

# *State of the* **U.S. Airline Industry**

**June 19, 2008**

**AirlineForecasts**  
Investment Research & Strategy



- Macroeconomic Overview
- Oil, Crack Spreads, and Jet Fuel Prices
- Airline Industry outlook

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## Consuming beyond capacity to produce

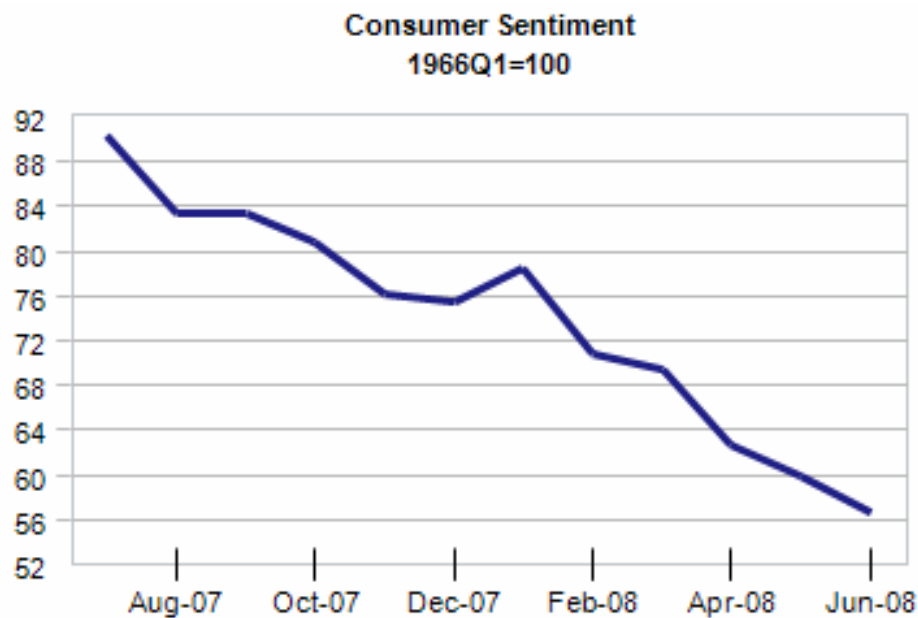


"It is the United States as a whole that became addicted to spending and consuming beyond its capacity to produce".

Foreign money and homegrown "financial legerdemain" disguised the problem for a while ...it is again time for "painful but necessary adjustments".

Paul Volcker / April 11, 2008

## Consumer Sentiment: 28 year low



This level of confidence is not only consistent with a recession, it is becoming suggestive of a severe recession.

Gasoline prices are hitting record highs on a regular basis, surging past \$4.00 per gallon. In addition, food prices are rising rapidly. They are being compounded by declines in wealth.

Declining employment is a major weight. The reduced availability of credit is undermining household cash flow. Consumers are also faced with high financial obligations in the face of very low saving out of income.

However, risks to the downside are high, especially if rebate checks do not provide the intended economic stimulus.

## Unemployment is rising



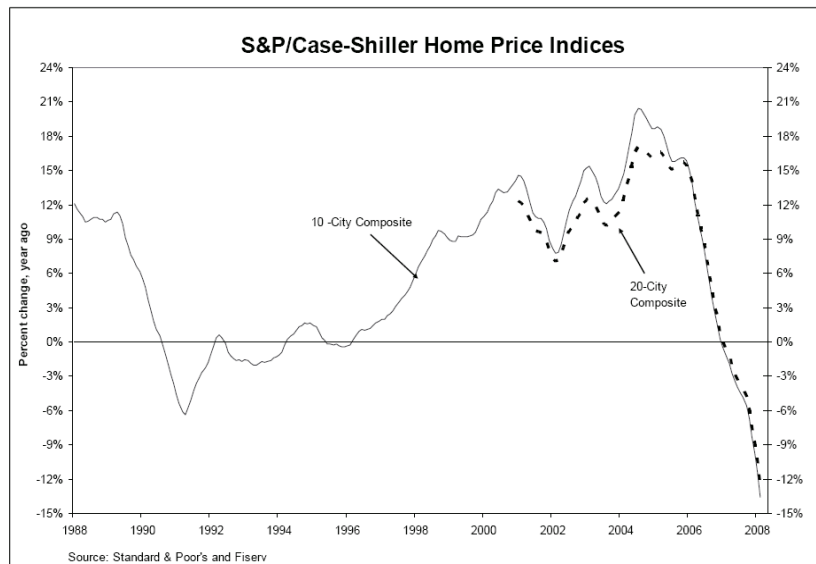
Initial claims spiked by 25,000 to 384,000, more than expected. This brings claims to their highest level since late March.

The four-week moving average for initial jobless claims increased to 371,500, compared with the prior week's 369,000.

Labor market slack is building, which finally showed up in the steep rise in the unemployment rate in May to 5.5%.

Signs indicate that business sentiment may not yet have hit bottom.

## Home values are still falling



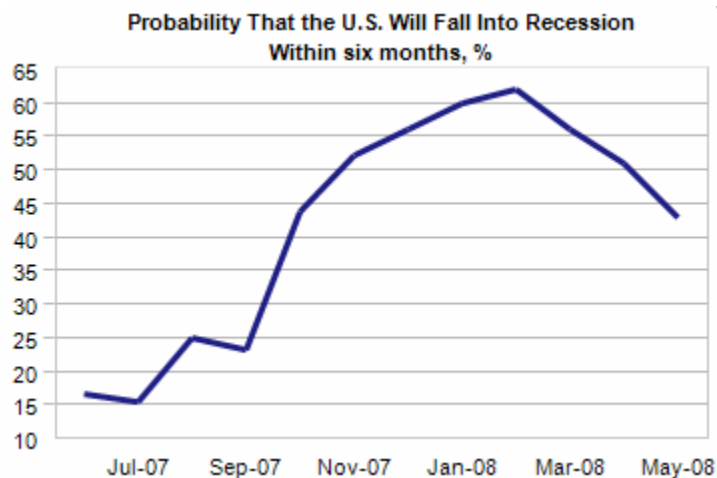
Case-Shiller index of repeat-purchase house prices declined by a sharp 18% annualized in the fourth quarter from the third. The decline is by far the sharpest in the 32-year history of the index when viewed from either a nominal or real basis.

The third quarter data reflect the depth to which housing markets are falling. The decline in house prices continues to deepen and spread across regions.

Given the fact that the economy is likely in recession, that credit markets continue to be in turmoil, and consumer confidence is extremely weak, demand for housing will be soft through the rest of this year.

House prices are likely only half way through a correction that will last well into 2009.

## Probability of recession remains high



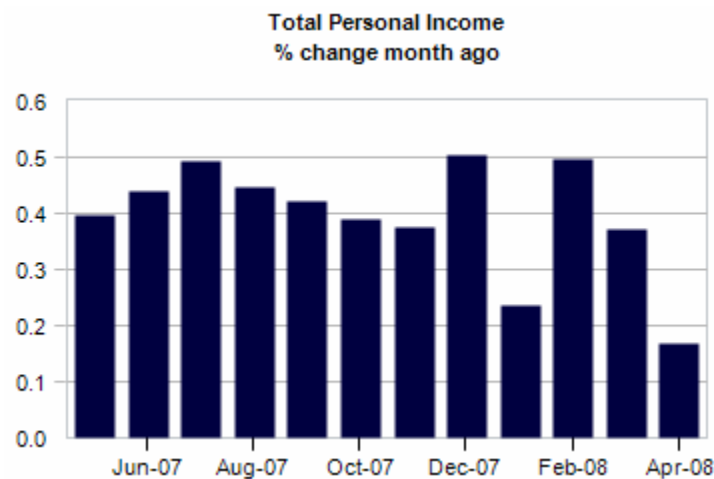
The Moody's Economy.com probability of recession eased to 43% in May, compared to April's 51%. Recent data suggest that the U.S. economy is bending but not breaking.

A growth recession is developing; data on hiring, spending and confidence suggest the recovery will be longer and more painful than previously expected. Meanwhile, tax rebate checks are showing up in consumers' checking accounts, which will provide a much-needed, but temporary, boost to spending.

Continuing claims for unemployment insurance, a better gauge for hiring activity, have steadily risen since the beginning of this year, a sign that businesses are cutting back on hiring.

There is growing evidence that businesses are retrenching as they have pulled back on hiring and reduced plans for capital spending. The abrupt decline in capital plans bodes ill for business investment.

## Consumer spending and income is weak



Consumer spending has nearly stopped growing.

Over the past year, real income has increased 1.8% and real spending has increased 1.6%. Both figures were at about 3% this time last year.

Tax rebate checks have begun to boost disposable income through reduced tax payments—to the tune of \$15.5 billion in April—and asset income growth will continue to moderate.

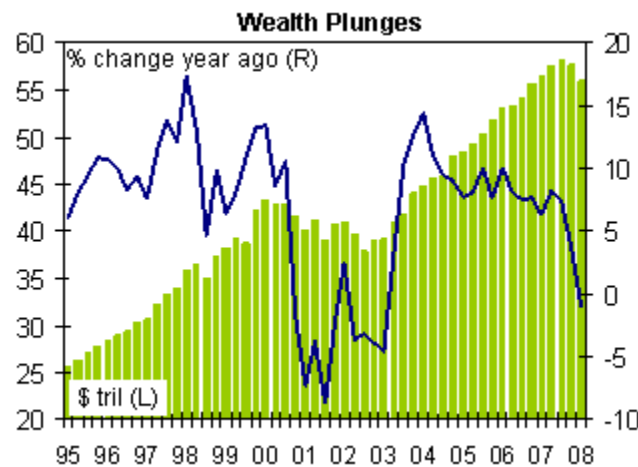
The combination of housing market woes, dramatically reduced credit availability, declining wealth, and tight budgets force consumers to cut back.

Declining wealth, reduced home equity, less available credit, and high debt burdens and financial obligations are all pushing consumers to save and repay debts rather than to borrow and spend. However, higher energy and food prices may limit the increases.





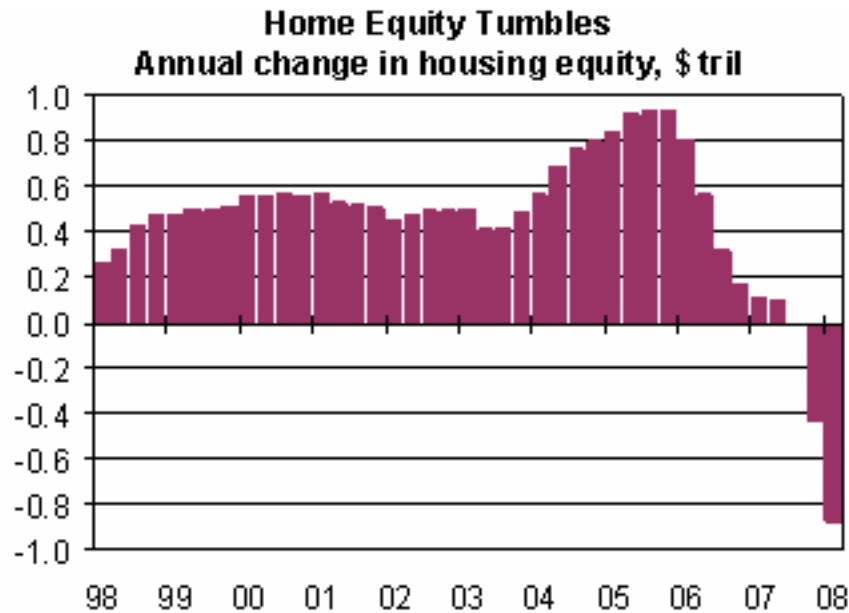
## Consumer wealth plunges \$2 trillion



The net worth of U.S. households fell in the first quarter of 2008 to \$56.0 trillion from the record high \$58.2 trillion in the third quarter

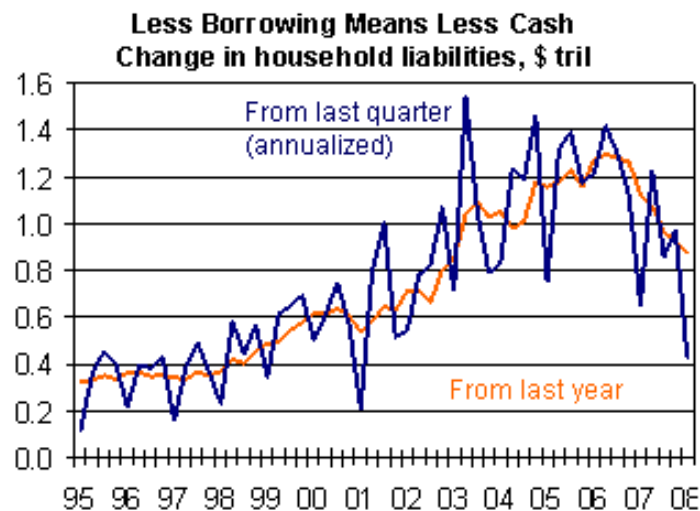
Wealth declined 11.3% at an annualized rate in the first quarter after declining at a 3.6% rate in the fourth quarter. This came from the combination of a decline in household assets and continued, if slower, growth in borrowing.

## Home equity hit = reduced borrowing & spending power



Net equity in homes declined on a year-ago basis in the first quarter for the third consecutive quarter and posted the largest decline in the history of the series back to 1952.

## Less borrowing = less spending

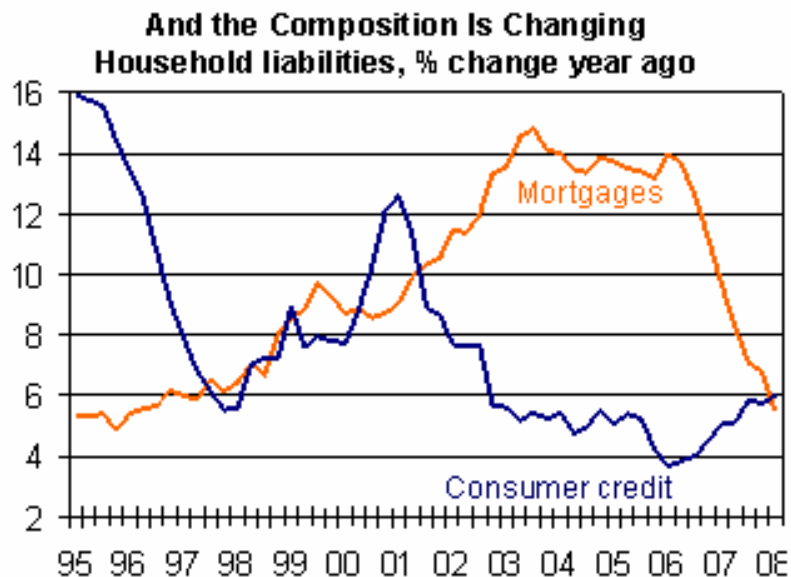


Borrowing grew 6.4% from last year, the slowest growth in borrowing since 1997. Asset growth fell to 0.4%, the weakest growth since the start of 2003. However, on a period-to-period basis, debts rose 3.0% (annualized) while assets fell 8.5%. Hence wealth declined in the quarter.

The slowdown in borrowing, though still gradual, is clear in the data. The increase in liabilities from the preceding year has declined from \$1.3 trillion in 2006 to \$870 billion in the first quarter.

Year-over-year growth has been in the single digits for five quarters after spending 17 quarters in double digits. Further, borrowing will continue to slow under the weight of rising mortgage rates, tightened lending standards, and weak home sales.

## Credit card debt replaces home equity debt



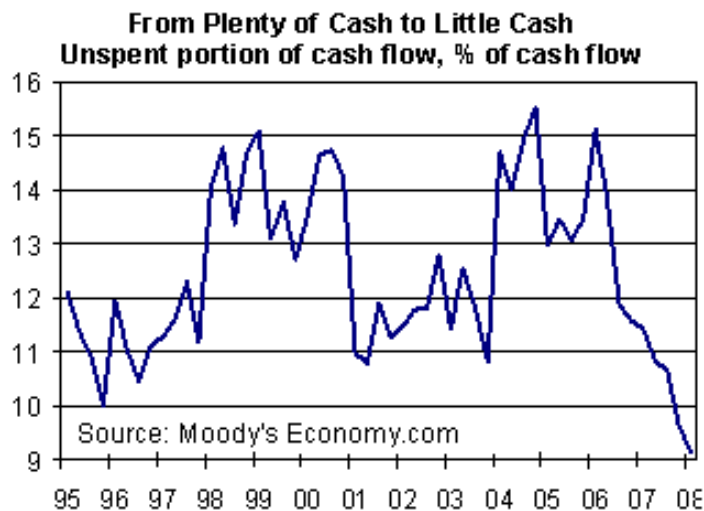
Consumers are shifting the nature of their borrowing.

Year-over-year growth in mortgage borrowing slowed to 5.5%, barely more than a third of the pace seen about two years earlier, and the slowest pace since 1996. At the same time growth in consumer credit borrowing added over two percentage points from its recent nadir to 6%.

**Growth in consumer credit borrowing exceeded growth in mortgage borrowing for the first time since 1991 in the first quarter.**

Falling home sales, house price declines, and tighter standards and higher costs for mortgages all point to further slowing in mortgage borrowing growth.

## Consumers have less spending power

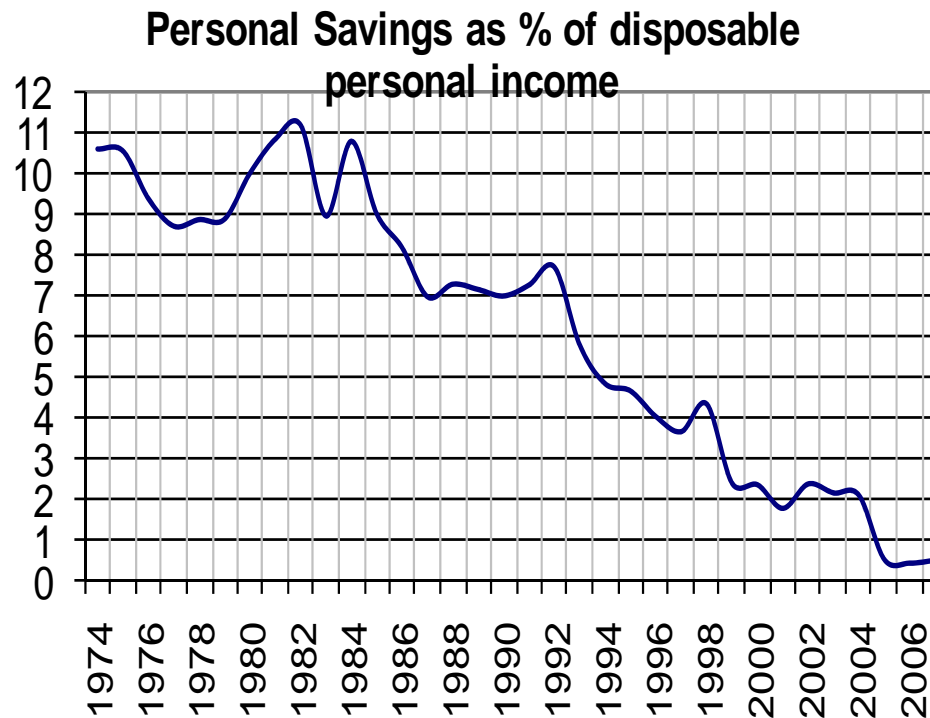


Income growth will be very weak this year.

Nominal income growth will be only about two-thirds of what it achieved in 2007. Further, the recovery will be slow and weak. Growth in 2009 will also be well below recent norms, although it will best 2008.

Growth in cash flow fell last year and is continuing to weaken. This is due to reduced realized capital gains and, most importantly, reduced borrowing. Neither of these will be quick to recover so household cash flow growth will remain weak even next year.

If consumers start saving...less consumption



## Conclusions

- Downside threats to consumer spending are high energy prices, weakening global growth, and further unraveling of the financial system.
- Energy prices are clearly a major risk. Rising energy spending is absorbing a growing share of household income growth and will absorb much of the tax rebates. This drag is being compounded by high food price inflation.
- If energy prices continue to rise, the recession will be more severe and longer-lasting than expected, with severe consequences for household incomes.
- A major source of economic growth and jobs currently is expanding exports. If that source of demand were to dry up, unemployment would rise further than expected, taking incomes down with it

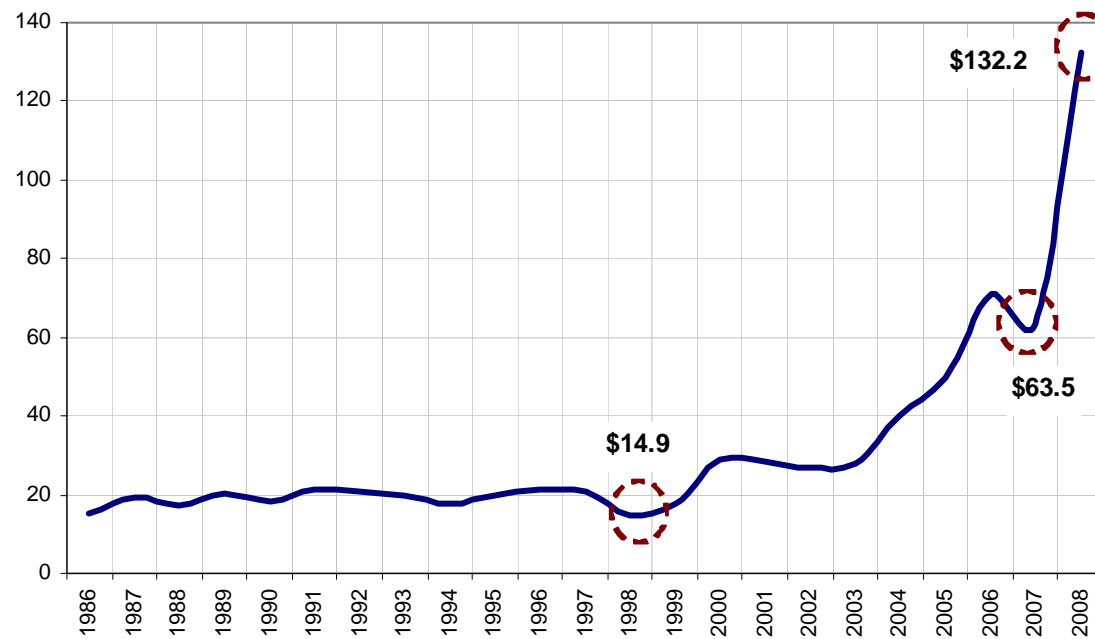
## Oil, crack spreads and jet fuel prices





\$132 oil is 1.83X 2007's \$72 average

**WTI Oil \$/barrel**  
*(May over May)*



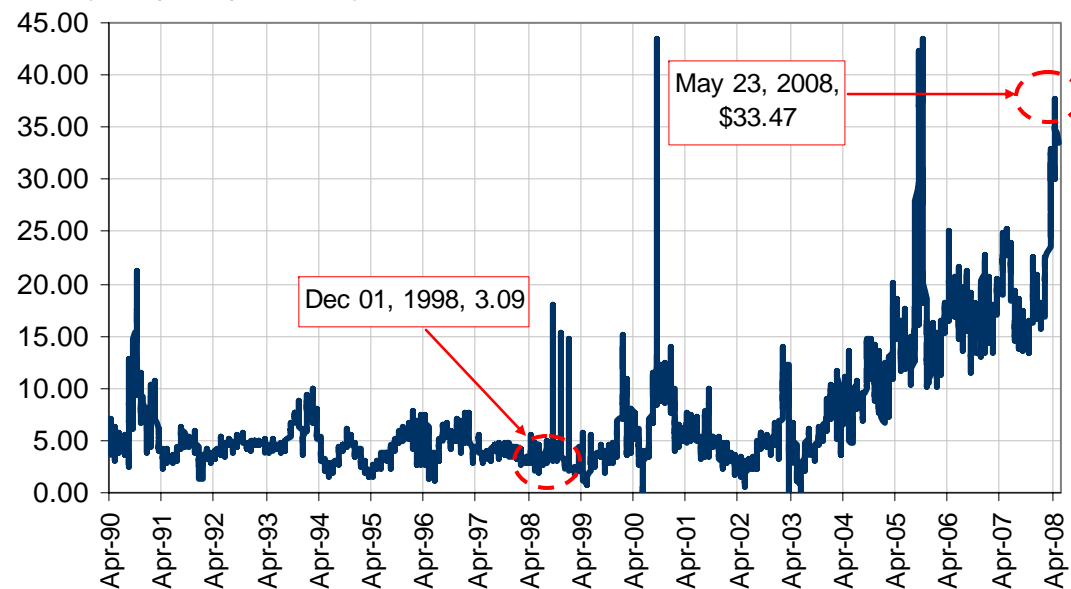
Note: Average prices except for 2008 which is based on May 23, 2008

Source: EIA & AirlineForecasts

\$33 crack spread is 2.25X 2007's \$15 average

### Crack Spreads\*

(US\$ price per barrel)



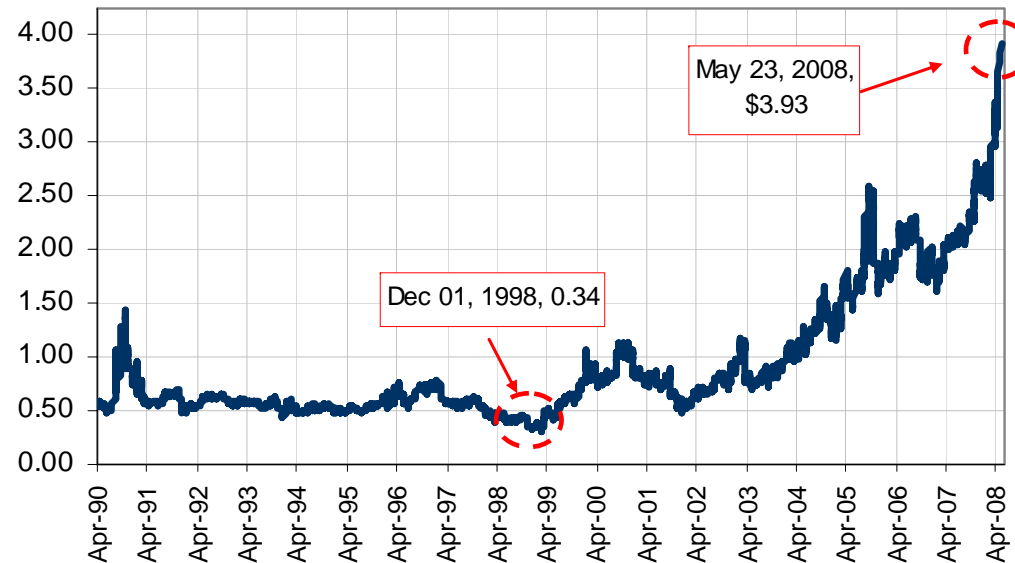
\* Spot price per barrel of Jetfuel minus the spot price in WTI oil

Source: EIA & AirlineForecasts

\$3.93 jet fuel is 1.86X 2007's average of \$2.11

### Spot Jet Fuel Prices\*

(US\$ price per gallon)

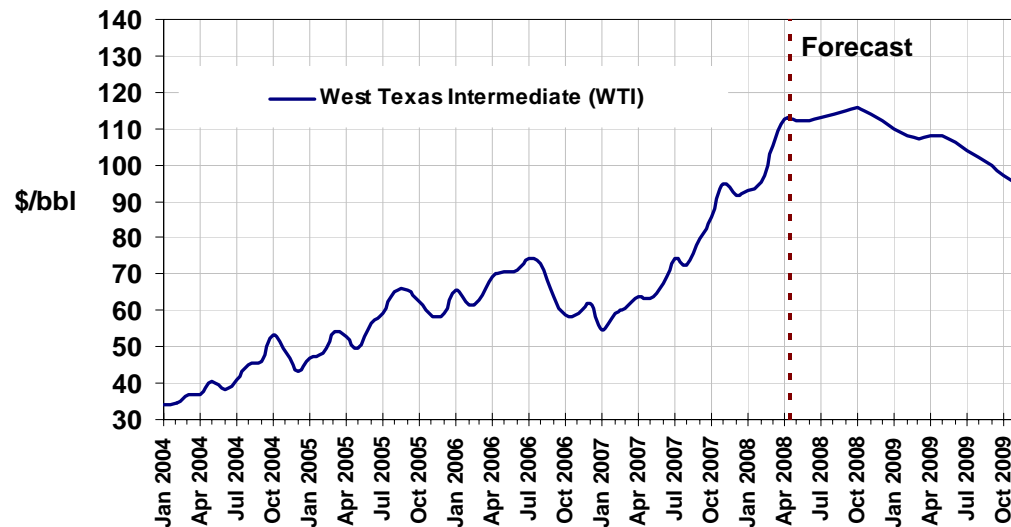


\* Average of NY Harbor, Gulf Coast, and Los Angeles Kerosene Jet Fuel Spot price  
 Source: EIA & AirlineForecasts

## EIA Forecast: Lower oil prices in 2009 and 2010

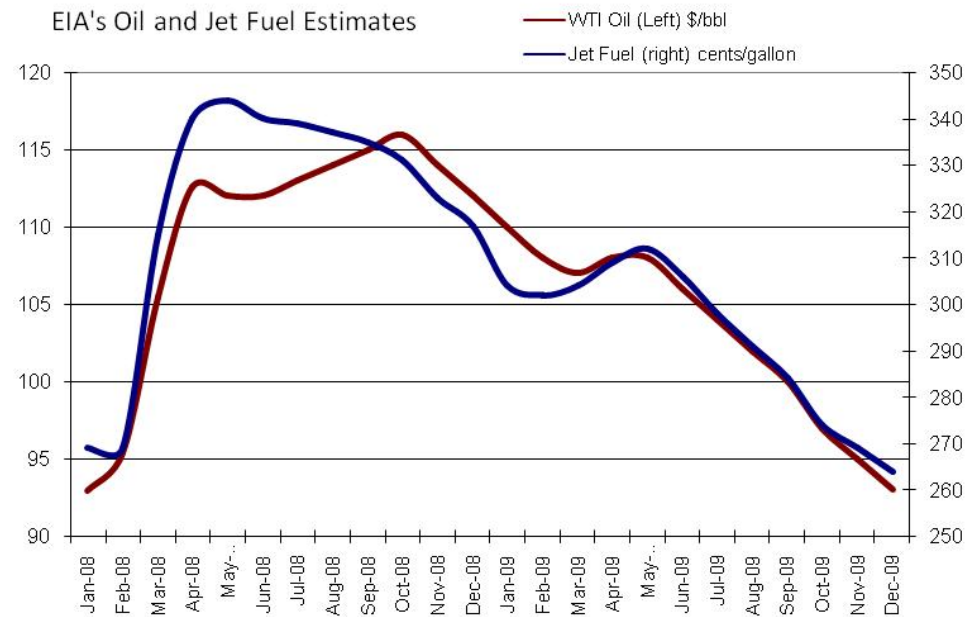
**Prices.** WTI crude oil prices, which averaged \$72.32 per barrel in 2007, are projected to **average \$110 per barrel in 2008**, up about \$9 per barrel from the projection in last month's *Outlook*, and **\$103 per barrel in 2009**, up about \$11 per barrel from the previous *Outlook*.

**EIA Crude Oil Forecast**



Short-Term Energy Outlook, May 2008

EIA's 2009 forecast : \$103 oil and \$2.93 jet fuel



## Futures market implies higher jet fuel costs

### NYMEX Oil Futures & Implied Jet Fuel Price

(as of 5/24/08)

	Oil \$/bbl	crack \$/bbl	tax \$/bbl	jet fuel \$/bbl	jet fuel \$/gal
2008	132	30	5	167	<b>3.97</b>
2009	130	30	5	165	<b>3.93</b>
2010	129	30	5	164	<b>3.90</b>
2011	129	30	5	164	<b>3.90</b>
2012	130	30	5	165	<b>3.93</b>
2013	131	30	5	166	<b>3.95</b>
2014	132	30	5	167	<b>3.98</b>
2015	133	30	5	168	<b>4.00</b>
2016	134	30	5	169	<b>4.02</b>

Note: 2008 values are based on average of the Jul - Dec period

Crack spreads are estimated based on recent data

Source: NYMEX & AirlineForecasts

## Airlines paid \$2.07 for jet fuel in 2007

### 2007 Fuel Consumption and Costs

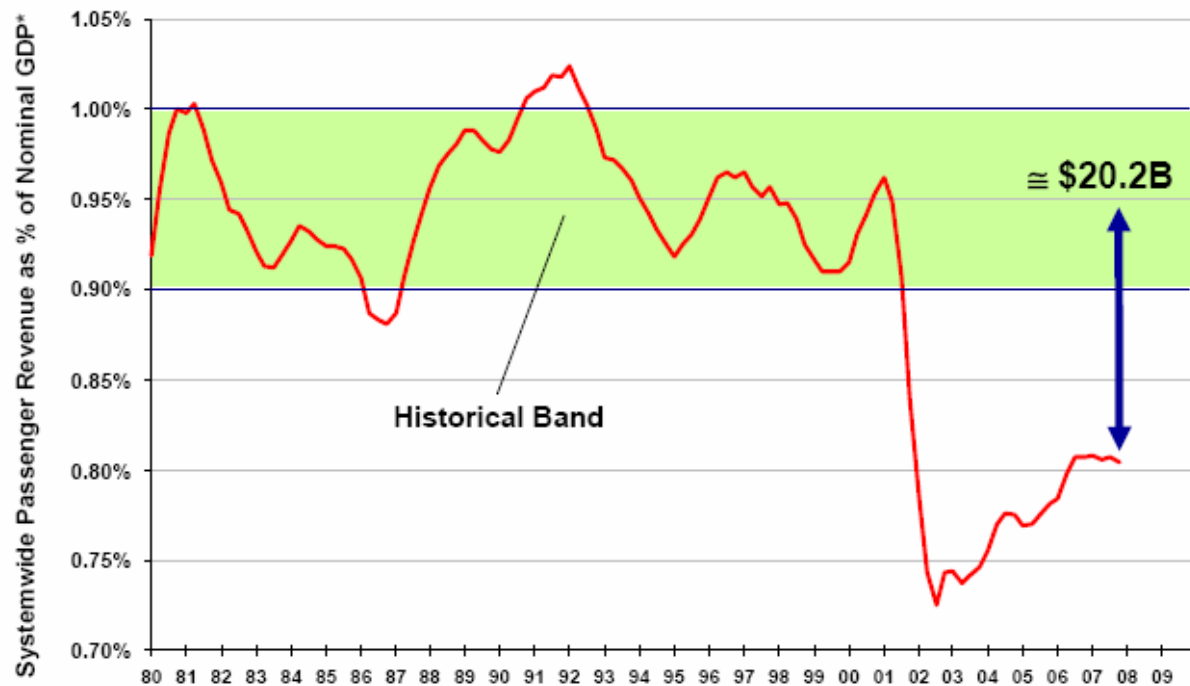
	Gallons	2007 Fuel Costs	\$/gallon
American Airlines	2,832,366,032	5,809,372,000	2.05
United Air Lines	2,285,484,841	4,823,415,000	2.11
Delta Air Lines	1,965,858,992	4,444,443,000	2.26
Southwest Airlines	1,491,332,821	2,531,582,000	1.70
Continental Airlines	1,495,284,000	3,163,988,000	2.12
Northwest Airlines	1,544,904,737	3,173,418,000	2.05
US Airways Inc	1,194,726,868	2,546,229,551	2.13
JetBlue	443,113,779	928,846,154	2.10
Alaska Airlines	354,314,906	778,971,000	2.20
Airtran	359,759,033	748,765,042	2.08
<b>Top 10 Airlines</b>	<b>13,967,146,009</b>	<b>28,949,029,747</b>	<b>2.07</b>

# Airline Industry Earnings & Outlook





## The industry never fully recovered from 9/11

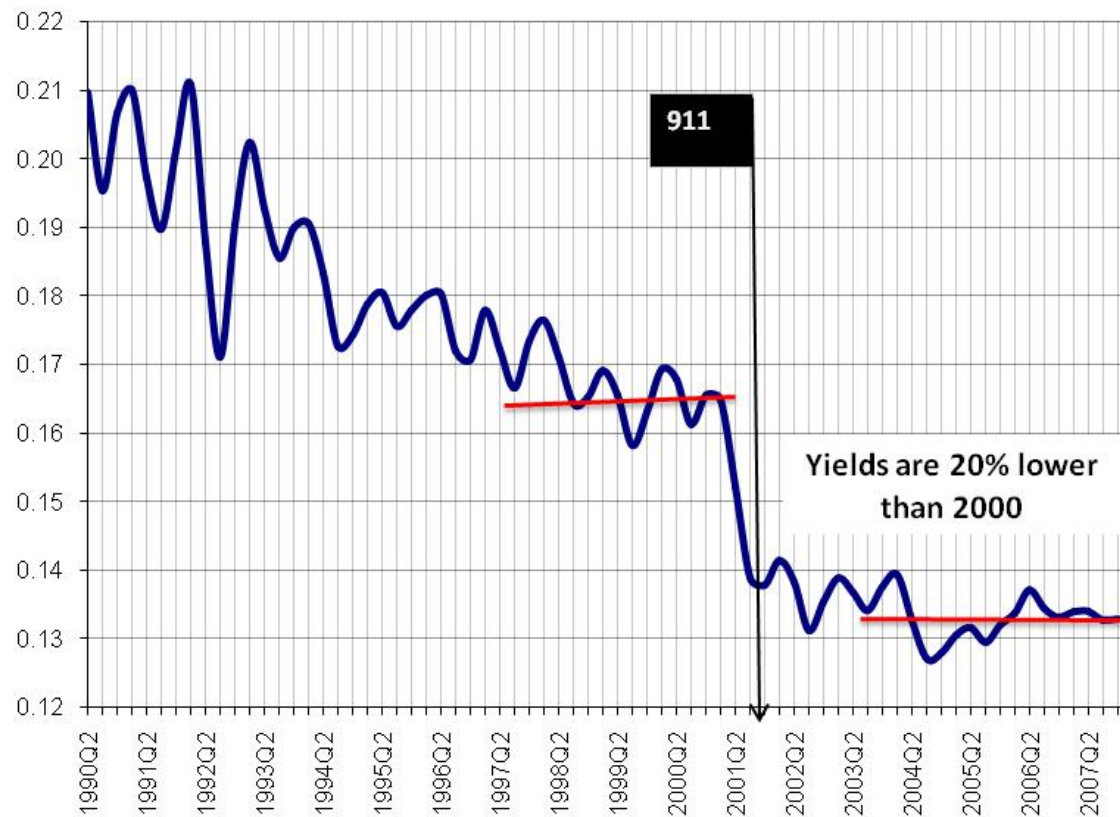


\*Four-quarter rolling passenger revenue (including charter revenue) of U.S. passenger airlines divided by four-quarter average of U.S. GDP  
Sources: ATA Passenger Airline Cost Index; Bureau of Economic Analysis; U.S. Department of Transportation

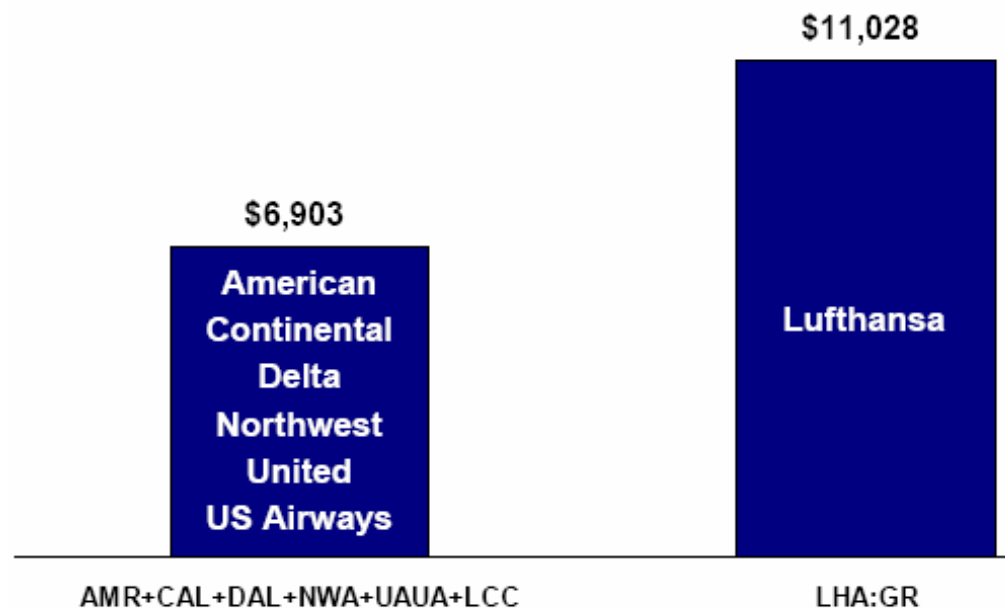
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## Real yields are 20% lower than 2000

**System-Wide Passenger Revenue Yields**  
*(In 2007\$)*



Too many competitors in the U.S. results in wealth-destruction fare competition



Sources: Bloomberg (for Deutsche Lufthansa AG – LHA:GR) and MSN

# 1Q08: Relative profit margins

## 1Q08 Operating Income as % of Revenue

	(in \$millions)	Revenue	Operating Income	% Revenue	Relative (Adv) / DisAdv
1	Republic	364	66	18.1%	77
2	WestJet	599	83	13.8%	101
3	Allegiant Travel Co.	133	14	10.8%	18
4	Skywest	868	68	7.9%	95
5	Southwest	2,530	88	3.5%	166
6	Pinnacle	204	7	3.3%	13
7	JetBlue	816	17	2.1%	42
8	GOL Airlines	1,607	(21)	-1.3%	28
9	Continental Airlines	3,570	(66)	-1.8%	43
10	Delta Air Lines (1)	4,766	(145)	-3.0%	1
11	American	5,697	(187)	-3.3%	(12)
12	Northwest (2)	3,127	(119)	-3.8%	(23)
13	Air Canada	2,727	(137)	-5.0%	(53)
14	AirTran	596	(35)	-5.9%	(17)
15	Alaska Air	840	(50)	-5.9%	(24)
16	US Airways	2,840	(196)	-6.9%	(109)
17	Hawaiian	251	(22)	-8.8%	(14)
18	United	4,711	(441)	-9.4%	(297)
19	ExpressJet	448	(49)	-10.9%	(35)
<b>Industry</b>		<b>\$36,695</b>	<b>(1,125)</b>	<b>-3.1%</b>	

(1) Ex-reorganization items which totaled \$6.116 billion, including (1) a \$6.1 billion non-cash goodwill impairment charge; and (2) a \$16 million severance charge.

(2) Ex-reorganization items which totaled \$4.2 billion (1) \$13.4 million of mark-to-market losses related to fuel derivative contracts that will settle in future periods; (2) a \$3.9 billion non-cash goodwill impairment charge; and (3) \$17.2 million of aircraft impairment charges.

Source: Company Reports & AirlineForecasts  
Vaughn Cordle, CFA / 703 830-1701

## \$9 billion in losses if oil prices remain at current levels

### 2008 Earnings: \$9 billion in Pre-Tax losses

		Total Revenue	Operating Earnings	Operating Margins	Pre-Tax Earnings	Pre-Tax Margins
		(\$Millions)	(\$Millions)		(\$Millions)	
1	Southwest	11,025	421	3.8%	313	2.8%
2	Alaska	3,890	(130)	-3.5%	(163)	-4.4%
3	Delta	20,900	(769)	-3.7%	(1,266)	-6.1%
4	Northwest	13,700	(684)	-5.0%	(997)	-7.3%
5	AirTran	2,850	(155)	-5.8%	(207)	-7.8%
6	JetBlue	3,400	(129)	-3.8%	(277)	-8.2%
7	United *	21,000	(1,896)	-9.0%	(1,946)	-9.3%
8	US Airways	12,780	(1,224)	-9.6%	(1,269)	-9.9%
9	Continental	15,300	(1,427)	-9.3%	(1,597)	-10.4%
10	American	20,239	(1,862)	-9.2%	(2,229)	-11.0%
Top 10		124,684	\$ (7,854)	-6.3%	\$ (9,638)	-7.7%

Earnings estimates based on \$133 oil

\* United's estimates are an average of several sell-side analysts

Source: AirlineForecasts

## Best-case: \$95 oil = \$2.8bn in losses

### 2009 Earnings Estimates based on \$95 oil

		Total Revenue	Operating Income	Operating Margins	Pre-Tax Income	Pre-Tax Margins	Net Income	Earnings Per Share
		(\$millions)	(\$millions)		(\$millions)		(\$millions)	
1	LUV	11,100	256	2.3%	132	1.2%	85	0.12
2	NWA	13,250	127	1.0%	(274)	-2.1%	(173)	-0.62
3	DAL	19,800	(12)	-0.1%	(531)	-2.7%	(531)	-1.34
4	AMR	22,880	(71)	-0.3%	(703)	-3.1%	(703)	-2.16
5	UAL	20,000	(308)	-1.5%	(737)	-3.7%	(737)	-6.14
6	JBLU	3,100	37	1.1%	(137)	-4.3%	(89)	-0.37
7	CAL	14,500	(288)	-2.0%	(690)	-4.7%	(439)	-3.19
8	ALK	3,450	(155)	-4.5%	(213)	-6.2%	(136)	-3.69
9	LCC	11,400	(572)	-5.0%	(770)	-6.8%	(770)	-3.84
10	AAI	2,410	(150)	-6.2%	(197)	-8.1%	(125)	-0.91
	<b>Industry</b>	<b>121,890</b>	<b>\$ (329)</b>	<b>-0.3%</b>	<b>\$ (3,315)</b>	<b>-2.7%</b>	<b>\$ (2,812)</b>	

Source: AirlineForecasts

Ual Corp's estimate is based on the average of several sell-side analysts

## 2009: \$7 billion in losses

### 2009 Earnings: \$7 billion in losses for the top 10 US airlines

		Revenue (\$millions)	EBITDAR (\$millions)	EBIT (\$millions)	EBIT Margins	Pre-Tax Inc (\$millions)	Pre-Tax Inc Margins	Net Income (\$millions)	EPS
1	LUV	12,024	1,310	518	4.3%	395	3.3%	253	0.34
2	DAL	21,000	929	(540)	-2.6%	(1,059)	-5.0%	(1,059)	-2.68
3	NWA	14,130	582	(397)	-2.8%	(799)	-5.7%	(503)	-1.82
4	AMR	24,400	796	(1,019)	-4.2%	(1,651)	-6.8%	(1,651)	-5.19
5	UAL	21,450	75	(1,161)	-5.4%	(1,590)	-7.4%	(1,590)	-13.25
6	ALK	3,700	134	(245)	-6.6%	(304)	-8.2%	(194)	-5.25
7	CAL	15,600	541	(925)	-5.9%	(1,327)	-8.5%	(844)	-6.14
8	JBLU	3,435	239	(119)	-3.5%	(293)	-8.5%	(189)	-0.79
9	AAI	2,650	115	(208)	-7.8%	(255)	-9.6%	(162)	-1.18
10	LCC	12,200	(73)	(1,065)	-8.7%	(1,263)	-10.4%	(1,263)	-6.29
<b>Industry</b>		<b>130,589</b>	<b>2,180</b>	<b>\$ (5,162)</b>	<b>-4.0%</b>	<b>\$ (8,148)</b>	<b>-6.2%</b>	<b>\$ (7,205)</b>	

Earnings estimates based on \$130 oil and \$3.81 jet fuel

Source: AirlineForecasts

Ual Corp's estimate is based on the average of several sell-side analysts

## A 20% smaller industry if oil prices don't fall

### Fuel Cost Impact on Jobs, Fares & Capacity

(systemwide for 40 passenger-only airlines)

Oil price	Jet fuel Costs	Industry Fuel costs	Increase in Fuel costs	Per passenger req'd price incr	req'd price incr	Loss of Jobs	Reduction in Capacity
\$/bbl	\$/gal	(\$millions)	(\$millions)	(\$)	(percentage)		
100	3.1	51,375	17,481	24	13%	44,300	11%
110	3.3	55,327	21,433	29	16%	54,315	13%
120	3.6	59,279	25,385	34	18%	64,329	15%
130	3.8	63,231	29,337	40	21%	74,344	18%
140	4.0	67,183	33,289	45	24%	84,359	20%
150	4.3	71,135	37,241	50	27%	94,374	23%
170	4.8	79,039	45,145	61	33%	114,403	28%
200	5.5	90,894	57,000	77	41%	144,448	35%

Per passenger price is based on revenue per enplaned passenger

Loss of jobs and capacity is based on estimated price elasticity of demand

The Increase In fuel costs do not include fuel hedge benefits and is relative to 2007

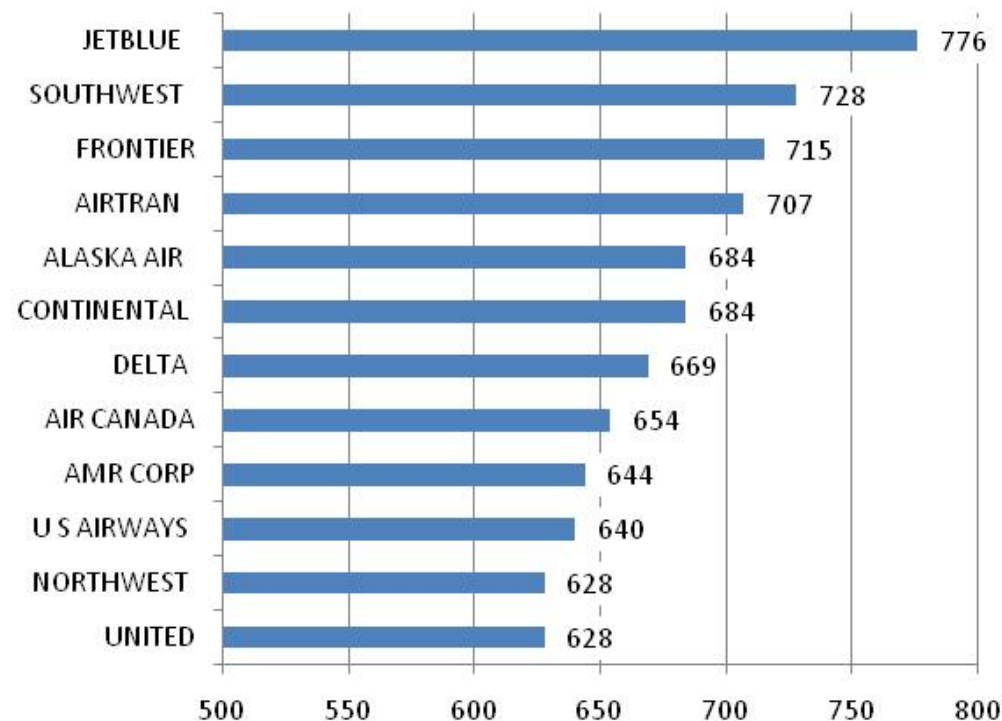
Source: AirlineForecasts



## Old-line airlines have the worst service...

### 2008 Airline Satisfaction Index Score

(based on a 1,000 point score)



Low-Cost Segment 730

Network Airlines 650

Source: J.D. Powers

## ...and, the highest operating costs

### 2007 Total Oper Exp. Per Block Hour

(system-wide costs in US\$)

		Total Oper. Expenses	% of Average	Block Hr (Adv)/DisAdv	System (Adv)/DisAdv
					(\$millions)
1	Southwest	2,656	69%	(1,183)	(2,416)
2	AirTran	2,794	73%	(1,045)	(556)
3	JetBlue	2,796	73%	(1,043)	(625)
4	Frontier	2,909	76%	(930)	(242)
5	Allegiant	3,369	88%	(470)	(31)
6	Alaska	3,484	91%	(355)	(161)
7	US Airways	3,764	98%	(76)	(101)
8	Continental	3,998	104%	159	239
9	Delta	4,218	110%	379	666
10	Northwest	4,361	114%	522	665
11	American	4,651	121%	812	1,957
12	United	4,899	128%	1,060	1,958
13	Hawaiian	6,011	157%	2,172	211
	<b>Average</b>	<b>\$3,839</b>	<b>100%</b>		

Source: DOT Form 41 & AirlineForecasts

## Massive loss of market value - year-over-year

Southwest Airlines Co.	-4%
Alaska Air Group, Inc	-31%
Continental Airlines Inc	-57%
Jetblue Airways Corp	-63%
Delta Air Lines Inc Del	-71%
Northwest Airls Corp	-71%
Airtran Hldgs Inc	-76%
AMR Corporation	-78%
Ual Corp	-80%
US Airways Group Inc	-89%

## Market values reflect potential bankruptcies

- *Market value as a % of 2008e revenue as of Jun 17, 2008*

Southwest Airlines Co.	0.93
Jetblue Airways Corp	0.31
Alaska Air Group, Inc	0.18
Northwest Airls Corp	0.12
Airtran Hldgs Inc	0.12
Continental Airlines Inc	0.09
Delta Air Lines Inc Del	0.08
AMR Corporation	0.06
Ual Corp	0.04
US Airways Group Inc	0.02

## High debt levels = high bankruptcy risk

### Net Debt as % of total capital

1	Alaska Air Group, Inc	71%
2	Delta Air Lines Inc Del	74%
3	Jetblue Airways Corp	76%
4	US Airways Group Inc	79%
5	Northwest Aircls Corp	80%
6	Airtran Hldgs Inc	89%
7	Continental Airlines Inc	93%
8	Ual Corp	94%
9	AMR Corporation	98%

Ual Corp's estimate is based on the average of several sell-side analysts

# Airlines are unable to increase revenue by \$20 billion

## \$135 oil: 2008 fuel costs will double

	2007 fuel	2008e fuel	increase fuel	2007 Net Inc	Costs above 07 earnings
	(\$millions)	(\$millions)	(\$millions)	(\$millions)	(\$millions)
American	5,809	11,464	5,655	504	5,151
United	4,823	9,251	4,427	398	4,029
Delta	4,444	7,957	3,513	448	3,065
Northwest	3,173	6,253	3,080	377	2,703
Continental	3,164	6,052	2,888	459	2,429
Southwest	2,532	6,036	3,505	645	2,860
US Airways	2,546	4,836	2,290	427	1,863
JetBlue	929	1,794	865	18	847
AirTran	749	1,456	707	53	654
Alaska	779	1,434	655	125	530
Frontier	409	730	321	(20)	341
Hawaiian	279	517	238	7	231
<b>Total</b>	<b>\$ 29,637</b>	<b>\$ 57,780</b>	<b>\$ 28,144</b>	<b>\$ 3,441</b>	<b>\$ 24,703</b>

2008 estimates exclude \$6 billion or so in fuel hedge benefits

Delta's and Northwest's 2007 income exclude reorg items

Based on \$135 oil and \$30 crack spreads

Source: AirlineForecasts

## Industry Outlook

- The top 10 U.S. airlines will spend almost \$25 billion in higher fuel costs this year over last year when jet fuel averaged \$2.11 per gallon. Fuel hedge benefits could offset \$5 to \$6 billion of the increased fuel costs.
- Earnings for the group, when one-time reorganization charges are removed, were less than \$4 billion in 2007. The group could lose as much as \$9 billion over the next 12 months if the current range of oil prices holds.
- Industry fares will have to increase at least 20% - across the board and on average - just to cover the dramatic gap-up in fuel costs from 2007. This is not possible given the level of uneconomic seat capacity in the system today.
- The upshot of higher fares is less traffic, and given a reasonable estimate of price elasticity, the industry will eventually be forced to shrink its seat capacity by 15% to 20%. However, there is no guarantee that a transition to a smaller, more expensive (for the consumer) airline industry would be successful and sustainable.
- Airlines have the ability to raise some cash, and moreover, suppliers such as aircraft manufacturers, leasing companies and travel management companies will have an incentive to support large airlines that provide a stream of value. Nevertheless, without a swift reduction in the price of fuel or seat capacity, the industry is headed toward a massive failure that will result in more bankruptcies, including liquidations.