May 2009



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The 2007/2008 Crisis

Challenging Conventional Views

"War is Economics Pursued by Other Means" -Raymond Devoe

"Economics is War Pursued by Other Means"

Desjardins

Securities



DEBT RISK

Debt Risk

- 1. Record U.S. Government: <u>Debt</u> GDP
- Record Consumer Debt : 2/3 of Economic Growth Due to Consumer "Self-restraint from spending, but, not yet!"
- 3. Record Current Account Deficit

CONCLUSION: CANNOT INFLATE AWAY DEBT AND DEFLATION IS NOT AN OPTION

250 years of United States Interest Rates (10 Yr Bond Yields)



Source: Desjardins Securities, Global Insight

Stock Market & Real Estate Crash : What Triggered it?



RATE SHOCKS NOT RECESSIONS at 1/3 & 2/3 for 10 year cycles



Source: Desjardins Securities, Global Insight

TIGHTEN UNTIL SOMETHING BREAKS



Source: Desjardins Securities, Global Insight

Recent market fundamentals compared with March 2003

	Recent	March 2003
10-year US bond yield (%)	2.05 (down from 4.00)	3.08 (down from 4.00)
US T-bill rate (%)	0.02	1.00
S&P 500 operating ROE (bottom- up weighted average) (%)	21.8	20.8
P/E (operating) (x)	14.2	23.0
P/BV (x)	2.9	4.4
P/BV five-year average (x)	4.0	7.68
P/BV vs five-year average (x)	0.72	0.57

Three most likely scenarios for S&P 500



Source: Desjardins Securities

THE 'SHADOW BANKING SYSTEM'



Source: Desjardins Securities

Financial Panic when:

1. Financial institutions REFUSE TO LEND to consumers

And/or

2. Each other

And/or

3. Consumers REFUSE TO BORROW to such an extent that economic system may suddenly become INHERENTLY UNSTABLE

US yield spread: AA corporate – 10yr US bond yields



Source: Desjardins Securities, Global Insight, Global Financial Data

US yield spread: AA corporate & 10yr US bond yields



US yield spread: AA corporate - 10yr US bond yields (as of 13May09)



Source: Desjardins Securities

150 Year history of US stock market declines of 20% or greater

1	То	% Decline	Duration (months)	6-month rebound	12-month rebound		
Jan - 1853	0ct - 1857	-64.55	57	41.03	38.46	Fail Ohio Life cause European Repatriation	
Apr - 1858	Nov - 1859	-22.95	19	25.54	40.43		
Nov - 1860	Jul - 1861	-32.43	8	14.00	40.00		
May - 1864	Apr - 1865	-25.67	11	10.75	4.45		
Jun - 1872	Jun - 1877	-47.24	60	18.64	25.00	Part of Long Depression 1870/1873	
Jul - 1881	Jan - 1885	-35.54	42	5.19	22.64		
Jun - 1887	Dec - 1890	-22.03	42	5.43	17.61		
Sep - 1892	Aug - 1896	-32.21	47	9.71	24.67	1893-1896 Depression, Rail failures	
Oct - 1902	Oct - 1903	-29.27	12	6.07	23.80		
Oct - 1906	No <u>v</u> - 1907	-37.69	13	22.08	41.28	1907 Bankers Panic, Capital Repatriation,	
Jan - 1910	Oct - 1914	-35.65	57	22.81	37.90	post SF earthquake, trust busting	
Dec - 1916	Dec - 1917	-33.40	12	10.90	16.44		
Nov - 1919	Jun - 1921	-33.62	19	14.55	30.76		
Sep - 1929	Nov - 1929	-34.03	2	17.09	-20.77		
Apr - 1930	Jun - 1932	-82.36	26	55.40	146.31		
Sep - 1932	Feb - 1933	-32.58	5	96.21	90.20	Excessive inventories, EMERGING NATION Stock mar crash, 1931 currency devaluation & UK gold reserve volatility, The Great Depression	
Feb - 1934	Mar - 1935	-24.24	13	36.90	76.34		
Mar - 1937	Mar - 1938	-53.03	12	44.00	29.18		
Jan - 1939	Ap <u>r</u> - 1942	-42.02	39	22.98	51.31		
Jun - 1946	Feb - 1948	-26.98	20	14.03	4.41		
Jan - 1962	Jun - 1962	-23.48	5	15.25	26.70		
Dec - 1968	Jun - 1970	-32.90	18	26.72	37.10		
Jan - 1973	Sep - 1974	-46.18	20	31.19	32.00	1973 Oil embargo	
Dec - 1980	Jul - 1982	-23.79	19	35.68	51.80		
Sep - 1987	Nov - 1987	-30.17	2	13.83	18.84		
Sep - 2000	Sep - 2002	-46.28	24	4.04	22.16	Info tech bubble bursts	
Nov - 2007	Jan - 2009	-43.52	14			Bank lending not pegged to gold reserve today	
	Average	-36.81	22.89	23.85	35.73		
rce: Desjardins S	Median	-33.40	19.00	17.87	29.97		

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Past Panics

Panic of 1870

- Four-year Crash & Severe monetary Crisis
- Origin European building boom, land speculation
- Mortgage mania even using un-built homes as collateral
- US emerges as very low cost when producers compared with Europe & Russia
- Largest wheat importer UK shifts demand to UK and European Crash occurs 1873
- European Banking collapse, economic growth estimates far too aggressive
- Interbank lending rates soar & UK financial institutions hoard capital as they wait to see which European banks will collapse due to mortgage crisis

1873

- US banking crisis follows and railroads collapse
- complicated financial instruments not honored that had "Guaranteed" returns but not well understood
- Rail roads resorted to short-term borrowing and then short rates soared; Jay Cooke Bankrupt
- PANIC LASTS FOUR YEARS IN US & SIX YEARS IN EUROPE

Past Panics

Panic 1870 LONG DEPRESSION OPPORTUNITIES

- Gilded age of Industrial Concentration
- Largest manufacturing entities had relatively stable revenues & guaranteed contracts yet huge pricing leverage with railroads
- smaller capital dependent industrial firms in crisis
- 25% unemployment in cities
- Civil unrest, extreme worker distress led to anti-Semitism

History of market declines





Debtor nation reserve currency military superpower



Vs.

Emerging nation domestic deflation export superpower



Vs.

Similarities Between Past & Present Reserve Currency Countries (U.K. 1930's & U.S. 1990's)

- 1. Record Government Debt/GDP
- 2. Record Consumer Debt
- 3. Record Current Account Deficit
- 4. Reserve Currency Status
- 5. Invaded Iraq in order to "Establish A Democracy"

Langs Observation "An unsophisticated forecaster uses statistics as a drunken man uses lampposts for support rather than for illumination"

"It is not sufficient that I succeed—all others must fail." - Genghis Khan



Emerging Economies





EVOLUTION OF THE CRISIS:

The Positive Correlation and

Its Significant Implications

Positive Correlation



US YIELDS & RATES WHAT IS NORMAL?



Source: Desjardins Securities, Global Insight

US Inflation



S&P 500 long-term downward P/E trend



THE BAD NEWS: Positive Correlation S&P 500 Price and Bond Yields





P/E = stock price/ earnings ratio



S&P 500 P/E vs S&P 500 index



Source: Desjardins Securities

UK FTSE and S&P 500 Total Return Since 1800



Source: Desjardins Securities, Global Insight

US Asset Classes Real Return



Bond yield levels approach the ceiling as curve is NORMALIZED



Selected US Asset Class Returns

Start	End	S&P 500 Total	S&P 500 AGR	Bond AGR	TBill AGR	CPI AGR	
Jan-22	Oct-29	382.12	22.24	4.78	3.55	-0.03	Inflation
Nov-29	Jan-39	-19.50	-2.32	4.08	0.68	-2.21	Deflation
Jan-42	Jan-46	166.84	27.17	2.93	0.37	4.13	War economy, Inflation
Jan-48	Jan-55	268.21	20.20	1.86	1.35	2.03	Painted rates
Jan-55	Jan-67	263.13	11.26	2.63	3.07	1.74	Steady rise, inflation
Aug-74	Jan-82	119.41	11.05	3.88	8.70	8.97	Hyperinflation
Aug-82	Jun-06	2157.68	13.92	10.01	5.25	3.12	Disinflation

Ceiling & floor – Asset mix switches August 1998 - 2002

	Returns
Buy & Hold Bond Returns	+45.4%
Buy & Hold Equity Returns	-2.5%
50/50 Bond & Equity Split	+21.4%
5 Ceiling/Floor Switches	+96.2%
Since June 2007	
S&P 500	-37.9%
US 10-yr bond return	+47.6%
Relative performance	85.5%

Source: Desjardins Securities

INVESTING STRATEGIES

- 1. VOLITILITY &
- 2. YIELD SAFETY
VOLATILITY

	+20%	-20%		
1928-39	5	5		
Next 60 years	0	2		

Do pension fund managers need to be traders?

(%)						Sell leve	el				
		1.00	0.98	0.96	0.94	0.92	0.90	0.88	0.86	0.84	0.82
	1.00	-3.98	0.05	-0.68	-2.65	-5.07	1.28	-0.28	0.36	-0.15	-3.34
	1.02	-0.98	3.57	2.48	1.90	0.87	2.12	2.33	0.82	1.00	-2.17
	1.04	-0.04	1.49	5.19	5.95	3.78	2.39	6.01	2.39	2.11	-0.92
_	1.06	0.23	1.95	6.41	5.97	2.65	0.43	2.19	-1.04	-0.37	-2.85
Buy level	1.08	3.02	2.82	4.90	6.51	6.42	6.82	3.87	3.09	4.19	2.59
Buy	1.10	0.45	1.02	3.78	1.68	1.76	2.39	-0.05	0.18	2.19	0.94
_	1.12	-1.28	1.12	2.94	2.63	-0.27	-0.16	-2.18	0.59	2.39	1.48
	1.14	-0.77	-0.91	0.06	-0.30	-1.13	-3.83	-4.90	-2.66	0.63	0.42
	1.16	1.66	1.62	0.97	2.46	2.58	1.22	0.29	1.77	3.15	-0.64
	1.18	1.64	0.33	0.85	4.22	4.71	4.25	4.18	5.50	5.85	3.04

S&P 500 trading, January 1, 1930 to December 29, 1939

Source: Desjardins Securities

Yield Safety/Coverage

- 5% yield pickup 1930s Total Return = -0.5%, Prices = -5.5% pa
- dividend yield low NOT 1929 but 1936!
- 1. Reasonable yield ie 2-11%

In ie 3-4% interest rate environment; Why not > 18%

- 2. Positive ROE level ie > 10%
- 3. * Positive ROE change NOT -0.3, -0.5 standard deviations
- 4. Safe Operating Earnings Payout Ratio (Canadian Banks) ie Top Quartile Break > 57%
- 5. Debt/Cash Flow Coverage; Median = 2.5x; Recall 1870s

2009 targets (as of 6Jan09)

	Recent	Year-end 2009
TSX	9121	11000 ²
Earnings (x) ¹	832	600
P/E (x)	10.9	15.2–18.3
S&P 500	906	1100 ³
Earnings (x)	65	50
P/E (x)	13.9	18.0–22.0
Canadian T-bills (%)	0.80	0.75
Canadian 10-year bond yield (%)	2.90	3.10
US T-bills (%)	0.02	0.50
US 10-year bond yield (%)	2.49	3.00–3.50
WTI oil (US\$/bbl)	43	70–80
Gold (US\$/oz)	844	1,000–1,100
C\$/US\$	0.84	0.90–0.95

¹ Larger decline on reported earnings due to writedowns compared with massive US writedowns but an operating number for the US; ^{2, 3} These peaks are trading levels and are likely unsustainable Source: Desjardins Securities, Bloomberg

Challenging Conventional Views Summary of Observations & Implications

1. BOND MARKET DICTATES:

Problem of too much Government & Consumer Debt

- 2. MUST PROTECT BOND YIELD TREND & LEVEL while awaiting an energy related technology driven productivity growth breakthrough
- 3. PLAYING FOR TIME: Bond yield collapse when FED tightens until they break something ie 87/88, 97/98, 07/08



4. BATTLE FOR GLOBAL ECONOMIC & MILITARY LEADERSHIP:

US Debt burdened, Reserve currency vs (ASIA) Export dependent emerging economy

5. NEXT FEW DECADES YUAN CARRY TRADE (VENDOR FINANCING for 3 billion people): Need Chinese Banking Crisis or something to drive rates down

Challenging Conventional Views Summary of Observations & Implications (continued...)

6. UNFORTUNATELY, ARTIFICIALLY LOW US RATES REQUIRE:

US Safe Haven Status or US Deflation

7. DEFLATION MEANS DANGEROUSLY WEAK US ECONOMY:

Falling bond yields coincide with falling stock prices (positive correlation)

8. ALL ASSET CLASS RETURNS FALL,

investing strategies change dramatically, Pension fund challenges multiply

9. END OF EQUITY/ECONOMIC CYCLE & FED INTEREST RATE POLICY defined by bond yield ceilings

10. THE BOND YIELD FLOOR IS EQUALLY DANGEROUS:

Our 2007/08 problems related to trend level being less than floor level !

Challenging Conventional Views Summary of Observations & Implications (continued...)

11. NARROWING CREDIT SPREADS IN LAST 18 MONTHS OF EQUITY CYCLE COINCIDE

with stock market rebound BUT due to rising government bond yields (& +ve stock correlation)

12. VOLATILITY

13. RULES FOR IDENTIFYING SAFE YIELD (dividend coverage)

14. T-18 months (Bond Yield Ceilings): The emerging China bet & the US\$ bet Gold & Oil vs Financials (Systemic)

15. UNDERSTANDING THE S&P 500 INDEX REBOUND (4 parts): Risk Premia Rebound, Lower LT Returns, Higher Volatility, ROE Recovery?

Appendix

Global Portfolio System (GPS)

Re Calculate	💐 Excel Export 🕴 Save	Print									
Portfolios		Portfolio R	esults								
Portfolio Options		Summary	Sector Diversification	Country Exposure	Fundamentals	Fundmtls (Graphs)					
🗉 Global Options				1	1	price	abs mom	rel mom	tilt	index weight	weight (%)
Base FX Rate	Default 🔽								factor	(%)	
Base Weighting	Market 🗸	utilities									
Benchmark	Desiardins Se 🗸	DUK	Duke Energy (US 28.72	1	4		0.22%	1.08%
Performant		EIX	Edison Interna			US 38.32	3	4		0.10%	0.51%
Style Weights 📃 (click	to enable)	CNP	CenterPoint E			US 12.58	3	3		0.03%	0.16%
Core	100.0	TE	TECO Energy,			US 18.64	1	4		0.03%	0.16%
Trading	100.0	CMS	CMS Energy C			US 14.30	3	1	-	0.03%	0.13%
			Sum of Portfo	-							2.02%
	~	e	Benchmark de	esjardins securitie	s north americ	an equity composi	te Sector	' Weight			3.17%
Screen Options											
Core		financials									
Weight Calculation		□ Core (1.3	-	New Reality		opulos	-	-		0.000	4.070
Min/Ma× Weig	0 100	BNS	The Bank of			CDN 39.75	5	5		0.26%	1.27%
Long/Short	Long 🚩 🚩	KFS		nancial Services II	nc.	CDN 20.94	3	3		0.01%	0.04%
E Factor Tilts		□ Trading (-				-	-		0.0007	1 100
Tilt Factor	None 🖌 🖌	KRB	MBNA Corpor			US 21.42	5	5		0.23%	1.10%
Tilt Formula	Aqqressive 🔽	BEN	Franklin Reso			US 72.69	3	3		0.15%	0.74%
Rank #1 ×		MTB	M&T Bank Co			US 104.23	5	5		0.10%	0.48%
Rank #2 ×		MEL	Mellon Finan			US 27.99	5	5		0.10%	0.48%
Rank #3 x		CMA	Comerica Ind			US 56.57	5	5		0.08%	0.39%
Rank #4 x		SAFC	SAFECO Cor			US 54.57	2	2		0.06%	0.28%
		JP		ot Corporation		US 50.11	5	5		0.06%	0.28%
Rank #5 ×		MTG	MGIC Invest			US 63.40	3	3	-	0.05%	0.24%
Trading			Sum of Portfo	olio Weights							5.29%
Weight Calculation			Benchmark de	esjardins securitie	s north americ	an equity composi	te Sector	[.] Weight			20.99%
Min/Max Weig	0 100										
Long/Short	Long 💙	consumer s	-								
E Factor Tilts		□ Core (0.0	-								
Tilt Factor	None 🖌 🖌	ATD.SV.B		Couche-Tard Inc	9	CDN 19.25	1	1		0.02%	0.09%
Tilt Formula	Aggressive 🗸	🗉 Trading (_			
Rank #1 ×		PG		& Gamble Co.		US 54.39	4	5		1.13%	5.49%
Rank #2 ×		WAG	Walgreen Co			US 46.24	4	3		0.39%	1.91%
Rank #3 x		HSY	The Hershey			US 64.32	3	3		0.10%	0.48%
Rank #4 x		SWY	Safeway Inc	2.		US 23.05	3	5		0.09%	0.42%
		UST	UST Inc.			US 45.42	3	3	-	0.06%	0.30%
Rank #5 ×			Sum of Portfo	-							8.69%
			Benchmark de	esjardins securitie	s north americ	an equity composi	te Sector	· Weight			10.33%
	~	1									
Portfolios		telecom svo									
1 01 01 01 0 9		FON	 Sprint Corpora 	ation		US 24.93	4	3	-	0.29%	1.41%
Screens						US 61.00					0.75%

Source: Desjardins Securities



Source: Desjardins Securities



IN

MORTGAGE RATES LAGGING

US existing home ave price (in 1000s)



Source: Desjardins Securities, Bloomberg

Housing affordability composite index



Source: Desjardins Securities, Bloomberg

Wealth effect US

- home about 2x stimulus as stocks?
- \$1 rise in housing \rightarrow \$0.04-0.10 increase in spending
 - Minimal aggregate change due to stock price change
- economic data implies further 5-10% housing price decline
- 20% = MASSIVE Consumer Retrenchment & 40% Distressed Mortgages
- 20% Decline = 1.0-1.5% GDP Decline
- BUT Issue of Linearity

TRADITIONAL!!!

- HOUSING INVENTORY WAS ESTIMATED 11.2 MONTHS IN NOVEMBER 2008*
- RECENTLY, FELL TO 9.3 MONTHS* BEST SINCE MID 2007
- NORMALLY, 5 MONTH SUPPLY
- TYPICALLY, INVENTORY COLLAPSES THEN PRICES STABLIZE
- PREREQUISITE, IF FINANCIAL SECTOR & CONSUMER CONFIDENCE TO STABLIZE
- IF SUPPLY FALLS BY 2 MONTHS FOR EVERY MONTH GOING FORWARD

THEN HOUSING STABLIITY BY JUNE?

RECENT MORTGAGE RATES -100BPS HAVE LAGGED MORTGAGE APPLICATIONS SOARED^T 100%yoy THEN 20% FORMERLY BROKEN PRICES AT 2000 LEVELS

^T MORTGAGE APPLICATIONS REFINANCING VS NEW HOME PURCHASES?* National Association of Realtors

US housing inventory (supply) (as of April 8, 2009)



Source: Desjardins Securities, RadarLogic

US housing inventory (supply) (as of April 8, 2009)



% of transactions 'Motivated' (as of April 8, 2009)



Source: Desjardins Securities, RadarLogic

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