744	27%
91	Oman	8,829,000,000	31 Dec. 2010 est.	2,522	14%
92	Bosnia and Herzegovina	7,996,000,000	31 Dec. 2010 est.	2,102	49%
93	Kenya	7,935,000,000	31 Dec. 2010 est.	215	24%
94	Syria	7,682,000,000	31 Dec. 2010 est.	374	15%
95	Tanzania	7,576,000,000	31 Dec. 2010 est.	174	32%
96	Yemen	7,147,000,000	31 Dec. 2010 est.	264	25%
97	Burma	7,145,000,000	31 Dec. 2010 est.	123	27%
98	Ghana	6,483,000,000	31 Dec. 2010 est.	253	38%
99	Libya	6,378,000,000	31 Dec. 2010 est.	1,025	11%
100	Bolivia	6,130,000,000	31 Dec. 2010 est.	523	30%
101	Zimbabwe	5,772,000,000	31 Dec. 2010 est.	496	132%
102	Jordan	5,522,000,000	31 Dec. 2010 est.	1,121	29%
103	Macedonia	5,520,000,000	31 Dec. 2010 est.	2,648	59%

Rank	Country	External Debt ^[2] (U.S. Dollars)	Date	Per Capita ^{[3][4]} (U.S. Dollars)	% of GDP ^[5] ^[6]
104	Armenia	5,227,000,000	30 June 2010	1,368	51%
105	Mauritius	5,043,000,000	31 Dec. 2010 est.	3,565	52%
106	Congo, Republic of the	5,000,000,000	2000 est.	1,722	155%
107	Turkmenistan	5,000,000,000	2009 est.	934	31%
108	Mozambique	4,990,000,000	31 Dec. 2010 est.	197	42%
109	Nepal	4,500,000,000	2009	161	36%
110	Paraguay	4,346,000,000	31 Dec. 2010 est.	513	22%
111	Cambodia	4,338,000,000	31 Dec. 2010 est.	298	38%
112	Trinidad and Tobago	4,303,000,000	31 Dec. 2010 est.	1,589	10%
113	Congo, Democratic Republic of the	4,300,000,000	2009 est.	164	100%
114	Ethiopia	4,289,000,000	31 Dec. 2010 est.	51	13%
115	Uzbekistan	4,236,000,000	31 Dec. 2010 est.	130	11%
116	Moldova	4,146,000,000	31 Dec. 2010 est.	1,113	73%
117	Algeria	4,138,000,000	31 Dec. 2010 est.	97	2%
118	Nicaragua	4,030,000,000	31 Dec. 2010 est.	743	76%
119	Senegal	3,885,000,000	31 Dec. 2010 est.	216	22%
120	Kyrgyzstan	3,738,000,000	30 June 2010	653	68%
121	Honduras	3,540,000,000	31 Dec. 2010 est.	423	23%
122	Zambia	3,495,000,000	31 Dec. 2010 est.	277	25%
123	Georgia	3,381,000,000	31 Dec. 2009	771	31%
124	Cameroon	3,344,000,000	31 Dec. 2010 est.	147	13%
125	Azerbaijan	3,221,000,000	31 Dec. 2010 est.	269	6%
126	Liberia	3,200,000,000	2005 est.	930	606%
127	Laos	3,085,000,000	2009 est.	484	55%
128	Guinea	3,072,000,000	31 Dec. 2009 est.	290	70%
129	Somalia	3,000,000,000	2001 est.	393	
130	Madagascar	2,973,000,000	31 Dec. 2010 est.	99	24%
131	Benin	2,894,000,000	31 Dec. 2009 est.	135	22%
134	Uganda	2,888,000,000	31 Dec. 2010 est.	62	13%
135	Mali	2,800,000,000	2002	240	84%
136	Afghanistan	2,700,000,000	2008	96	23%
137	Gabon	2,374,000,000	31 Dec. 2010 est.	2,078	28%
138	Namibia	2,373,000,000	31 Dec. 2010 est.	569	13%
139	Botswana	2,222,000,000	31 Dec. 2010 est.	910	14%
140	Niger	2,100,000,000	2003 est.	178	79%
141	Burkina Faso	2,002,000,000	31 Dec. 2010 est.	128	23%
142	Tajikistan	1,997,000,000	31 Dec. 2010 est.	260	34%
143	Mongolia	1,860,000,000	2009	690	44%
144	Chad	1,749,000,000	31 Dec. 2008 est.	177	27%
145	Sierra Leone	1,610,000,000	2003 est.	311	163%
146	Albania	1,550,000,000	2004	497	21%
147	Papua New Guinea	1,548,000,000	31 Dec. 2010 est.	366	29%
148	Seychelles	1,374,000,000	31 Dec. 2010 est.	14,706	163%
149	Malawi	1,213,000,000	31 Dec. 2010 est.	78	24%
150	Burundi	1,200,000,000	2003	167	202%
151	Central African Republic	1,153,000,000	2007 est.	270	68%
—	West Bank	1,300,000,000	2007 est.	552	
152	Belize	1,010,000,000	2009 est.	2,982	70%
153	Guinea-Bissau	941,500,000	2000 est.	722	203%
154	Bhutan	836,000,000	2009	1,239	66%
155	Equatorial Guinea	832,000,000	31 Dec. 2010 est.	136	1%

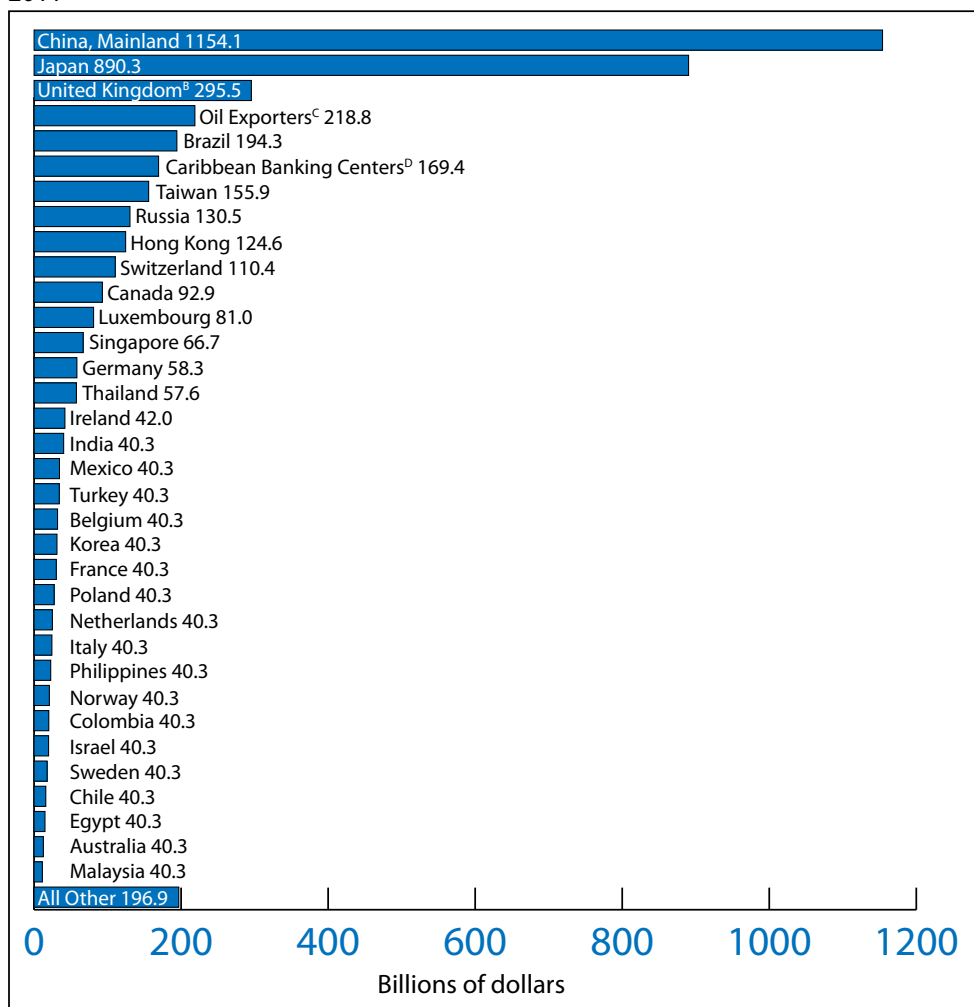
Rank	Country	External Debt ^[2] (U.S. Dollars)	Date	Per Capita ^{[3][4]} (U.S. Dollars)	% of GDP ^[5] ^[6]
156	Guyana	804,300,000	30 Sept. 2008	1,049	42%
157	Barbados	668,000,000	2003	2,456	25%
158	Montenegro	650,000,000	2006	939	24%
159	Lesotho	647,000,000	31 Dec. 2010 est.	233	36%
160	Maldives	589,000,000	2009 est.	1,707	43%
161	Gambia, The	530,000,000	31 Dec. 2010 est.	438	170%
162	Suriname	504,300,000	2005 est.	1,011	28%
163	Swaziland	497,000,000	31 Dec. 2010 est.	520	18%
164	Haiti	494,000,000	31 Dec. 2010 est.	48	7%
165	Saint Vincent and the Grenadines	479,000,000	2010	2,084	54%
—	Aruba	478,600,000	2005 est.	4,935	21%
166	Djibouti	428,000,000	2006	573	56%
167	Antigua and Barbuda	359,800,000	June 2006	4,388	36%
168	Grenada	347,000,000	2004	3,402	74%
169	Bahamas, The	342,600,000	2004 est.	1,067	6%
170	Cape Verde	325,000,000	2002	722	53%
171	Sao Tome and Principe	318,000,000	2002	2,193	349%
172	Saint Kitts and Nevis	314,000,000	2004	6,408	79%
173	Eritrea	311,000,000	2000 est.	87	44%
174	Saint Lucia	257,000,000	2004	1,586	32%
176	Comoros	232,000,000	2000 est.	420	115%
177	Dominica	213,000,000	2004	3,000	75%
178	Samoa	177,000,000	2004	994	47%
179	Solomon Islands	166,000,000	2004	355	44%
—	Bermuda	160,000,000	FY99/00	2,560	
—	Cook Islands	141,000,000	1996 est.	7,756	
180	Fiji	127,000,000	2004 est.	150	5%
181	Marshall Islands	87,000,000	2008 est.	1,377	54%
182	Vanuatu	81,200,000	2004	383	22%
183	Tonga	80,700,000	2004	791	33%
—	New Caledonia	79,000,000	1998 est.	404	
—	Cayman Islands	70,000,000	1996	2,078	
—	Faroe Islands	68,100,000	2006	1,409	
184	Micronesia, Federated States of Greenland	60,800,000	FY05 est.	563	
—	British Virgin Islands	36,100,000	1997	1,897	
185	Nauru	33,300,000	2004 est.	2,599	
186	Kiribati	10,000,000	1999 est.	120	14%
—	Montserrat	8,900,000	1997	14,958	
—	Anguilla	8,800,000	1998	818	
—	Wallis and Futuna	3,670,000	2004	244	
—	Niue	418,000	2002 est.	196	
187	Brunei	0	2005	0	0%
188	Liechtenstein	0	2001	0	
—	Macau	0	2009	0	0%
189	Palau	0	FY99/00	0	

^{[1]-[17]} The source table has extensive explanatory footnotes, which are not repeated here. Go to http://en.wikipedia.org/w/index.php?title=List_of_countries_by_external_debt&oldid=425984804.

Source: Wikipedia contributors 2011.



Figure 3. Major foreign holders of Treasury Securities—Holdings^a at end of February 2011



^a Estimated foreign holdings of U.S. Treasury marketable and non-marketable bills, bonds, and notes reported under the Treasury International Capital (TIC) reporting system are based on annual surveys of foreign holdings of U.S. securities and on monthly data.

^b United Kingdom includes Channel Islands and Isle of Man.

^c Oil exporters include Ecuador, Venezuela, Indonesia, Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates, Algeria, Gabon, Libya, and Nigeria.

^d Caribbean Banking Centers include Bahamas, Bermuda, Cayman Islands, Netherlands Antilles and Panama. Beginning with new series for June 2006, also includes British Virgin Islands.

Source: Department of the Treasury 2011.

out countries that were about to default on their debts, and once that decision was made, confidence in the currency eroded quickly. The problematic countries are Portugal, Ireland, Greece, and Spain. The rules were broken and Greece and Ireland were bailed out, and the process is continuing with Portugal. However, the bailouts were also a reprieve for the value and international position of the dollar. The lack of fiscal discipline of the Eurozone members

and their willingness to renege on the original agreement under which the euro was coined have investors realizing that the euro has as much inflation potential as the dollar.

How Much Does the United States Really Owe?

In Shakespeare's *Hamlet*, Polonius states, "To thine own self be true," referring to the propensity of people not to face the facts about themselves.

It may also be applicable to people who tally the debt for the U.S. government. During Lyndon Johnson's presidency, the cost of the Vietnam War was escalating, so some accounting gimmicks were used to hide large increases in the federal deficit. In what was called *unified budget accounting*, revenue generated from Social Security taxes was included in the general fund without regard to future payouts for Social Security.

In other words, Social Security money was always separated from the general fund because it was not revenue that could be spent but was supposed to be saved for those who paid into it. The government was able to combine it with the general fund because the government uses a cash basis for accounting, which does not take into consideration money owed in the future. Thus, from 1998 to 2001, it was often announced that there was a budget surplus, when in reality there was a serious deficit.

Table 4 shows one analyst's estimate of the actual debt owed when future debts are included. It appears that the total debt has more than doubled in the last 10 years. According to the U.S. Treasury, the total official debt is \$64 trillion, whereas the Williams newsletter estimate is \$76.5 trillion. It is interesting that even the official government figures, though less than the alternative figures, are exceedingly high.

Recently, Federal Reserve Chairman Ben Bernanke said the following on CBS's *60 Minutes*:

Well, this fear of inflation, I think, is way overstated. We've looked at it very, very carefully. We've analyzed it every which way. One myth that's out there is that what we're doing is printing money. We're not printing money. The amount of currency in circulation is not changing. The money supply is not changing in any significant way.

However, also on *60 Minutes*, 21 months earlier, when asked if it's tax money the Fed is spending, Bernanke said,

It's not tax money. The banks have accounts with the Fed, much the same way that you have an account in a commercial bank. So, to lend to a bank, we simply use the computer to mark up the size of the account that they have with the Fed. It's much more akin to printing money than it is to borrowing.

"You've been printing money?" Scott Pelley asked. Bernanke replied,

Well, effectively, and we need to do that, because our economy is very weak and inflation is very low. When the economy begins to recover, that will be the time that we need to unwind those programs, raise interest rates, reduce the money supply, and make sure that we have a recovery that does not involve inflation. (James 2010)

Regardless of whether money is increased electronically or as paper money, it still increases the money supply and eventually causes inflation. The United States is also buying its own mortgage-backed securities, because no one else wants to buy them as real estate continues to decline. Of course, no country can continue buying its own debt, because this is also an accounting gimmick. Moreover, the Fed has been flooding the United States with cheap money to avoid a depression, as Mr. Bernanke had promised to do in prior speeches if it was necessary (Lanman 2010).

But Aren't We in a Cycle?

We hear a lot about cycles when economists speak. The markets will come back and things will be good again—that could happen if world borrowing was in a cycle. However, there is no cycle because borrowing never goes down significantly with most countries; it may go down a little but not enough to make a difference.

Table 4. U.S. Government alternative fiscal deficit and debt

Fiscal Year ⁽¹⁾	Formal Cash-Based Deficit (\$Billions)	GAAP Ex-SS Etc. Deficit (\$Billions)	GAAP With SS Etc. Deficit (\$Trillions)	GAAP Federal Negative Net Worth (\$Trillions)	Gross Federal Obligations Debt (\$Trillions)	Total ⁽²⁾ Federal (GAAP) (\$Trillions)
<i>Alternative</i>						
2010	\$1,294.1	\$2,080.3	\$5.3 ⁽³⁾	\$68.9 ⁽³⁾	\$13.6	\$76.3 ⁽³⁾
<i>Official</i>						
2010	\$1,294.1	\$2,080.3	(\$7.0) ⁽³⁾	\$56.5 ⁽³⁾	\$13.6	\$64.0 ⁽³⁾
2009 ⁽⁴⁾	1,417.1	1,253.7	4.3	63.6	11.9	70.5
2008	454.8	1,009.1	5.1	59.3	10.0	65.6
2007	162.8	275.5	1.2 ⁽⁵⁾	54.3	9.0	59.8
2006	248.2	449.5	4.6	53.1	8.5	58.2
2005	318.5	760.2	3.5	48.5	7.9	53.3
2004	412.3	615.6	11.0 ⁽⁶⁾	45.0	7.4	49.5
2003	374.8	667.6	3.0	34.0	6.8	39.1
2002	157.8	364.5	1.5	31.0	6.2	35.4

(1) Fiscal year ended September 30th; the numbers are subject to rounding differences. (2) Includes gross federal debt, not just "public" debt. While the non-public debt is debt the government owes to itself for Social Security, etc., the obligations there are counted as "funded" and as such are part of total government obligations. (3) The official reporting includes a large, one-time reduction in the estimated net present value of unfunded Medicare liabilities, due to generally favorable underlying assumptions tied to the passage of healthcare legislation. With consistent accounting, SGS estimates the GAAP shortfall with Social Security and Medicare for 2010 to be roughly \$5 trillion. The *Alternative* numbers here are being used as a placeholder until better accounting estimates are available, and reflect results using the "illustrative alternative scenario" on Medicare costs shown on page 130 of the 2010 report. (4) The 2009 data predate December 2009 guarantees of Fannie Mae and Freddie Mac and do not reflect PBGC or FDIC liabilities. Please note that mid-year accounting redefinitions for TARP knocked off roughly \$500 billion from the reported formal cash-based estimate and contributed to a TARP "profit" in the GAAP numbers. (5) On a consistent reporting basis, net of one-time changes in actuarial assumptions and accounting, SGS estimates that the GAAP-based deficit for 2007 topped \$4 trillion, with negative net worth of \$57.1 trillion and total obligations of \$59.8. So as to maintain consistency with the official GAAP statements, the "official" numbers are shown. (6) SGS estimates \$3.4 trillion, excluding one-time unfunded setup costs of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (enacted December 2003). Again, in order to maintain consistency with the official GAAP statements, the "official" numbers are shown in the table for 2004. The 2010 GAAP statements were released on December 21, 2010: <http://fms.treas.gov/fr/index.html>. The initial SGS analysis of same is found in *Commentary No. 340*.

Source: Shadow Government Statistics 2010; courtesy of ShadowStats.com.

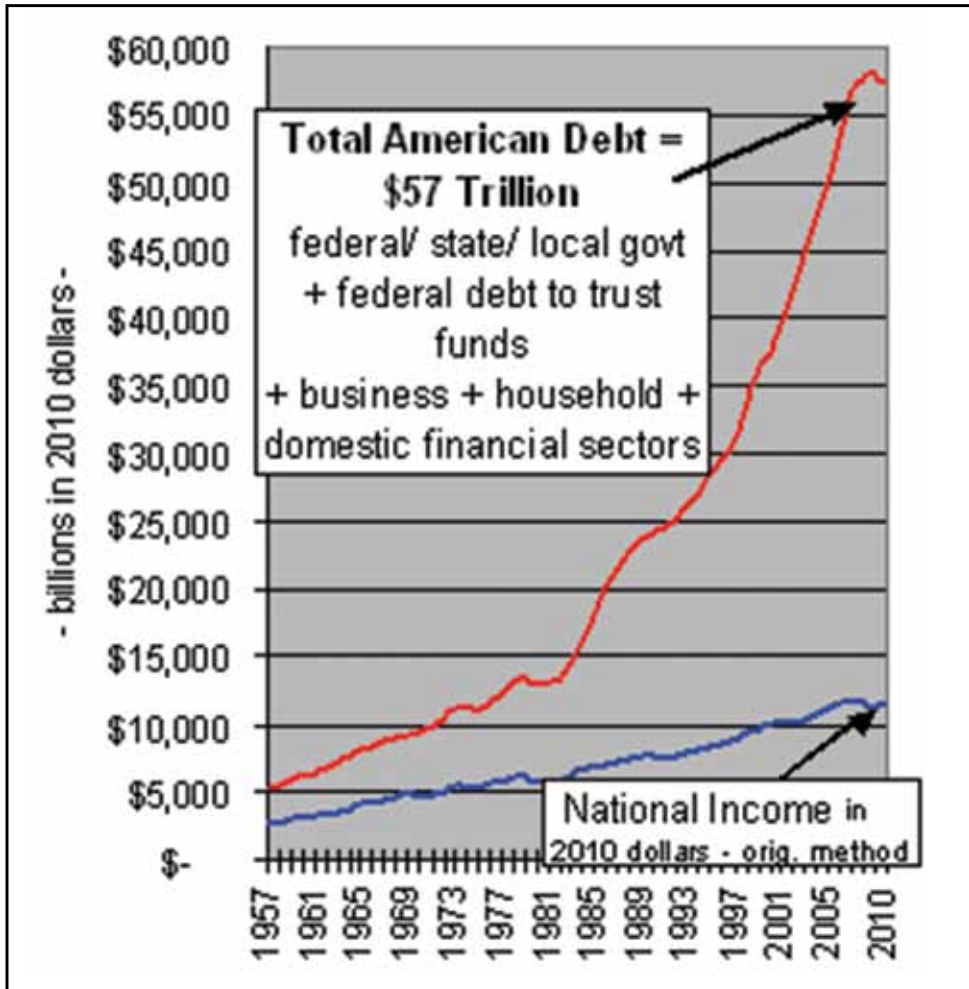


Historical records show that most nations continue to borrow more and more. England still owes money that it borrowed for the Napoleonic Wars in the early nineteenth century. There may appear to be a cycle in the economy, but if overall debt continues to increase, then problems are bequeathed to coming generations and at some point the bills have to be paid.

Figures 4 and 5 show the increase in debt over the years. Figure 4 is an estimate of total debt up to 2010, before the marked increase occurred. It also shows that that debt has spiraled up with minimal decreases. The data in figure 5 only go to 2005, but show how debt skyrocketed in the 1980s without a major downward trend.

Hiding Inflation

Figure 4. Total American debt versus national income



Source: Hodges 2011.

The government measures what it calls *core inflation*, which some economists have said is good only for people who don't drive or eat, because it does not include energy or food in its inflation numbers. Moreover, core inflation has been distorted by the fact that housing prices have declined. This downturn has countered the increase in the cost of commodities. In an IAAO article in 2010, I predicted that commodities would be the first prices to rise (Lifflander 2010). Since that time, silver has jumped from about \$15.00 to \$47.00 per ounce, gold has increased more than 30 percent, cotton has moved up 156 percent, oil has gone from \$74 to \$112 per barrel, and many other commodities have markedly increased.

Hiding Foreclosed Properties

The U.S. government does not guarantee the securities issued by Freddie Mac and Fannie Mae, so their debt is not recorded in the national debt figures. These numbers would be significant, but it is beyond the scope of this article to go into the details. However, there is another way these losses are being hidden. New accounting rules are allowing banks to keep on their books distressed loans that in the past would have been written off as bad debts and accounted for. In other words, some banks are holding properties because if the real value of them was revealed, they may no longer have the necessary reserves required by FDIC and they would be shut down. Or, at the least, their profits would look worse and this would affect their stock value (Harrison 2010).

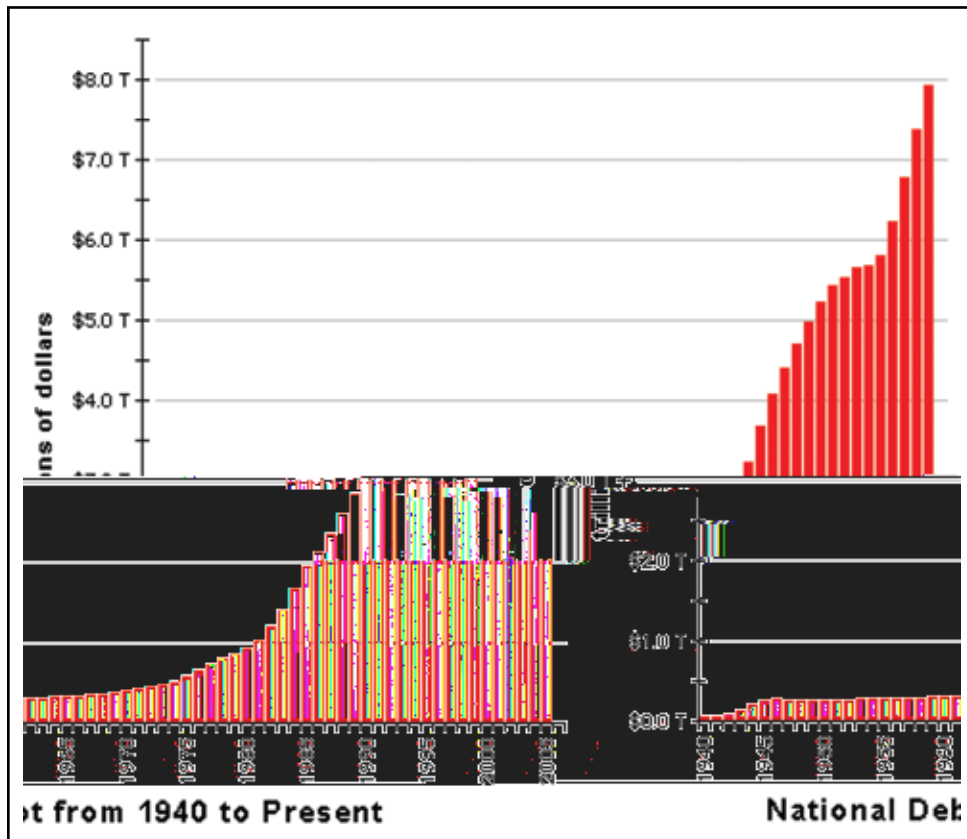
How Do All These Things Affect Real Estate Values?

The scenario above affects real estate values in the United States because the value of real estate would probably be lower if all foreclosed properties were put on the market. But on an international scale, many countries find themselves interconnected whether they like it or not.

For instance, China finances the debt of the United States, but the United States is the largest buyer of Chinese products. This reluctant symbiotic relationship means that any change in economic policy by one country will probably have a significant effect on the other. The United States wants the yuan to increase in value so that its goods will sell more easily in China. China wants interest rates to be increased in the United States so it will not lose its investment in dollars to inflation.

If China is able to pressure the United States into raising rates or if

Figure 5. National debt 1940–2005



Source: Hall 2008.

Japan no longer buys U.S. debt because it has to fund rebuilding due to the recent disasters there and rates are increased, home prices in the United States will plummet. With unrest in the Middle East causing oil prices to increase, people with homes on the outskirts of major metropolitan areas are finding that their real estate values are decreasing because of the extra expense of commuting.

With the decision to bail out the deficit-ridden Eurozone countries, the euro will decrease in value, resulting in higher fuel prices and a myriad of other problems that will affect real estate values through Europe.

What Might Be on the Horizon?

The Fed has kept interest rates low, in the hope of preventing the economy from slowing further. However, as previously discussed, rates can be kept low only as long as U.S. Treasuries can be

sold. If the market dries up, rates will have to increase to make up for the risk that bond investors must take. These low rates have caused bubbles in many markets and, of course, in real estate markets. Other countries, following the lead of the Fed, have also kept rates low; in many cases this also caused a bubble in prices, and from Dubai to Ireland values are dropping.

However, in spite of the fact that raising interest rates will cause more declines in real estate values, it appears that rates may have to rise eventually in the United States, and probably in other countries as well. Note that most people buy real estate based on the payment amount, not the total cost, and as rates increase, fewer buyers will be able to buy at each price level, resulting in further declines in values. The countering effect will be the fact that new construction is down and eventually real estate will

be absorbed as populations increase, although that may take many years.

In the United States, many businesses have been built on the sale and servicing of luxury products. Eating at restaurants is a luxury and many are suffering because of the recent financial hardships and increase in unemployment. The old saying, “The taller they are, the harder they fall,” may be appropriate in this economic situation. Moreover, in the United States, hundreds of thousands of mortgages are under water—in other words, the borrowers owe more than the property is worth. Many of these people have good jobs and good credit, but they are planning to default on their homes because of the decrease in value. They have figured that they would rather have a bad mark on their credit report than keep making payments on a home they bought for \$450,000 that is now worth \$270,000 or \$210,000. They believe that prices will not rise to previous levels any time in the near future and have determined that renting is a better choice for the time being.

Because there are so many of these situations, soon there may not be a stigma associated with defaulting. In fact, some creditors are already continuing to extend credit if a real estate default is the only problem with a person’s credit. Other borrowers must default because of lost jobs, businesses that are failing, and other circumstances. Some of these people are self-employed or have lost their jobs and are now living on credit cards, or equity lines, using what they can borrow to extend their livelihood until there is nothing left.

The Fed in the United States may raise interest rates slightly in the coming quarters, and if it does, some commodity prices may burst, because the prices are becoming bubbles with the



availability of cheap funds. For example, investors who purchased silver at \$15.00 per ounce and watched it climb to \$47.00 could pull their earnings out in a hurry if the price fell quickly, causing a crash. (Note that after this article had been written, in early May the price of silver did crash to \$34.00 per ounce.)

In any event, an increase in interest rates will probably be followed by another decrease if things get worse, as long as the Fed is able to keep rates down. However, the pressure for interest rates to rise permanently may eventually be too great to resist, even with all the accounting gimmicks that are being employed to keep them down—and real estate will be a major casualty of any increases. Supply and demand used to be the main economic factor influencing real estate values, but now international and national monetary policies are playing a major role and they should be considered in any projection for real estate valuations.

References

Department of the Treasury, Federal Reserve Board. 2011. *Major foreign holders of Treasury securities holdings at end of period*, April 29. <http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/mfh.txt> (accessed May 11 2011).

Evans-Pritchard, A. 2009. Hilary Clinton pleads with China to buy US Treasuries as Japan looks on, *The Telegraph*, Feb. 22. <http://www.telegraph.co.uk/finance/financialcrisis/4782755/Hillary-Clinton-pleads-with-China-to-buy-US-Treasuries-as-Japan-looks-on.html> (accessed April 26, 2011).

Foster, R.T. 2008. *Fiat paper money: The history and evolution of our currency*, 2nd ed. Berkeley, CA: Ralph T. Foster.

Hall, E. 2008. *U.S. national debt clock*. Feb. 6. http://brillig.com/debt_clock/faq.html (accessed May 11, 2011).

Harrison, E. 2010. Hiding bank loses. *Credit Writedown*, April 13. <http://www.creditwritedowns.com/2010/08/hiding-bank-losses.html> (accessed April 26, 2011).

Hodges, M. 2011. Summary page: American's total debt report, *Grandfather Economic Report series*. April. <http://grandfather-economic-report.com/debt-nat.htm> (accessed April 26, 2011).

Horne, C.F. 1915. *The Code of Hammurabi: Introduction*. New Haven, CT: Yale University. <http://avalon.law.yale.edu/ancient/hammint.asp> (accessed April 26, 2011).

James, F. 2010. Jon Stewart busts Fed Chair Ben Bernanke on 'printing money,' *npr*. <http://www.npr.org/blogs/itsallpolitics/2010/12/08/131903366/jon-stewart-busts-fed-chair-ben-bernanke-on-printing-money> (accessed April 26, 2011).

Jones, N. 2009. Fiat currency: using the past to see into the future, *The Daily Reckoning*. <http://dailyreckoning.com/fiat-currency/> (accessed May 11, 2011).

Kwaves.com. undated. *Fiat Money History in the US*. <http://kwaves.com/fiat.htm> (accessed May 11, 2011).

Lanman, S. 2010. Fed looks to spur growth by buying government debt, *Bloomberg*, Aug. 10. <http://www.bloomberg.com/news/2010-08-10/fed-to-reinvest-principal-on-mortgage-proceeds-into-long-term-treasuries.html> (accessed April 26, 2011).

Lifflander, J. 2010. The effects of U.S. economic policies on real estate values. *Fair & Equitable* 8 (2): 3–7.

Shadow Government Statistics, American Business Analytics & Research LLC. 2010. No. 340: 2010 Financial Statements of the U.S. Government, *John Williams' Shadow Government Statistics*, Dec. 22. <http://www.shadowstats.com/article/no-340-2010-financial>

statements-of-the-us-government (accessed May 2, 2011).

Shadow Government Statistics, American Business Analytics & Research LLC. 2011. Hyperinflation special report (2011), special commentary number 357, *John Williams' Shadow Government Statistics*, March 15. <http://www.shadowstats.com/article/hyperinflation-special-report-2011> (accessed May 11 2011).

TradeSystem Guru.com. 2009. Quote of the week, *TSG Stock Market Letter*, July 3. <http://tradesystemguru.com/content/view/274/58/> (accessed April 26, 2011).

Wikipedia contributors. 2011. List of countries by external debt, *Wikipedia, The Free Encyclopedia*. http://en.wikipedia.org/w/index.php?title=List_of_countries_by_external_debt&oldid=425984804 (accessed April 27, 2011).

WorldCent Forum. 2009. Kublai Khan—The first of the fiat money makers, *Forumotion.com*, Dec. 22. <http://worldcent.forumotion.com/t35-kublai-khan-the-first-of-the-fiat-money-makers> (accessed April 26, 2011).

John Lifflander, ASA, has been appraising for more than 32 years and is president of Covenant Consultants, Inc. in Ridgefield, Washington, an appraisal and property tax consulting firm specializing in assessment consulting and litigation for complex valuation issues. He has served in management, as an industrial appraiser, and as an administrative law judge for property tax appeals. Mr. Lifflander teaches courses on various appraisal subjects and is the author of the 2007 IAAO textbook *Fundamentals of Industrial Valuation*, as well as many other publications. He can be reached at john@liffland.com.