Presentation to the Treasury Borrowing Advisory Committee

January 31, 2006

Question 1: Bills/Coupon Composition

We seek to develop guidelines for the appropriate composition of Treasury's debt portfolio based on the share of the portfolio devoted to bills relative to coupon securities. We would like the Committee's views on charts that we present and Committee suggestions on how to further develop guidelines on portfolio composition.

Characteristics of Bill Financing

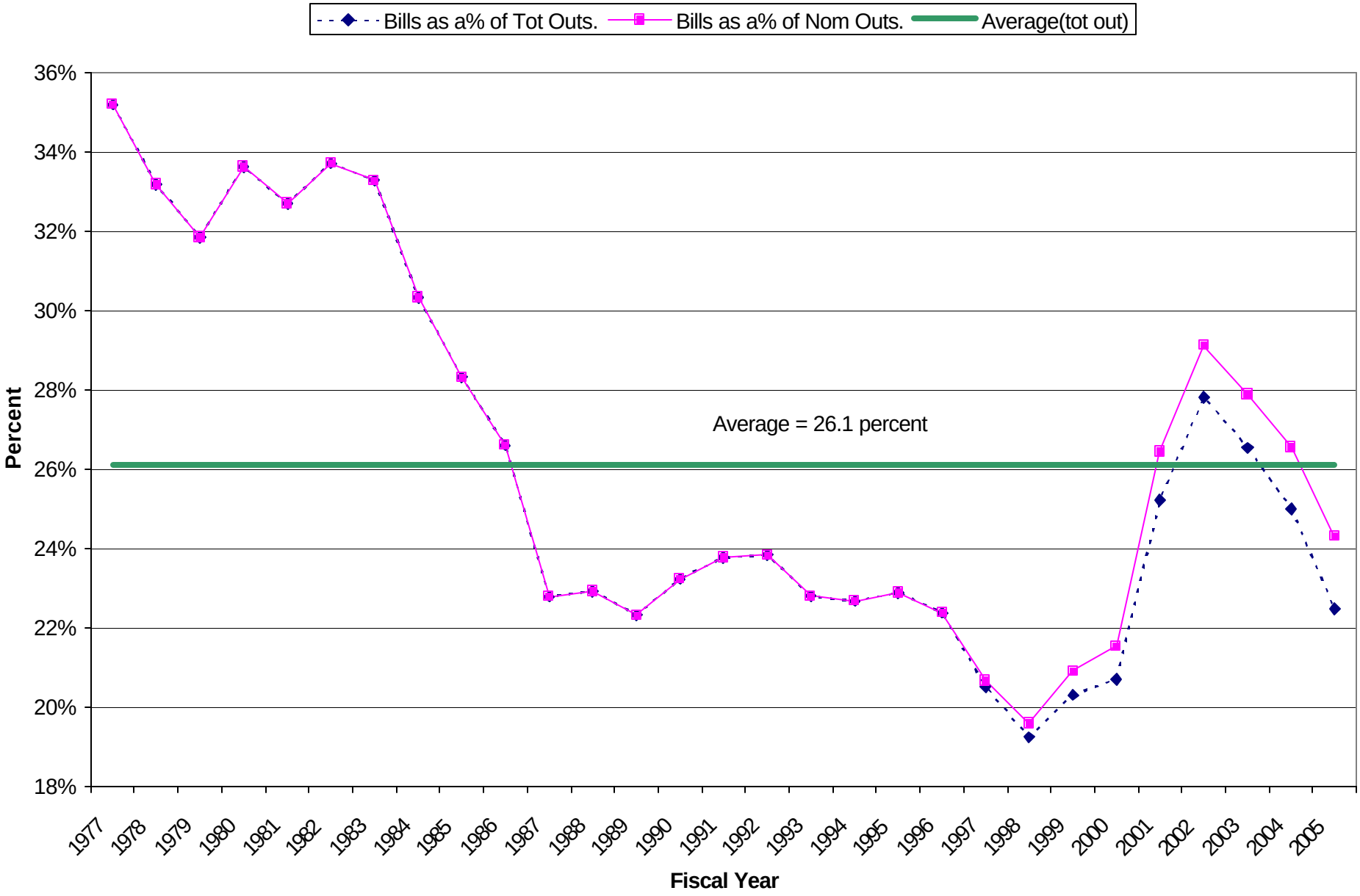
- **Flexibility:** Frequency of issuance and maturity creates flexibility for uncertain borrowing needs
- **Capacity:** The bill market is accustomed to volatility of issuance and can absorb seasonal and transient supply shocks with little price distortion
- **Cost:** Given the term structure of rates, bill financing is cheaper over time

Characteristics of Coupon Financing

- **Lower Rate Volatility:** Coupon financing is subject to lower interest cost volatility
- **Reduced rollover risk:** – Longer portfolio maturity decreases risk of not being able to rollover debt at critical times
- **Reduced Operational Risk:** - Longer maturities require fewer auctions
- **Expanded Investor Base:** Many investors desire longer-dated debt instruments -- expanding investor base attracts more investors to Treasury securities, reducing borrowing costs.

Portfolio Considerations

- Interest cost over time
- Various risks (Operational, Cost Volatility, Rollover)
- Flexibility to respond to uncertainty in borrowing needs
- Capacity – Constraints on issue sizes and changes in issue sizes for bills and coupons
- Providing liquidity and Benchmark status
- Expanding the investor base


Bills as a Percent of Total and Nominal Marketable Outstanding
Bills as a% of Tot Outs.
Bills as a% of Nom Outs.
Average(tot out)
Average = 26.1 percent
Percent
36%
34%
32%
30%
28%
26%
24%
22%
20%
18%
1977
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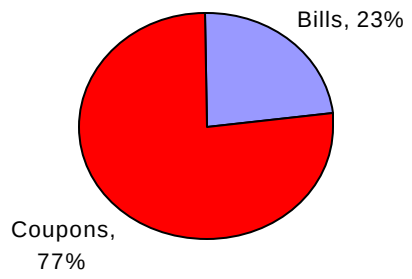
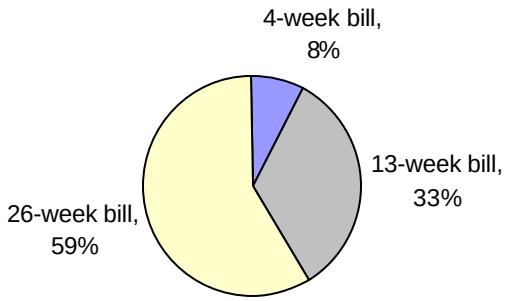
Debt Distribution

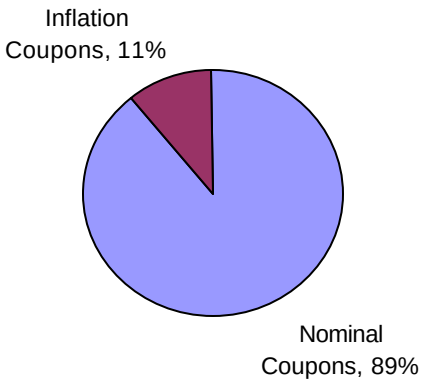
Bills vs Coupons



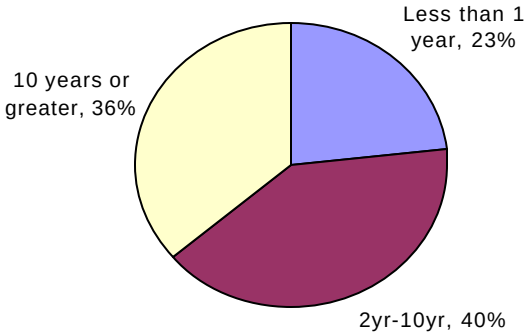
Bill Portfolio



Nominal vs Inflation Coupons



Maturity

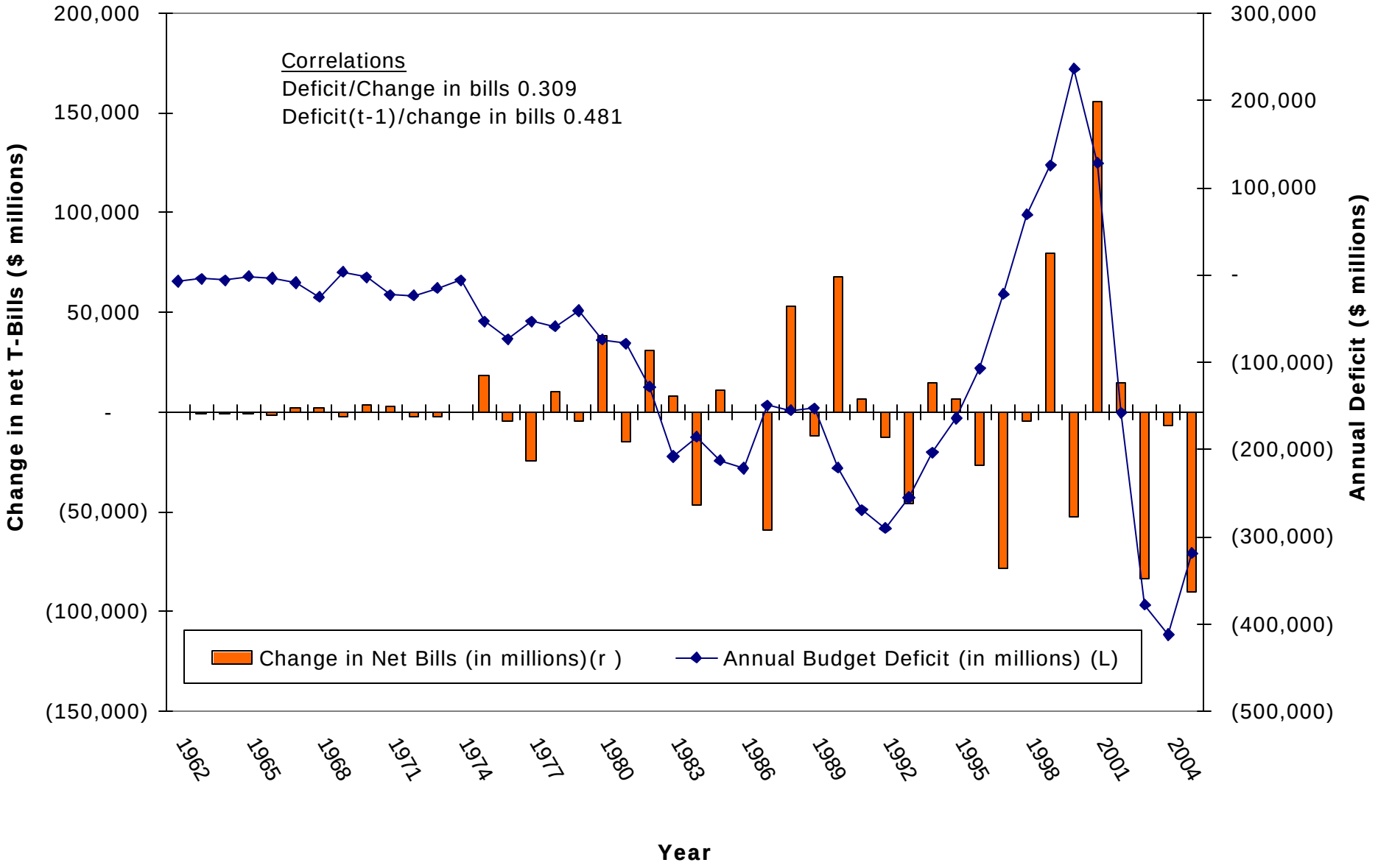


Historically, bills carry lower interest rates on average, but higher interest cost volatility

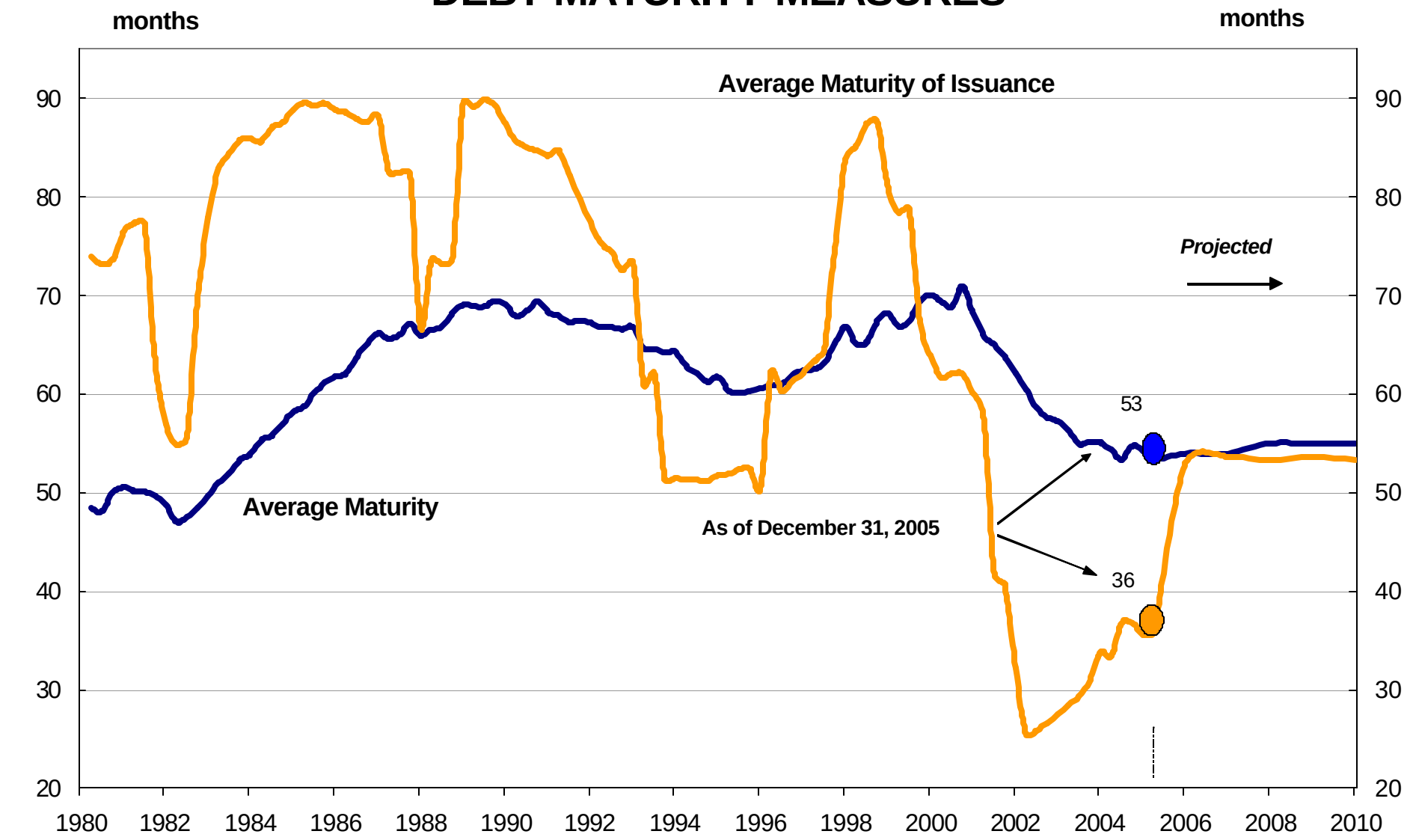
	1962-Present Avg Cost Percent	1962-Present Std Dev Percent	Avg # Auctions 1990-Present	Current # Auctions
Bills			134	177
3 month	5.88	2.91		
1 year	6.29	2.93		
Coupons			34	44
3 year	6.71	2.75		
5 year	6.93	2.64		
10 year	7.15	2.53		
30 year*	7.52	2.40		
Total			171	221

**** concatenated series using 20 year rate from 1962 to 1977 and 30 year rate from 1977 to 2002***

T-Bill Issuance is Used First to Address Changes in the Deficit



DEBT MATURITY MEASURES

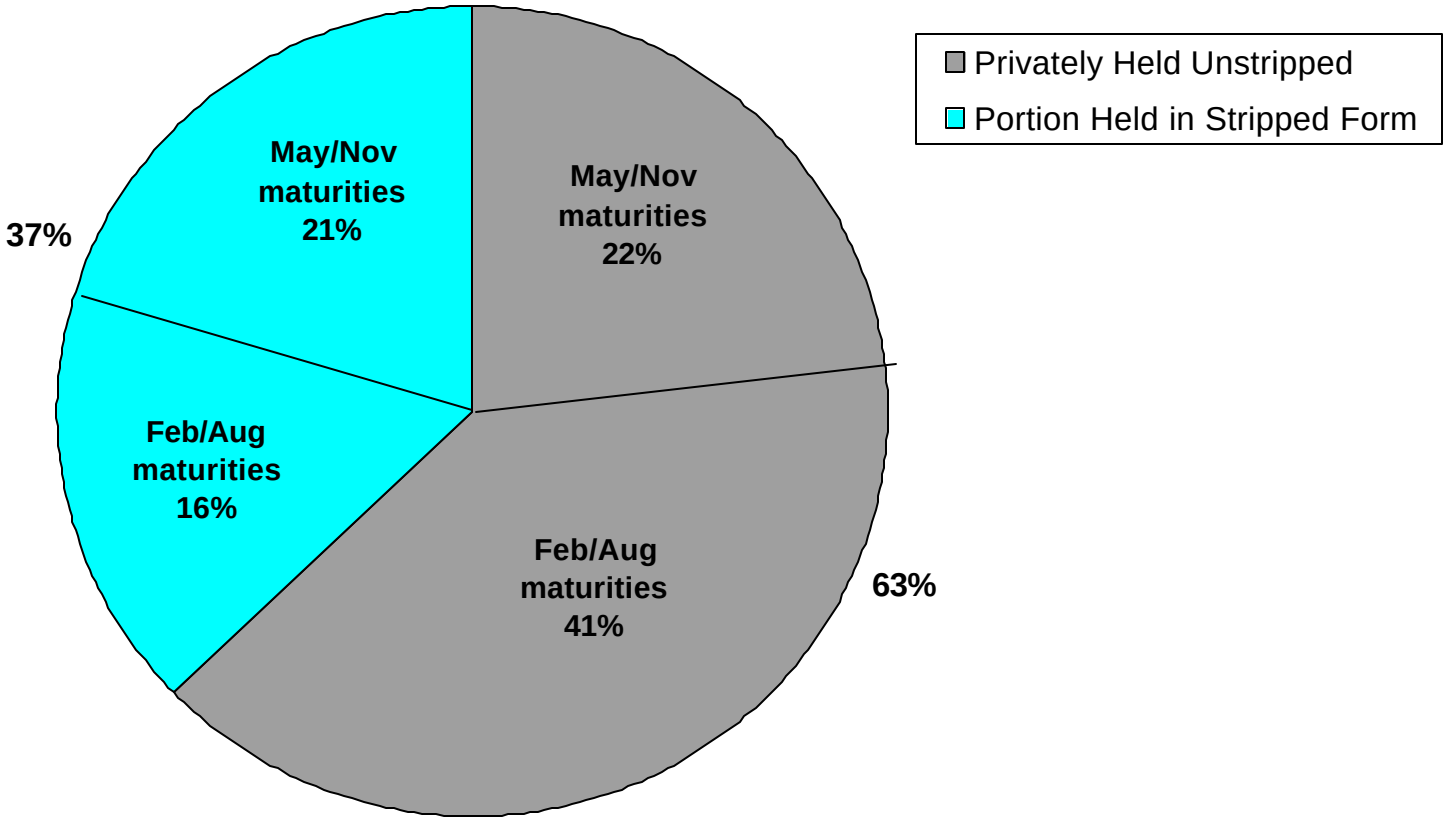


Projections are based on current OMB MSR budget estimates, except for Treasury's internal FY 2006 estimate. Future residual financing needs are spread proportionally across auctioned securities to maintain constant maturity of issuance.

Question 2: 30-Year Bond

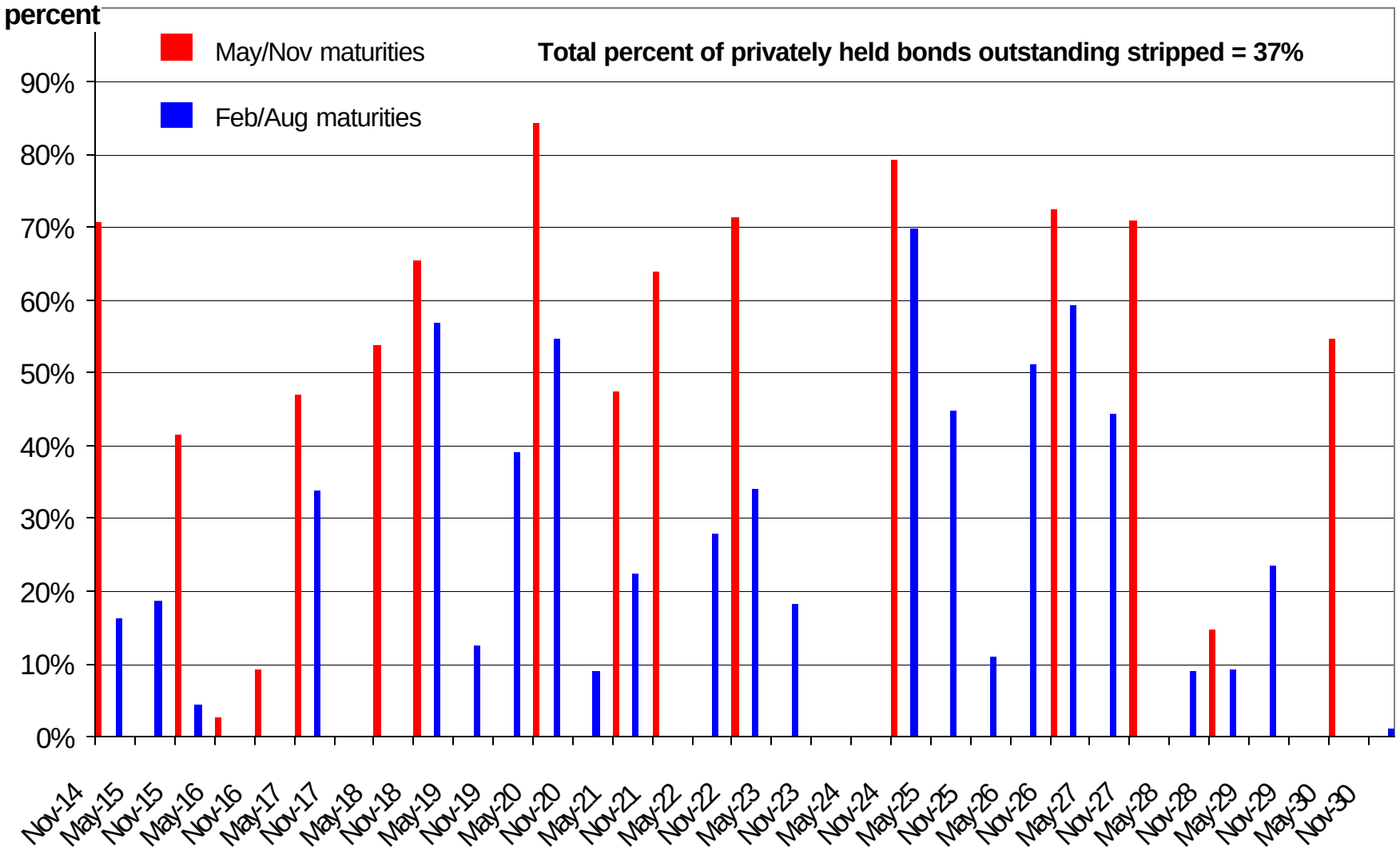
We would like the Committee's views on resumed issuance of the 30-year bond; initial sizes, coupon cycles for the STRIPS market, and the potential consequences of moving to quarterly while maintaining the same annual issuance in 2007.

Treasury Bonds Held in Stripped Form
percent of total privately held bonds outstanding
(as of 12/31/05)



Source: US Treasury Bureau of the Public Debt

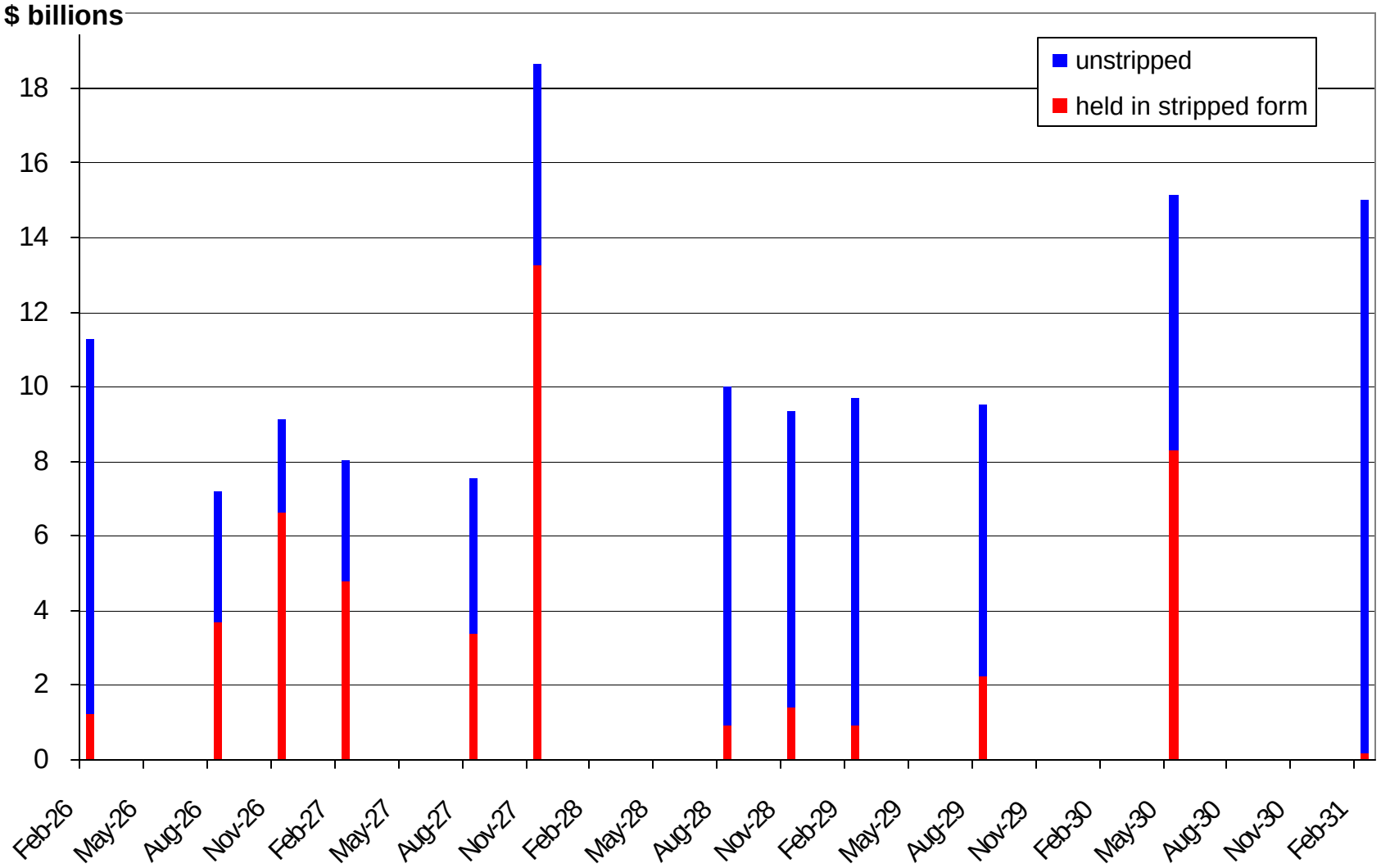
Percent of Privately Held Outstanding Treasury Bond Issues Stripped (as of 12/31/05)



Source: US Treasury Bureau of Public Debt

Treasury Bonds STRIPS

Bonds with maturities from 2/15/26 - 2/15/31, as of 12/31/05



Source: US Treasury Bureau of the Public Debt

Question 3: Shape of the Yield Curve

The recent flattening of the yield curve has led to questions about the relationship between the shape of the yield curve and the outlook for financial markets. We would like the Committee's views on the relevance of curve shape, at current levels, on the financial markets and institutions.

Presentation to the U.S. Treasury and the Treasury Borrowing Advisory Committee

January 31, 2006

TBAC

A Flat Yield Curve and its Implications on Financial Markets and Institutions

January 31st, 2006

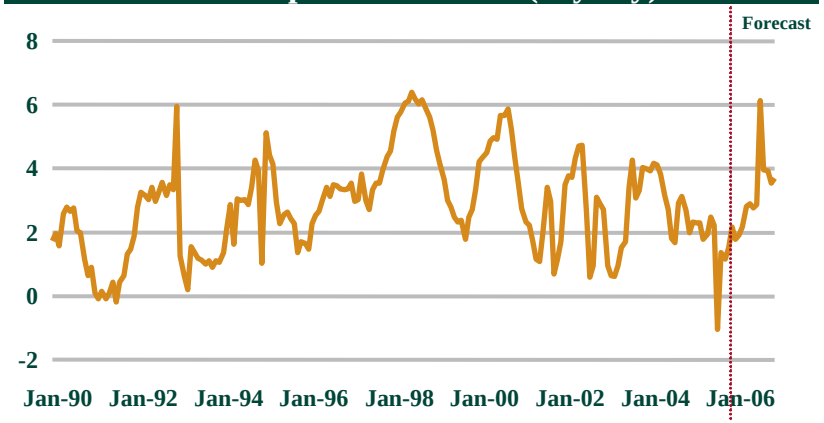
GDP and the Housing Market

We Think the General Economic Climate in 2006 Will Be Generally Favorable, and that the Consumer Should Remain in Decent Financial Shape…

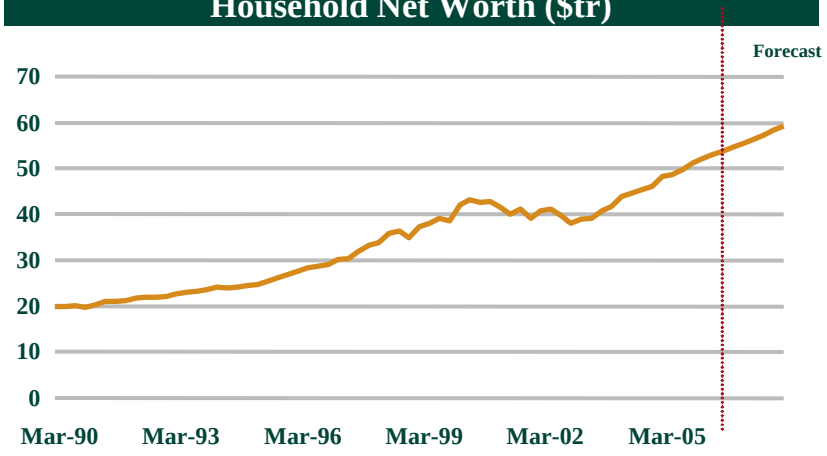
United States

%	1Q05	2Q05	3Q05	4Q05	1Q06	2Q06	3Q06	4Q06	2005	2006	2007
Real GDP	3.8	3.3	4.1	1.1	4.5	3.2	2.8	2.5	3.5	3.2	3.0
Private consumption	3.5	3.4	4.1	1.1	3.5	2.7	2.5	2.2	3.6	2.8	2.6
Government expenditure	1.9	2.5	2.9	-2.4	5.5	3.5	3.5	3.2	1.7	2.7	3.0
Non res fixed invest	5.7	8.8	8.4	2.8	9.8	9.0	9.0	9.0	8.5	7.9	9.8
Residential fixed invest	9.5	10.8	7.3	3.5	-5.0	-5.0	-5.0	-5.0	7.2	-1.0	-5.0
Exports	7.5	10.7	2.5	2.4	7.0	7.0	6.8	6.4	6.7	5.7	8.4
Imports	7.4	-0.2	2.4	9.1	6.0	5.5	5.0	5.0	6.2	5.4	6.3
Contributions to GDP:											
Domestic final sales	3.9	4.4	4.7	0.8	4.0	3.1	3.0	2.7	4.1	3.1	3.2
Inventories	0.3	-2.2	-0.4	1.4	0.8	0.3	-0.1	-0.1	-0.3	0.3	0.0
Net trade	-0.4	1.1	-0.1	-1.2	-0.3	-0.2	-0.1	-0.2	-0.3	-0.3	-0.1
Unemployment rate	5.2	5.1	5.0	4.9	4.9	4.8	4.9	5.0	5.1	4.9	5.0
Non-farm payrolls, 000	182	198	147	146	200	170	150	130	168	163	130
Consumer prices	3.0	2.9	3.8	3.7	3.5	3.1	2.5	2.3	3.4	2.9	2.3
Core CPI	2.3	2.2	2.1	2.1	2.1	2.2	2.4	2.5	2.2	2.3	2.5
Core PCE deflator	2.2	2.0	1.9	1.9	2.0	2.1	2.2	2.3	2.0	2.2	2.2

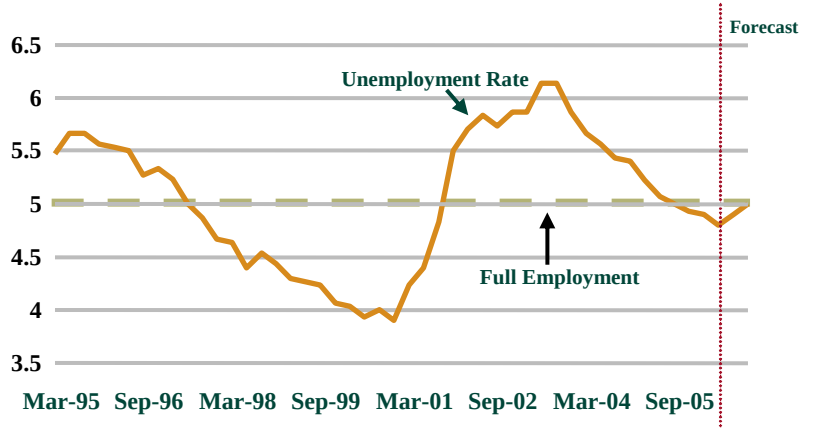
Real Disposable Income (%y-o-y)



Household Net Worth ($tr)



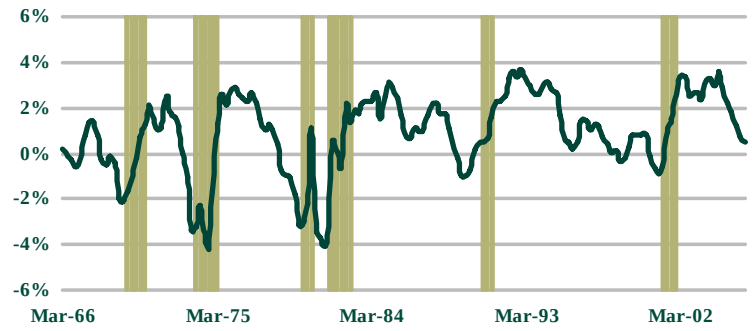
Unemployment Rate (%)



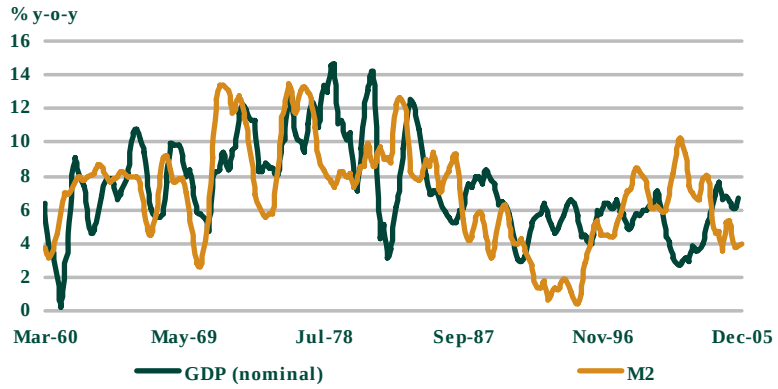
Source: Commerce Dept, BLS, Lehman Brothers.

The Historic Signals of Economic Growth, Such as the Shape of the Curve and Money Supply Are Much Less Robust Barometers of Future Economic Performance Today… The Ramifications of a Flat Curve and the Level of Rates for the Consumer, as Well as the Broader Financial Markets, Are Important…

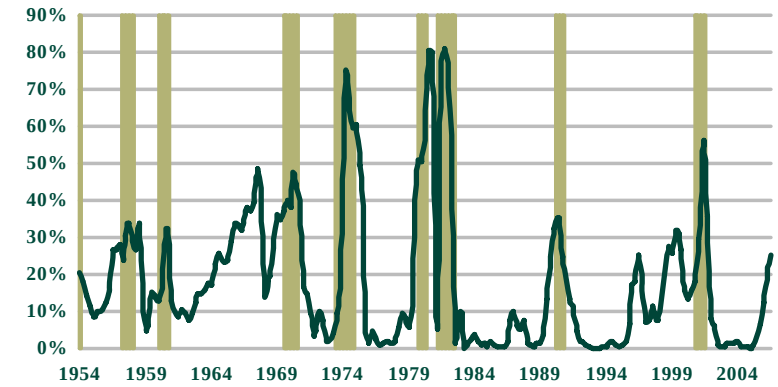
TSY 10yr – Fed Funds Spread



Nominal GDP and Money Supply



Probability of a Recession*



GDP – Curve Regression

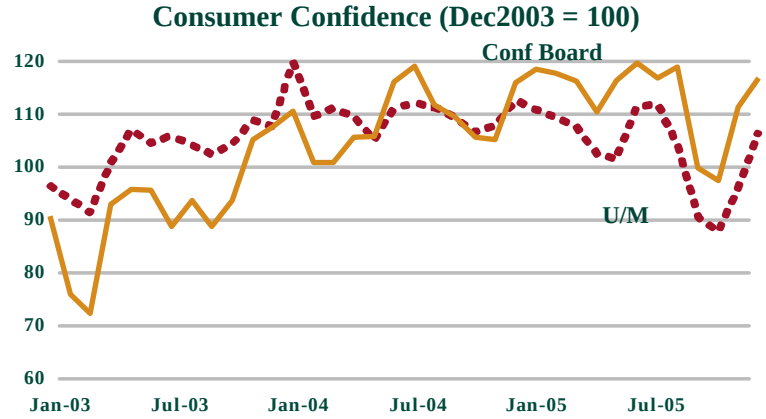
	1964:Q1-1989:Q4		1990:Q1-2005:Q5	
	TSY Curve	Corporate Curve	TSY Curve	Corporate Curve
Constant	2.13	2.42	2.46	2.47
p value	[0.000]	[0.000]	[0.002]	[0.004]
TSY Spread (t-4)	1.15		0.28	
p value	[0.000]		[0.312]	
Corporate Spread (t-4)		0.81		0.17
p value		[0.000]		[0.407]
R-Squared	0.312	0.337	0.032	0.014

Note: p-values in brackets are calculated using Newey-West standard errors; dependent variable is Real GDP % y-o-y; Source: Lehman Brothers

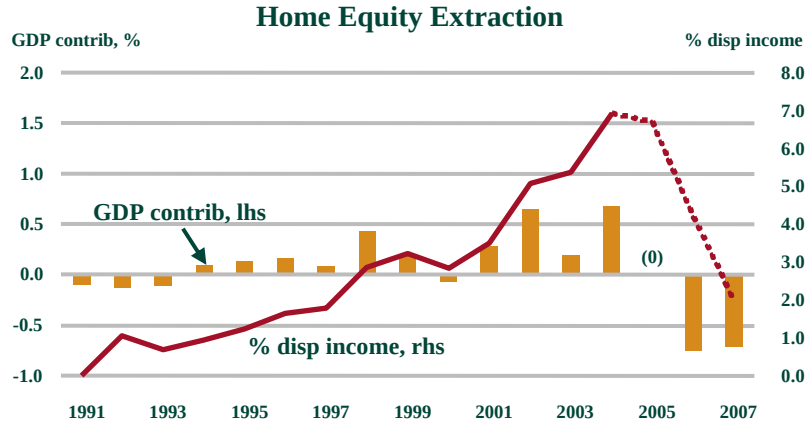
*Source: US Treasury, Lehman Brothers. *Using a Probit Model to Calculate the 1 year future probability of a Recession using the 3 month bills to 10 year treasury spread as the independent variable.*

Coming into 2006, Consumer Confidence and Disposable Income (and/or Wealth), Are in Solid Shape... Yet, This Could Very Well Deteriorate over the Coming Quarters…

Household Moods Remain Cautious – But Improving…



But Households Have Come to Rely Heavily on Home Equity Extraction…



Equity Extraction Depends on Two Factors:

- **Interest rates**
  - We expect mortgage rates to remain well below 6.50%
  - Homeowners will have little additional rate incentive to refinance
- **Price appreciation**
  - We expect home price appreciation to cool but not collapse
  - Some regional markets may be overvalued, but they account for 30% of the aggregate housing stock

Residual Effects:

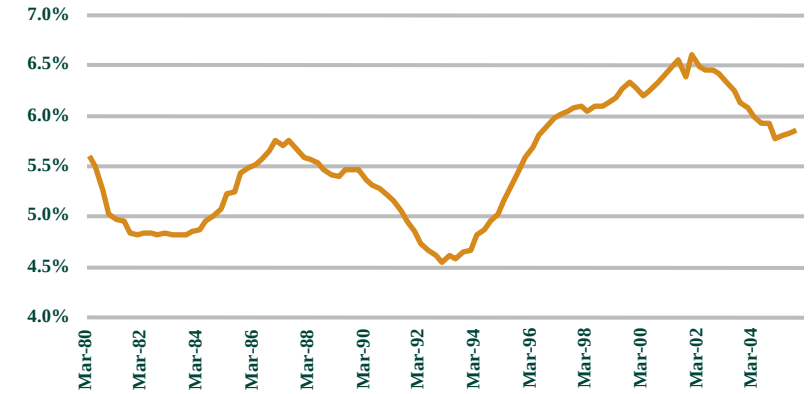
- Households don't typically spend all funds extracted
  - About 50% is used to increase savings and retire debt
  - Which suggests that there could be as much as $300bn left over from 2005 available for spending or investment

Source: Conference Board, University of Michigan and Federal Reserve.

The Monthly Payment for the Populace at Large Is on the Upswing, Largely due to the Cost of Home-Ownership and the Nature of How That Ownership Has Been Financed…

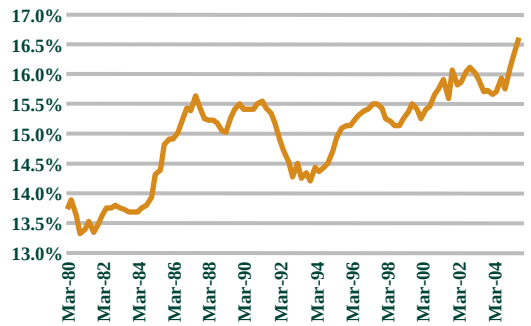
Financial Obligation Ratio – Debt Payments as a Percentage of Disposable Income

Homeowners – Consumer

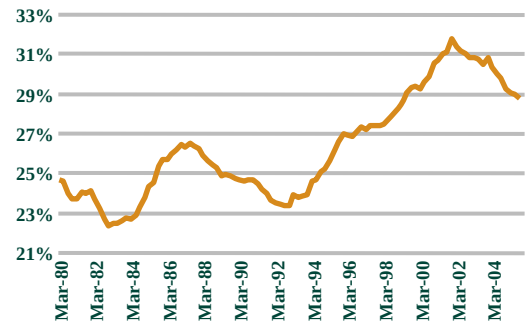


Homeowners – Mortgage

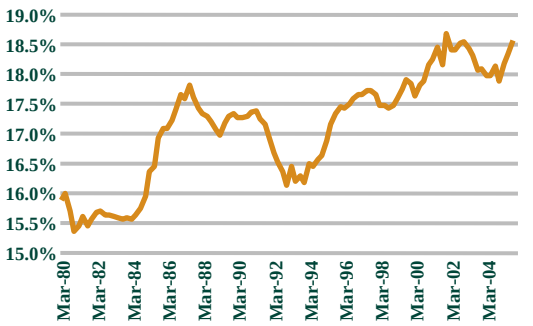
Homeowners – Total



Renters



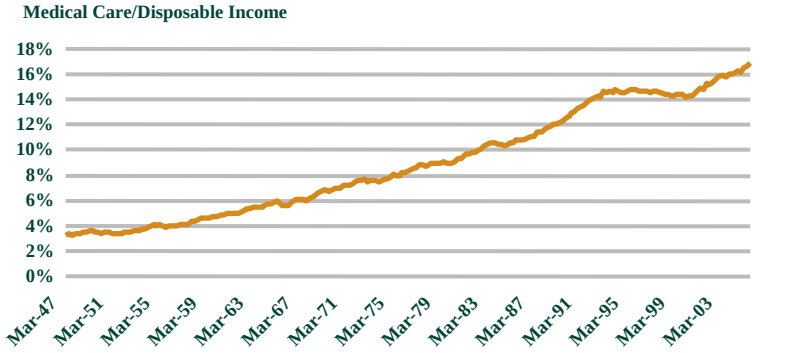
Total (Homeowners + Renters)



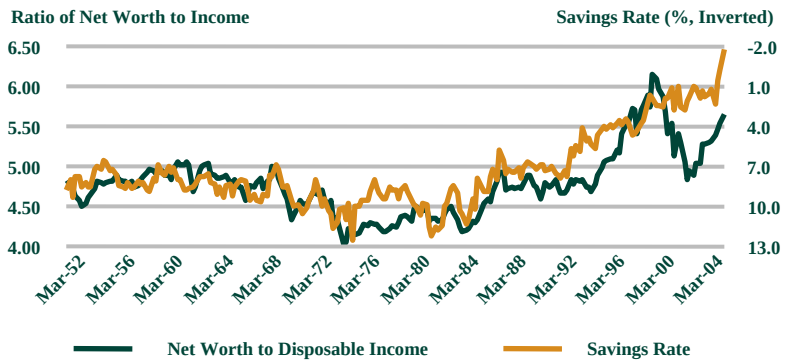
Source: Federal Reserve

Simultaneously But Equally As Important, Healthcare & Energy Expenses Are Rising — While the Middle Class Consumer Continues to Utilize Housing Gains As Their Primary Savings Vehicle…

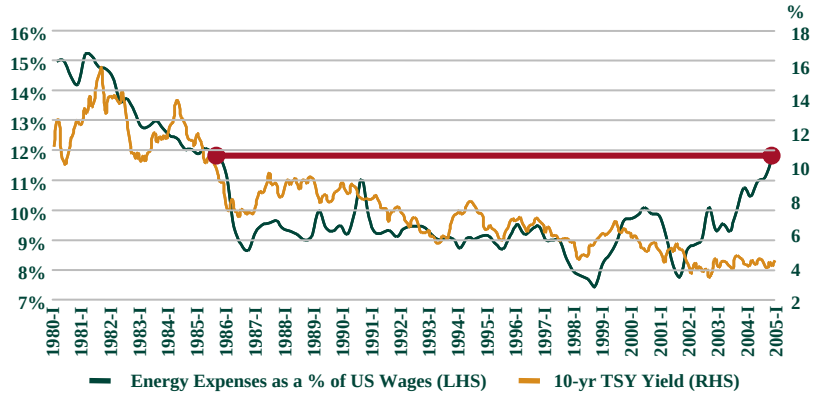
Medical Care Expenditures as a Share of Disposable Income Continues to Rise



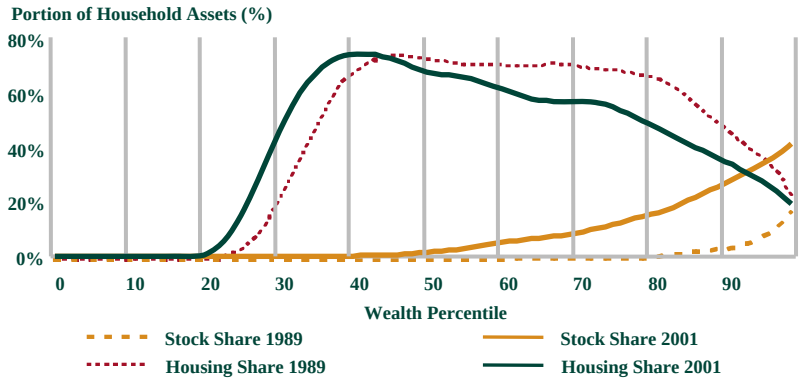
Net Worth to Disposable Income at Peak



Fuel, Gas, & Electricity Expenses as a Percentage of US Consumer Wages



For Most Consumers, Their Home Is Their Most Important Asset

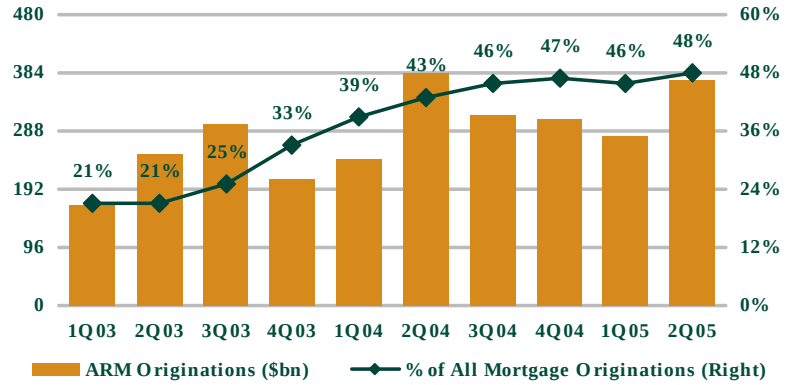


Source: Lehman Brothers, Federal Reserve, BEA and FactSet.

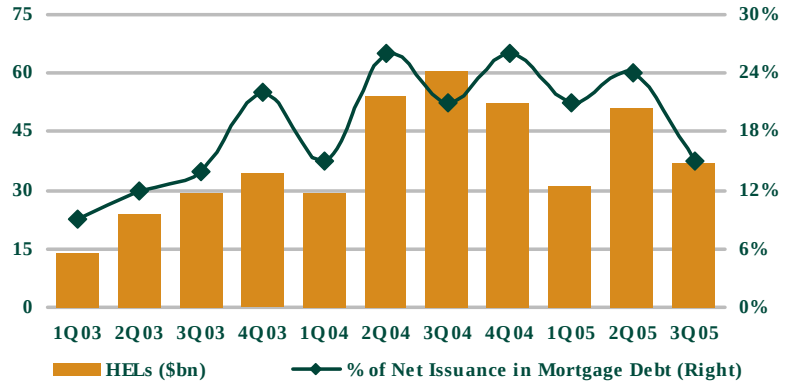
The Engine of Growth

Home Wealth Extraction Has Been the Primary Engine Allowing Consumers to Expand Spending Capacity … The Shape of the Curve and Level of Rates Have Had a Profound Impact on This Phenomenon…

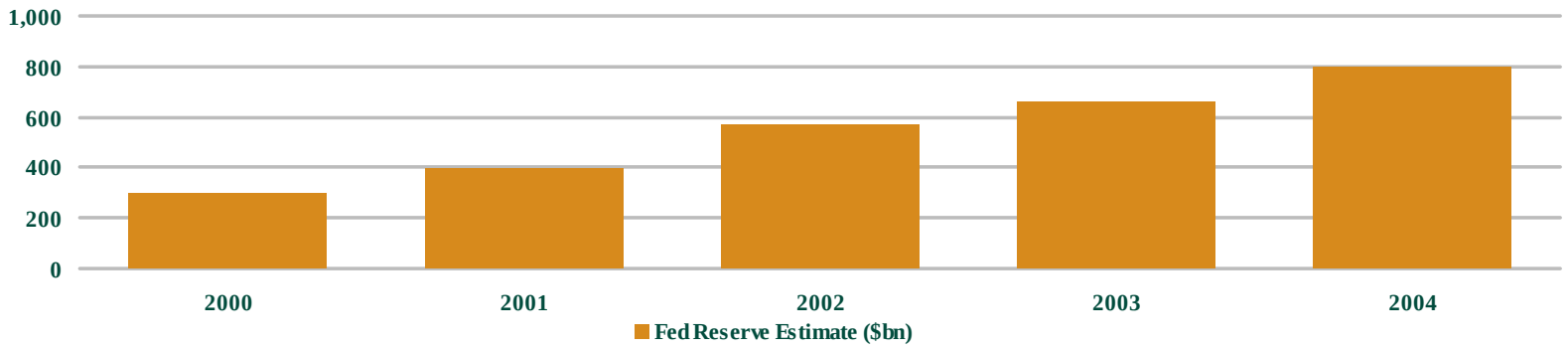
Share of ARM's Has Grown to 50% of All Originations



The HEL Market Has Grown as Well



Gross Equity Extraction from the US Mortgage Market – Federal Reserve Estimate ($bn)



Shows equity extracted through cash-out refinancings and existing home sales.
Source: Lehman Brothers, Federal Reserve, MBA.

Payment Shocks Down the Road???

The Nature of the Curve over the Past Few Years Has Created a Dynamic Which Requires Either Growth of Income or a Continued Robust Housing Market to Prevent a Payment-Increase Induced Spending Slowdown…However, Shape of the Curve and Level of Rates, Will Be the Primary Driver of How This Plays Out over the Coming Months…

Payment Shock on the PRIME ARM Universe at First Reset

	Total Volume of Resets ($bn)		Payment Increase		
Horizon (months)	All ARMs	IO/Neg-am	Rate Effect	IO Effect	Total
2006	100	39	36%	69%	47%
2007	203	110	35%	63%	49%
2008	204	93	37%	73%	51%
2009	514	368	36%	85%	68%
2010	187	145	34%	94%	76%

Payment Shock on the NON-PRIME ARM Universe at First Reset

	Total Volume of Resets ($bn)		Payment Increase		
Horizon (months)	All ARMs	IO/Neg-am	Rate Effect	IO Effect	Total
2006	309	62	41%	72%	46%
2007	159	44	41%	70%	47%
2008	31	12	44%	73%	54%
2009	8	5	46%	71%	60%
2010	1	1	43%	60%	52%

Payment Increase under Rate Effect captures payment jump due to a change in rates. IO/Neg-am effect captures payment jump due to expiry of IO period or teaser period and includes the Rate Effect. Total payment increase is computed based on level-pay borrowers subject only to rate effect and IO/Neg-am borrowers subject to IO/Neg-am effect. Scaled up for $1650bn of prime ARMs and $650bn of sub-prime ARMs from the ARM reset distribution in non-agency securitized universe as of 2Q05. Forward rates as on 11/21/05.

Is There an Exit Strategy? Yes…But It's Very Optimistic…

- The primary conclusion from the previous page is that *if* rates moved along the forward curve and *if* the borrowers stayed with their current mortgage, they would need to spend a significantly higher proportion of their income in servicing their mortgage debt. Intuitively, the scenarios where this would be less of an issue are:
  - **Sharp Rally in Rates**
  - **Offsets from Income Growth** - This would call for rosy optimism. For instance, for ARMs resetting 2-3yrs out, annual income growth of the order of 20-25% is required to offset payment shocks
  - **Keep Rolling it Over** - The most plausible exit option is for the borrowers to keep rolling over their mortgage and try to avoid payment shocks through that process. There are quite a few stumbling blocks for this easy way out. First, short term interest rates have already risen significantly over the past several months. The second stumbling block is willingness of lenders to continue to offer IO/neg-am loans. If the IO/neg-am products are not available – say, due to a secular tightening in lending standards on the heels of a softening in the housing market interest rates would need to rally by 150-200bp for borrowers to be able to roll their mortgages painlessly

Scenarios That Bail Out Leveraged Borrowers Look Rather Optimistic

Horizon	Total ARM Resets	Payment Increase	B/E Income Growth (annual)		Required Rate Rally to Refi with no Payment Shock *			
					0% Income Growth		4% Income Growth	
	($bn)	(%)	IO/Neg-am	Total	Optimistic	Pessimistic	Optimistic	Pessimistic
0 – 12	324	36%	90%	36%	166	191	145	169
13 – 24	182	53%	37%	24%	133	197	71	129
25 – 36	419	52%	21%	15%	117	185	24	86
37 – 48	325	42%	14%	9%	111	169	18	67
48+	516	54%	13%	9%	102	168	1	50

** In an optimistic scenario, the borrower can refi into an identical product. In a pessimistic scenario, the borrower may only refi into a level-pay ARM.*
B/E Income Growth is computed such that at time of reset, borrower has the same DTI as at origination.
Required rally in mortgage rates is computed such that at the time of reset, the borrower refis and monthly payments are unchanged. The required rally is computed from the forward mortgage rates, for the same product type. With growth in income, the borrower is able to afford a higher monthly payment.
As of end April 2005, mortgage rates 5 years forward are 100 bp above spot rates.

Financial Institutions

Insurance Companies…
Achieving Target Yield/Returns in a Low Yield, Flat Curve, Tight Credit Spread Environment Has Become Very Difficult for Insurers…

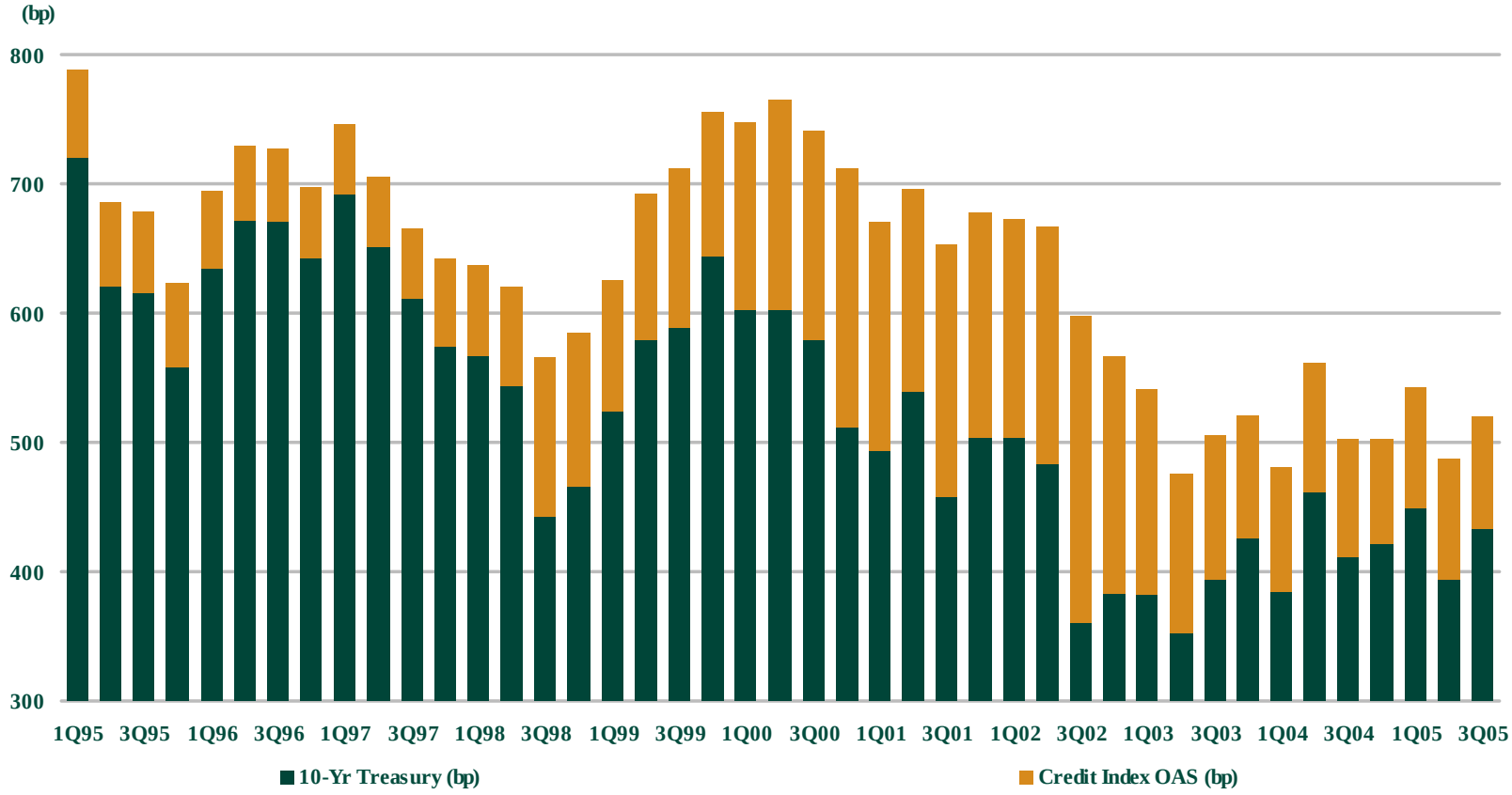
Fixed Annuity Analysis[1]	December 2001	December 2003	December 2005
Asset Spreads (over UST)			
60% Investment Grade Corporates	1.80%	0.90%	1.00%
7% Below Investment Grade Corporates	3.55%	2.10%	2.35%
13% MBS	0.55%	0.25%	0.50%
10% ABS/CMBS	0.90%	1.00%	0.65%
10% Commercial Mortgage Loans	2.25%	1.75%	1.25%
Asset Yield	6.42%	4.76%	5.39%
Annuity Crediting Rate (5yr UST+25bps)	4.59%	3.59%	4.60%
Net Spread	**1.83%**	**1.17%**	**0.80%**

1. *All spreads are illustrative estimates. Investment Grade Corporates include both publics and privates. MBS spreads are OAS for generic pass-throughs. Actual commercial mortgage spreads vary considerably depending on individual loan characteristics. Asset yields assume a mix of 5yr and 10 yr assets.*

Interest Rates and Credit Spreads Pressure on Spread Income:

Yield Compression Has Heightened Reinvestment Risk for the Life Industry and Hurt the Industry's Ability to Organically Grow Margins on Spread Products…

10-Year U.S. Treasury and HG Index OAS



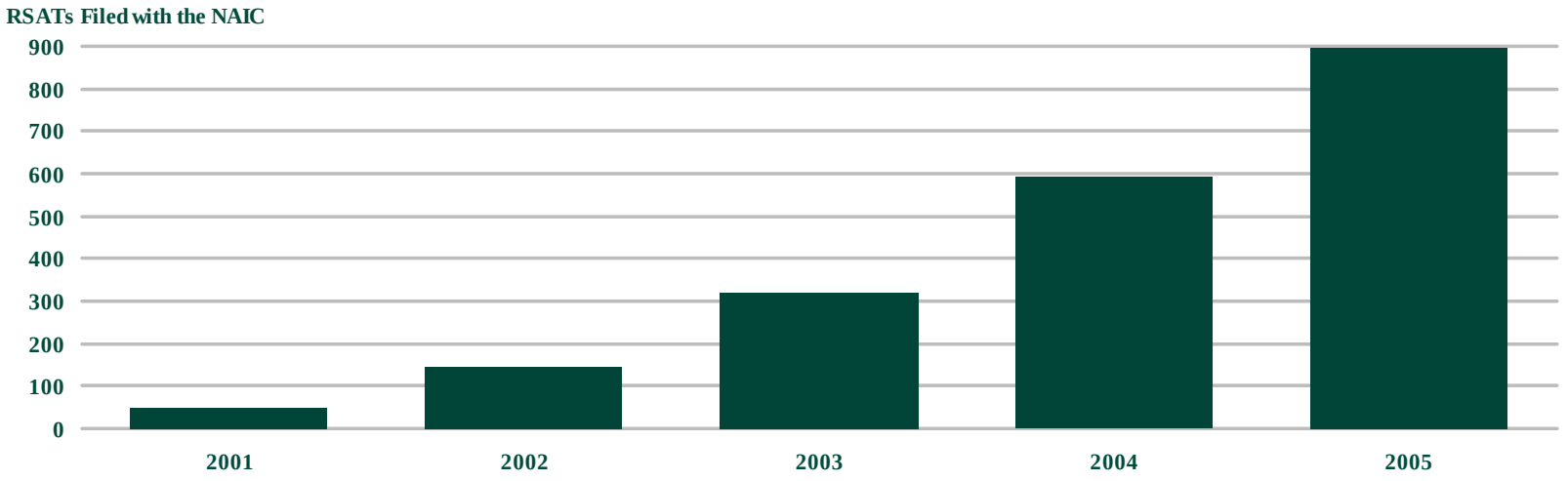
Source: Lehman Brothers.

Creating The Need to Take on Additional Risks to Offset This Phenomenon…

The Structured Markets Have Become Extremely Important to Insurance Companies to Offset the Impact from the Yield Curve Dynamic of the Past Few Years…

- Looking beyond the traditional cash bond market, insurance companies filed approximately 900 Replication Synthetic Asset Transactions (RSATs) with the Securities Valuation Office (SVO) in 2005, a 175% increase in two years (RSATs reflect only US General Account transactions)
- In addition, participation in credit linked notes (CLN), which is not captured by RSAT filings, increased sharply; insurance companies were among the top investors in CLNs with synthetic CDO exposures over the course of 2005

Cumulative RSATs Filed with the NAIC

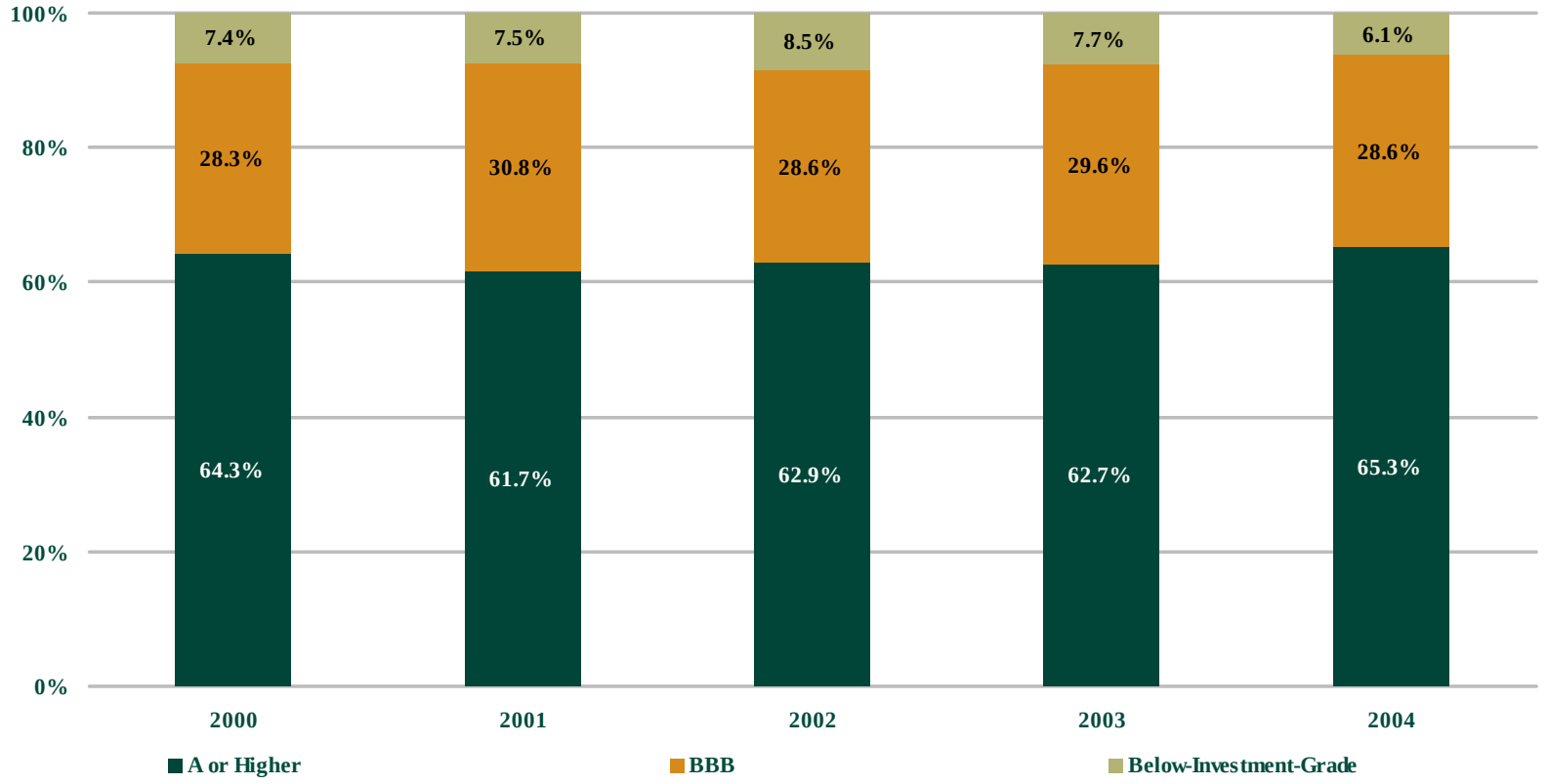


Source: Securities Valuation Office.

Asset Quality Shift:

While Reducing Exposure to High-Yield Assets Post 2002 (to address Rating Concerns); Insurers have Increased Exposure to High Quality Structured Assets and have, at the margin, added Convexity to Enhance Yield…

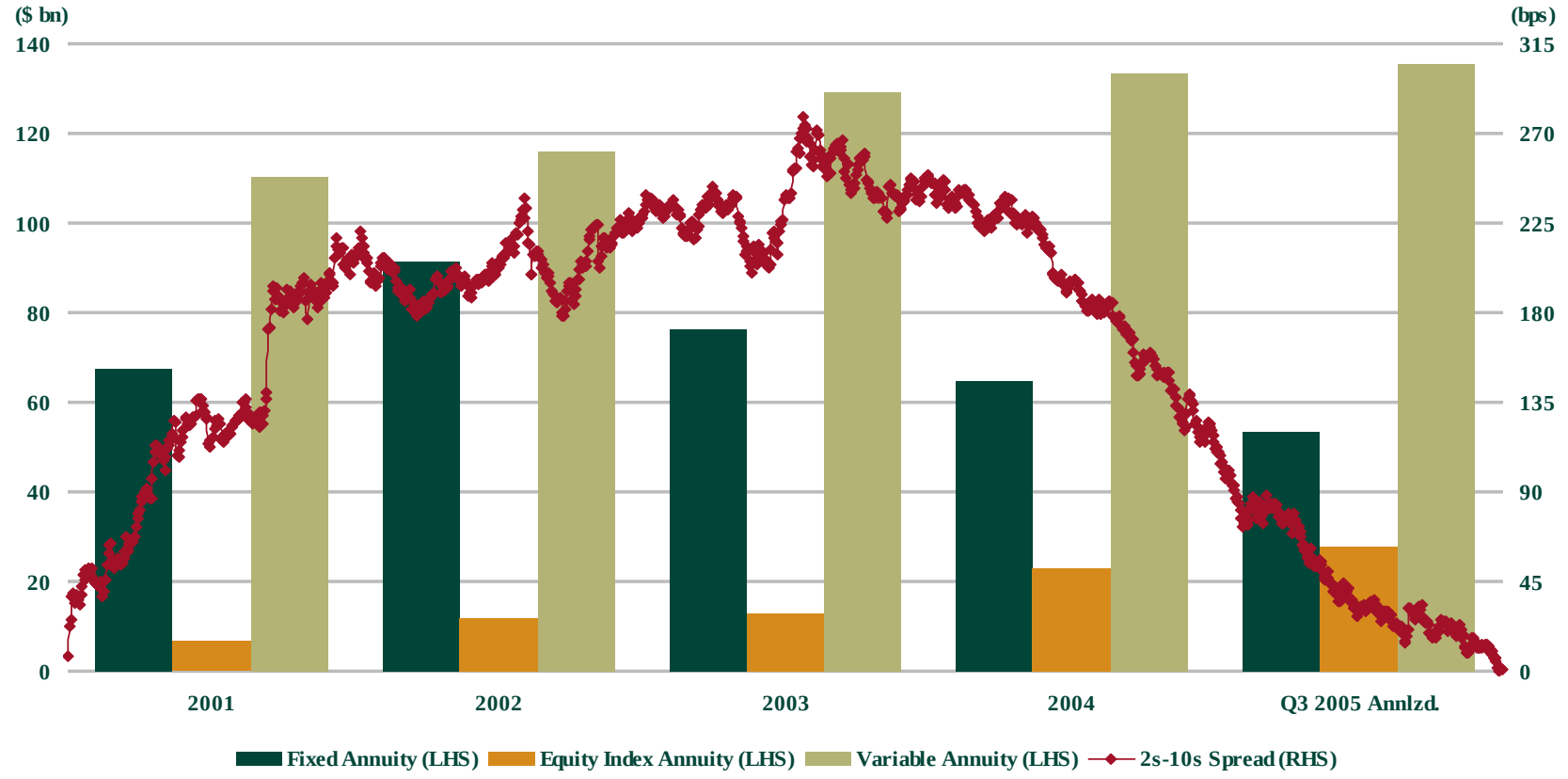
U.S. Life Industry Asset Mix



Source: Highline Data.

The Nature of Annuity Sales Has Changed Alongside a Low and Flat Yield Curve Environment… It Has Forced Demand into Riskier Products in an Attempt to Achieve Decent Returns… This Trend Will Continue into ’06…

Annuity Sales vs. Treasury Curve



Source: LIMRA, Bloomberg.

Effect of Interest Rates and the Flattening of the Yield Curve on Life Insurance Companies

- **Low-interest rates** have been a negative for the industry…
  - Given that reinvestment yields have forced down spreads on fixed-rate products
  - The industry has responded by lowering crediting rates on its products to partially offset the decline in portfolio yield
  - Given that rates have fallen to historical lows in the last few years, the industry was forced to seek regulatory permission to drop minimum policy crediting rates below 2%, from the 3.5%-4.0% range
  - This has enabled the industry to mitigate what would have been a very material blow to ROE in the last several years
- **Flattening Yield Curve: also a negative…**
  - By definition, a flattening yield curve is a negative for life insurance companies as the long duration nature of whole life insurance and fixed annuity sales are be disintermediated by higher-return/short-duration savings products like bank CD's
  - In the current low nominal yield environment, the flattening of the curve, through higher short term rates compounds the negative sales picture for traditional life and fixed annuity products which offer a smaller (if any) incremental yield play compared with short-duration contracts
  - That said, we still believe that the low yield environment has been more of a negative for life companies in recent quarters. Despite a positive sloping yield curve (until recently), fixed annuity sales have been declining due to lower crediting rates

Effect of Interest Rates and Flattening of the Yield Curve on Life Insurance Companies (Cont'd)

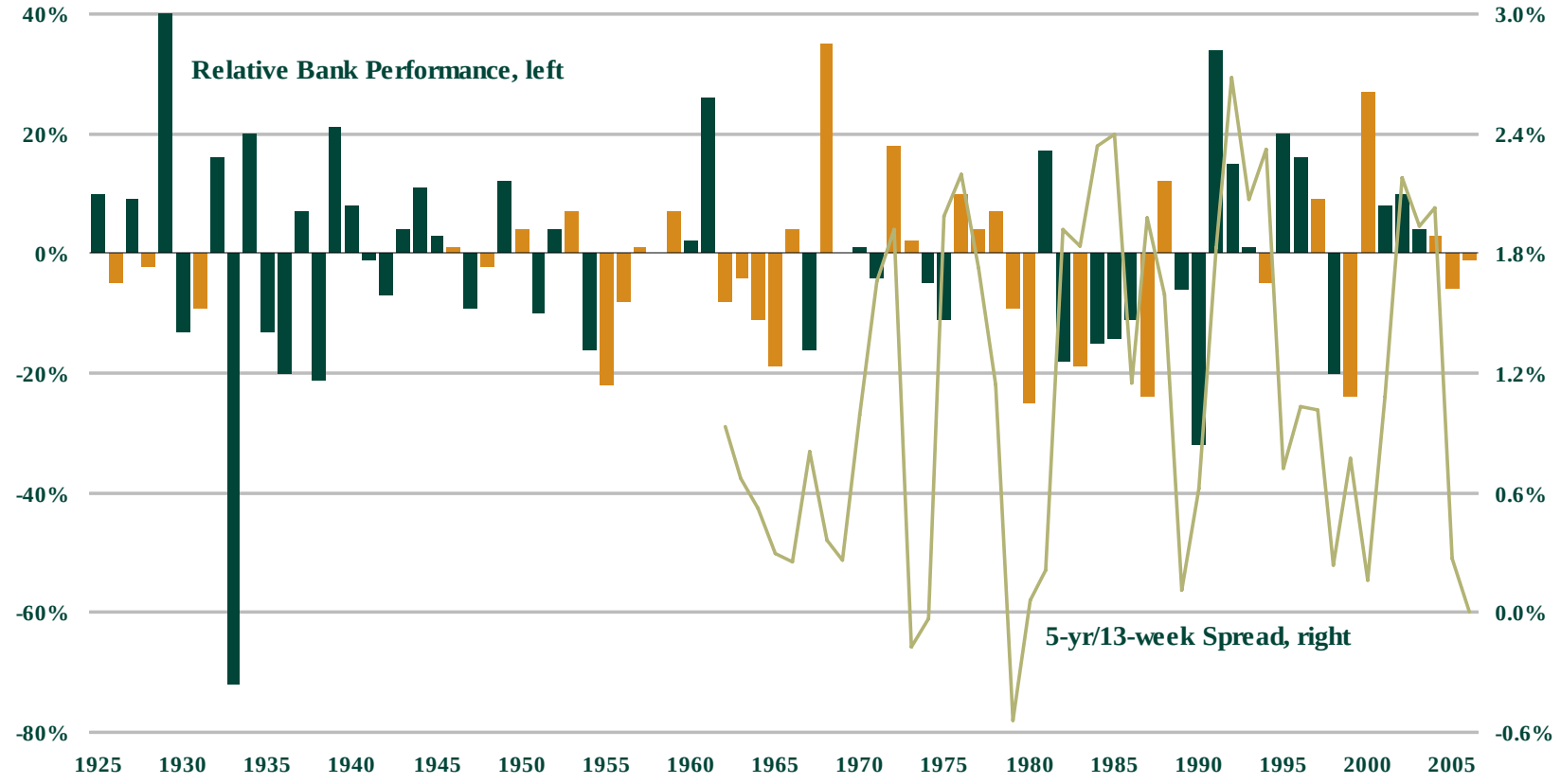
- **Earnings Impact: Lower sales and contracting product spreads negatively affect earnings for several reasons…**
  - First, lower sales hurt GAAP earnings, given that GAAP accounting rules permit life insurers to amortize the expense of commissions and other costs associated with writing new policies. Hence, growth typically results in higher GAAP earnings in the period the new policy is produced (this is not the case for statutory accounting – where all costs are expensed up front)
  - Second, contracting spreads are a more obvious negative as insurers endure yield contraction in their portfolios. And while there is an ability to lower crediting rates on policies, there are minimum crediting guarantees in most policies, which at some point limit the insurer's ability to maintain spread margin in a falling rate environment

These dynamics continue to be in place in 2006, perpetuating the need to increase risk-tolerance in multiple spots…

The Banking System…

There Is Clearly a Profound Correlation over the Past 40 Years Between Bank Earnings (and Equity Performance) with the Shape of the Yield Curve…

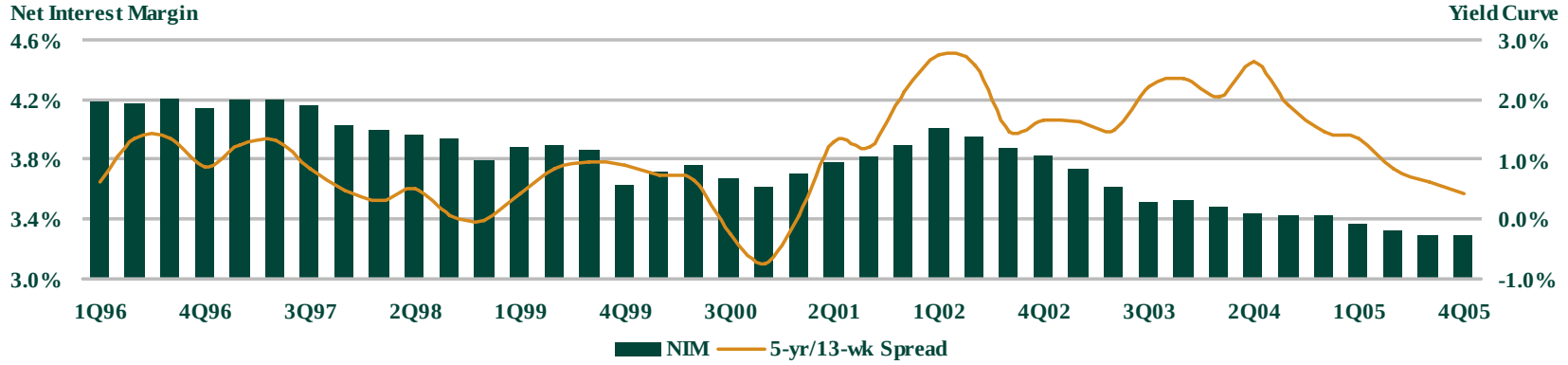
US Bank Index Relative to the S&P 500 vs. Yield Curve, 1925 – Present



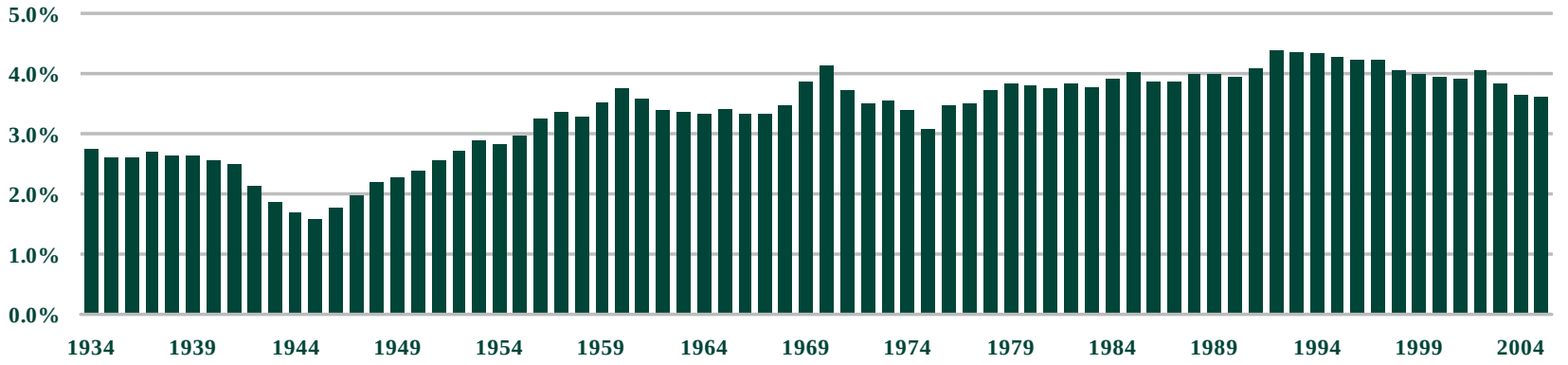
Note: Lighter-shaded bars indicate year when discount rate (1925-54) and fed funds target (1955-present) ended the year higher than where it began.
Source: Lehman Brothers, Baseline, DRI, FactSet, Bloomberg, and Standard & Poor's.

The Equity Market Seems to Accurately Reflect the Tangible Nature of NIM Performance in a Flat Curve Environment… However, the Nature of the Banking System over the Past 5 to 10 Years Has Changed Such That This Correlation Should Still Hold, yet More Loosely Than in the Past… *NIM's Have Been Contracting, Regardless of the Curve Paradigm over Prior Years. More Performance Is Now Driven from Fee Income…*

Net Interest Margin vs. 5-Year/13-Week Interest Spread



Net Interest Margin, 1934 – 1H05



Source: Company reports, Lehman Brothers, FDIC, Federal Reserve and Baseline.

The Consolidation of the Banking Sector Has Clearly Been a Primary Driver of This Evolutionary Change…

Top 25 Banks by Market Capitalization, 1990 and 2005

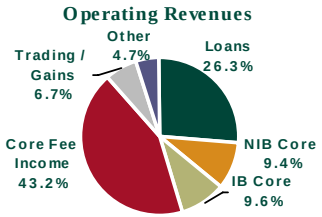
1990			2005		
Rank	**Company**	**Market Cap**	**Rank**	**Company**	**Market Cap**
1	~~J.P. Morgan & Co.~~	$8,238	1	Citigroup	$241,689
2	~~BankAmerica~~	$5,654	2	Bank of America	$184,586
3	~~Bank One Corp.~~	$4,408	3	JPMorgan Chase	$138,387
4	~~Citicorp~~	$4,248	4	Wells Fargo	$105,403
5	~~Bankers Trust NY Corp.~~	$3,510	5	Wachovia	$82,303
6	~~Wells Fargo~~	$2,977	6	U.S. Bancorp	$54,250
7	~~First Wachovia~~	$2,918	7	SunTrust Banks	$26,338
8	SunTrust Banks	$2,885	8	Bank of New York	$24,567
9	~~Security Pacific~~	$2,572	9	BB&T Corporation	$22,761
10	~~NBD Bancorp~~	$2,407	10	Fifth Third Bancorp	$20,958
11	NCNB Corp.	$2,353	11	National City	$20,647
12	~~C&S/Sovran Corp.~~	$2,106	12	State Street	$18,496
13	Norwest Corp.	$2,100	13	PNC Financial	$18,116
14	PNC Financial Corp.	$2,066	14	Regions Financial	$15,589
15	National City Corp.	$1,878	15	Mellon Financial	$14,230
16	~~CoreStates Financial~~	$1,725	16	KeyCorp	$13,390
17	~~Republic New York~~	$1,703	17	North Fork Bancorp	$12,778
18	First Union	$1,679	18	M&T Bank Corp	$12,231
19	~~Manufactures Hanover~~	$1,546	19	Northern Trust	$11,303
20	~~First Interstate~~	$1,461	20	Marshall & Ilsley	$10,132
21	~~Chase Manhattan~~	$1,383	21	UnionBanCal	$9,910
22	Fifth Third	$1,300	22	Comerica Inc	$9,246
23	The Bank of New York	$1,231	23	AmSouth Bancorp	$9,123
24	~~U.S. Bancorp~~	$1,222	24	Synovus Financial	$8,444
25	~~Fleet/Norstar Financial~~	$1,212	25	Zions Bancorporation	$7,945
	Average of Top 25	**$2,591**		**Average of Top 25**	**$43,713**

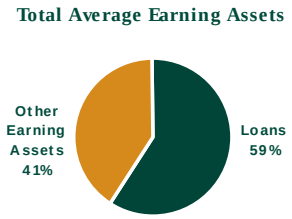
17x Larger

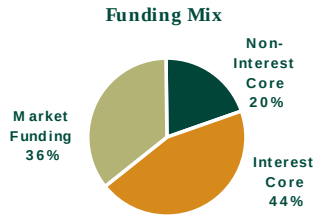
Source: SNL, Reuters, Lehman Brothers

It Is Too Simplistic to State the Shape of the Curve/Level of Rates Has One Unique Impact on the Banking System… There are Dramatic Structural Differences Between the Different Types and Sizes of Institutions… For Integrated Providers and Fiduciary Banks, Fee Income Is a Large Part of the Fee Pool, While Market Funding Is Critical for the Integrated Providers…

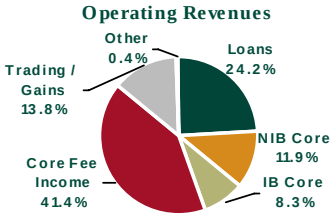
Aggregate Bank Universe

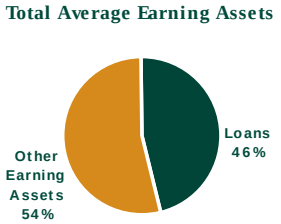


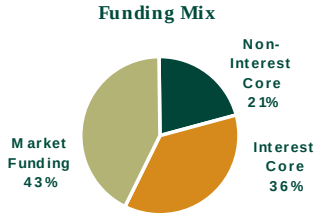




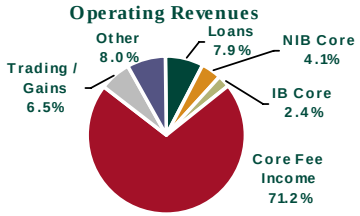
Integrated Providers

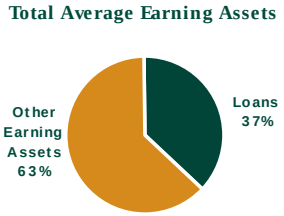


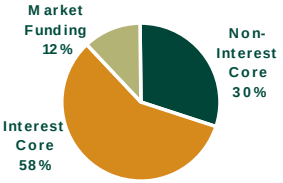




Fiduciary Banks





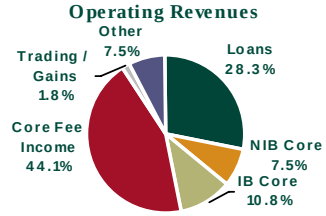


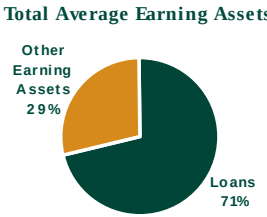
The drive to continue to grow fee income sources and offset the higher costs of market funding in a flat curve environment, result in a need to take on greater risk, expand out the Business platform and achieve scale to minimize costs… This is clearly taking place in the Banking System today…

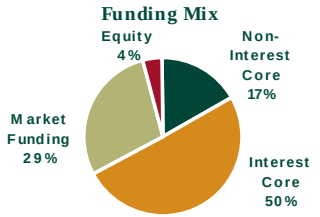
Source: Lehman Brothers & FactSet.

For Super Regionals, Mid Caps, and Small Caps, Loans Are a Very Large Portion of the Asset Mix… For Many of These, a High Level of Core Deposits Helps Stabilize the Rise in Yields in the Front-End as There Is Stickiness to Low Rate Deposits. *Yet, the Overall Flat Curve Requires a Need to Take on Additional Risk to Stabilize Potential NIM Compression…*

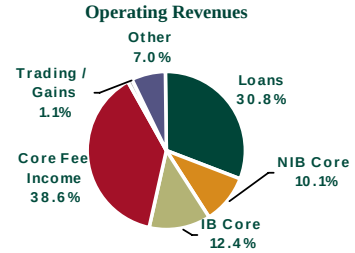
Super Regionals

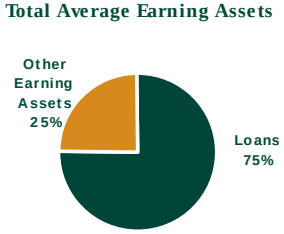


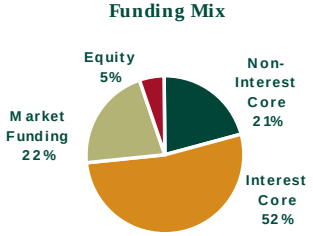




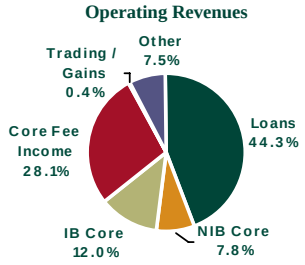
Mid-Cap Banks

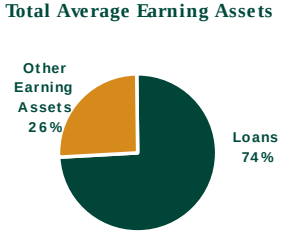


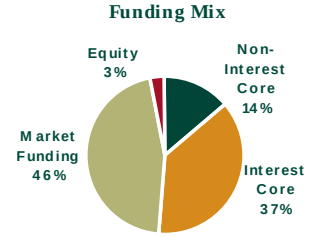




Small-Cap Banks (East Coast/Mid-Atlantic)





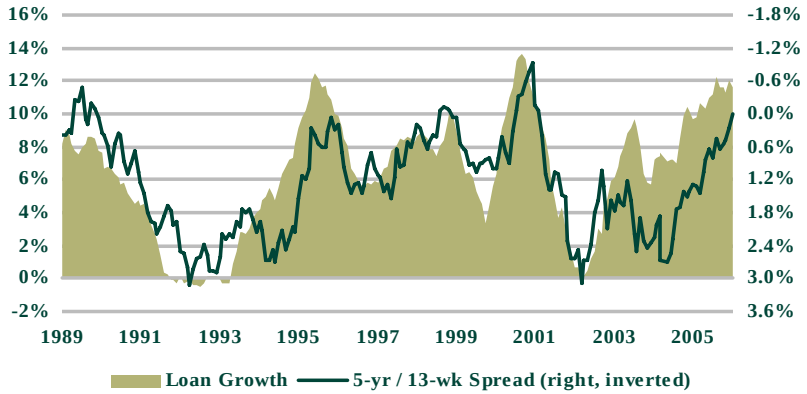


Source: Lehman Brothers & FactSet.

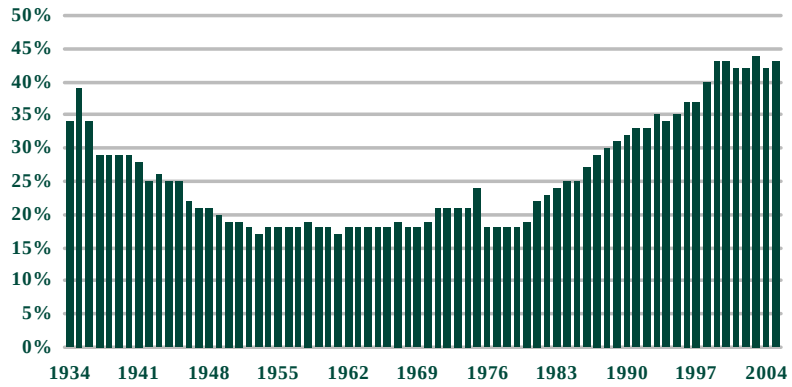
Historically However, Loan Growth Took Place Alongside of a Flattening Curve… Presumably, a Strong Economy Drove Loan Demand While the Fed Flattened the Curve to Restrain Economic Over-Heating…

- There is high correlation between loan growth and a flattening yield curve.
- Furthermore, in 2004, fee income represented over 42% of the industry's revenues. This compares to 18% in 1977. With fees now contributing 2.5x more to revenues, the industry is less reliant on net interest income.

Loan Growth vs. 5-Year/13-Week Interest Spread



Fee Income % Revenues, 1934 – 1H05

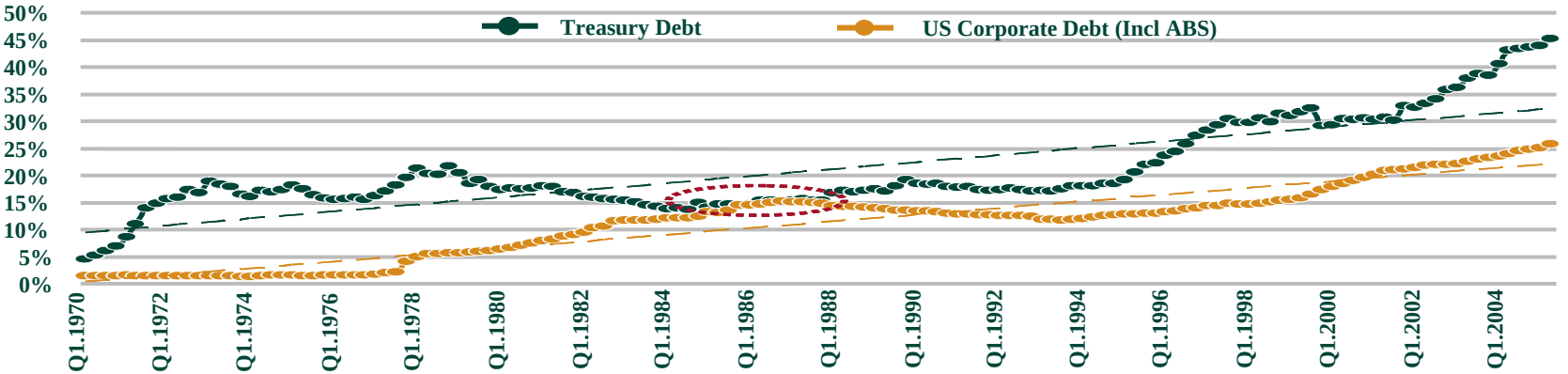


Today however, the flatness of the Curve is driven not by a robust economy or robust Corporate demand, it is driven by tremendous technical buying of long Treasuries… Hence, while loan demand is solid, more risk-taking is necessary to grow out the earnings asset base…

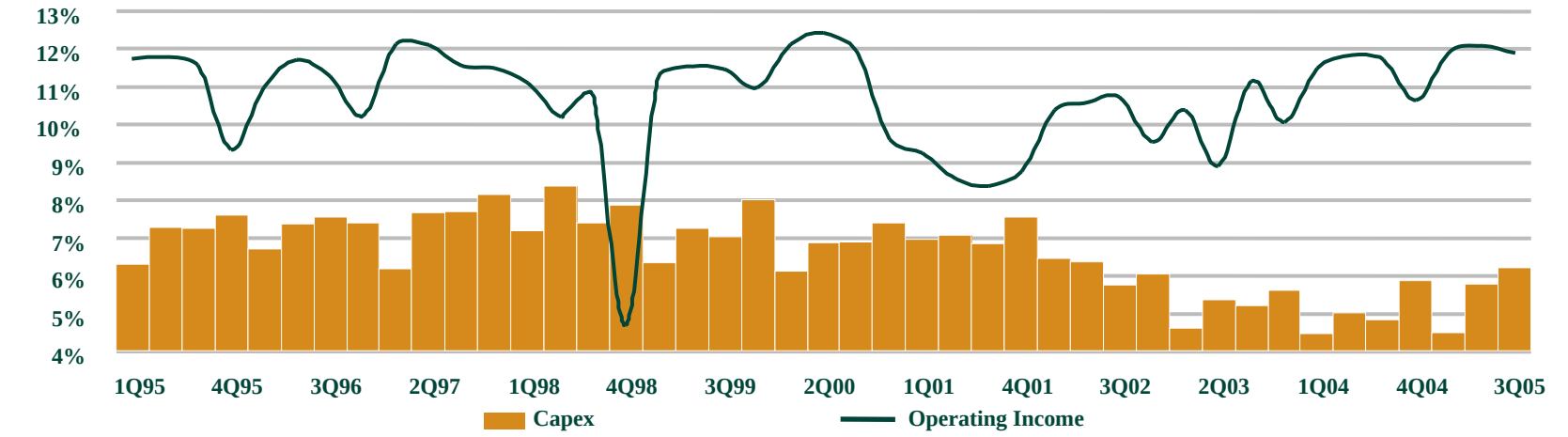
Source: Baseline, FDIC, Federal Reserve, and Lehman Brothers.

International Buying of Treasuries Has Kept the Long-End of the Curve at Low Levels… In Addition, Corporate Cap-Ex Growth Is Improving, but Not Enough to Create Robust C&I Loan Demand…

% of US Debt Held Overseas



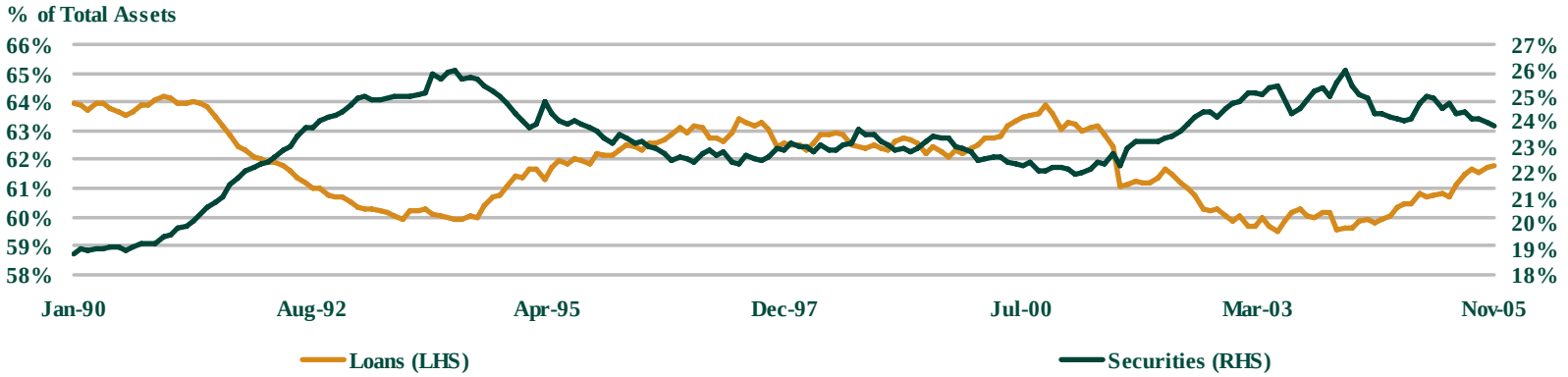
S&P 500 (Ex. Financials) – % of Revenues



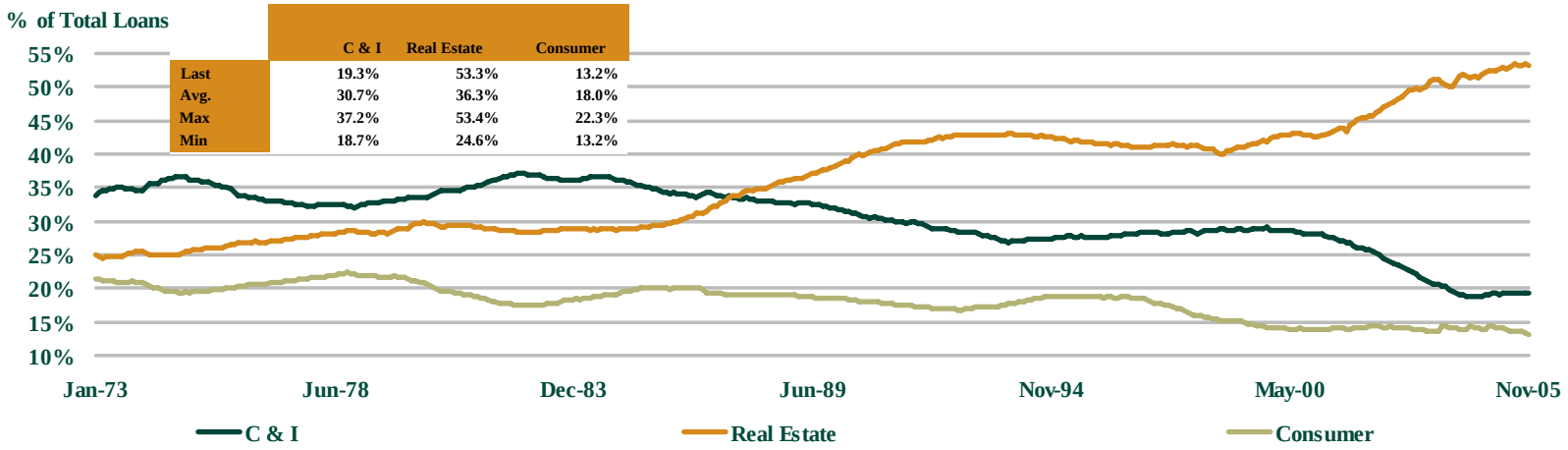
Source: Federal Reserve, Bloomberg, FactSet.

And the Dramatically Different Nature of Asset Accumulation over the Prior Years Has Created a Dynamic Whereby if Housing Slows, It Will Require Greater Leniency of Lending Standards (Higher Risk) to Maintain/Grow Earning Assets…

Proportion of Assets on the Balance Sheet of US Commercial Banks



Proportion of Loans on the Balance Sheet of US Commercial Banks



	C & I	Real Estate	Consumer
Last	19.3%	53.3%	13.2%
Avg.	30.7%	36.3%	18.0%
Max	37.2%	53.4%	22.3%
Min	18.7%	24.6%	13.2%

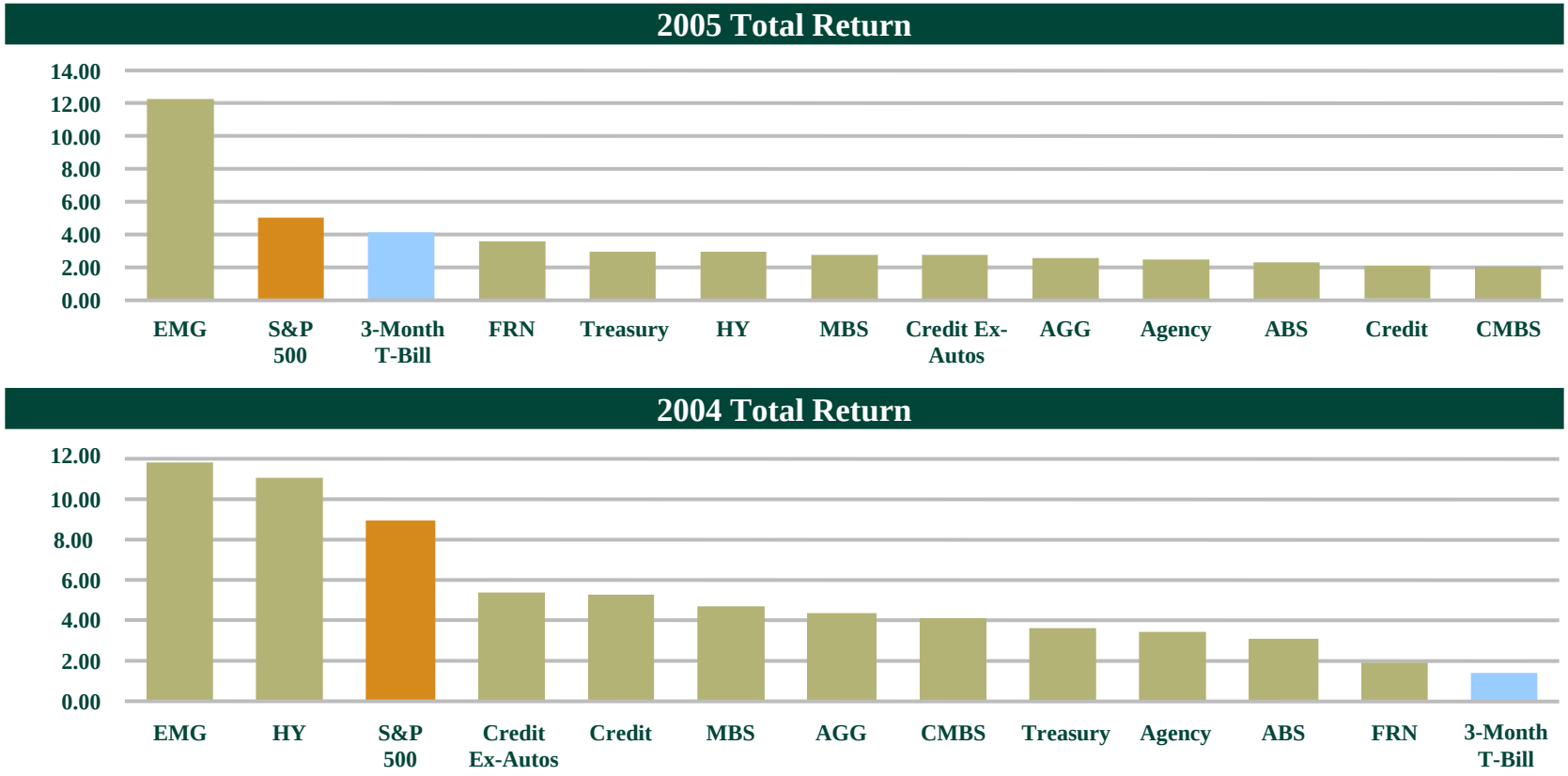
*Source: Federal Reserve. *Other Loans Not Included.*

This Is Not a Crisis Building… There Are Many Factors as to Why the Curve Is Influencing Activity… Yet, There Are Many Countervailing Factors Which Dull the Impact vs. Prior Cycles…

- **It is important to note the four factors below:**
  - Bank stock performance is much less correlated with the yield curve over the last 20 years relative to the prior 20 years
  - Loan growth, particularly C&I, tends to accelerate when the yield curve flattens, aiding net interest income
  - Net interest margins have declined in 9 of the past 13 quarters, 11 of the 12 years, and are at their lowest level since 1977 (more than 25 years), so margin compression is not a new phenomenon
  - Fee income represents more than 42% of the industry's revenues, compared with 18% in 1977. With fees now contributing 2.5x more to revenues, the industry is les reliant on yield curve-sensitive net interest income

Levered Money/Hedge Funds

In 2004, the Carry/Trade Was Very Lucrative for Levered Money… Low Rates, Especially at the Front-End, Allowed for Investment in Virtually All of the Fixed Income Asset Classes with a Positive Return Paradigm Very Much in Place…



In 2005 and 2006, the primary competitor to Levered Money investment and the primary impediment to positive carry positioning is "Cash."

The Flatter Curve Has a Profound Impact on the Fundamental Nature of Levered Money Business Models…

- Look at their investment choices to determine which risks they are trying given market opportunities
- Look at their incentive structure to determine their investment horizon

Plain Vanilla Capital Management Fundamental Investment Equation

- **Earn:**
  - {Risk Free Rate + FX risk + Liquidity Premia + Curve Premia + Option Premia + Default Premia} x (Leveraged Amount + Equity Capital)
- **Pay:**
  - Money Mkt rate x Leveraged Amount x FX
- **Return:**
  - (Earn-Pay x FX Move)/Equity Capital

Flatter Yield Curves Create Multiple Challenges for Levered Models… All Derivatives Are a Bet Against the Forwards, and When They Buy Bonds and Repo Them They Are Getting Long the Bond Forward… The Simplest Form of This and the Most 'Leverage-able' Is the Pure Treasury Carry Trade…

- Looking at a Carry Trade Example - Six Months Forward in different curve shapes and its effect on breakevens
  - Scenario A: Normal Curve (5's vs Bills is +30)
    - Buy 5yr UST @ 4.306% (99-24)
    - Carry = 12cents
    - 6 month Break Even Yield = 4.341% (+3.5bp)
  - Scenario B: Inverted Curve (5's vs Bills is -20)
    - Buy 5yr UST @ 4.306% (99-24)
    - Carry = -13cents
    - 6 month Break Even Yield = 4.279% (-2.7bp)
- You have cushion in a positive carry environment which allows for better risk reward trades

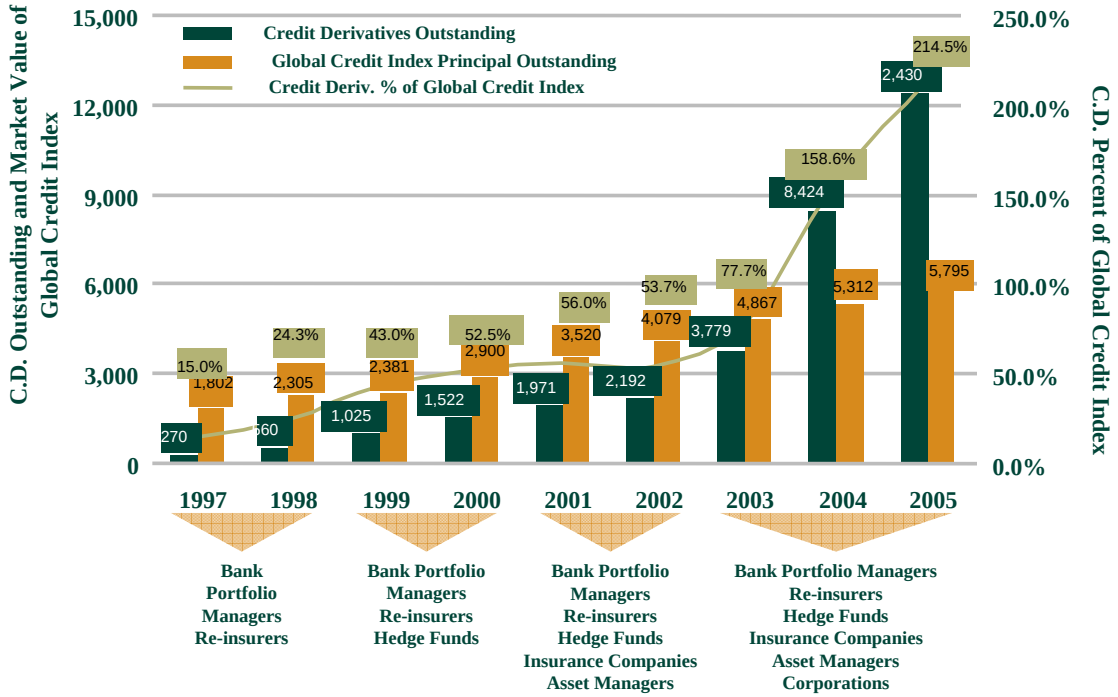
When You Incorporate Lack of Roll Down and Neg Carry It Becomes Pretty Scary

- Without the benefit of roll down you need 3bps of roll down to breakeven
  - Scenario A: 4's vs 5's is Pos 25bp
    - Buy 5yr UST @ 4.306% (99-24)
    - Roll down = +25bp
    - Unlevered Total Return = 5.2%
  - 100x Levered Return = 80% (assumes 4.4% Repo Rate)
  - Scenario B: 4's vs 5's is flat
    - Buy 5yr UST @ 4.306% (99-24)
    - Roll down = 0bp
    - Unlevered Total Return = 4.3%
    - 100x Levered Return = -10% (assumes 4.4% Repo Rate)
  - Scenario C: 4's vs 5's is Neg 25bp
    - Buy 5yr UST @ 4.306% (99-24)
    - Roll down = -25bp
    - Unlevered Total Return = 3.4%
    - 100x Total Return = -100% (assumes 4.4% Repo Rate)

So, What Do You Do???

- Adapt the Business Profile to this Environment… Take on new risks (more risk?)
  - Structured risk (More Derivative Usage)
  - Higher Yielding Asset classes – Emerging Market Investments, Middle-Market Lending, Distressed Securities, Private Equity, LBO Funding, Special Situations/Opportunistic…

Global Credit Derivatives Outstanding ($ Billions)
as a Percentage of Global Credit Index Principal Outstanding



This dynamic continues into ’06….
The flatness of the curve has profound implications for these concepts…

Source: ISDA, Lehman Brothers.

Conclusions

GDP & The Housing Market/Consumer

- The strength of the relationship between the Yield Curve & GDP are breaking down
- However, the flat yield curve is reflective of market participants confidence in the Fed's ability to reign in long term inflation
- The absolute level of interest rates impact the "affordability" of housing
- Historically, the shape of the curve has dictated where housing is financed. During a flat curve environment, 30 year mortgages will see greater volume as the "cost of extension is cheaper"
- Today's hybrid mortgage products (highlighted earlier) along with the absolute level of interest rates has created abnormal short end mortgage financing
- This could cause consumer default risk in 2007 to unusually spike higher in a period of relatively strong GDP growth and low unemployment

Insurance Companies

- Today's low yields, flat curve, and tight credit spreads are a challenging environment for Insurers
- The long duration nature of Whole Life Insurance and Fixed Annuity sales becomes disintermediated by higher-return/short-duration savings products like bank CD's
- And the front end of the curve rising simply compounds the negative sales picture for Traditional Life and Fixed Annuity products which offer a smaller (if any) incremental yield play compared with short-duration alternatives
- Given that reinvestment yields have forced down spreads on fixed-rate products, the industry has responded by lowering crediting rates on its products to partially offset the decline in portfolio yield
- The income statement impact is straightforward, lower sales (volume) and contracting product spreads (margins) will negatively affect earnings…
- Hitting yield bogies are becoming tougher and tougher, consequently Insurance companies are using more structured credit products as a means to satisfy their end
- Clearly regulation curtails their risk appetite, but in a sustained flat curve environment where risky asset classes continue (on the margin) to do well, they will continue to test their risk tolerance within their (regulation & rating agency) boundaries

Banks

- The Yield Curve does matter
- However, it matters less today
- The decline in NIM's are both secular (competition in a historically low loan growth environment) & cyclical (Yield Curve)
- Consequently, the Industry has used its Balance Sheet in the Bond Markets
- Clearly Small Cap Banks have a higher sensitivity to loans and a lower sensitivity to fee income compared to their larger counterparts
- This will drive more consolidation in the banking sector which could have implications for Corporate as well as Consumer lending

Levered Money

- The Yield Curve can dictate the level of risk/reward appetite
- A steeper curve can present a utopian environment for hedge funds
- In this scenario, Equity markets (traditionally) do poorly, Credit spreads are wider, and market volatility is higher
- This tends to cause large asset mis-pricing, creating opportunities in two related ways:
  - It's easier for them to profit in volatile markets
  - It's easier for them to raise capital/retain existing funds
- Consequently, a flat yield curve is a tougher environment for the opposite reasons to the former
- Risk appetites will grow and stay high in a flat curve environment