

Today's Notes:

- 1. The Big Fix**
- 2. Banks- be Careful**
- 3. Retirement**

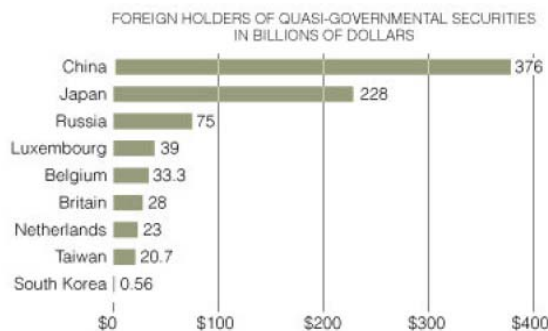
1. THE BIG FIX

Fannie was a child of the Great Depression, created in 1938, eventually to provide access to the post-war American Dream – home ownership. A home, two cars and a steady American lifestyle have come under some pressure recently. Freddie, the sister company, was created in 1971. Both companies are public (owned by mom and pop) and government-backed. I did not say “*guaranteed.*” That is the question rolling around the halls of Congress this fine day, like a hot potato.

Fannie Mae and Freddie Mac are really big. Big companies. Big issues. I mean really big. Take, for example, their share of the US mortgage space. There are approximately \$12 trillion in mortgage loans extant in the US economy. Fannie and Freddie either own or have securitized \$5.2 trillion of these. The NYT reports that 1 in 10 American homeowners' mortgages are “*in the hands of institutions and governments outside the US.*” That's what I mean by “BIG issues.” One might ask, “How did they get so big?” the answer is that with an implicit backing by Uncle Sam they became the go-to mortgage makers. Not only were they too big to fail, but they may be too big to save. One week ago, the capital markets were becalmed by Washington suggesting that the government would step in and make all OK with the Twins. But this may take more than \$1 trillion. Foreigners now hold \$1.3 trillion in the “Twins” paper. Whatever happens to Fannie and Freddie is very important to the world. How this mega-problem is handled will be a marker for the faith in the US, its Congress and ultimately, its currency.

In the Hands of Foreign Countries

The amount of quasi-governmental, non-Treasury securities, including those of Fannie Mae and Freddie Mac, held by foreign countries tripled to \$1.5 trillion in 2008, from \$504 billion in 2001. The following nine countries hold just over half the total amount.



Sources: U.S. Treasury; CLSA Group; Japan Ministry for Financial Services; Taiwan Financial Supervisory Commission; South Korea Financial Supervisory Service

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For years foreigners have been financing the American Dream. This is plainly evident in the large foreign holdings of Fannie and Freddie's paper. The question of saving FNM and FRE, therefore, has big implications. Secretary Paulson wants a blank check from Congress. Yesterday he sent a warning to Congress. He is, *"very optimistic that we're going to get what we need from Congress ... Congress understands how important these institutions are."*

Still, there is likely to be debate in Congress. This will be discomfoting to foreigners and Americans alike. In the 1990s and early this decade the Agency's paper was aggressively sold abroad as a higher yield alternative to Treasuries.

Look at IndyMac, a much smaller problem. Every system that could fail (the country's second largest bank failure – a \$4 to \$8 billion FDIC rescue) , Congress, the OTS, depositors, shareholders and mortgagees have failed or been damaged. But IndyMac is a multi-billion dollar failure not a multi-trillion dollar failure. I am certain you are well aware that a trillion is 1000 times larger than 1 billion – three orders of magnitude.

In the interim euphoria over Citi's write-off (**ONLY**\$2.5 billion and J.P. Morgan's loss (earnings **ONLY** 53% lower) last week Fannie and Freddie popped.



In the 1980s and 90s these stocks were on every institutional investor's list. One money manager made his performance goals on three stocks, Fannie, Freddie and Phillip Morris. We use to call the portfolio the Pep Boys portfolio – Fannie Mo and Mac.

Fannie and Freddie became known as public companies whose stock was as good as the US Government's paper. But things were going dangerously wrong as Fannie and Freddie got aggressive and got bigger. They became fierce competitors overseas in marketing their mortgage paper as a substitute for Treasuries. Then at the height of earnings hubris, a history of 6 years of accounting scandals arose in 2006 forcing resignations, a \$400 million fine and more government oversight – obviously not enough. Fannie's management (Franklin Raines) was forced out after allegedly manipulating earnings to maximize executive payouts, according to the Washington Post¹.

But here is the question, a BIG one. If Fannie and Freddie cannot survive does the government step in and nationalize them? Lawmakers will soon vote on how to deal with Fannie and Freddie but be certain that it will impact the \$. If so the costs will be really big. This will depend as much on the fate of the housing market as any other factor. If we are near the bottom, there is a good chance that billions of dollars from Washington will see the Agencies through. If many more defaults and foreclosures result then we may be talking trillions. How does the US government make China and Japan (\$800 billion in Agency paper) whole and not the shareholders of IndyMac? When does the housing downturn end? When do the bank write-downs end? How are mortgage defaults and home foreclosures to be stemmed? Unfortunately I have no answers, nor does anyone in Washington. I only understand that these are key issues. Much rests in their resolution. The fate of the \$ and more monetary inflation are two outcomes.

2. WRITEDOWNS

I have been looking hard for detailed write-down statistics. This past weekend I roamed the web and put together the following list. It is a close approximation. The FT noted that total write-downs as of Friday amounted to \$436 billion. By way of reckoning, several research organizations believe that there will eventually be more than \$1 trillion in write-downs. If so at best we are about 40% of the way to the end of this episode.

The top ten in the list have written off \$260 billion. They are:

1	CITI (Billions)	\$ 55.00	7/18/2008
2	Merrill Lynch	\$ 46.10	7/18/2008
3	UBS	\$ 45.00	7/18/2008
4	HSBC	\$ 26.50	4/1/2008
5	Morgan Stanley	\$ 23.30	6/19/2008
6	Credit Agricole	\$ 13.80	5/12/2008
7	Soc Gen	\$ 13.70	6/4/2008
8	IKB	\$ 12.91	3/20/2008
9	J P Morgan	\$ 12.80	7/18/2008
10	Bayern	\$ 9.80	

Other banks include:

¹ “[Fannie Mae](#) engaged in "extensive financial fraud" over six years by doctoring earnings so executives could collect hundreds of millions of dollars in bonuses, federal officials said yesterday in a report that portrayed a company determined to play by its own rules.” Washington Post May 24 2006.

11	Lehman	\$ 7.20	4/1/2008
12	Deusch Bank	\$ 7.10	4/1/2008
13	Wachovia	\$ 6.80	
14	CIBC	\$ 6.70	
			6/17/2008
15	Goldman Sachs	\$ 6.20	8
16	CS	\$ 5.95	5/2/2008
17	Bank America	\$ 5.70	4/1/2008
18	RBS	\$ 5.60	6/4/2008
19	Mizhuo	\$ 5.40	
			5/19/2008
20	West LB AG	\$ 4.80	8
21	Credit Suisse	\$ 4.70	4/1/2008
22	Natixis	\$ 3.40	
23	Barclays	\$ 3.30	4/1/2008
			7/16/2008
24	Wells Fargo	\$ 2.90	8
25	Bear Stearns	\$ 2.75	4/1/2008
26	BNP	\$ 2.50	6/2/2008
27	DZ BANK	\$ 2.10	
28	Wamu	\$ 1.62	
29	US BC	\$ 1.60	
30	RBC	\$ 1.60	
	Sovereig		
31	n	\$ 1.58	4/8/2008
32	Sun Trust	\$ 1.50	
33	Commerz	\$ 0.86	
34	Mitsubishi	\$ 0.76	
			5/29/2008
35	BMO	\$ 0.61	8
36	Fifth Third	\$ 0.16	
37	Mellon	\$ 0.12	

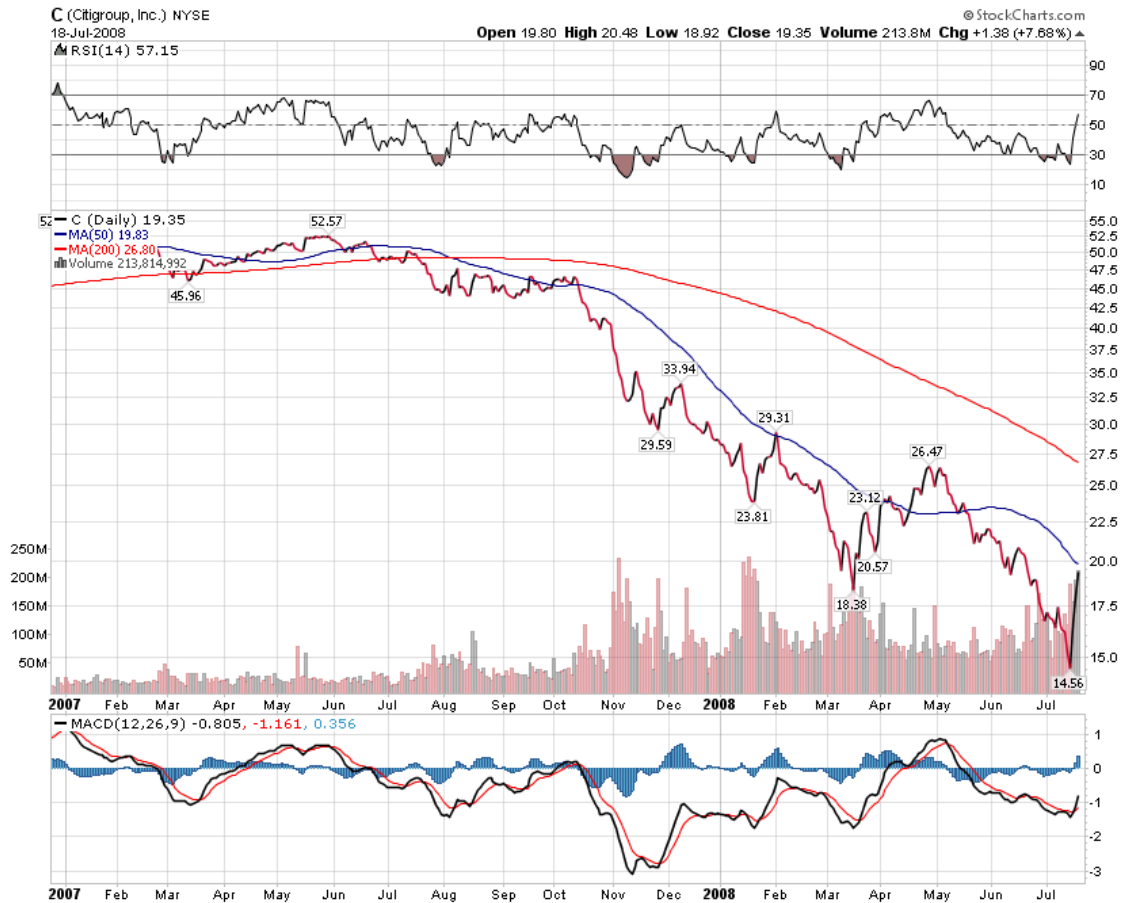
The total for all 37 banks in this list is \$352 billion. Please note that there are Swiss, Chinese, Canadian, French, Japanese and German banks in the list.

On Friday there was much excitement amongst the talking heads on CNBC about Citi's strength. But the FT notes that Citigroup still has \$114 billion in subprime and Alt-A exposure, roughly twice as much as it has written off.

Merrill Lynch's CEO John Thain was criticized for not taking enough of a write-down by Oppenheimer's Meredith Whitney on last week's conference call. It seems to me that most banks, particularly the large banks, are in that mode of hoping the worst is over and not aggressively writing off the loans that are likely to become bad.

If these write-downs persist how does the recapitalization of Tier 1 and 2 capital ratios proceed. Do banks sell equity at these levels after they have sold off their more liquid assets? And what about the credit card businesses that seems to be next in line. More important while we have a positive sloping yield curve interest rates are still extremely low, real rates are negative, and banks are not even lending to each other yet while they contemplate their troublesome balance sheets. This seems to be quite a Catch 22 where

real choices exist but no choice leads to the apparent success that Congress and the Street are eagerly seeking.



There are short term profits to be made from this bank bounce. But be very careful because unless we experience a Deus ex Machina or a friendly Black Swan, there is more pain to come from the housing and the banks.

3. RETIREMENT- WHY DISCOVERY

We are likely in the next decade, to need increasing Discovery in medicine, energy, transportation, infrastructure, food and water amongst many other areas to support and enhance our lifestyle and that of the BRICS. I hope that I have made that case very clear. In short, the world is increasingly in need of Discovery. If you doubt this just look at Vice President Gore's discussion last week of a renewable, clean energy future. There will be many technological discoveries required for all these grandiose schemes. I am certain some will occur and we hope to be a part of that process.

But the first wave of Baby Boomers is beginning to count on retirement according to a report published and discussed in the NYT yesterday. Here are few facts from book, *“Working Longer: the Solution to the Retirement Income Challenge.”* by Alicia Munnell and Steven Sass.

- 1) The nation's public (Soc Sec) and private (IRA's) retirement system is contracting even as life expectancy is increasing.
- 2) 19% of men and 33% of women who are 65 today will live to 90 or longer meaning support for 30 years in retirement will be required.
- 3) Today's retirees can expect Social Security to provide 39% of their incomes. Retirees in 2030 will replace only 30% of their income with the government's safety net.
- 4) In 1989 66% of American employers provided medical care. By 2006 35% of employers provided post retirement medical care. GM may have opted out last week.
- 5) Actual average saving amongst the 55 to 64 year old age group is \$60,000 in IRAs and 401Ks.

The solution, according to the authors of this Brookings Study, is to work longer and for the government to delay Social Security payments to 66 years, the average retirement age in 1962. So those who plan on retiring must stay a little longer. The authors are careful to point out that employers are also anxious to get rid of (not hire) older workers. The authors note ***“as a baby boomer, I strive for the best but have learned to expect the worst.”***

That is why I firmly believe that an appropriate allocation to Discovery is crucial particularly for many Baby Boomers who will undoubtedly find themselves in this crunch.

At present the Incubator and Mature discovery names are out of favor – partly as a result of the credit squeeze. This may be the perfect opportunity for those who thought they had missed the Discovery train.

The material herein is for informational purposes only and is not intended to and does not constitute the rendering of investment advice or the solicitation of an offer to buy securities. The foregoing discussion contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (The Act). In particular when used in the preceding discussion the words “plan,” confident that, believe, scheduled, expect, or intend to, and similar conditional expressions are intended to identify forward-looking statements subject to the safe harbor created by the ACT. Such statements are subject to certain risks and uncertainties and actual results could differ materially from those expressed in any of the forward looking statements. Such risks and uncertainties include, but are not limited to future events and financial performance of the company which are inherently uncertain and actual events and / or results may differ materially. In addition Dr. Berry may review investments that are not registered in the U.S. Dr. Berry has been awarded 10,000 stock options exercisable at \$7.50 from Senesco Technologies, 200,000 options from Aura Silver (strike C\$.30), 150,000 options which strike at \$.50 from Birch Mountain for Corporate Finance consulting services. He has been awarded 100,000 options of Derek Oil and Gas exercisable at C\$.47. He is a consultant to Piedmont Mining (250,000 options), Valcent Products (300,000 options), Global Green Solutions (400,000 options) and War Eagle Mining. He owns shares in

Goldcorp, Golden Predator, Senesco Technologies, Birch Mountain Resources, DataMeg, Immtech International, Horseshoe Gold, Midway Gold, Derek Oil and Gas, Terraco Gold, Stealth Ventures, Kenrich-Eskay Gold, US Silver, Galway Resources, Neuralstem, Oil Sands Quest, Enhanced Oil Resources, Piedmont Mining, MegaWest Energy, Valcent Products, CGX Energy, MacMillan Gold and Quaterra Resources. He has been awarded 250,000 options on Terraco Gold exercisable at C\$.50 for 5 years, for services as a consultant. He has also been retained as an advisor by Dejour Enterprises (200,000 options plus retainer of \$2,500 per month), Grande Portage (210,000 options, \$5,000 per month retainer and Galway Resources (200,000 options and \$5,000 per month). In his role as advisor he has been awarded 75,000 options from Polymet which strike at C\$2.76. We cannot attest to nor certify the correctness of any information in this note. Please consult your financial advisor and perform your own due diligence before considering any companies mentioned in this informational bulletin.