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Done Shopping – Structural Shifts in the US Retail Sector and Their Implications for Real Estate Investment

Report Contents

Executive Summary

With the economy now showing the first positive, if tentative, signs of a bottoming, retailers and shopping center owners could be forgiven for wanting to believe that their current pain reflects mostly cyclical weakness – albeit more profound than typical – and that the sector will resume its former strong growth once consumers regain their footing. But the ongoing economic meltdown masks more enduring structural changes that are transforming the retail landscape.

Once economic recovery is in full swing, retail sales growth is likely to be just half of that achieved in recent years. Meanwhile, fewer retail chains will be expanding, and many will continue recent downsizing of both store counts and sizes. The sector, therefore, will comprise fewer retailers and less retail space than exists currently. As a result, rent increases will be lower than what shopping center owners have grown to expect, while vacancies will be higher – and many existing centers will be forced to close for lack of tenants and shopper support.

Not all is bleak, however. Under almost any conceivable scenario, both the economy and population will grow faster in the US than in any other major industrialized nation, supporting renewed retail spending growth. Together with faster rates of asset obsolescence of retail space relative to other property types, this spending will support *some* new development. Nonetheless, developers and property owners face the prospect of much slower – and different – growth patterns relative to those in recent years.

Key Conclusions

- Consumer spending, once it resumes full growth around 2011, will expand at only half the rate of recent years without the prop of rapidly rising household wealth boosted by the housing boom and the stock market rally earlier in the decade.
- Retail sales growth also will moderate due to demographic shifts to age cohorts that spend relatively less, and shifts to income groups who spend less of their incomes on discretionary retail goods. Higher taxes and greater shares of household budgets going to non-retail spending are also likely in the offing, further depressing retail sales.
- Fewer retailers will survive to fill the nation's shopping centers, the result of the economic downturn, reversal of retail over-expansion, and relentless competitive pressures to wean out underperforming concepts and operators. Retail chains also will be leasing less space per store as they seek more efficient formats, reversing longstanding trends toward ever-increasing store sizes.
- Near-term retail spending will swing away from luxury goods, especially home-oriented items, and focus more on everyday necessities, services and value-oriented discretionary spending. Discount retailers will benefit at the expense of full-price merchants.
- Shifts in the regional distribution and ethnic composition of future population growth portend further shifts in the location and nature of retail demand, providing new development and repositioning opportunities, as well as challenges to existing centers.

The result will be a growing divide between retail's winners and losers. Truly dominant centers should thrive at the expense of those with inferior locations and tenant mixes. The downstream impact will be a wave of shopping center closures, mirroring the shakeout among the national retail chains. The nation's most oversupplied markets will be especially vulnerable. With chain stores the primary source of tenancy for shopping centers, and tenant losses concentrated in the weakest centers, a failure of 10% of retail centers in the near term appears possible.

Prepared By:

Andrew J. Nelson
Vice President
RREEF Research
San Francisco
USA
(415) 262-7735
andrewj.nelson@rreef.com

Alex Symes
Economic Analyst
RREEF Research
San Francisco
USA
(415) 262-7746
alex.symes@rreef.com

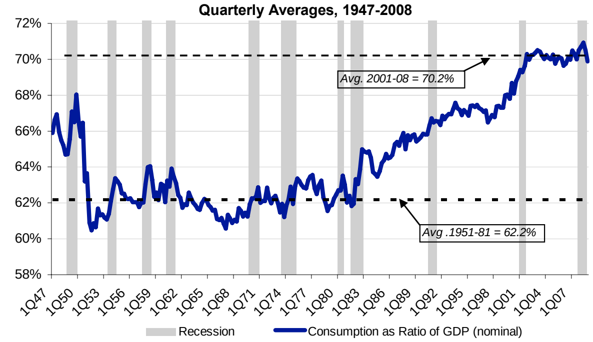
Introduction: A Retail Economy?

Retailers are being battered by the economic downturn, as consumers dramatically dial back their spending in the face of plummeting household wealth, income, and confidence. Moreover, with the consumer sector accounting for over two thirds of US GDP, the plunge in consumption has accentuated a nasty spiral of declining economic activity, further undermining consumer strength and ultimately spending. Job losses, estimated to peak at over seven million by mid-2010, are having a significant effect on consumer confidence and spending. These impacts are being felt forcefully at the nation's shopping centers, where vacancies are surging to levels not seen in a generation, while rents are falling – and conditions continue to deteriorate.

With the economy now showing the first positive, if tentative, signs of a bottoming in the next six to 12 months, the temptation is to believe that the current pain in retail real estate markets reflects mostly an unusually strong cyclical weakness, but that market conditions will revert to their old form once the economy stabilizes and consumers regain their footing – with strong, even vigorous, growth in consumer spending and retailer expansions. However, underlying the economic meltdown are more enduring structural changes that are transforming the retail sector, starting with consumers.

One of the hallmarks of recent US economic history – in addition to the explosive growth in asset values, especially home prices – was the rise of the consumer sector, which grew well above historical norms. The consumer sector – that is, spending by households on retail goods and services, as well as rent, transportation and health care, but excluding new home purchases – accounted for 62% of the nation's economic activity for the 30-year period from 1951 through 1981 (Exhibit 1). This share began to rise in the early 1980s, with the shift toward smaller government, lower taxes and increased discretionary income. The consumer portion of the economy rose steadily to about 70% in late 2001, where it stabilized through at least the end of 2008, at the highest share of any major economy in modern economic history.[1]

Exhibit 1
Consumption Share of GDP
Quarterly Averages, 1947-2008



Sources: Bureau of Economic Analysis and RREEF Research

During much of this period, retail spending growth also was strong. As shown in Exhibit 2 (next page), retail sales grew steadily over the past 40+ years. In the housing bubble years from late 2002 to third quarter 2008, nominal retail sales (excluding motor vehicles and parts) jumped 40%, at an average annualized rate of almost 6%.

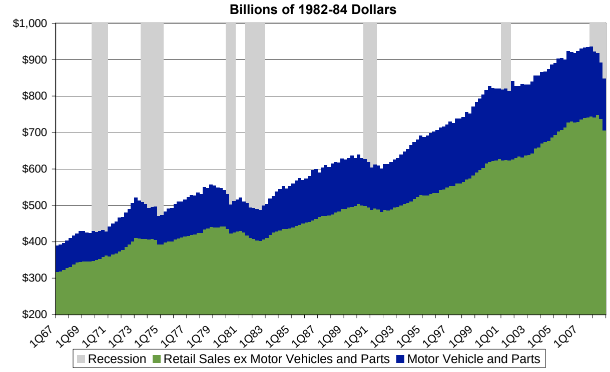
Much of this recent retail growth has been attributed to the explosive rise in home values, as homeowners leveraged their inflated home values to ramp up their spending, leading many commentators at the time to rightly question whether the accelerated consumer growth was sustainable. On a superficial level, retail spending and new home prices have been closely connected, rising more or less in tandem going back at least as far as 1968, though the link with existing home prices is somewhat weaker, as shown in Exhibit 3.

Since retail spending traditionally has been a key driver of the US's economic growth, many economists have shown concern about the strength of the eventual economic recovery, as

[1] Stephen S. Roach, "Dying of Consumption," Morgan Stanley, November 28, 2008.

retail spending reverts to more sustainable levels.[2] With housing appreciation inevitably going to be more modest for some time, the question is what will replace housing as the source of consumer strength. However, much of this discussion about recent retail trends and their link to the housing bubble reflects incomplete or distorted views of recent industry history.

Exhibit 2
Quarterly Retail Sales, 1967-2008
Billions of 1982-84 Dollars

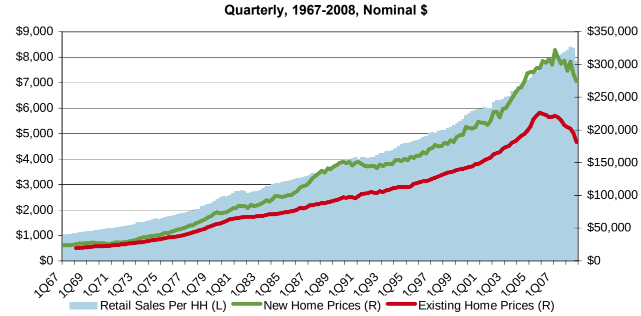


Sources: US. Census Bureau, Bureau of Labor Statistics, and RREEF Research

To begin with, retail sales growth during the housing boom, while substantial, was actually broadly typical of growth patterns during other recent economic expansions. For example, *nominal* retail sales grew at a 5.9% compounded annual growth rate (CAGR) during 2002-08 housing boom, almost identical to the 5.7% CAGR during the preceding decade (fourth quarter 1992 to second quarter 2002) – a period that included two brief recessions – while *real* retail sales grew at a 3.1% CAGR, compared to only 2.8% during the 2002-08 housing bubble. In fact, real retail spending including motor vehicles actually grew at about the same rate during the housing bubble as during the preceding four decades.

More importantly, retail sales growth in the last several decades has actually lagged GDP growth and other economic drivers. As shown in Exhibit 4 (next page), retail spending grew in lockstep with GDP from 1967-1981, but since then has generally grown more slowly.

Exhibit 3
Retail Sales* per Household vs. Home Prices
Quarterly, 1967-2008, Nominal $

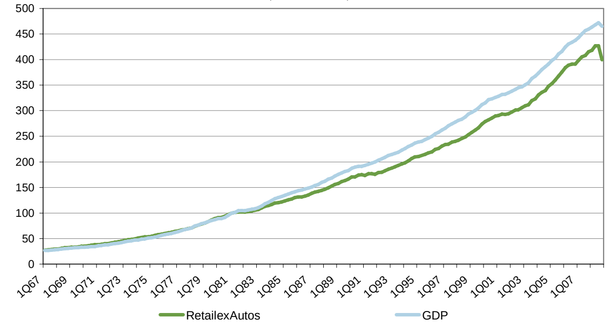


Sources : US Census Bureau, National Association of Realtors and RREEF Research

** Retail sales excluding motor vehicles.*

[2] For example, "What Lies Ahead for the U.S. Economy in 2006," Knowledge @ Wharton, February 2006.

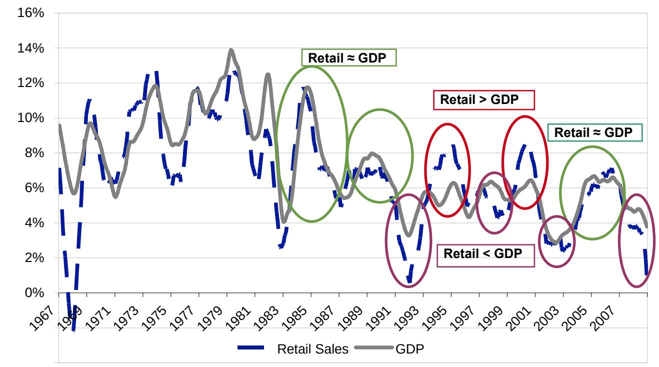
Exhibit 4
Growth in Non-Auto Retail Sales* vs. GDP
Nominal $, 1967-2008, 1981 = 100



Sources: US Census Bureau, Bureau of Economic Analysis and RREEF Research

As shown in Exhibit 5, retail sales growth has exceeded GDP growth for some short periods, but in most years, retail has lagged or grown in line with the rest of the economy. Even in the recent overheated consumer-driven economic expansion, retail sales only kept pace with total national output. Overall, GDP rose 16% more than retail spending since 1981.

Exhibit 5
Nominal Retail Sales and GDP Change
12-Month Moving Average, 1967-2008



Sources: Bureau of Economic Analysis and RREEF Research

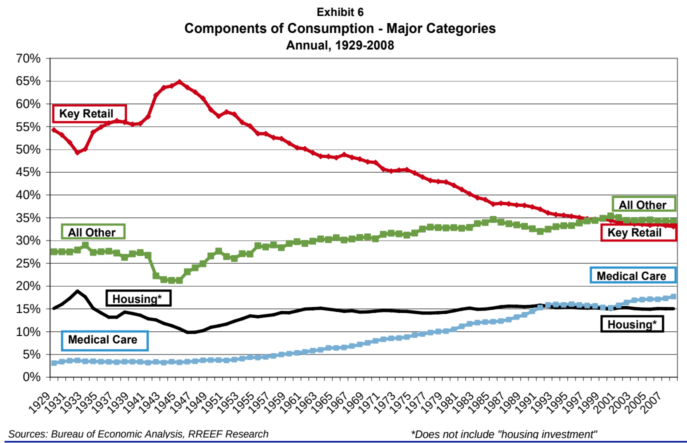
Moreover, retail spending is not primarily responsible for the growth of the consumer sector, which also includes outlays for items such as rent, medical care and travel. As shown in Exhibit 6 (next page), retail's share of total consumer outlays peaked at the end of World War II, and has been declining steadily ever since, from almost 63% of consumer spending in 1945 to less than 31% in 2008.[3] By far the biggest consumer growth category has been medical care, rising from only 3% of household budgets to almost 18% over this period.

Similarly, retail spending has been declining as a share of GDP. When the government began tracking monthly retail sales in 1965, retail accounted for virtually two thirds (66%) of all household spending and more than 40% of GDP (Exhibit 7, next page).[4] These figures declined to only 42% and 30%, respectively, by the end of 2008.

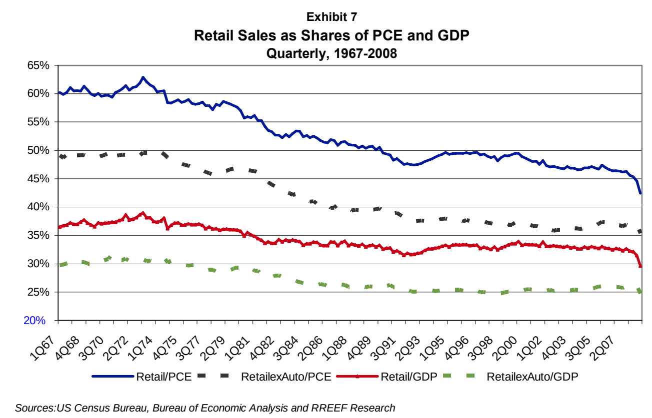
In sum, retail spending was *not* unusually strong in recent years, despite the surge in household wealth, and favorable trends on almost every factor that contributes to strong retail sales growth: economic (e.g., income growth and distribution); demographic (the extent and type of population growth); and sociological (consumption/saving rates and consumer confidence); as well as financial (wealth creation and credit expansion).

[3] For this analysis, retail spending is defined to include all durable goods *except motor vehicles*, and all nondurable goods (e.g., food, apparel) *excluding gasoline*, and personal care services (e.g., barbers and nail salons), in order to focus on the retail spending transacted at shopping centers.

[4] These figures include all auto-related purchases, which were excluded from the prior chart.



With these conditions almost certain to be less favorable for at least the near future, even once the economic recovery begins in earnest, retail sales growth will suffer as a result. Thus, rather than reverting to robust growth, the retail sector is likely to experience a prolonged period of modest retail sales growth. Changes in each of these drivers of retail sales growth are discussed below.



Demographic Growth

Demographic shifts and trends have profound impacts on retail spending and will have a considerable impact on future patterns and levels of spending. In sharp contrast to most other major industrialized nations, the US population continues to grow strongly. Fueled by both high birth and net in-migration rates, this population growth is anticipated to continue into the foreseeable future. The US Census Bureau forecasts the population will grow by more than 8% during each of the next two decades, adding some 27 million residents each decade. By contrast, Europe will grow less than 3% over the next decade, and by barely 1% the following decade, due to both lower birth rates and much less in-migration.[5]

More than any other factor, this population growth will support continued development of new retail space. Currently the US has about 23.1 square feet of shopping center space per capita, which accounts for about half of all retail space in the country.[6] Population growth alone would seem to imply the need for some 22 million square feet of shopping center space annually, in addition to the need to periodically replace or update obsolete centers over time.

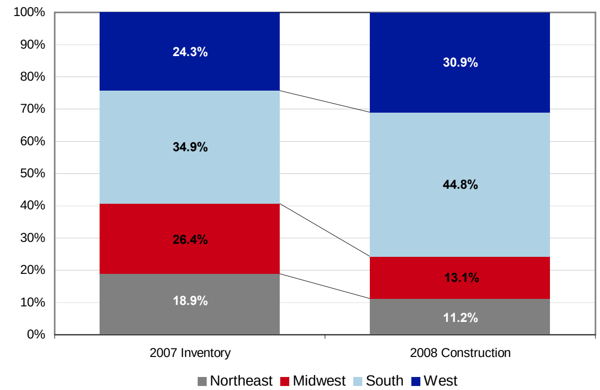
5 US population data compiled from the US Bureau of the Census. European data is from Eurostat, the official statistical source for the European Union.

6 Based on data from "US Retail Real Estate Industry: Size, Shape and Scope – The 2009 Industry Census," *Retail Real Estate Business Conditions*, Vol. 6, No. 9, April 17, 2009, ICSC Research.

Not all regions or metros in the country are growing at the same rate, however. Of the 27 million people projected to be added to the US population over the next decade, virtually three quarters (74%), or about 20 million people, will be concentrated in only 10 states, all of which are situated in South or West. The Northeast and Midwest are projected to add only 3.4 million residents over the next decade, a rise of less than 4.5%, while the South and West will add 23.5 million, increasing by almost 14%. Of course, even slow-growth regions will have metros and submarkets that outperform. But in the main, support for net additional retail space will be highly focused on the southern and western states.

This trend has not been ignored by developers. As shown in Exhibit 8, the faster-growing Southern and Western regions account for a disproportionate share of recent building, based on data for the top 63 metropolitan areas tracked by CoStar.

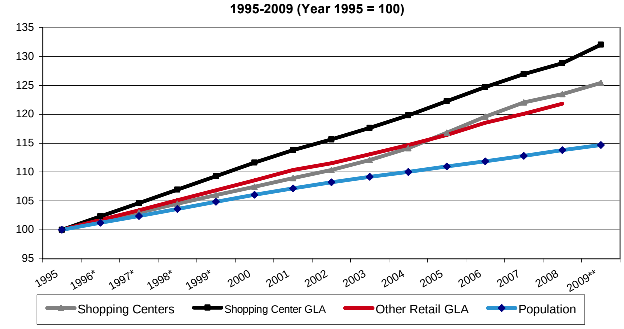
Exhibit 8
US Retail Stock vs. Construction by Region



Sources: CoStar Group and RREEF Research

The problem is, developers have been adding to supply well in excess of population growth. Since 1995, the number of shopping centers in the country jumped more than 23%, and the total gross leasable area (GLA) almost 30%, while the population grew less than 14%, as shown in Exhibit 9. Thus, shopping center space grew at more than twice the rate of population growth for more than a decade.

Exhibit 9
Shopping Center and Retail Space vs. Population Growth
1995-2009 (Year 1995 = 100)



Sources: CoStar Group, ICSC, US Census Bureau, and RREEF Research

** Extrapolated*
*** Other Retail N/A in 2009*

The 23.1 square feet of shopping center space per capita in the US is up 18% from 19.6 square feet in 1995. By sharp contrast, the amount of shopping center space in Europe is only 2.4 square feet per capita – less than one tenth the amount in the US – and the top European country (Sweden) has only 7.5 square feet per capita.[7] There are a host of historical, geographic and cultural factors (and perhaps measurement issues) for the differences between Europe and the US, and no necessary reason the two regions should be equivalent.

[7] *The Importance of Shopping Centres to the European Economy*, the European Shopping Centre Trust and ICSC Europe, March 2008.

Still, it is worth considering that *the US added more shopping center space per capita since 1995 (3.6 square feet) than the entire per-capita inventory in Europe (2.4 square feet)*. This comparison, together with the divergence between supply and population growth, suggests, at a minimum, that recent growth rates in retail development are not sustainable.

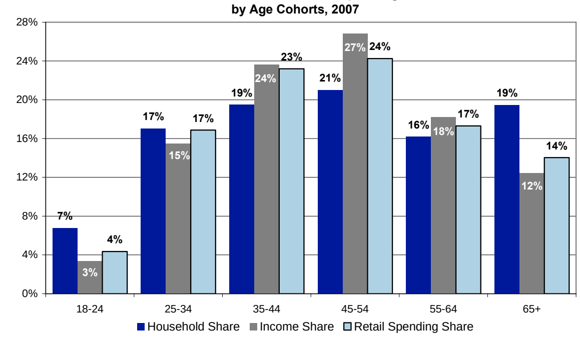
Underlying these growth patterns are less visible demographic shifts that have equally significant implications for retailers and shopping center owners alike. These include shifts in the age distribution away from higher-spending to lower-spending age cohorts, and a shift in income shares from wealthier to less affluent households.

Baby Boomers Start to Retire

Consumers alter their consumption patterns over their lifetimes based on their incomes and needs. Younger households tend to have limited income but considerable needs. Households tend to purchase more items as they age, generally commensurate with their incomes, which tend to peak in late middle age. Finally, older households and retirees begin reducing their expenditures, as they have already accumulated most of their necessities, especially longer-lived items such as furniture.

These generational patterns are outlined in Exhibit 10. As shown, households headed by someone under 25 years of age account for 7% of all households, but only 3% of income and 4% of retail spending. Similarly, seniors head 19% of households, but account for only 12% of income and 14% of retail spending (drawing on retirement savings to fund the difference between income and spending shares). By contrast, households headed by someone between 35 and 44 years of age also account for 19% of households, but 24% of income and 23% of retail spending. Similarly, those aged 45 to 54 also account for an above average share of income and spending. In other words, middle-aged households account for a disproportionate share of retail spending relative to young and older households.[8]

Exihibit 10
Household, Income, and Retail Spending Shares
by Age Cohorts, 2007



Sources: US Census Bureau; Bureau of Labor Statistics; and RREEF Research

The unfortunate news for the retail sector is that while the past decade was marked by a period of unusually strong growth of households in their prime earning and spending years (late middle age), future decades will see most of the growth concentrated in the (older) age groups with less income and lower rates of spending. In 2000, those born at the mid-point of the baby boom turned 45, the heart of peak earning years, which are generally between ages 35 and 55. This demographic growth drove retail spending as the large baby-boom cohort began earning more income and accumulating wealth. But now these consumers are nearing the end of their peak earning years and are beginning to retire. As they age, baby boomers will have decreased needs for retail goods and will be conserving more cash as they retire.

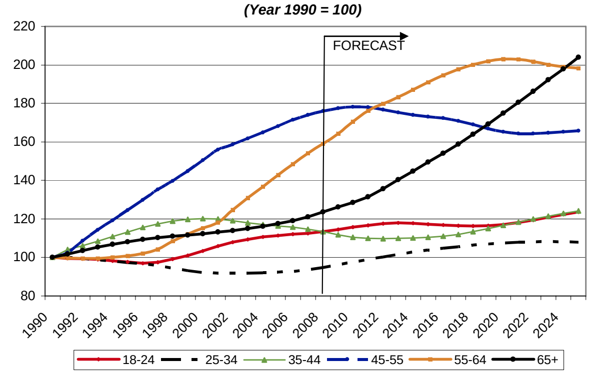
In their place is "Generation X," the baby bust cohort that followed the baby boom, which is now entering its peak earning years over the coming decade. Given their greatly diminished numbers, they cannot replace the retail sales of the baby boomers. Assuming each generation

[8] This analysis draws largely on data from the US Bureau of Labor Statistics, "*Consumer Expenditure Survey – 2007*."

spends similarly to their predecessors, we can expect slower retail spending growth in future years, quite apart from the end of other recent economic conditions that fueled retail spending.

The baby-boom generation refers to people born in the almost 20 years after the end of World War II from 1946 through 1964. As shown in Exhibit 11, the fastest-growing cohort during the past decade of rapid retail sales growth was the age 45-54 cohort (the middle of the baby boom generation), followed by the next older cohort aged 55 to 64 – the two highest-spending cohorts. The younger cohort from 34-44 (the youngest boomers) – also a high-spending cohort – is third in its contribution to population growth during the past decade. By contrast, Generation X, those aged 25 to 34, have been the smallest population cohort.

Exhibit 11
US Adult Population by Age Cohort, 1990-2025
(Year 1990 = 100)

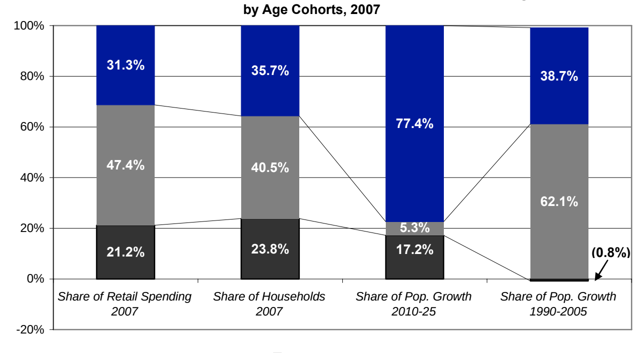


Sources: Bureau of Census; Moody's Economy.com; and RREEF Research

During the next decade, with the natural aging of the baby boomers, the population is shifting to older demographics. Seniors (aged 65 and above) will be growing at an escalating rate, while households headed by someone in their prime-earning/spending years will be growing at a reduced rate.

As shown in Exhibit 12, the high-spending cohorts aged 35-54 (which spends disproportionate to its population share), will account for only 5% of the population growth from 2010-25, whereas the lower-spending population aged 55 and over (which spends less than its population share), will account for more than three quarters of the population growth. In sum, the high-spending age cohorts are barely growing, while the lower-spending cohorts are growing rapidly. This pattern is in sharp contrast to recent years, when the high-spending cohorts accounted for 62% of the population between 1990 and 2005, while the older cohorts accounted for only 39% of the growth.

Exhibit 12
Share of Households, Population Growth and Retail Spending
by Age Cohorts, 2007

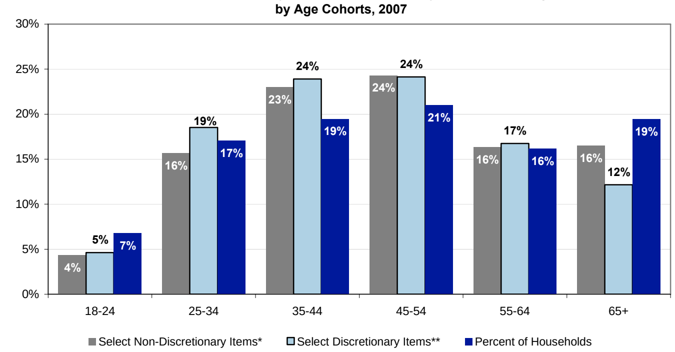


Sources: Bureau of Census, Bureau of Labor Statistics and RREEF Research

Thus, forecasted strong national population growth will yield less retail spending increases than was supported in prior years. *We estimate that this factor alone will reduce retail spending growth by more than 10%* relative to the spending that would be supported if the components of population remained the same as during the recent past.

Moreover, older consumers have different spending patterns, with more of their dollars allocated to basic staples, such as groceries and personal-care items, and less to discretionary spending such as apparel and home furnishings; younger households tend to devote relatively more of their budgets to capital goods such as furniture, as shown in Exhibit 13. With older households projected to significantly outpace younger households in the coming decades, this trend heralds a shift away from discretionary items to more everyday staples.

Exhibit 13
Share of Discretionary vs. Non-Discretionary Retail Spending by Age Cohorts, 2007



** Includes Food at Home and Personal Care items only*
*** Includes Apparel, Food away from Home, Audi/Visual Equipment, and Household Furnishings/Equipment*
Sources: Bureau of Census; Bureau of Labor Statistics; Moody's Economy.com; RREEF Research

A related demographic issue concerns the flattening of household formation rates. The number of persons per household in the US fell for over a century. There were an average of 4.6 persons per household in 1900, falling to 3.4 persons in the 1950s; by 2000, the number had fallen to about 2.6, where it has remained. The Census Bureau does not expect further declines, at least in the near future.

Many home-related purchases – furniture, housewares, garden supplies – depend more on household growth than population growth (though they are obviously closely related), as purchasing decisions for these items tend to be based more on household creation rather than population growth per se. The retail industry benefited from the decades of rising household formation rates, but this factor will no longer boost retail sales.

Ethnicity and Retail Sales

Just as different age cohorts are growing or declining at different rates, the racial composition of the population is changing as well, as some ethnic groups are growing much faster than others, with important implications for the retail industry. As shown in Exhibit 14 (next page), Whites accounted for more than two thirds of the US population in the last census, but will account for barely one fifth of the forecasted population growth from 1995 to 2025, according to the last long-term ethnicity forecast undertaken by the Census Bureau.[9] By contrast, the three other major racial groups – Blacks, Asians, and especially Hispanics – are all growing far disproportionate to their current shares of the population. In the Northeast and West, Hispanics alone will account for more than half of all population growth in the region, despite having only one eighth of the nation's population.

[9] *Population Projections for States by Age, Sex, Race, and Hispanic Origin: 1995 to 2025*, US Bureau of the Census, October 1996.

Exhibit 14
Ethnic Composition of Population and Population Change

	Non-Hispanic					
	White	Black	Other/ Multiple	Asian	Hispanic	Total
US Population 2000	69.1%	12.1%	2.6%	3.7%	12.5%	100.0%
Population Growth 1995-2025						
U.S.	21.6%	16.5%	1.1%	16.5%	44.3%	100.0%
Northeast	(34.9%)	25.2%	0.5%	39.1%	70.1%	100.0%
Midwest	25.0%	25.4%	2.7%	15.5%	31.4%	100.0%
South	35.2%	25.8%	0.7%	6.1%	32.2%	100.0%
West	18.4%	3.1%	1.3%	22.8%	54.4%	100.0%

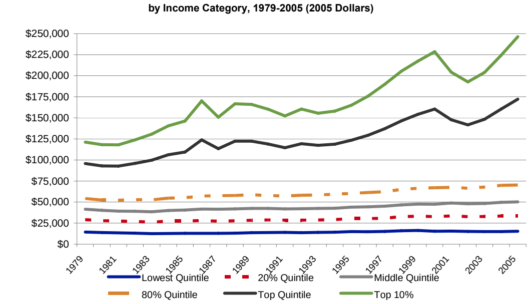
Sources: U.S. Bureau of the Census, Claritas, and RREEF Research

The significance for the retail industry is that ethnic population groups tend to reside in different submarkets, patronize different retailers, and purchase different products and services than those of the larger population. Relying on general population growth figures without considering the US's changing racial composition can be even more misleading than ignoring the changing age structure. Of course, many ethnic and immigrant groups assimilate over time, adopting the economic characteristics of the dominant culture and residing in neighborhoods still or formerly dominated by it. However, these social changes take time. In the meantime, developers and retailers would be deceived were they to ignore the ethnic composition of the population growth, nationally and within their trade areas.

Income Distribution

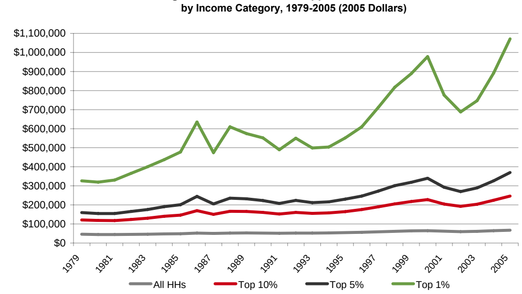
Another factor underlying growth and changes in the retail sector in recent decades has been the increase in income disparities. As shown in Exhibit 15, incomes at the lower end of the spectrum have grown much less over the past 30 years than have incomes at the upper end, in both dollar and percentage terms (Exhibit 15A). These differences have been especially pronounced since 2000, as the median household income has been essentially flat, while incomes in the most affluent households have surged (Exhibit 15B).

Exhibit 15A
Average After-Tax Income for All Households by Income Category, 1979-2005 (2005 Dollars)



Sources: Congressional Budget Office and RREEF Research

Exhibit 15B
Average After-Tax Income for Upper-Income Households by Income Category, 1979-2005 (2005 Dollars)

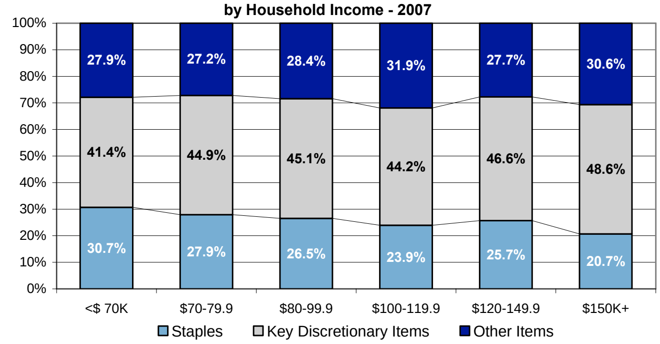


Sources: Congressional Budget Office and RREEF Research

These trends affect the retail sector as spending patterns (as well as levels) vary by the level of household affluence. Relative to lower-income groups, affluent households spend smaller shares of their income on essential staples and relatively more on discretionary items (Exhibit 16, next page). For households earning less than $70,000 annually, almost a third of their retail spending is allocated to essentials and 41% to discretionary items. But for households earning at least $150,000, the staples' share falls to only a fifth while the discretionary share rises to half.[10]

[10] Derived from the *Consumer Expenditure Survey – 2007* published by the Bureau of Labor Statistics.

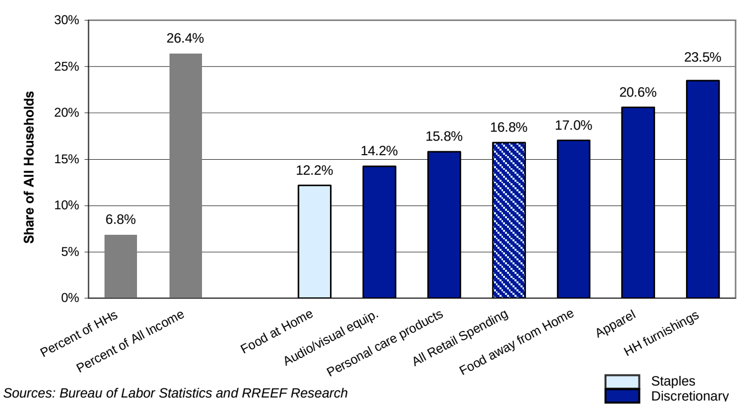
Exhibit 16
Share of Spending on Various Retail Categories
by Household Income - 2007



Sources: Bureau of Labor Statistics and RREEF Research

These spending patterns, in conjunction with the rising share of income going to America's wealthiest households, have tended to favor shopping centers that concentrate on comparison goods, like regional malls, over centers that sell more convenience items, like grocery-anchored neighborhood centers. Lifestyle centers, which are tenanted largely with apparel and home furnishing retailers, benefited more than any other type of shopping center. As shown in Exhibit 17, these mainstays of lifestyle centers appeal more to upper-income households than does any other retail category. Households with incomes of at least $150,000 annually account for 17% of all retail spending, but for almost 21% of apparel sales and more than 23% of home furnishing sales.

Exhibit 17
Shares of Spending by Households Earning $150,000+



Sources: Bureau of Labor Statistics and RREEF Research

Looking forward, the share of income going to upper-income households is likely to decline in the next decade, with far-reaching counter impacts on the retail sector. First, much of the recent jump in top incomes can be attributed to the unprecedented growth and profitability of the financial sector. Historically, financial firms accounted for 10% to 15% of total US corporate profits, but with the boom in securitizations and asset values, this share surged to 40% in the early years of this decade, leading to outsized compensation packages and capital gains for many in the industry. With the conditions that supported the financial bubble unlikely to be repeated anytime soon, incomes in this sector surely will be less generous for some time. Secondly, a growing populist and shareholder revolt against extravagant executive compensation also could rein in income at the upper end. Finally, coming tax law changes are likely to favor lower- and middle-class households over more affluent households, accentuating the redistribution of income shares away from the rich and near rich.

It would be a mistake to conclude that these trends will lead to higher spending among the greater population, however. It is true that upper-income households spend a smaller share of their incomes (the marginal propensity to consume generally declines with income) as they save and invest relatively more. For example, households earning less than $70,000 annually spend an average of 32% of their income on retail items, whereas households earning at least $150,000 spend only 15%; the average for all households is 23%. (And, as shown in Exhibit 17 above, the 7% of households earning $150,000+ control 26% of all income but only 17% of all retail spending.) Thus, in theory, the shift in income distributions away from this affluent group could support greater overall retail spending.

The problem with this line of reasoning is that the declining share of income at the top does not amount to an actual redistribution to the other classes, but only income lost at the high end. Much of the recent income generated in the financial sector resulted from financial engineering rather than value creation,[11] meaning the downstream benefits to the rest of the economy were neither real nor sustainable. Increasing the affluence of the lower- and middle-class households would require improving their productivity (and perhaps political clout) – conditions quite distinct from the factors considered here. As noted previously (and shown in Exhibit 15A), the median household income stagnated in recent years, while the lowest-income groups actually lost ground. The conditions for reversing these trends are not obvious.

The net result of the reduced income at the top, therefore, should be a shift in both the amount and nature of goods and services demanded in the marketplace. Relatively less of the retail pie will go to the luxury sector, and less will go to discretionary goods such as apparel and home furnishings. This is not to say that these sectors will wither and decline. Once the economy begins to turn, we might well see robust spending from affluent households who deferred their consumption well beyond their absolute economic needs. Nonetheless, the reduced high-end affluence should moderate longer-term growth in these sectors.

Accounting for Recent Retail Sales Growth

To gauge future conditions in the retail sector, it is essential to understand what has been driving sales growth in recent times and to evaluate how the underlying conditions may endure or change over time.

One of the popular media stories about consumer spending during the early years of this millennium is that households were using the home as an ATM – tapping home equity for retail spending through either equity extraction from their existing homes (refinancing or equity line of credit) or equity proceeds from home sales. In reality, the housing bubble did motivate additional retail spending, but retail sales growth was much slower than growth in housing values, immediately suggesting that the media storyline did not capture the essential dynamics. In fact, households increased their spending as least as much because they felt wealthy from rising home values and stock portfolios as because these inflating assets were generating income or credit that could be spent. That is, the *wealth effect* was at least as important as the *income effect*, which has important implications for retailing going forward.

Certainly, mortgage equity withdrawals (MEW) provided households with a major source of funding for spending, but most MEW did not go to retail sales, or even consumption, as homeowners tapped home equity for a variety of purposes as well, such as savings and home improvements, as discussed below.[12] Retail sales financed through equity extraction contributed to the growth in spending in the past decade, but much of the growth came from other sources, such as rising incomes and population growth. In addition, two factors associated with the wealth effect, increasing consumption rates (lower savings) and credit card usage, also contributed.

[11] See, for example: Kemal Dervis, ”Perspectives on the New Structure of the World Economy,” Annual Commencement Day Lecture of the Export-Import Bank of India, March 18, 2008.

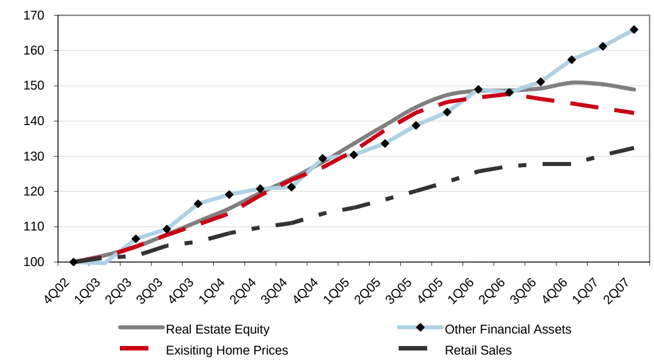
[12] See, for example, Andrew Benito and John Power, “Housing Equity and Consumption: Insights from the Survey of English Housing,” *Bank of England Quarterly Bulletin*, Autumn 2004, and Peter Hooper et al, “ Fall in Housing Markets Likely to Hit Consumption, Deutsche Bank Global Economic Perspective, 15 October 2007.

Note that the wealth effect, while well documented,[13] explains only consumer motivations, but not how consumers actually pay for the goods and services. As with consumer confidence, another important predictor of retail spending levels, the wealth effect cannot, by itself, actually fund consumer spending, which must come from one of the other income sources. In this section, we evaluate the relative importance of these sources, starting with an examination of the impact of rising home prices on retail spending.

Home-Fueled Retail Spending

To set the context, retail sales were not growing exceptionally fast during the housing boom relative to overall growth in the economy, as noted previously (Exhibits 4 through 7). Existing housing prices and homeowners' equity both grew much faster than consumption and retail sales during this period. The period of maximum equity growth occurred from fourth quarter 2002 through second quarter 2007. During this period, existing home prices grew by more than 42%, household real estate equity by almost 50%, and other household equity by almost two thirds. Yet, as shown in Exhibit 18, nominal retail sales increased by a more modest one third over this period.

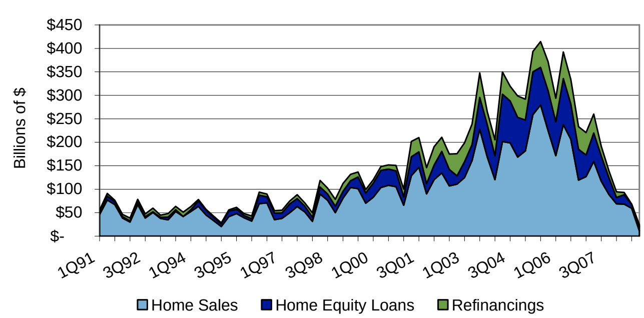
Exhibit 18
Household Equity vs. Retail Sales
4Q02-2Q07 (4Q02 = 100)



Sources: Federal Reserve Bank and RREEF Research

More importantly, with the maturing of the securitized mortgage market and rapidly rising housing prices, the rate of equity extraction exploded. MEWs had been averaging about $92 billion quarterly for the two decades beginning in 1991, and had not reached as much as $100 billion until 1998. But during the housing bubble, MEW averaged almost $300 billion quarterly, hitting an astonishing $415 billion in the fall of 2005, as shown in Exhibit 19. By far the biggest share was realized through home sales, but refinancings and home equity loans also were growing rapidly.

Exhibit 19
Mortgage Equity Withdrawls by Source
Billions of $, Quarterly 1Q91-4Q08



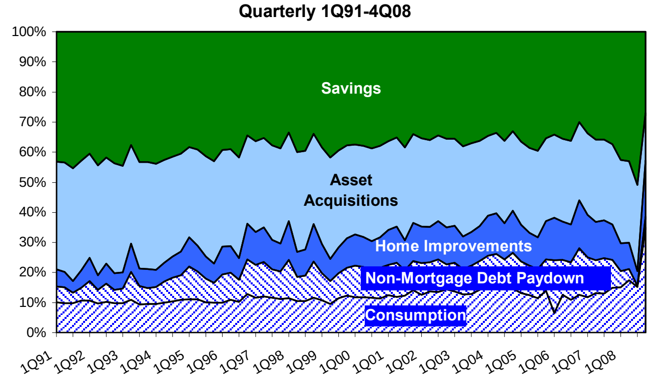
Sources: Federal Reserve Bank via economy.com and RREEF Research

[13] An overview of the wealth effect literature may be found in *Housing Wealth and Consumer Spending*, Congressional Budget Office Background Paper, January 2007.

With eye-popping figures like these, it is natural to conclude that these equity extractions were responsible for packing the parking lots at the nation's shopping centers, particularly when newspapers were filled with accounts of homeowners tapping their newfound wealth for spending excursions. Although home equity was an important contributor to retail sales growth, its role has been exaggerated. Certainly, some homeowners pulled equity out of their homes to finance extravagant lifestyles, but relatively little MEW paid for everyday retail purchases.

As shown in Exhibit 20, fully two thirds of MEW went into savings and to finance asset acquisitions.[14] By contrast, personal consumption expenditures (PCE) account for only one eighth. Adding in repayment of non-mortgage (e.g., credit card) debt – much of which likely supported PCE – still brings the total to only 22%. In other words, less than a quarter of all MEW went to support consumption.

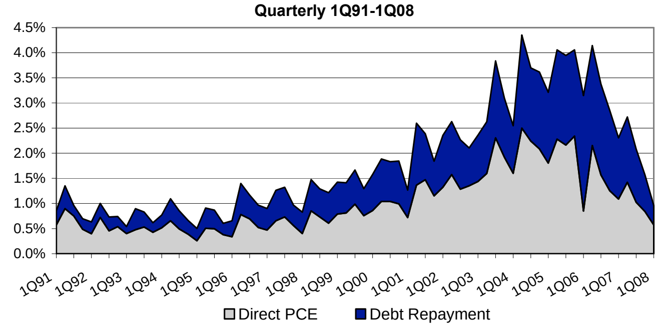
Exhibit 20
Mortgage Equity Withdrawls by Use
Quarterly 1Q91-4Q08



Sources: Federal Reserve Bank via economy.com and RREEF Research

In all, Federal Reserve data reveals that MEW accounted for an average of only 3.3% of consumption during the housing bubble, peaking at 4.3% in mid 2004, as shown in Exhibit 21. This level was up from an average of 1.3% during the prior 20 years, but the 200 basis-point rise hardly justifies the hyperbole of popular accounts positing much more profligate home-fueled spending.

Exhibit 21
MEW Share of Personal Consumption by Source
Quarterly 1Q91-1Q08



Sources: Federal Reserve Bank via economy.com and RREEF Research

Other Support for Rising Retail Spending

The foregoing analysis concerns overall consumer spending. Of greater interest to the nation's shopping center owners, however, is the share of these extra expenditures that went to retail sales, and then the specific types of retailers that benefited. As noted, PCE includes many categories not considered "retail spending," such as vacations, medical services and rent. In

[14] Alan Greenspan and James Kennedy "Sources and Uses of Equity Extracted from Homes," Finance and Economics Discussion Series Working Paper #2007-20, Federal Reserve Board, March 2007.

fact, retail sales account for only a third of household expenditures (Exhibit 6 above). Unfortunately, precise MEW data drilling down to the retail sales level are not available. In the absence of definitive information, we thus assume that retail sales account for a comparable share of MEW-funded consumer spending as it does of consumer spending generally, that is, about one third of spending.

RREEF Research thereby concludes that mortgage equity withdrawals explain no more than a third of the *growth* in nominal retail sales during the housing boom, including direct purchases and repayment of consumer debt, such as credit cards, as shown in Exhibit 22. To the extent that the retail share of MEW-fueled consumption could be somewhat higher than the typical one-third share for all consumption, then MEW probably accounts for between a quarter and a third of the retail sales growth in this period. Population growth accounts for another 15% of the growth.

Exhibit 22
Approximate Shares of Support for Retail Growth
4Q02-2Q07

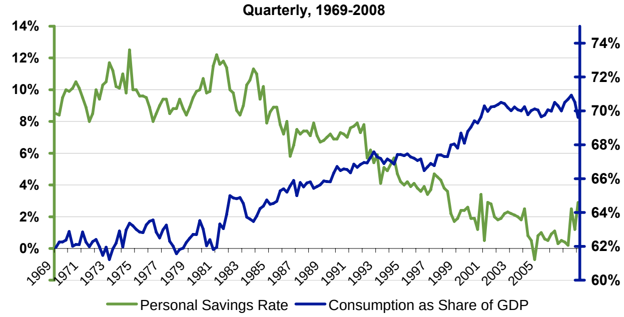
Source	**Indicated Share***	**Likely Range**		
Mortgage Equity Withdrawls				
Direct for Consumption	13.8%	13%	-	18%
Indirect for Consumer Debt Paydown	11.9%	11%	-	15%
Population Growth	15.3%	15%	-	15%
Credit Card Debt Growth**	6.7%	6%		10%
Declining Savings Rate	6.7%	6%	-	10%
Subtotal	*54.5%*			
Other***	45.5%	33%	-	50%

** Assuming retail sales account for one third of consumption*
*** Net of interest changes, assumed to be 20% of outstanding debt*
**** Includes increases in spending by tourists from abroad, the "underground" economy, and corporate purchases of retail goods, as well as per-capita income growth*

Source: Federal Reseve, US Census Bureau and RREEF Research

Two other factors linked to the wealth effect of rapidly-rising home prices were the declining savings rate and increased credit card debt. The drop in the savings rate did not begin with the housing bubble. As shown in Exhibit 23, US households saved an average almost 10% of their disposable income for the 20 years starting in the late 1960s, though the rate was somewhat volatile, ranging between 7% and 12%. The savings rate began to decline in the mid 1980s, and by the turn of the century, averaged barely 2%. As home and stock values shot upward in the middle years of the decade, the savings rate fell further still, and actually briefly turned negative in 2005, as consumers abandoned income-based savings in favor of asset-based savings. Overall, the savings rate averaged only 1.3% during the housing bubble. We estimate that this drop in savings accounted for 8% of the rise in retail sales during this period.

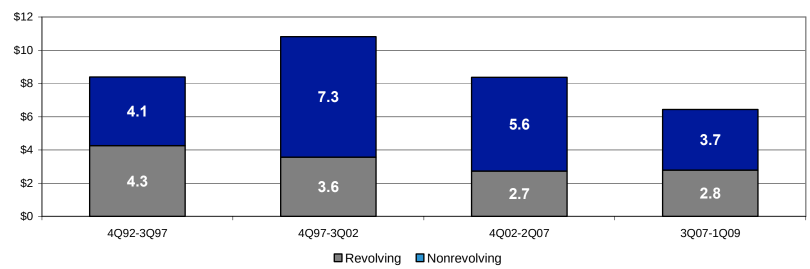
Exhibit 23
Savings Rate and Consumption Share of GDP
Quarterly, 1969-2008



Source: Bureau of Economic Analysis and RREEF Research

The last factor was rising credit card use. Despite popular belief to the contrary, revolving (credit card) debt actually grew more slowly during this period than in the preceding five-year periods, as shown in Exhibit 24. Nonetheless, outstanding revolving debt rose almost 25% over this period. A material but unknown share of this increase can be attributed to interest charges, which we have assumed to be 10%. Further assuming typical patterns of credit card use, then the rise in credit card debt contributed about 8% of the increase in retail sales.

Exhibit 24
Average Monthly Net Additions to Consumer Credit*
Housing Bubble (4Q02-2Q07) vs. Other Periods, in Billions of $



Together, the foregoing factors – mortgage equity withdrawals, credit card debt, population growth, and the falling savings rate – account for at least half, and perhaps as much as two thirds of the increase in retail sales during the housing boom. Several other factors likely also played a role. Clearly, rising incomes were as factor, as were growing purchases from tourists visiting the country; the “underground economy,” which includes both illegal and unreported economic activity; and corporate purchases of retail goods. The impact of these factors could not be estimated reliably, however, due to various limitations of the national income accounts.

Finally, the impact of low taxes during this period should be acknowledged. Although not quantified separately, the generally low tax rates during this period would be reflected in the greater household disposable incomes (and arguably wealth as well) previously cited, thereby driving retail sales. Looking forward, the federal government almost certainly will need to raise taxes and fees to pay for the stimulus package and deficit spending generally, as well as looming shortfalls in Social Security and Medicare. Such tax hikes would reduce disposable incomes and divert household budgets away from retail spending.

In a similar vein, higher energy prices are likely to further drain household spending power for discretionary purchases. Energy prices began rising in earnest during the housing boom. Though currently down from their historic levels of last year, most analysts believe we have entered an era of permanently elevated energy prices. In addition, ever-rising medical and education expenses continue to increase faster than the general inflation rate, with no end in sight. The result will be reduced household disposable income and thereby lower retail sales.

Of course, the housing meltdown also has made housing more affordable for many consumers, especially first-time home buyers lacking equity from prior homes. But few renters will see an increase in their disposable income, net of housing payments, when buying a home – in most markets mortgage payments still exceed rental payments for comparable units by a wide margin. Meanwhile, monthly payments are rising for many home-owning households as their old “teaser” rates reset to higher interest rates. Thus, retailers can expect little direct benefit from the drop in housing prices.

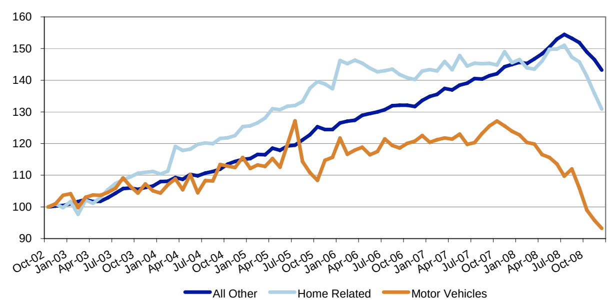
Implications for Future Retail Sales

Perhaps a quarter to a third of the recent retail sales growth were motivated and funded by the jump in equity-based income tied to soaring home prices. And another sixth of the sales growth can be attributed to the wealth effect of household asset values on saving rates and credit card usage. In sum, the wealth and income effects *from asset appreciation* during the bubble years account for about half of the retail growth. With the recent degree of housing price escalation unlikely to be repeated for many years, and stock prices also unlikely to regain their prior levels for some time, these incremental retail sales are likely to be lost as well.

Already the savings rate is now nearly 5% of disposable income and rising, while net additions to credit card debt are negative – households are increasing their savings and paying down their debts. Moreover, financial institutions have tightened standards for all types of household debt, including mortgages, home equity lines of credit, and credit cards, forcing households to live within their means, even if they still wanted to borrow and spend. This process of debt "deleveraging" will likely prove to be among the most consequential transformations in recent retail history, as households are forced to better align their spending with their resources.

One mitigating factor for apparel and general merchandise retailers, however, is that a large share of retail sale increases during the housing boom were home related, so this retail downturn will hurt general merchandise retailers less than home-related retailers. From late 1999 through early 2003, home-related retail sales – including furniture and building supplies – were growing roughly on par with all other retail sales. But as home prices and equity extractions began to soar, so, too, did home-related retail sales, which grew more than twice as fast as other retail sales through mid 2006, as shown in Exhibit 25. (These sales are distinct from, and in addition to, the home improvement investments homeowners were making, as were shown in Exhibit 20 above. The latter category would include payments to contractors and other wholesale activities.) This data suggests that to the extent homeowners were using their growing equity to fund retail sales, in actuality they were plowing much of this spending back into improving or furnishing their homes, rather than pulling equity out of their home to purchase more extravagant luxury items such as electronics and jewelry – or even cars, the sales of which began their slide in January 2005, well before the housing downturn.

Exhibit 25
Per-Capita Home-Related and Motor Vehicle Sales
vs. Other Retail Sales
Monthly, 4Q02-2008, Oct 2002 = 100



Accordingly, home-related retailers disproportionately benefited from rising home prices, and now are bearing the brunt of the housing downturn. With the housing market cresting in 2006, it is not surprising to find that consumers' investments in their homes also peaked then. Home-related retail sales remained flat from early 2006 to mid 2008, while other retail sales increased by another 10%. Looking forward to an era of more restrained (if any) home-price escalation, apparel and general merchandise retailers will be less affected by the lower household wealth than will the home-related retailers.

The Changing Retail Landscape

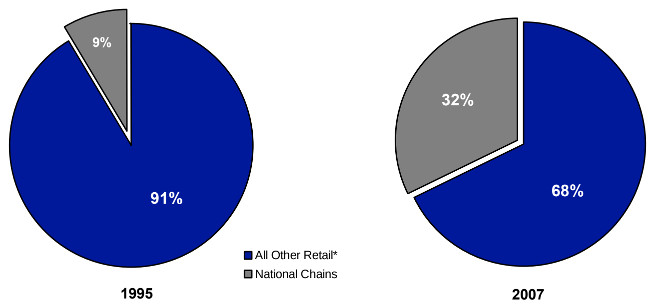
In addition to the dynamics of the consumer and the economy, the retail sector is being shaped by changes within the industry itself, among the nation's retailers and shopping center developers. No real estate sector is more dynamic than retail, where new concepts reinvent and reinvigorate the industry with startling frequency. The enclosed regional malls of the 1970s gave way to the power centers in the 1980s and then to the open-air lifestyle centers in the 1990s. The next big idea has yet to emerge, but several other trends are emerging.

Maturation of the Retail Sector

Paralleling trends in other real estate types, recent decades witnessed the transition of the retail sector from a primarily local or regional industry, into one increasingly dominated by national players. This includes not only shopping center owners, but more importantly, tenants in the nation's retail centers.

Only eight national chains in 1995 operated stores in at least 40 states; by 2007 there were 39, collectively growing from $152 billion in sales to over $1.0 trillion during this period.[15] In total, national retailers more than tripled their share of retail sales between 1995 and 2007 (Exhibit 26, next page), with nominal sales volumes growing at a 17.4% CAGR. By contrast, the sales growth rate for all retailers in the US was only 5.1%. Similarly, store area among these major retailers grew by an 11.7% CAGR, compared to only 1.7% for all retail space. Thus, chain store sales grew 3.4 times faster than all retail sales nationally, while chain square store GLA grew 7.1 times faster.

Exhibit 26
Chain Store Sales as Share of All Retail Sales*
1995 vs 2007



Sources: economy.com, Credit Suisse, and RREEF Research

**Excludes motor vehicles and parts, gas stations, and non-store retail*

In turn, the emergence of fast-growing national chains helped fill the nation's new shopping centers, and especially newer formats such as lifestyle centers that depend on recognizable brand names for their tenanting strategy and strong corporate credits for their balance sheets. The era of easy credit facilitated retailers' aggressive growth strategies in two ways: directly, by providing capital to the chains to finance expansion, and indirectly, by pumping up retail sales to support the new stores.

Those days are over. Credit for expansion is scarce, at least for now, and retailers are increasingly nearing their targeted chain size. Even before the current downturn, expansion rates for most of the major chains had been declining for several years. Moreover, the economy has hit the retail sector especially hard, with consumers pulling back their spending dramatically. Many of nation's major chains were unprepared for the downturn, as they focused on building market share at the expense of near-term profitability. Thus, the national chains consistently underperformed the non-national retailers on standard metrics of profitability, even during the halcyon bubble years. While real retail sales at non-chain retailers grew 50% faster than store space from 1995 to 2007, the differential at the national chains was less than half that, suggesting the chains grew their store counts ahead of the market's ability to support them, and making retrenchment inevitable.

Indeed, many chains, most notably Starbucks and the Gap, already bumped up against their near-term expansion potential, with new units either "cannibalizing" sales at existing stores or opening in markets that represented an unsustainable stretch from the retailer's core target market. The inevitable reckoning has forced substantial and painful cutbacks in store counts, to the detriment of both chain profitability and shopping center performance.

The Chain Store Shakeout

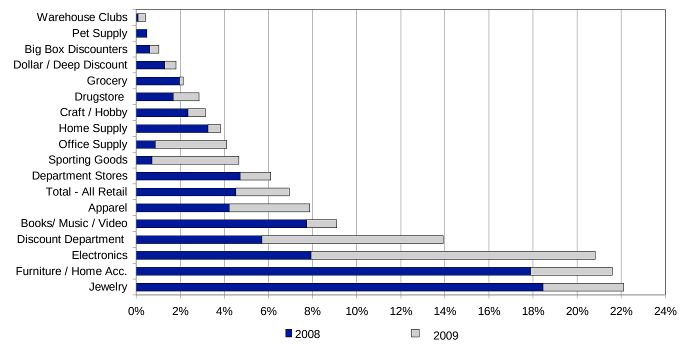
Future expansion plans aside, the industry will be supporting fewer retailers. Based on public data compiled by the CoStar Group., RREEF Research has calculated that more than a third of the 200 retail (non-restaurant) chains tracked by CoStar had net unit closings in 2008, with

[15] Michael Exstein et al, "The End of an Era – Retail Square Footage Growth to Slow as National Chains Mature," Credit Suisse, 8 July 2008.

aggregate net closure of more than 90 million square feet (MSF) of space in some 5,800 stores. Another 62 expanding retail chains announced closures for 2008 covering almost 20 MSF in some 900 stores, despite overall positive store growth. Figures for 2009 could be even higher, although announced store closings to date are down from last year. The bankruptcy and eventual liquidation of Circuit City alone has left the nation’s shopping centers with 22 MSF of vacant space to fill, and Mervyn’s another 14 MSF, with the vast majority of these closings occurring in 2009.

These announced closings are depicted in Exhibit 27, expressed as shares of the number of chain stores in each category. Hardest hit are the discretionary goods such as jewelry, furniture and electronics, each of which will see store closings exceeding 20% of their 2008 inventory. By contrast, discount oriented chains – including dollar stores, big box discounters and warehouse clubs – all are faring relatively well, with less than 3% closure rates, as are purveyors of other nondiscretionary items, such as grocers and drug stores.

Exhibit 27
Announced Store Closings as Share of 2008 Store Count



Sources: CoStar Group, Inc. and RREEF Research *Based on public announcements by major retail chains.*

Most of these closings are tied to the economic downturn, as the number of store closings spiked more than 50% from 2007-08 when the recession set in. Other store closings represent normal pruning of underperforming stores. But many – especially the bankruptcies – represent the end game in a decade-long battle for market share, with fewer chains dominating each category. Some retail segments are now down to one dominant national chain (e.g., Best Buy in electronics and Bed Bath and Beyond in housewares), while others are down to two (Petco and PetSmart in pet supplies; Barnes & Noble and, for now, Borders, in books).

Related to these trends is another ominous trend for the nation’s shopping centers: chains are reducing the sizes of their store prototypes. With retailers more focused now on profitability than market share, store efficiency is becoming paramount. Though there are certainly some chains experimenting with larger store sizes (e.g., Forever 21 moving into former Mervyn’s department stores), the predominant trend is for smaller store formats that can generate greater sales volumes per square foot of space. As a result, the major chains will be leasing less space for their stores, on top of the lower store counts.

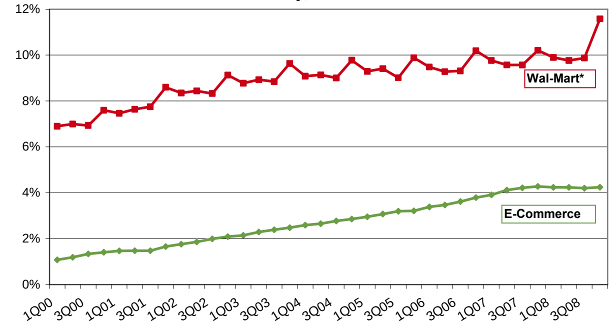
Wal-Mart and E-Commerce

One cannot discuss today’s retail environment without considering the increasing impacts of Wal-Mart and e-commerce. In less than a decade, Wal-Mart increased its share of the US retail market by 45%, from an average of about 7% in 2000 to more than 10% in 2008, as shown in Exhibit 28 (next page). Meanwhile, e-commerce is coming of age, quadrupling its share of the retail market, from barely 1% in 2000 to more than 4% in 2008.[16] Alternately stated, Wal-Mart’s US sales doubled from 2000-08 and e-commerce sales rose 3.5 times, while all other retail sales in the US rose less than 35% over this period. In sum, these two sources alone accounted for almost 30% of retail sales growth during the decade.

[16] Wal-Mart figures include all US Wal-Mart and Sam’s Club stores, and are compared to a baseline of all US retail sales excluding food service and motor vehicles and parts. For e-commerce, the comparison baseline also excludes gasoline sales.

The significance for the retail real estate industry is that all of the e-commerce and most of Wal-Mart's sales transpire away from the nation's shopping centers. Moreover, Wal-Mart sales volumes at better than $400 per square foot average more than twice those of conventional department stores, implying that every square foot of GLA at Wal-Mart displaces more than twice the supportable store area at other retailers.[17] These retail powerhouses thus drain shopper support from America's malls and other retail centers.

Exhibit 28
E-Commerce and Wal-Mart* Shares of All Retail Sales**
Quarterly, 2000-2008



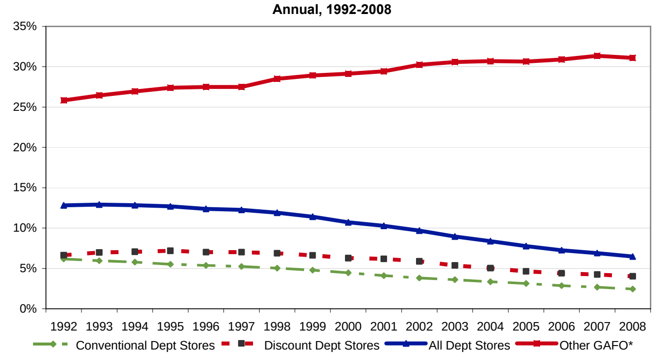
Sources: Moody's economy.com, Wal-MART SEC filings, and RREEF Research

** Includes Wal-Mart US and Sam's Club*
*** Excluding motor vehicles and parts*

The Vanishing Traditional Department Store

No retail segment has been affected more by the growth of e-commerce and the large discount retailers like Wal-Mart than has the traditional department store. These stores are also losing market share to specialty retailers. As shown in Exhibit 29, both conventional (e.g., Macy's and JC Penney) and discount (K-Mart and Target) department stores have been losing market share, while other GAFO[18] retailers have gained. Though department stores undoubtedly will still have some role in the retail sector going forward, there is no sign in sight for reversing these long-term trends.

Exhibit 29
Shares of Retail Sales by Store Type
Annual, 1992-2008



Sources: Moody's economy.com and RREEF Research

**GAFO represents sales at stores that sell merchandise normally sold in department stores.*

Implications for Retailers and Shopping Centers

Retail sales growth will be much less robust for the foreseeable future than in recent years on several fronts. Population growth will continue, but will favor age cohorts that spend relatively less. Shifts in the regional distribution and ethnic composition of future population growth

[17] Industry data from *Dollars and Cents of Shopping Centers / The Score 2008*, Urban Land Institute and the International Council of Shopping Centers. Wal-Mart figures derived from company financial filings.

[18] GAFO stands for General Merchandise, Apparel, Furniture and Other, and includes sales at stores that sell merchandise normally sold in department stores.

portend further shifts in the location and nature of retail demand. Income growth is also likely to be modest in the near term, with a greater share of income flowing to households that spend disproportionately on basic staples, and more of everyone's incomes eaten away by higher taxes and non-retail spending. Meanwhile, the outsized compensation packages that fueled much of the spending on luxuries and other discretionary goods can be expected to be more restrained, cooling higher-end consumption. And certainly home and stock price appreciation will not support the levels of discretionary spending of recent years, as household delever, save more, and generally try to better spend within their means.

At the same time, development opportunities will be limited, reducing future new competition for existing centers. REIS, Inc. projects that completions of neighborhood and community centers will fall almost 50% in the coming years relative to the completion rate earlier in the decade. REIS expects the stock to grow by an average of only 0.8% annually – half the 1.6% rate from 1999-2007, and less than even the 1% forecasted annual population growth rate. The decline in construction of malls, lifestyle centers and power centers is likely to be even more pronounced. Limited access to capital is the primary reason, but developers are also facing diminishing prospects for leasing new centers due to the dwindling roster of expanding retailers – particularly for the big box tenants that occupy power centers, and the apparel and luxury retailers that lease the nation's malls and lifestyle centers.

Finally, there will be fewer retail chains, the result of the economic downturn, reversal of retail overexpansion and relentless competitive pressures, which wean out underperforming concepts and operators.

The vital issue for the retail sector is how these dynamics will play out for existing shopping centers. How equally will shopping centers share in the pain of reduced retail sales growth and fewer retailers? Will vacancies rise and rents fall relatively evenly across all centers, or will the damage be more concentrated? RREEF Research believes that the latter scenario is the more likely, with the best centers – those with the strongest tenant line-up and the most accessible, visible location – most successful in retaining their tenants and sales, while the inferior centers suffer disproportionately, ultimately leading to closures.

Relative to other real estate product types, vacancy rates in the retail sector tend to be low. At the same time, the performances of individual retail properties tend to vary more than in other real estate sectors. Retail product is the least fungible of the major real estate types – the individual attributes of the property matter relatively more than local market conditions, resulting in more sorting of properties into "winners" and "losers." With other property types, rent levels can be used to control occupancy, reducing them when vacancies threaten to rise and raising rents when market conditions tighten.

This strategy is less effective for shopping centers, however. Retailers care primarily about other tenants in the center and less about rents, which tend to set more on the basis of sales potential at the particular shopping center, and even the particular space within the shopping center, rather than local market conditions per se. Top retailers, especially, will "pay to play" – paying what it takes to be in the best centers and avoiding the others altogether. Thus, the best retail centers tend to have both higher rents and higher occupancies, whereas vacancies tend to be more evenly distributed among all asset qualities in other real estate sectors, with rent levels serving as the primary differentiator.

"Co-tenancy" and "go-dark" clauses common in retail leases act as accelerants in driving down occupancy in inferior centers. Top retail tenants typically have the right to terminate their leases ("go dark") or seek rent relief when their sales do not hit specified targets or when key tenants in the center close their stores ("co-tenancy"). Thus, the poor performance of one even one anchor tenant can trigger a series of events culminating in sharply reduced occupancy and/or rents in that center. Meanwhile, nearby centers may be unaffected or even benefit as tenants flee the failing center for the superior one.

Comprehensive asset-by-asset data demonstrating this dynamic are not available, but the essence of this concept can be established by comparing retail vacancy and rental rates across different metropolitan areas. As shown in Exhibit 30 (next page), retail vacancy rates are the second lowest of the four major property types (higher than only apartments, which experience more frequent tenant turnover and rent adjustments). Yet retail has the highest degree of inter-area variability, both absolutely and especially relative to the mean vacancy level (Coefficient of Variation).[19] This pattern holds true for rents as well.

Exhibit 30
Vacancy and Rental Rate Comparisons
Major Metro Areas - 1Q09

	Mean Vacancy	Standard Deviation	Coeff. Of Variation*
Office	12.2%	2.5%	0.21
Industrial	9.2%	2.4%	0.26
Apartment	8.2%	2.2%	0.27
Retail	**8.8%**	**2.7%**	**0.30**

	Mean Rent**	Standard Deviation	Coeff. Of Variation*
Office	$21.61	$6.81	0.32
Industrial	$6.14	$2.53	0.41
Apartment	$969.81	$380.61	0.39
Retail	**$19.08**	**$9.08**	**0.48**

** Standard deviation divided by mean*
*** Rent per unit for apartments and per square foot for all other types*

Sources: CoStar Group, Axiometrics, and RREEF Research

Much of the variation in rents and vacancy can be tied to supply excesses relative to demand (population). Based on data for 58 of the largest metropolitan areas in the country, there is about 30 square feet of shopping center space per person in metro areas overall, but this figure jumps to 39 square feet for the 20 metros with the greatest amount of per-capita shopping center space (Exhibit 31).[20]

Exhibit 31
Shopping Center Operating Data
Top Metro Areas, Ranked by GLA Per Capita, 1Q09

	Total GLA	Population	Total GLA Per Capita	Vacancy Rate	Asking Rents
Top 20	1,578,802,149	40,464,555	39.0	9.6%	$16.33
Bottom 20	1,426,952,065	60,950,780	23.4	7.8%	$20.41
Top 58 Metros	4,423,990,050	148,036,064	29.9	8.9%	$18.34
US Total	7,014,000,000	303,719,020			
Top Metros' share	63.1%	48.7%			

Sources: CoStar Group, US Census Bureau, and RREEF Research

Significantly, the average vacancy rate for the most oversupplied 20 metros is 9.6%, compared to only 7.8% for the 20 least-supplied metros. Moreover, the average asking rent for the oversupplied markets is only $16.30 per square foot, compared to well over $20.00 for the lesser-supplied markets. Similarly, within metro areas, the best centers achieve both higher occupancies and higher rents, at the expense of inferior centers.

With some metros trying to sustain twice as much retail space as others, consolidation is inevitable. The most oversupplied markets are highly concentrated in the faster-growing metros including Greensboro/Winston-Salem, Greenville/Spartanburg, Raleigh/Durham and Orlando, in which near-term population growth cannot justify the construction.

The share of struggling centers that will ultimately close is impossible to handicap, and certainly will vary by market, depending upon the local dynamics and relative strengths of the centers in the area. But the combination of overcapacity in the sector and the higher rates of

[19] Coefficient of Variation is the ratio of the standard deviation to the mean.

[20] Note that the figure here of about 30 square feet per capita of shopping space for metro areas exceeds the overall national of figure 23.1 square feet per capita, because the nation's retail space is highly concentrated in metropolitan areas. Metros account for almost two thirds of the nation's shopping center space but less than half of the nation's population.

obsolescence – fashions in retail goods, retailers and retail centers all change more quickly than in other real estate sectors – suggests a momentous shake-out is inevitable. Using the foregoing chain-store analysis as a guide, some 7% of national chain stores will have closed from 2008 through 2010, on top of 2% in 2007. A similar closure rate for the nation's shopping centers is likely, as these chain stores are the primary source of tenancy for shopping centers, and tenant losses tend to be concentrated in the weakest centers. On this basis, a failure of 10% of shopping centers nationally seems possible. This range is broadly consistent with a recent calculation by Green Street Advisors that 8% of malls nationally are in danger of closing based on perilously low sales volumes (below $250 per square foot), and the figure could exceed 10% by year end if retail sales continue to decline at current rates.[21]

Conclusion

No real estate sector is more subject to the sin of extrapolation – assuming past as a prologue to the future – than is the retail sector; for no sector is more subject to the winds of fashion and changing market dynamics. While the current downtown and inevitable recovery may have some familiar patterns, on several key fronts, RREEF Research finds that retail's future will be quite different from its recent past, and decidedly less vigorous.

To be sure, once the economy stabilizes, the retail sector will resume growing: credit will again start to flow to retailers; developers will seek out new opportunities, encouraged by local governments eager for sales tax revenues; and, most importantly, consumers will again open their pocketbooks and wallets. How could it be otherwise? Economic growth cannot be sustained without a vibrant consumer sector, even if the consumer share of the economy will ease from its elevated level earlier in the decade. Moreover, the retail sector is constantly reinventing itself: New concepts emerge and old ones expire with increasing speed. This process of creative destruction continually breeds new opportunities.

Nonetheless, RREEF Research forecasts that retail sales and supply growth will be considerably less robust over the next decade than in the one just past due to structural changes in the country's demographic profile and economy. Once a retail recovery is in full swing, anticipated by 2011, retail sales growth is expected to be 50% or less of the growth rate experienced in the last cycle, with real sales growth of 1% to 2%, instead of the recent level of 3% to 4%. Together with sales declines to date, retail sales would not reach their 2007 levels until at least 2012.

Slower consumer growth also implies slower overall economic growth for the nation, as the household sector is by far the largest in the economy. Consumers are likely to account for a smaller share of the nation's economy, reversing decades of disproportionately high growth, while retail sales continue to account for a shrinking share of household spending.

The impact on the nation's retail real estate sector will be severe, with a wave of shopping centers forced to close and others that will struggle with lower occupancy and rents. But the pain will not be spread evenly. The "flight to quality" underway in all property types likely will be felt most intensely in the retail sector, where markets more decisively sort between the winners and losers. Thus, even with restrained consumer spending, the nation's truly dominant centers will continue to find their market and attract a disproportionate share of shoppers, spending, and top tenants. These centers also will benefit from more muted construction levels. But even here, retail rent increases are likely to be lower than what leading shopping centers owners have grown to expect, while vacancies will be higher.

At least for the intermediate term, mainstream discount retailers should thrive at the expense of more specialized upscale retailers. Home-oriented retailers face a particularly long recovery period. Finally, traditional shopping center tenants (department stores and smaller in-line tenants) will see falling shares of both shopping centers sales and consumer spending, though shopping centers will continue to account for an increasing share of all retail space, as more centers incorporate big box retailers.

[21] "Recession Turns Malls into Ghost Towns," *The Wall Street Journal*, May 22, 2009.

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Main Offices

Frankfurt

Mergenthalerallee 73-75
65760 Eschborn
Germany
Tel: +49 69 71704 906

Hong Kong

48/F Cheung Kong Centre
2 Queen's Road Central
Hong Kong
Tel: +852 2203 8888

London

1 Appold Street
Broadgate
London
EC2A 2UU
United Kingdom
Tel: +44 20 7545 8000

New York

280 Park Avenue
23W Floor
New York
NY10017-1270
United States
Tel:+1 212 454 3900

San Francisco

101 California Street
26th Floor
San Francisco
CA 94111
United States
Tel:+1 415 781 3300

Tokyo

Floor 17
Sanno Park Tower
2-11-1 Nagata-cho
Chiyoda-Ku
Japan
Tel:+81 3 5156 6000

RREEF Research

Peter Hobbs
Head, Global Real Estate Research
+44 20 7547 4855

Asieh Mansour
Chief Economist and Strategist
+1 415 262 2044

Europe

Brenna O'Roarty
Director
+44 20 7545 6099

Lonneke Löwik
Vice President
+44 20 7545 6328

Maren Väth
Vice President
+49 69 717 04 466

Ermina Topintzi
Vice President
+30 210 7256 153

Justin Curlow
Assistant Vice President
+44 20 7545 9682

Jarek Morawski
Assistant Vice President
+49 69 717 04 204

Asia Pacific

Tan Yen Keng
Vice President
+852 2203 8062

Koichiro Obu
Vice President
+81 3 5156 6522

Henry (Wei) Chin
Vice President
+852 2203 7908

North America

Alan Billingsley
Director
+1 415 262 2017

Brooks Wells
Director
+1 212 454 6437

Hope Nadji
Director
+1 415 262 2022

Andrew J. Nelson
Vice President
+1 415 262 7735

Bill Hersler
Vice President
+1 415 262 2075

Ross Adams
Vice President
+1 415 262 2097

Jaimala Patel
Vice President
+1 212 454 1752

Stella Yun Xu
Assistant Vice President
+1 415 262 7715

Publication Address:
RREEF
101 California Street
26th Floor
San Francisco, CA 94111
USA

Website:
www.rreef.com

Additional information is available upon request

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