Outlook for the U.S. and Florida

Florida Gas Utility

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Hank Fishkind, Ph.D., President
Stan Geberer, Senior Associate
Fishkind & Associates, Inc.
12051 Corporate Boulevard
Orlando, Florida 32817

Yogi Berra observed, it's tough to make predictions, especially about the future

U.S. Forecast Summary 2018 – 2020

- **Current status +/- 3% GDP growth**
  - **Positive forces:**
    - Strong gains in jobs and rising wages
    - Low interest rates, oil prices and inflation
    - AI and big data
  - **Negative forces:**
    - Structural change without proper policy response
- **Monetary policy – the shift to normal rates**
- **Trump's fiscal policies will boost growth and interest rates in 2018**
  - **Big tax cuts for corporations and households**
  - **Higher defense spending**
  - **Reduced regulations**
  - **Big unknowns are healthcare, immigration and trade policies**
- **Boom in 2018-19 then higher rates and recession**
- **Main forecasts risk: (1) fiscal policies under Trump, (2) Geopolitical risks, and (3) effects of higher interest rates**

Florida Summary

- Strong cyclical performance continues
  - Sustained job growth lead by tourism and bus. svc.
  - Population growth stable
  - Impact from Puerto Rico 50,000+ influx
- Recovery is above average recovery by Florida standards 2018-2019
  - 350,000 population growth
  - 135,000 new jobs
  - 125,000 housing starts
- Geographic focus of growth shifted and tightened

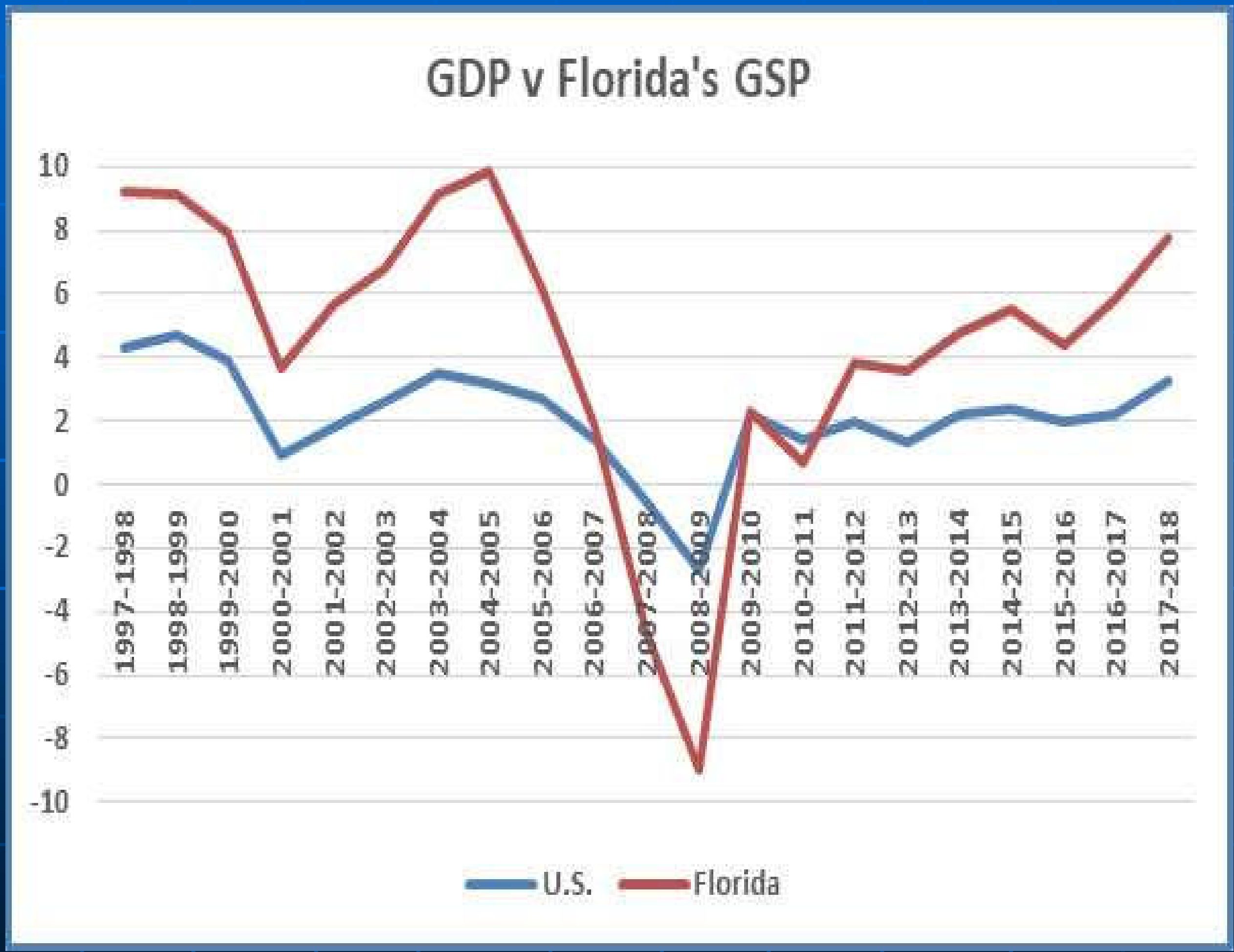
Factors Shaping U.S. Outlook

- How much momentum?
- Tax Cuts and Jobs Act?
- Impact of structural change?
- Policies on trade and immigration?
- When will higher interest rates slow growth?

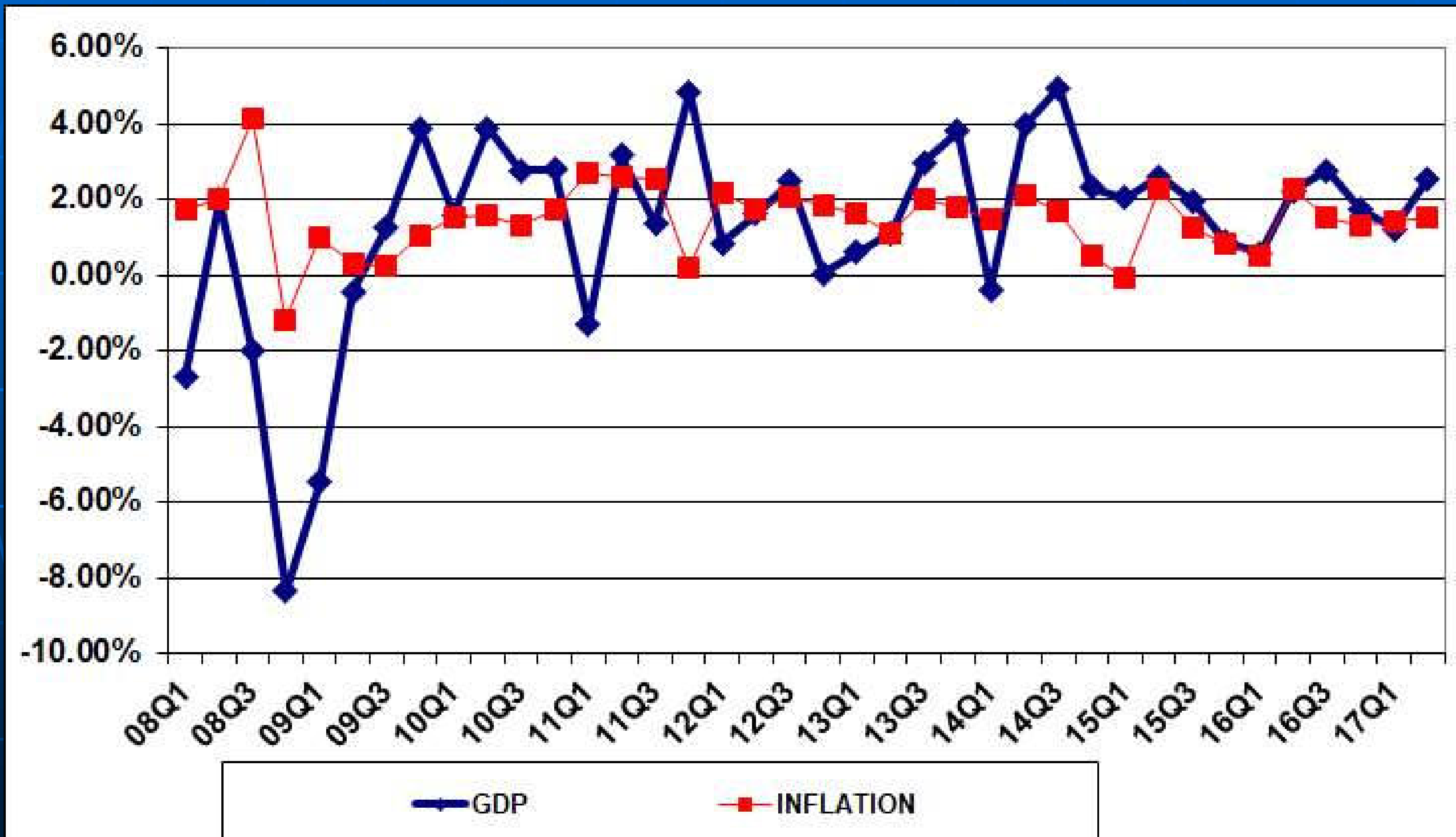
HOW MUCH MOMENTUM?

Why Care About GDP?

- Trajectory of GSP correlated with pathway of GDP
- Correlation = 0.88
- 88% of annual growth in GSP can be explained by growth GDP

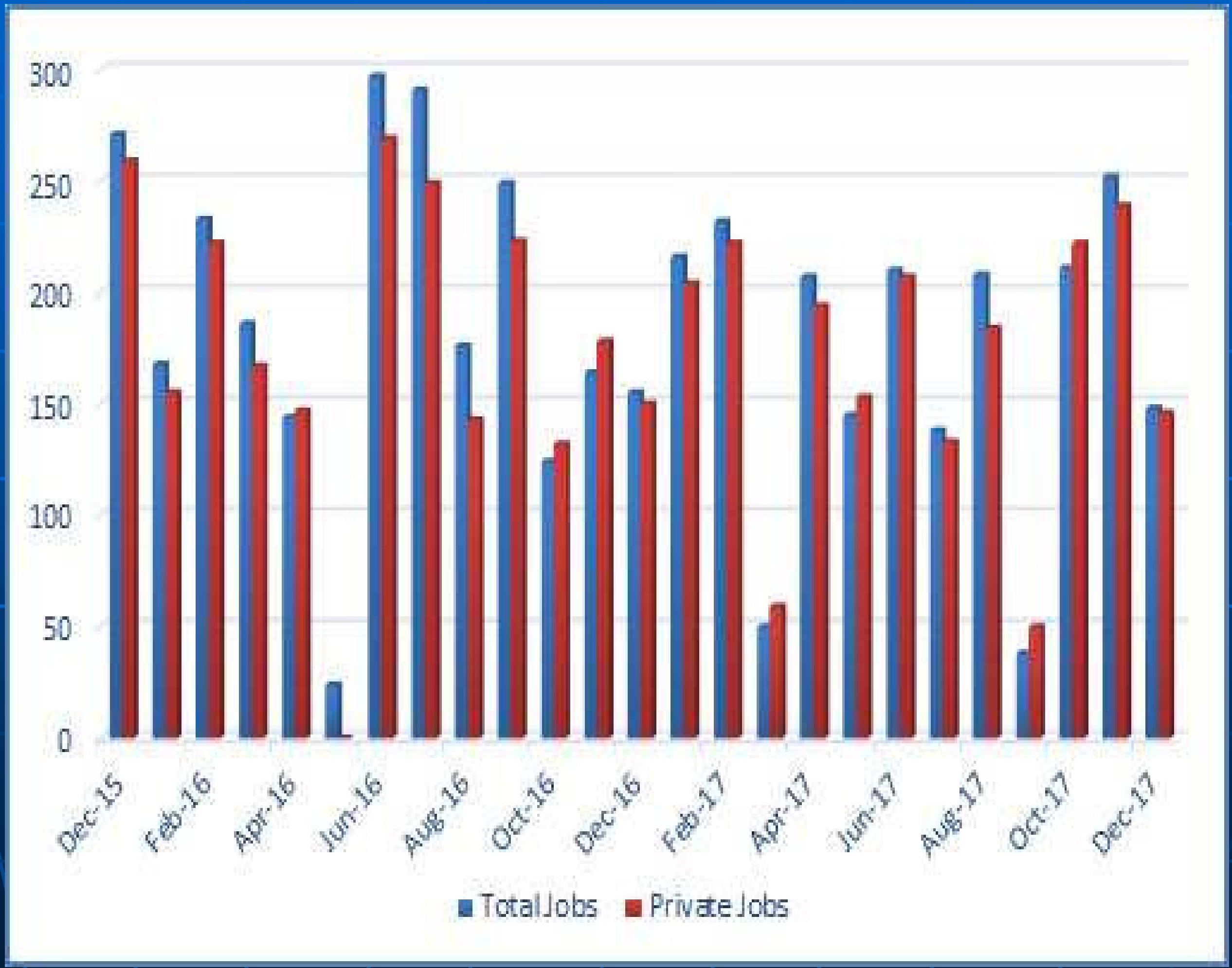


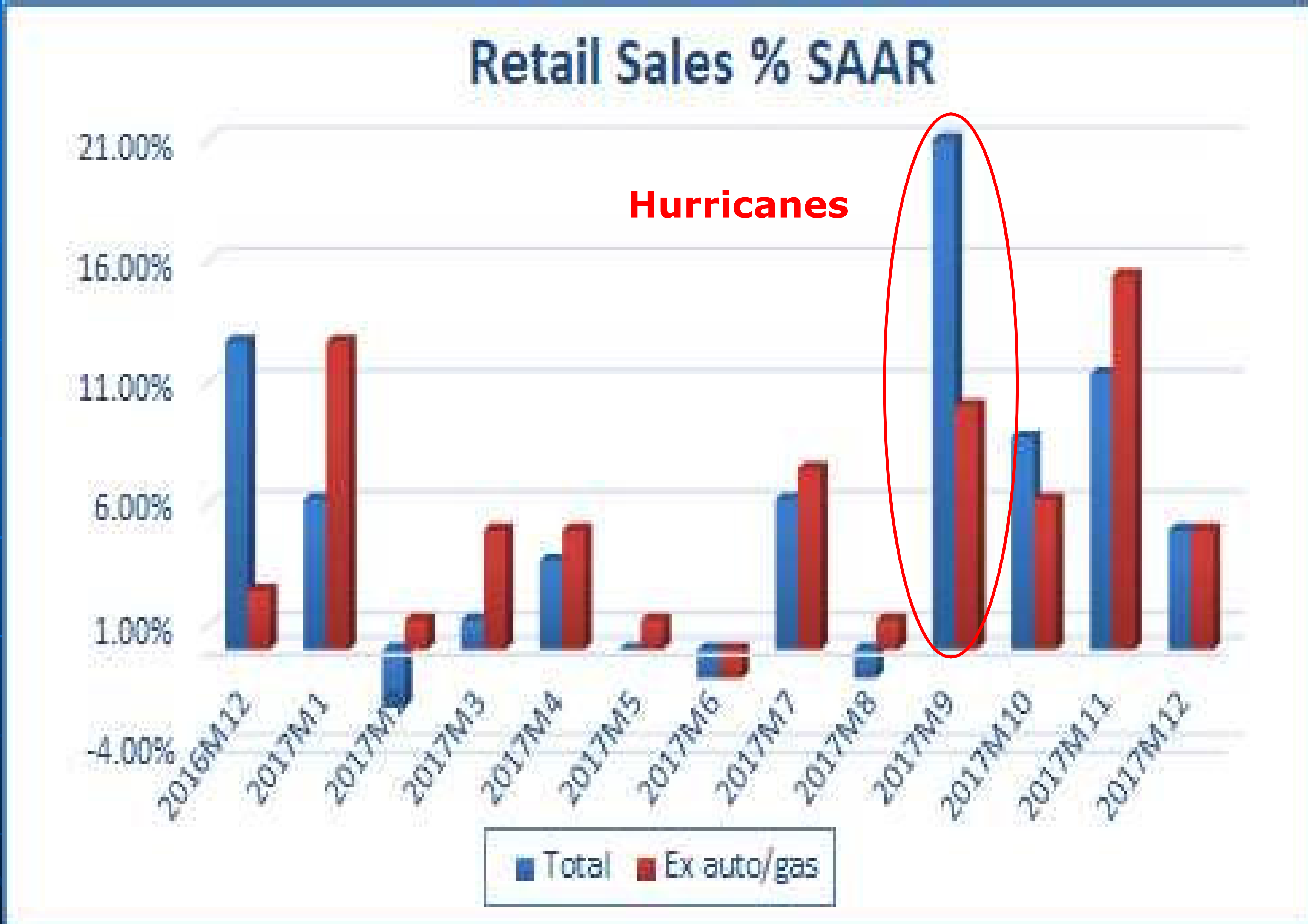
RECENT TRENDS IN GDP AND INFLATION



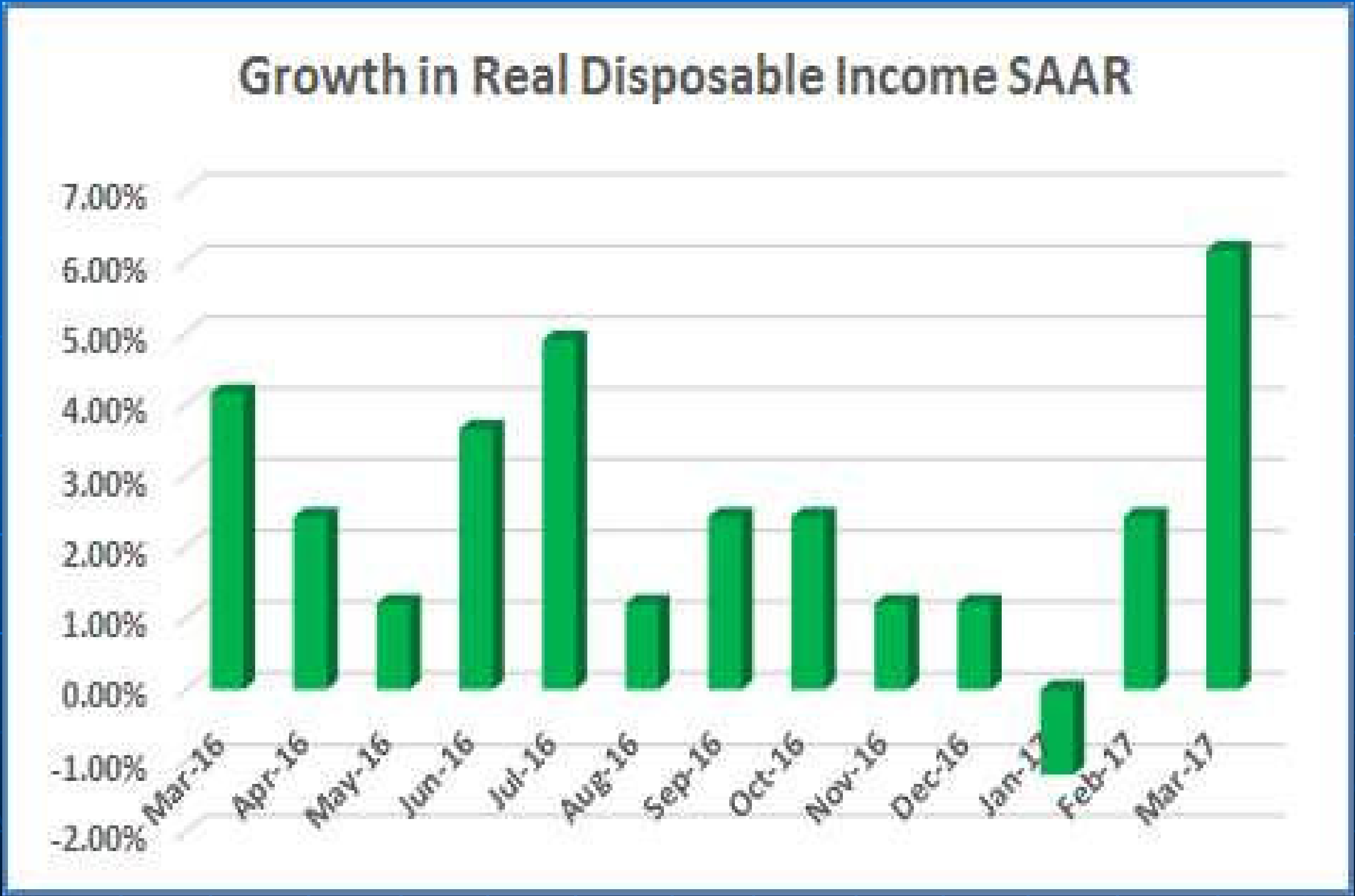
Change in Jobs

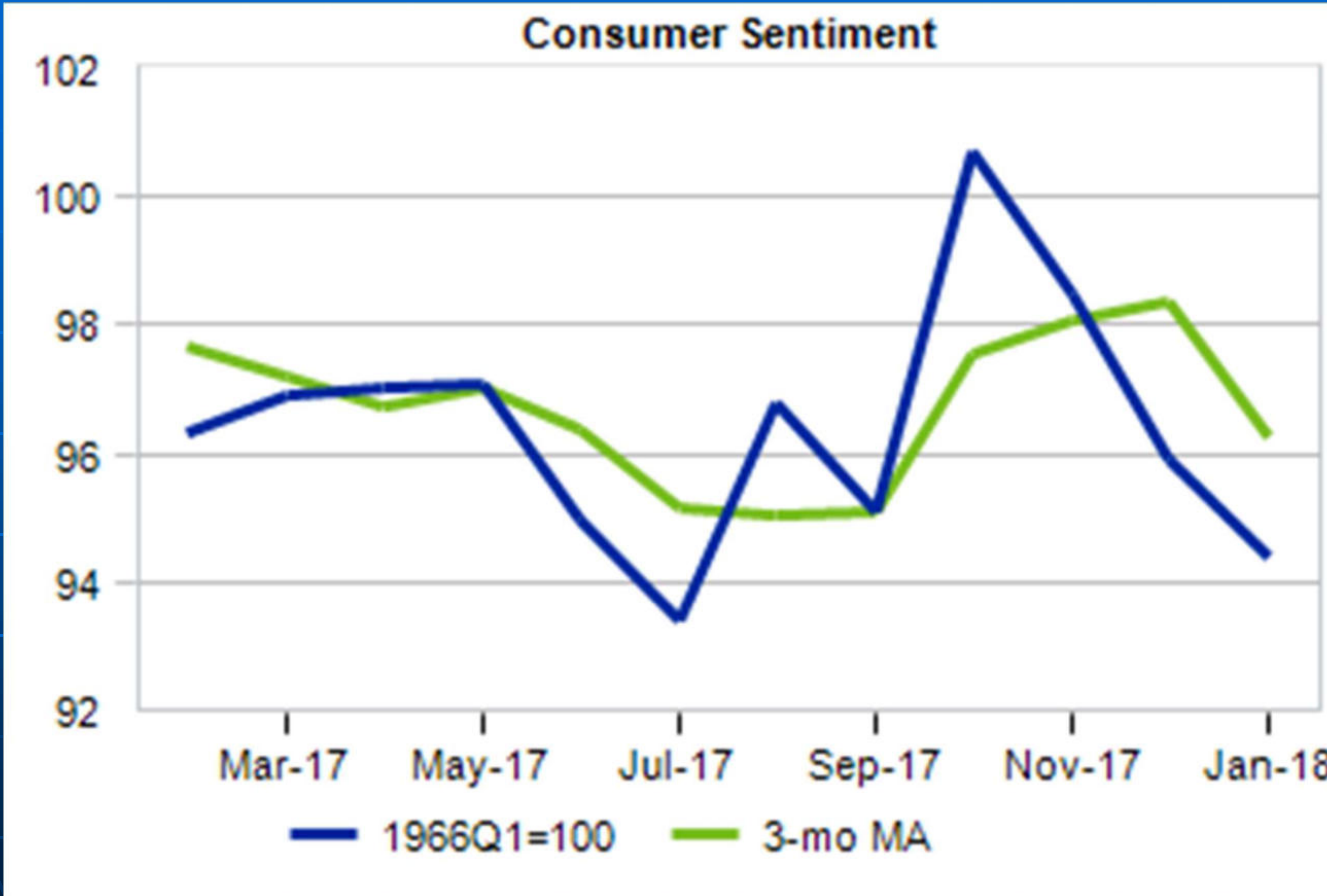
- **Hiring up 92 consecutive months – longest ever**
- **Job gains > 2M/Year for 7 years**
- **3-Month average 220,000 – upper bracket**





Retail Sales % SAAR
Hurricanes
21.00%
16.00%
11.00%
6.00%
1.00%
-4.00%
2016M12
2017M1
2017M2
2017M3
2017M4
2017M5
2017M6
2017M7
2017M8
2017M9
2017M10
2017M11
2017M12
Total
Ex auto/gas


Growth in Real Disposable Income SAAR
7.00%
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
-1.00%
-2.00%
Mar-16
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Mar-17


Consumer Sentiment
102
100
98
96
94
92
Mar-17
May-17
Jul-17
Sep-17
Nov-17
Jan-18
1966Q1=100
3-mo MA

TAX CUTS AND JOBS ACT

Tax Cuts and Jobs Act

- **$1.5 trillion stimulus over 10 years**
- **Corporations**
  - **21% rate**
  - **Shift to Territorial System – taxed at U.S. rate (21%) on profits generated in U.S. and profits elsewhere taxed at rates in effect in those foreign countries and exempt from U.S. taxation**
  - **Full expensing of investments for 5-years**
  - **Expands areas for oil/gas exploriation**
- **Individuals**
  - **Cut in rates and changes in brackets**
  - **Double standard deduction**
  - **$10,000 limit on SALT deductions**
  - **$750,000 limit on mortgage interest deduction**
  - **Repeals ACA Mandate to purchase insurance**

Impact on Households

Average Income	Total Tax Change (Thousands)	Avg. Tax Change	Share of US Tax Change	Tax Change as share of Pre-Tax Income
$14,600	$ –3,176,900	$ –100	1%	-0.7%
$32,900	$ –12,674,800	$ –410	4%	-1.3%
$53,400	$ –24,555,400	$ –800	8%	-1.5%
$86,400	$ –42,990,200	$ –1,400	14%	-1.6%
$155,700	$ –63,769,500	$ –2,770	21%	-1.8%
$356,800	$ –76,424,100	$ –12,470	25%	-3.5%
$2,023,900	$ –84,753,100	$ –55,190	27%	-2.7%
$94,400	**$ –308,290,500**	**$ –1,990**	**100%**	**-2.1%**

Source: Institute on Taxation and Economic Policy
https://itep.org/finalgop-trumpbill/

Effects of the ACT

- Reform is needed, but stimulus is ill timed
  - Economy operating at or near full employment
  - Capacity utilization high
  - Fed is embarked on program to raise interest rates and reduce money supply
- Add ½ % to GDP growth 2018 & 2019
  - Impact muted by composition of cuts which primarily go to higher income households with lower propensity to spend
  - Investment impacts muted by structural changes
- Act cause interest rates to rise higher and faster
  - Finance $1 trillion more debt over 10-years
  - Fed is raising rates and shrinking money supply
- Ultimately, this will slow growth and lead to a recession

Policy Decisions Pending

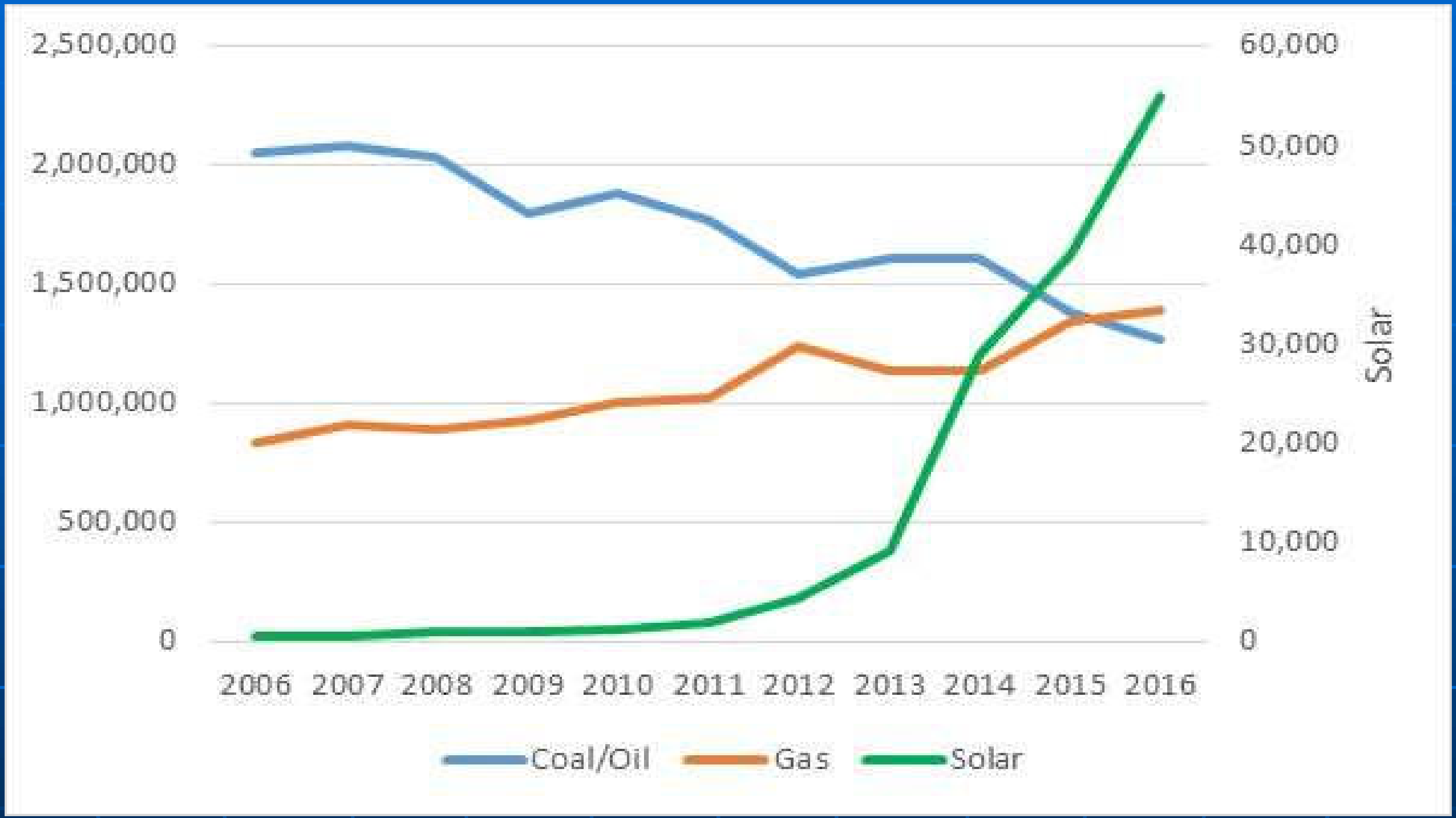
- Major unresolved issues remain
  - Structural budget deficit
- Major unknowns and risks
  - Foreign trade
  - Immigration
  - Mueller Investigtion
- Pander to the Base – But Destructive Policies are Ultimately Unlikely
  - NAFTA will be renewed
  - Drastic immigration policies will not be imposed

STRUCTURAL CHANGE

Structural Change
Requires Policy Response

- AI and Automation – less friction/cost
- Globalization- equalization in edu, tech
- Immigration – demographics matter
- Income inequality – propensity to consume
- Impact on real estate development
  - Less demand for retail & office space
- Climate Change and Current Impacts
  - Shift toward renewable energy
  - Mitigation costs – beaches, low lying cities

Megawatthour Generation



-Total Generation up by 2% in 10 years
-Gas Generation now exceeds Coal/Oil Combined
-Solar up 10,700%, only accounts for 1.3% of generation

Planned Capacity 2017-2021(MwH 000's)

U.S. Total	81,527
Coal	-18,757
Petroleum	-915
Natural Gas	57,253
Other Gases	513
Nuclear	2,312
Hydroelectric Conventional	379
Wind	25,362
Photovoltaic	14,259
Fuels	239
Geothermal	127
Other Biomass	188
Storage	--
Other Energy Sources	567

Current Impacts of Climate Change on Florida

- Increased frequency and intensity of tropical cyclones, flooding rains
- Increased “nuisance” coastal flooding monthly in SE/SW FL and the Keys
- Rising sea level and beach erosion
- Invasive plants/bugs/disease
- Migration from Puerto Rico >50,000

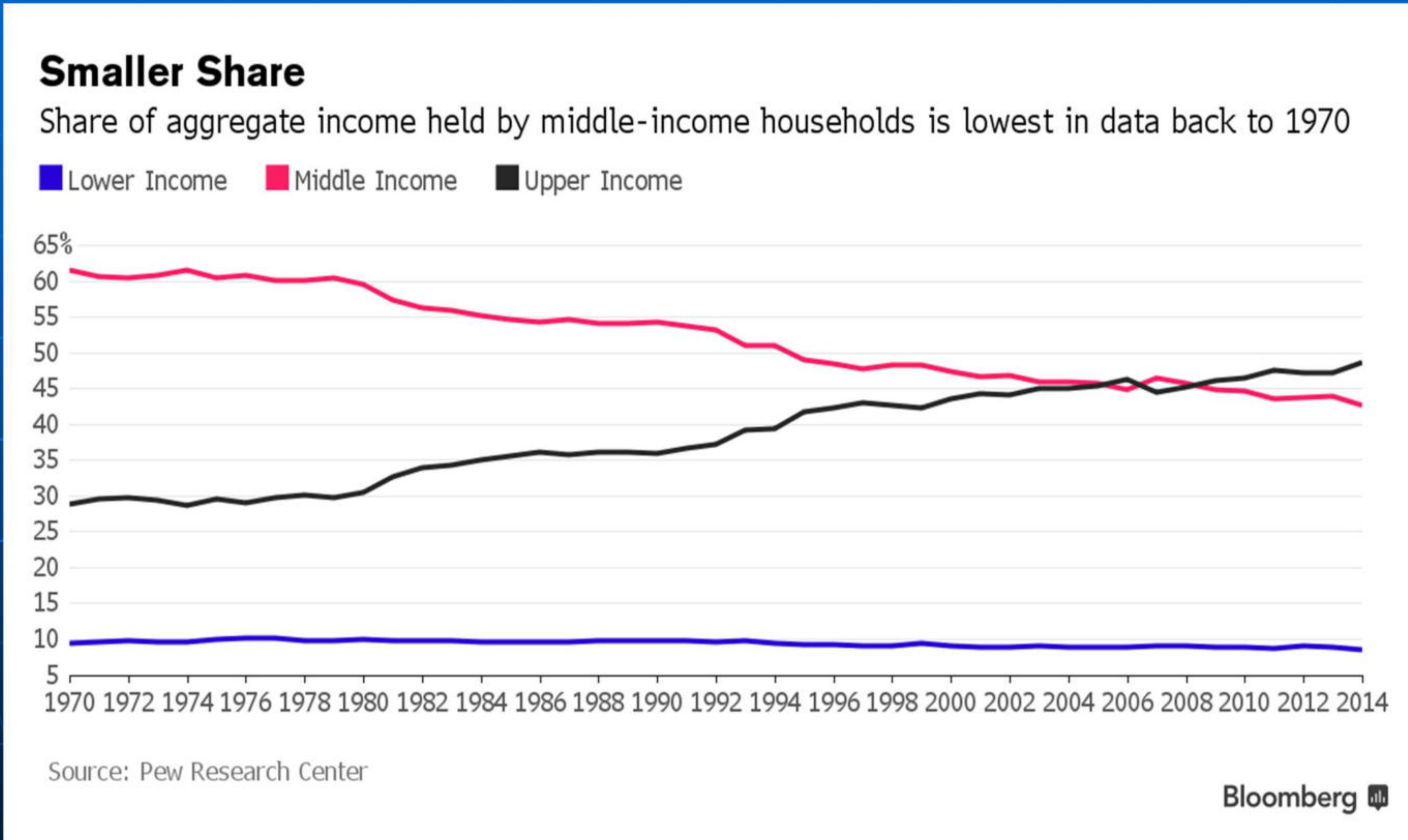
$Billion Events Impacting the U.S. from 2005-2018

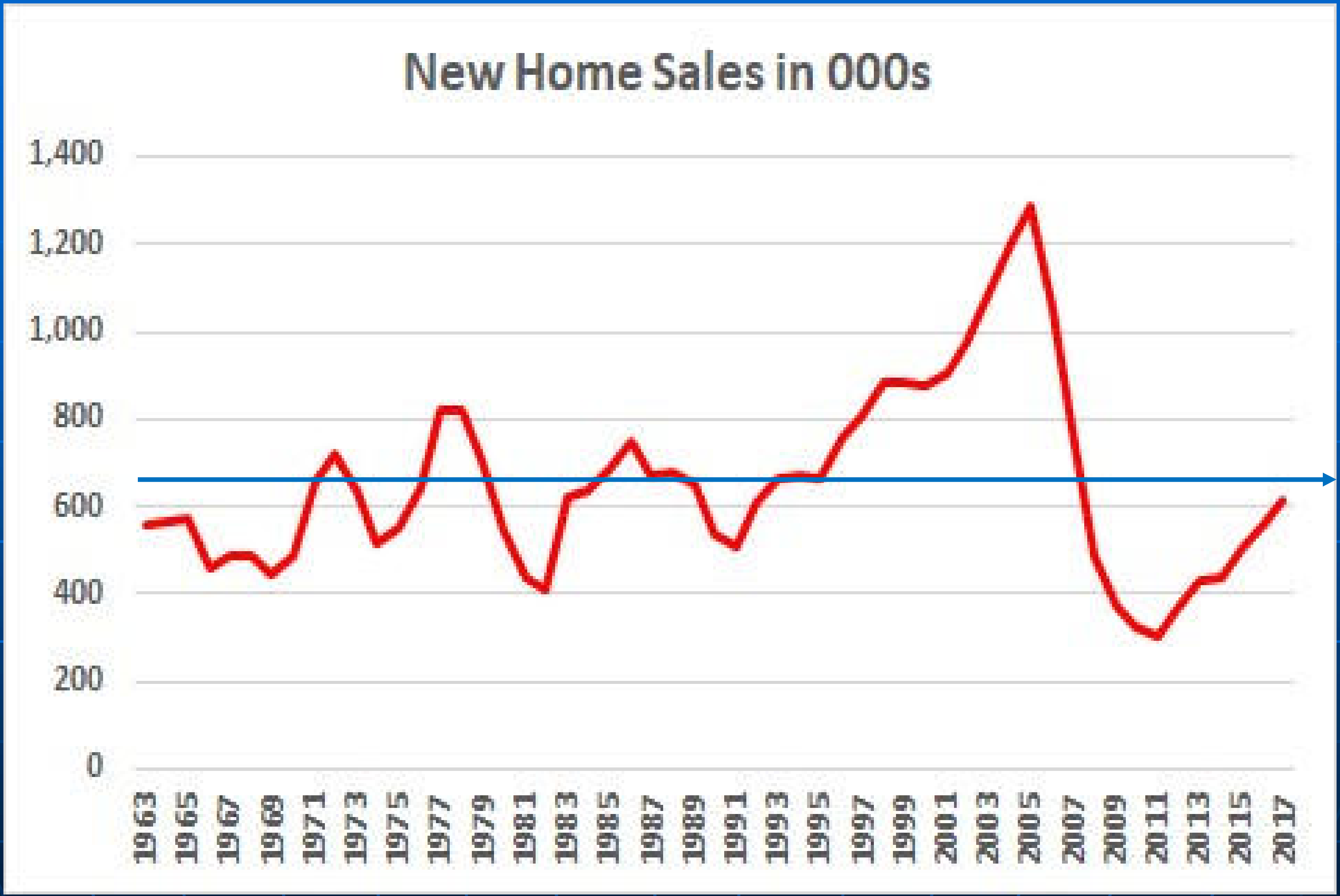
Disaster Type	# Events	% of Events	CPI-Adjusted loss $B	% of Losses	Average Cost/Event	Deaths
Drought	12	9.20%	$99.3	10.00%	$8.30	286†
Flooding	17	13.10%	$52.7	5.30%	$3.10	244
Freeze	3	2.30%	$5.2	0.50%	$1.70	1
Severe Storm‡	69	53.10%	$155.1‡	15.7%‡	$2.2‡	994
Tropical Cyclone	**15**	**11.50%**	**$630.9**	**63.80%**	**$42.10**	**2,704**
Wildfire	9	6.90%	$35.8	3.60%	$4.00	166
Winter Storm	5	3.80%	$10.3	1.00%	$2.10	113
All Disasters	**130**	**100.00%**	**$989.3**	**100.00%**	**$7.60**	**4,508**

‡ Does not include cost statistics for the following: Southeastern Severe Storms (March 2018)

- **Source:** NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2018). https://www.ncdc.noaa.gov/billions/
- **Florida subject to hurricanes which are the most damaging of events**

Growing Income Inequality
Due to Globalization, AI, Automation



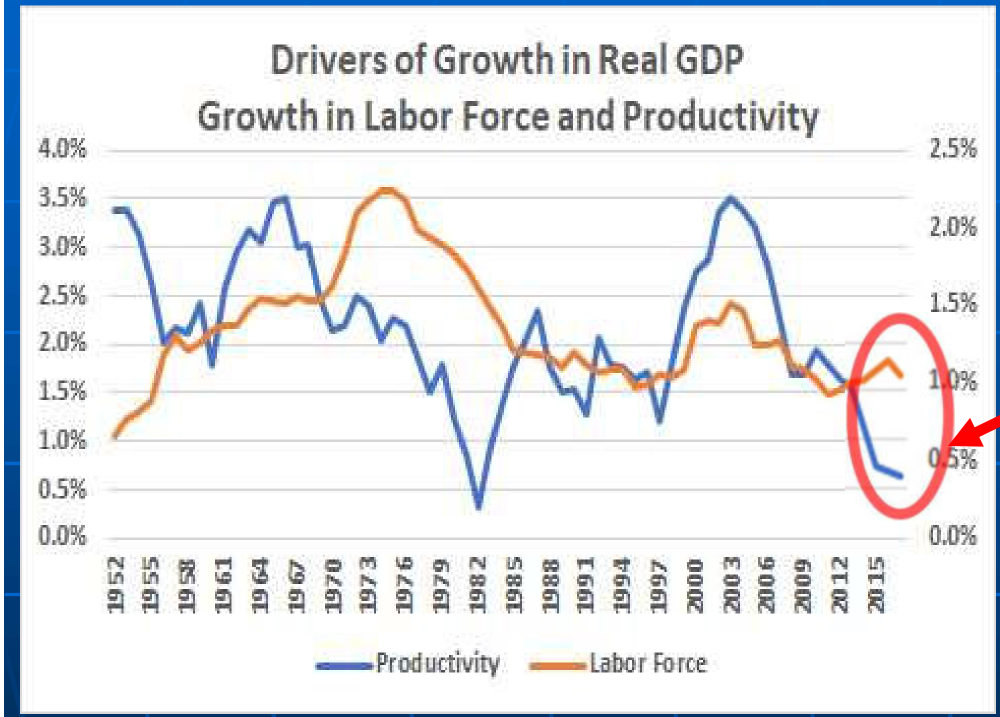

New Home Sales in 000s
1,400
1,200
1,000
800
600
400
200
0
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017

Structural Change, Retail Sales and Store Space

- Major structural changes in retail sales
  - Historic shift to ecommerce
  - Change in composition of sales: less goods and more services
- Impact on store space requirements

Category	2000-08	2009-16	Change
Neighborhood	35	35	0
Community	45	30	-15
Regional	35	15	-20
	======	======	======
Total	**115**	**80**	**-35**

Long Term Economic Growth



- % GDP = % Productivity + % Population
- 1.8% to 2.75% GDP
  - 0.8% to 1.5% productivity
  - 1% to 1.25% population

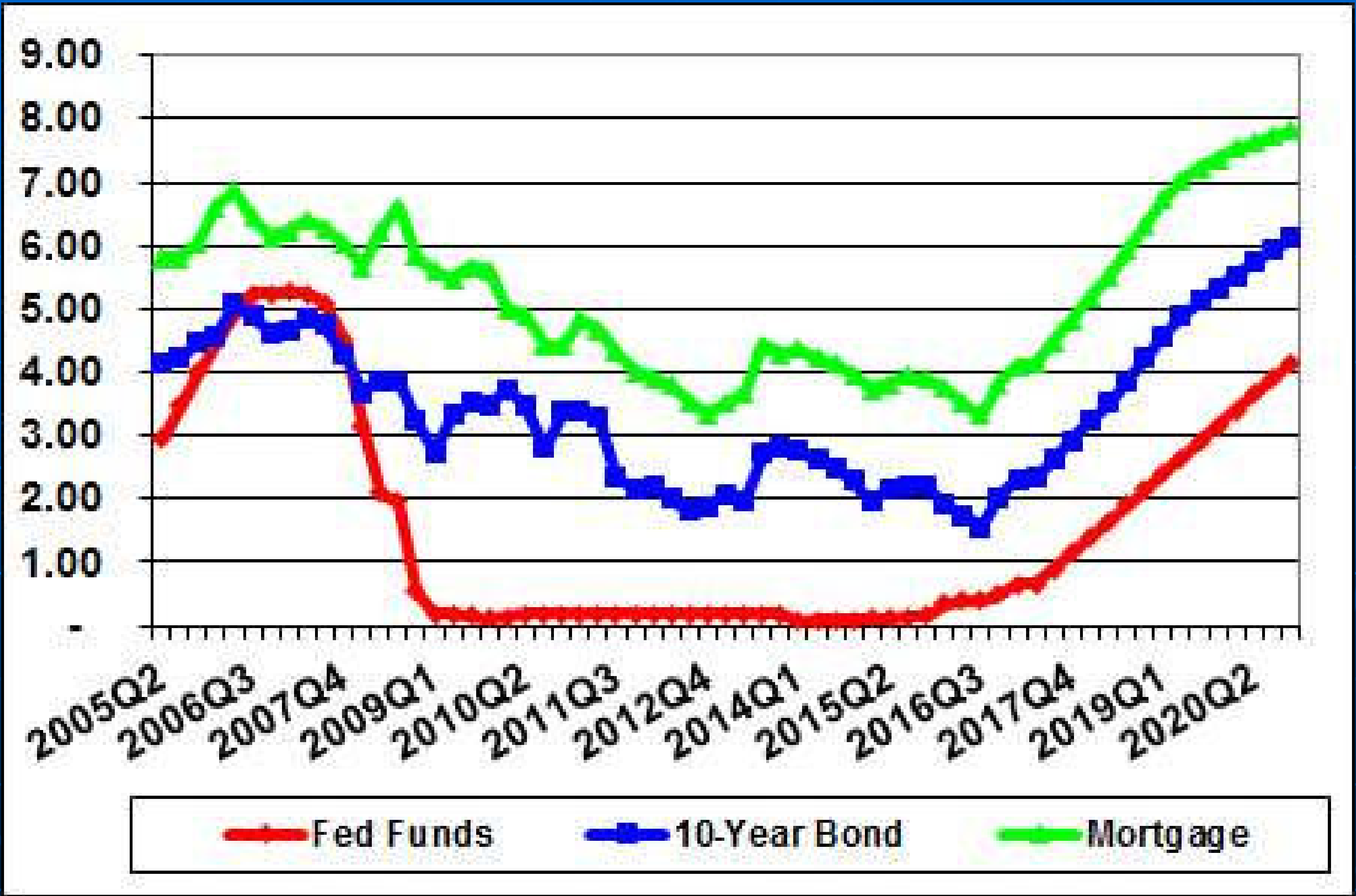
- Investment in human & physical capital
- Reform entitlements and healthcare
- Revise immigration policy

U.S. FORECAST

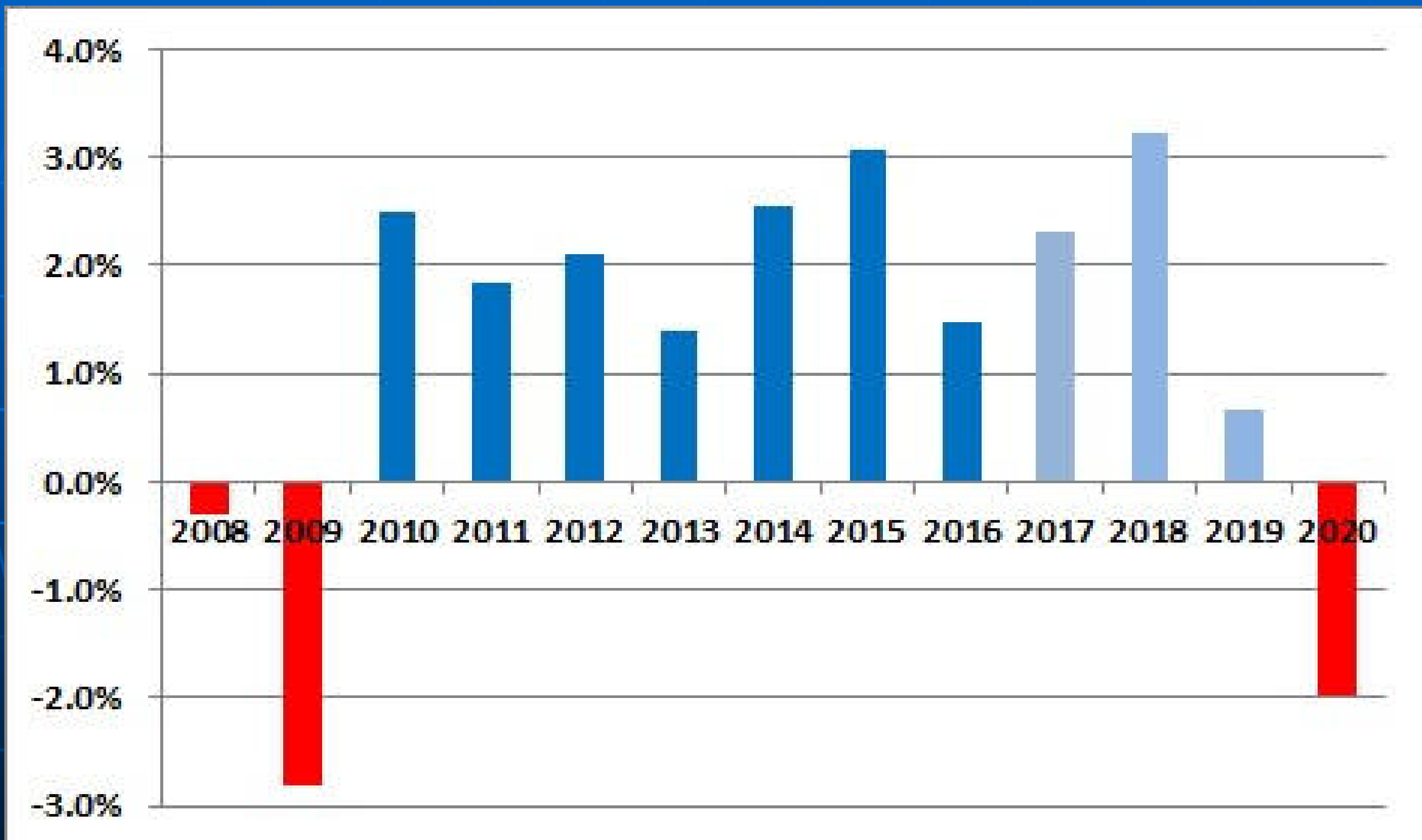
What to Watch For

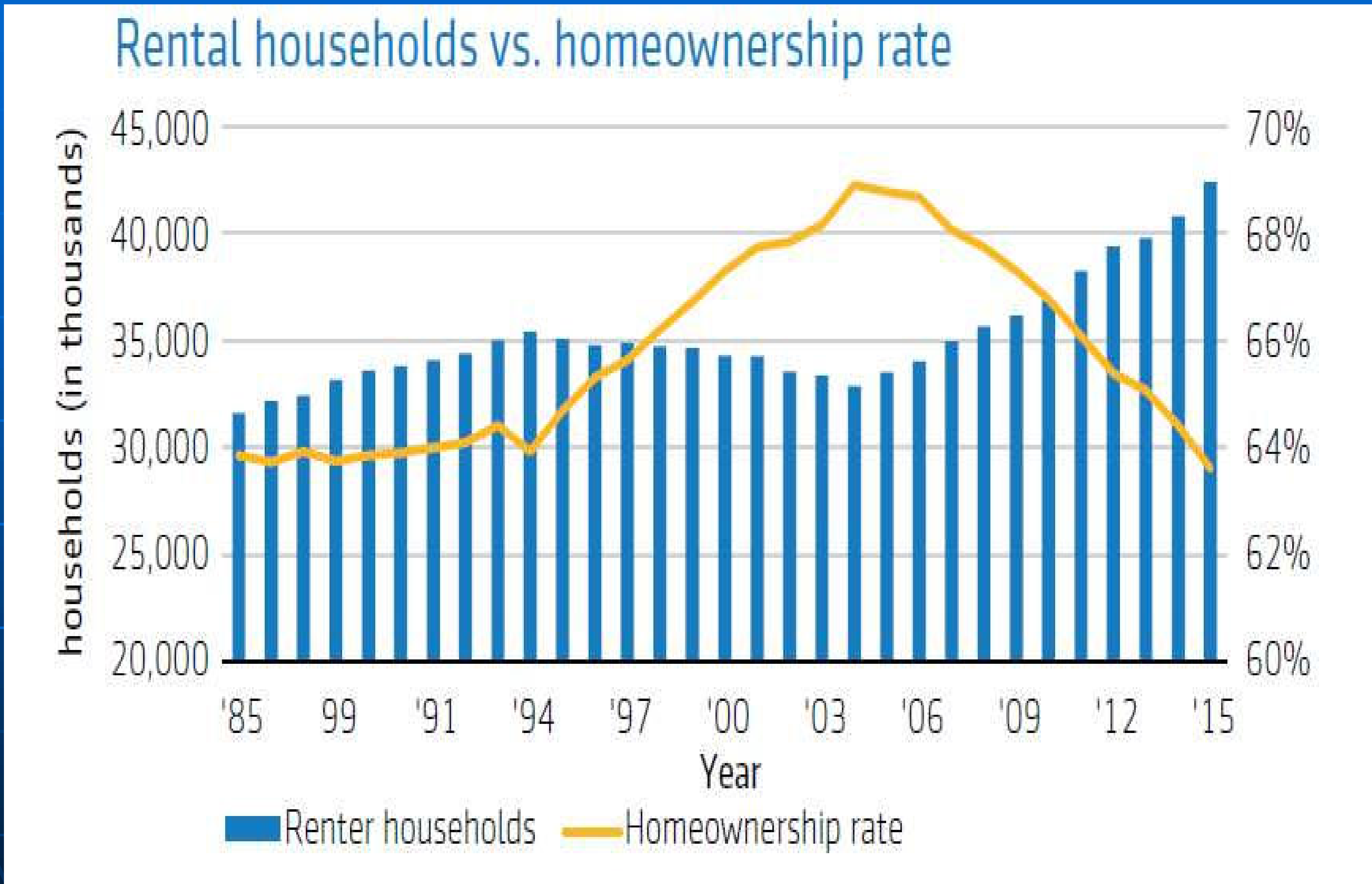
- 10-year Bond Rate
- Stock market and volatility
- Fed funds rate
- New claims for unemployment
- Policy decisions: immigration and trade

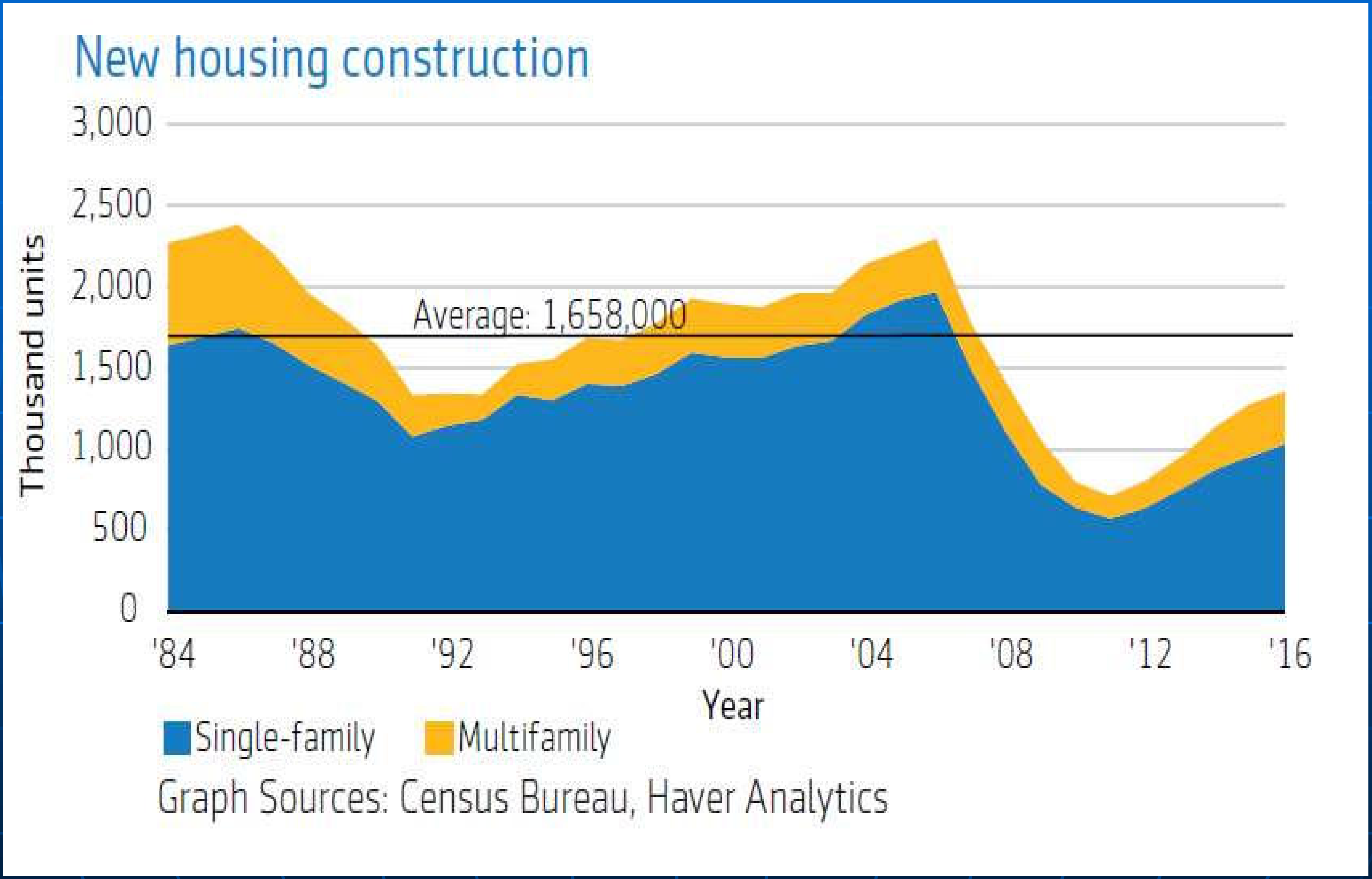
INTEREST RATES



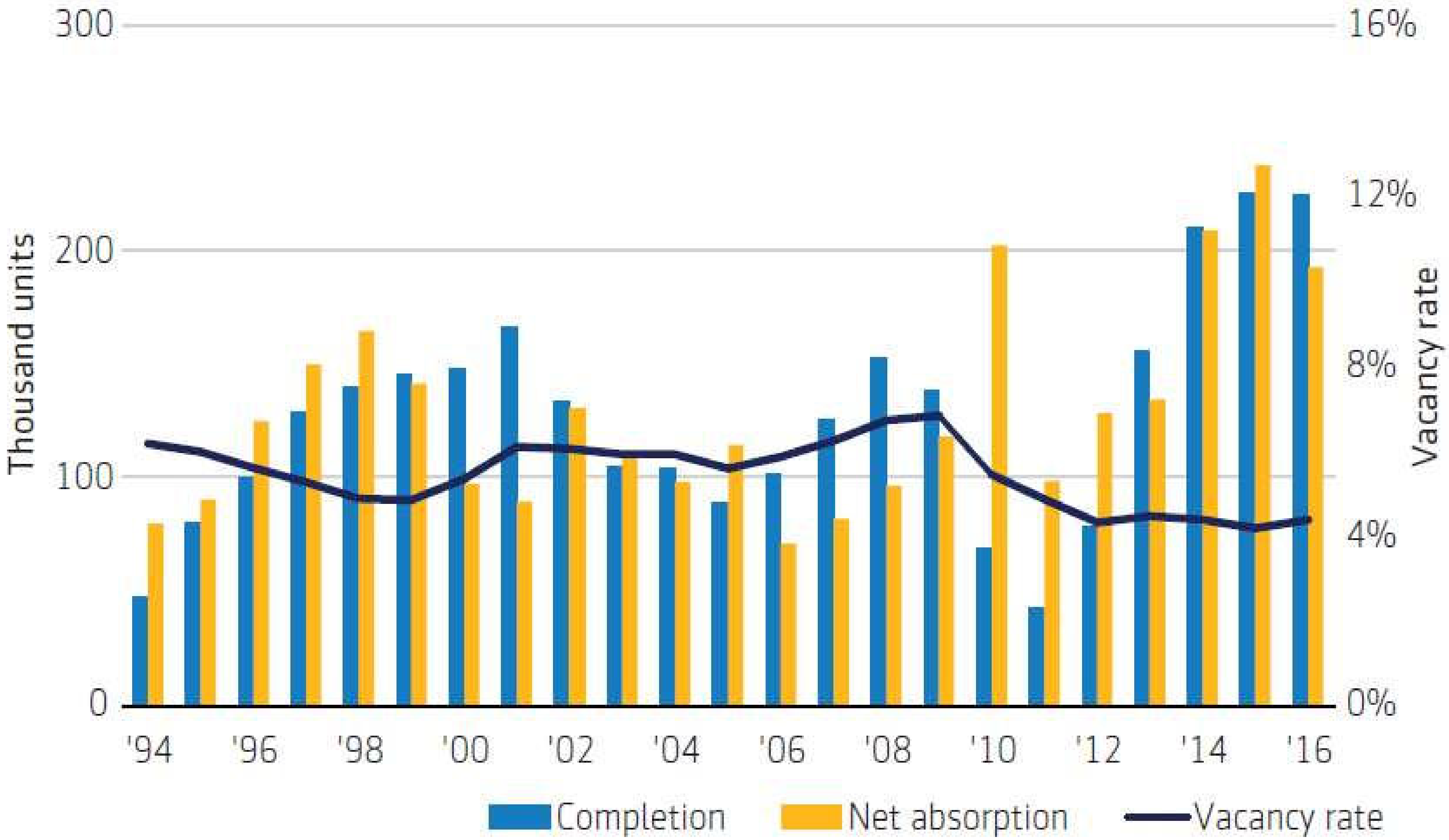
GDP Growth
(Percent growth SAAR)

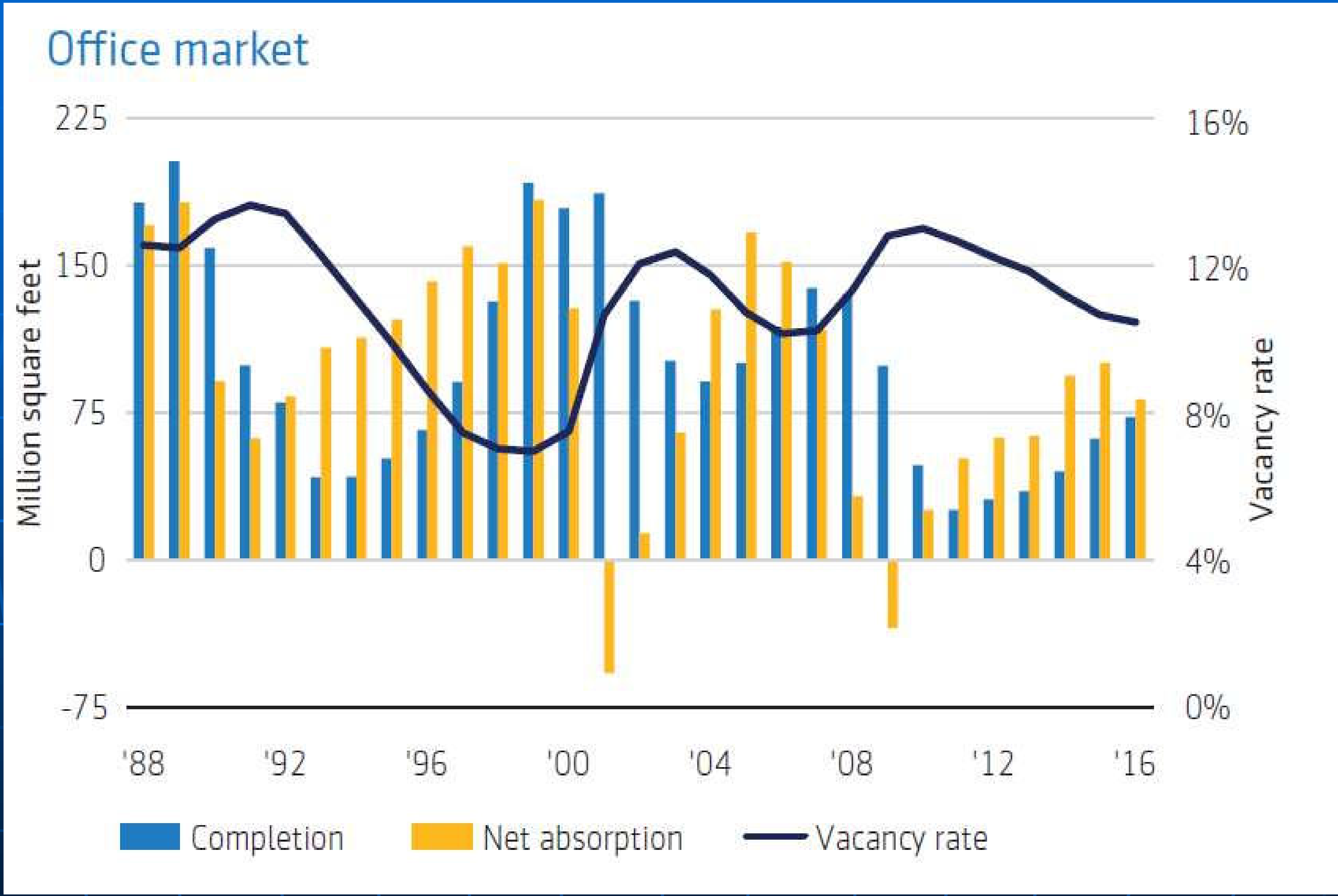


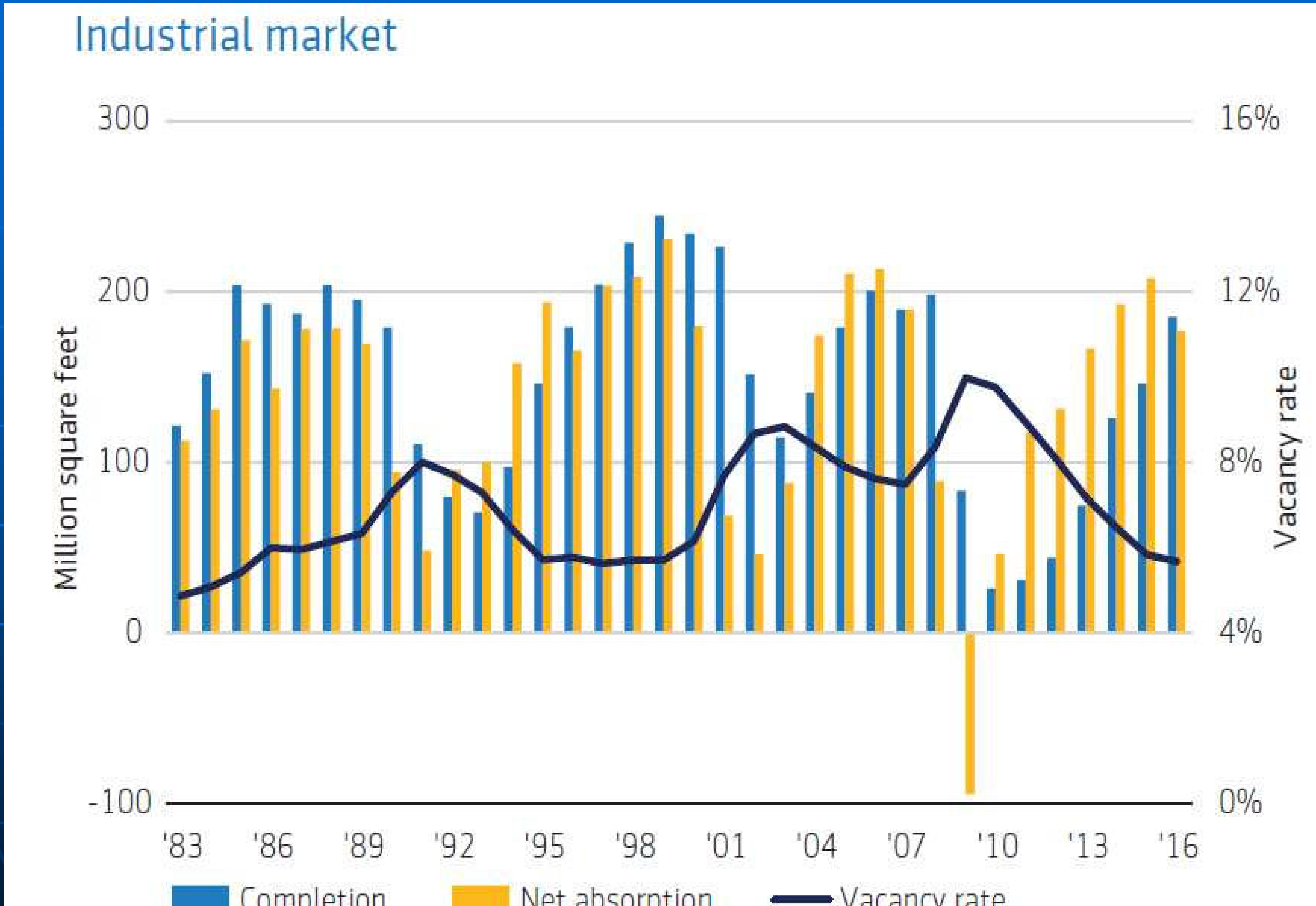

Rental households vs. homeownership rate
households (in thousands)
45,000
40,000
35,000
30,000
25,000
20,000
70%
68%
66%
64%
62%
60%
'85
99
'91
'94
'97
'00
'03
'06
'09
'12
'15
Year
Renter households
Homeownership rate

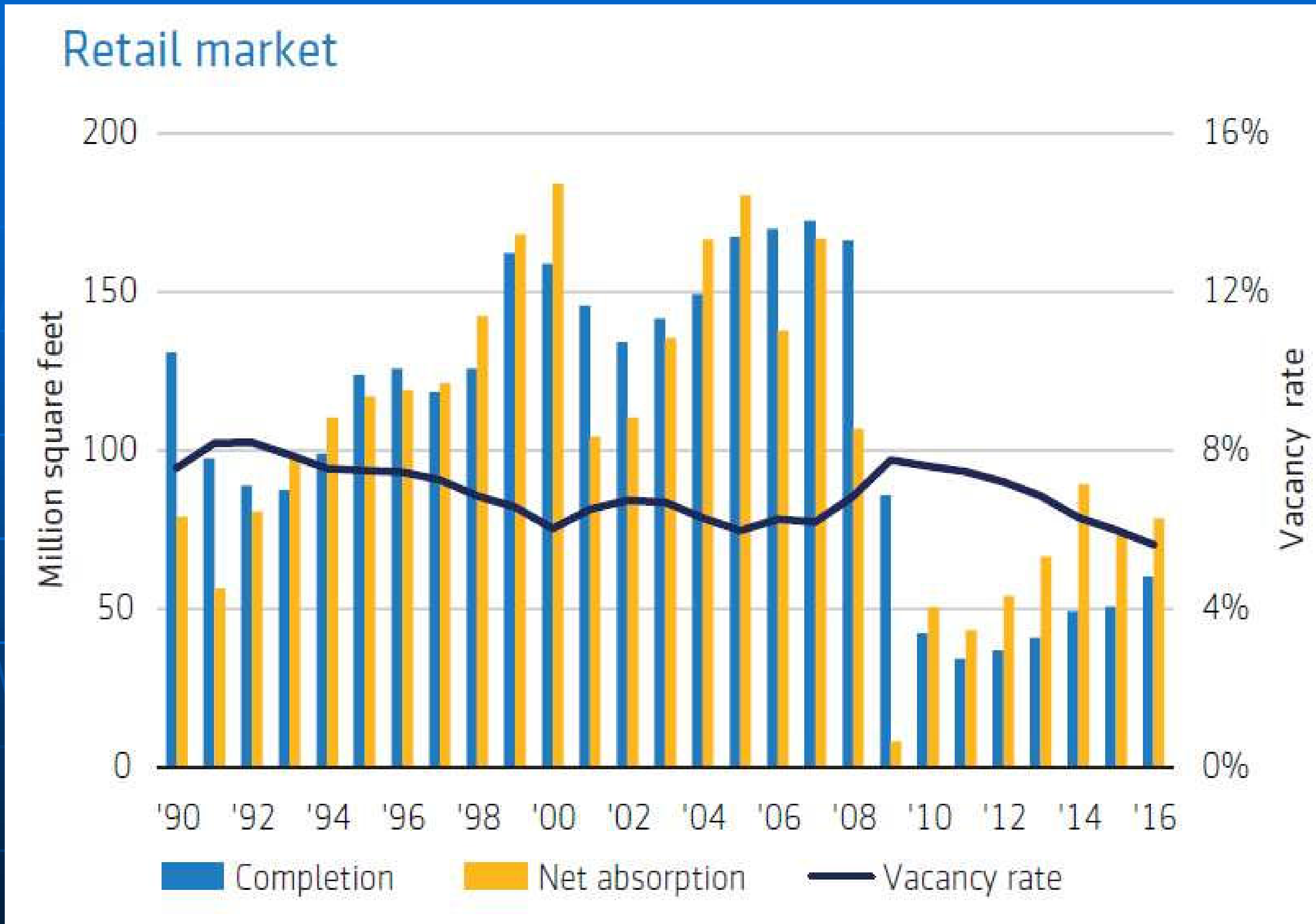

New housing construction
3,000
2,500
2,000
1,500
1,000
500
0
Thousand units
Average: 1,658,000
'84
'88
'92
'96
'00
'04
'08
'12
'16
Year
Single-family
Multifamily
Graph Sources: Census Bureau, Haver Analytics

Apartment market

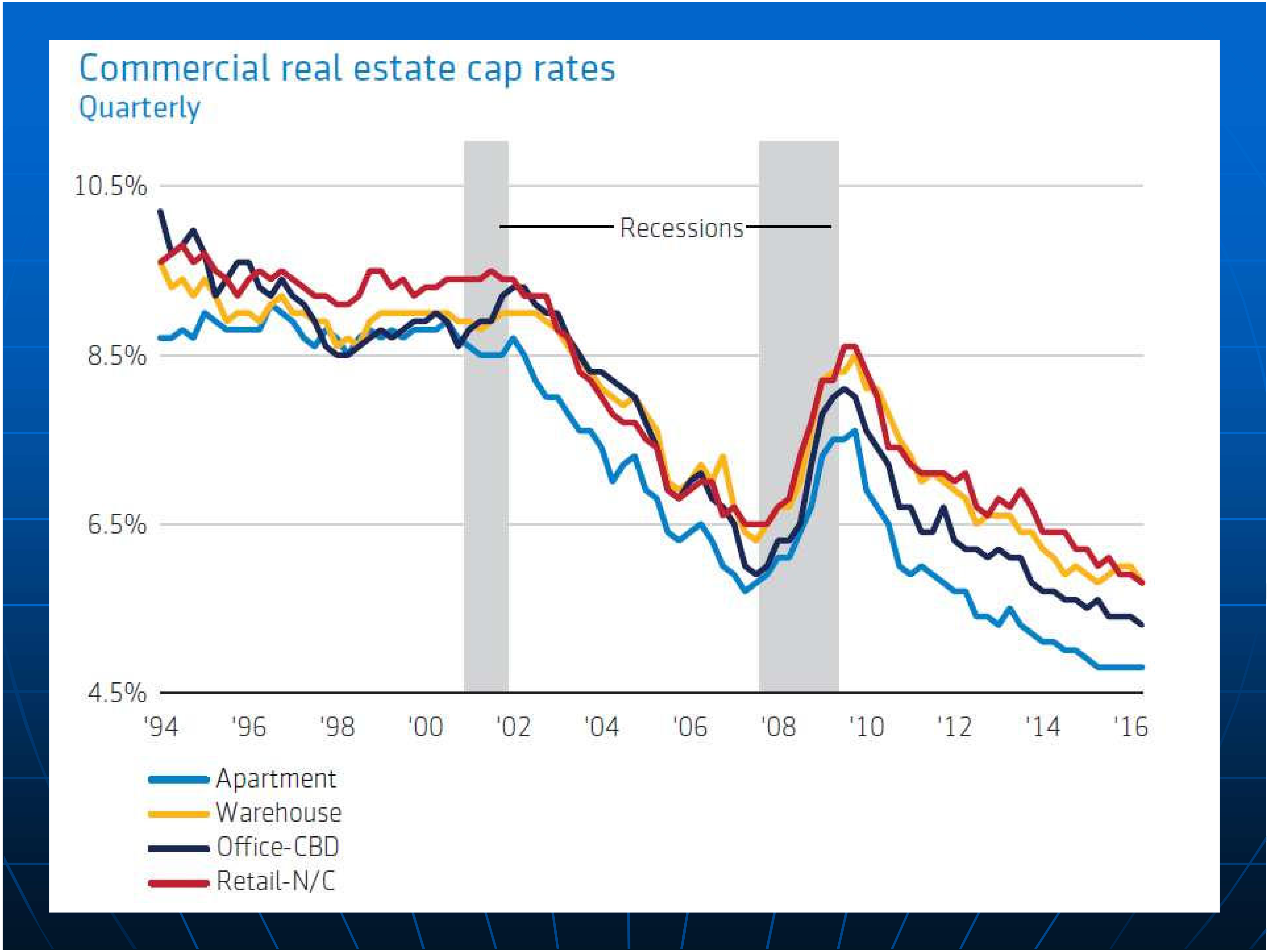



Office market
225
150
75
0
-75
Million square feet
16%
12%
8%
4%
0%
Vacancy rate
'88
'92
'96
'00
'04
'08
'12
'16
Completion
Net absorption
Vacancy rate


Industrial market
300
200
100
0
-100
16%
12%
8%
4%
0%
Million square feet
Vacancy rate
'83
'86
'89
'92
'95
'98
'01
'04
'07
'10
'13
'16
Completion
Net absorption
Vacancy rate



Retail market
200
150
100
50
0
16%
12%
8%
4%
0%
Million square feet
Vacancy rate
'90
'92
'94
'96
'98
'00
'02
'04
'06
'08
'10
'12
'14
'16
Completion
Net absorption
Vacancy rate


Commercial real estate cap rates
Quarterly
10.5%
8.5%
6.5%
4.5%
Recessions
'94
'96
'98
'00
'02
'04
'06
'08
'10
'12
'14
'16
Apartment
Warehouse
Office-CBD
Retail-N/C

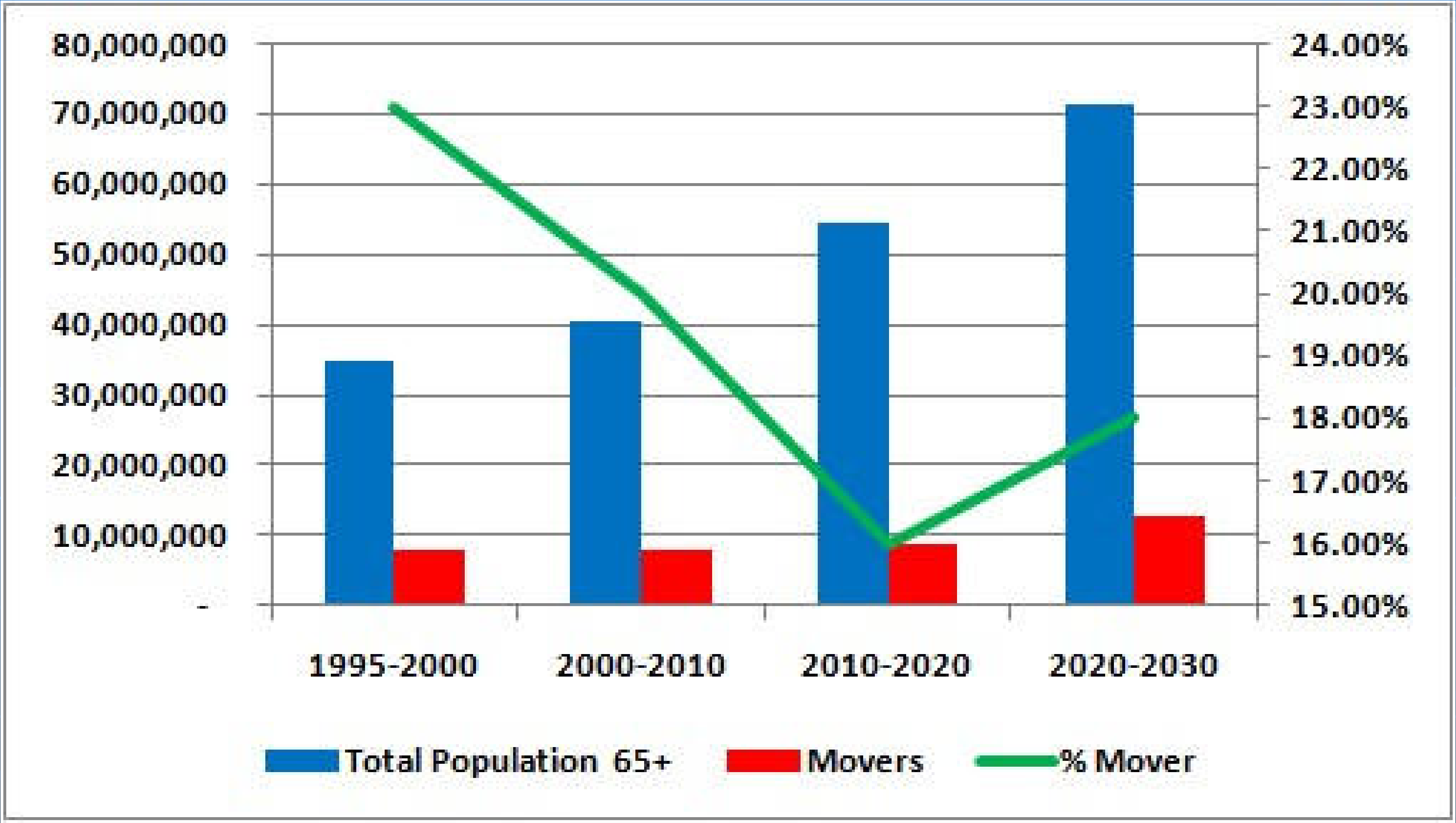
Florida Forecast

Demographics Support Projection for Continued Strong Population Growth in Florida

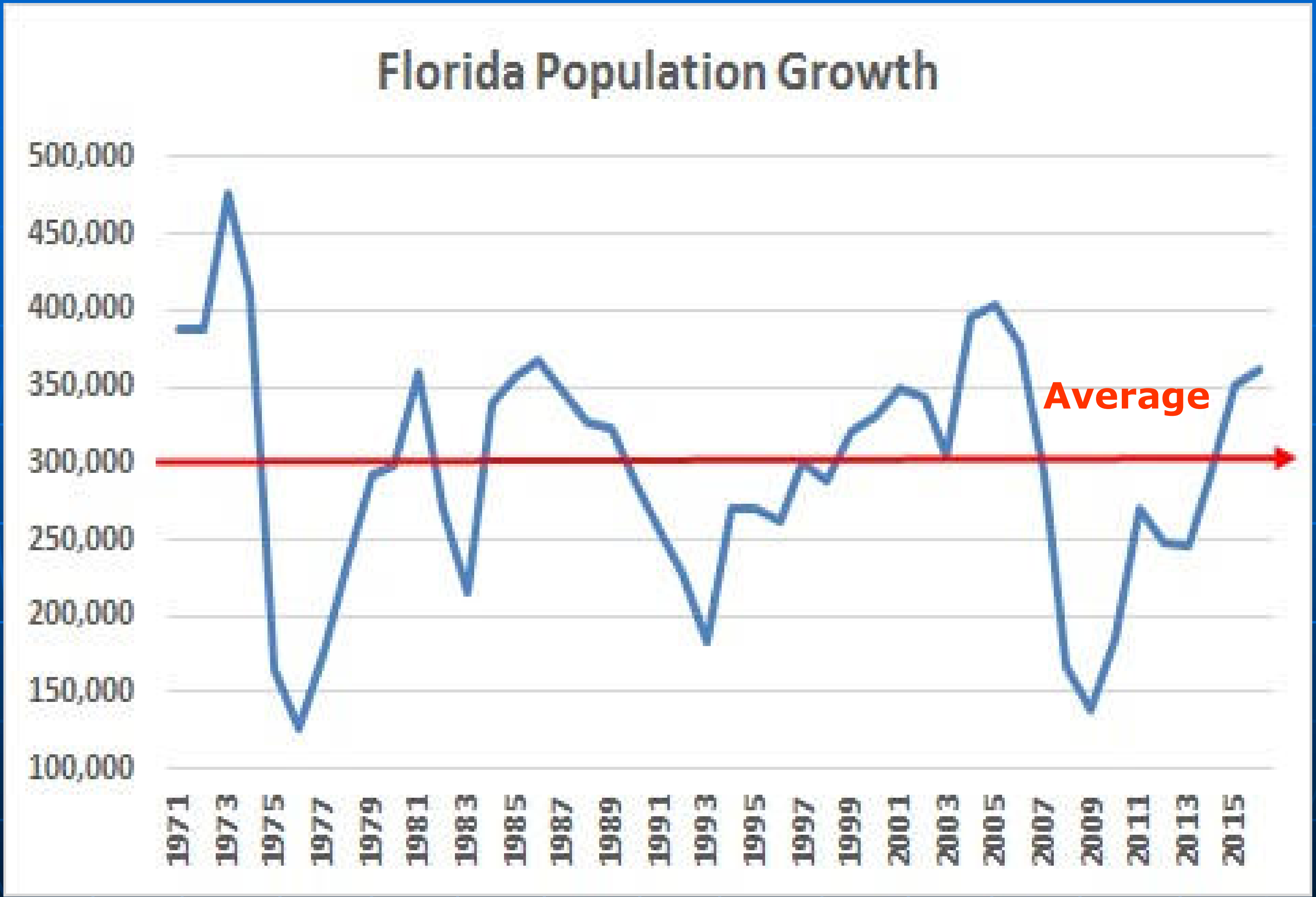
Total U.S. Population Over 65	1995-2000	2000-2010	2010-2020	2020-2030
Total Population 65 and Over	34,991,753	40,243,713	54,631,891	71,453,471
Total Movers	8,048,743	8,048,743	8,741,103	12,861,625
% Total Movers	23.00%	20.00%	16.00%	18.00%
Florida's Share of total movers 65+	**10.33%**	**9.00%**	**8.50%**	**9.00%**
Florida's Total of movers 65+	831,299	724,387	742,994	1,157,546
Instate	544,491	481,709	508,942	804,481
Percent instate	65.50%	66.50%	68.50%	69.50%
Out of state	286,808	242,678	234,052	353,065
Percent out of state	34.50%	33.50%	31.50%	30.50%

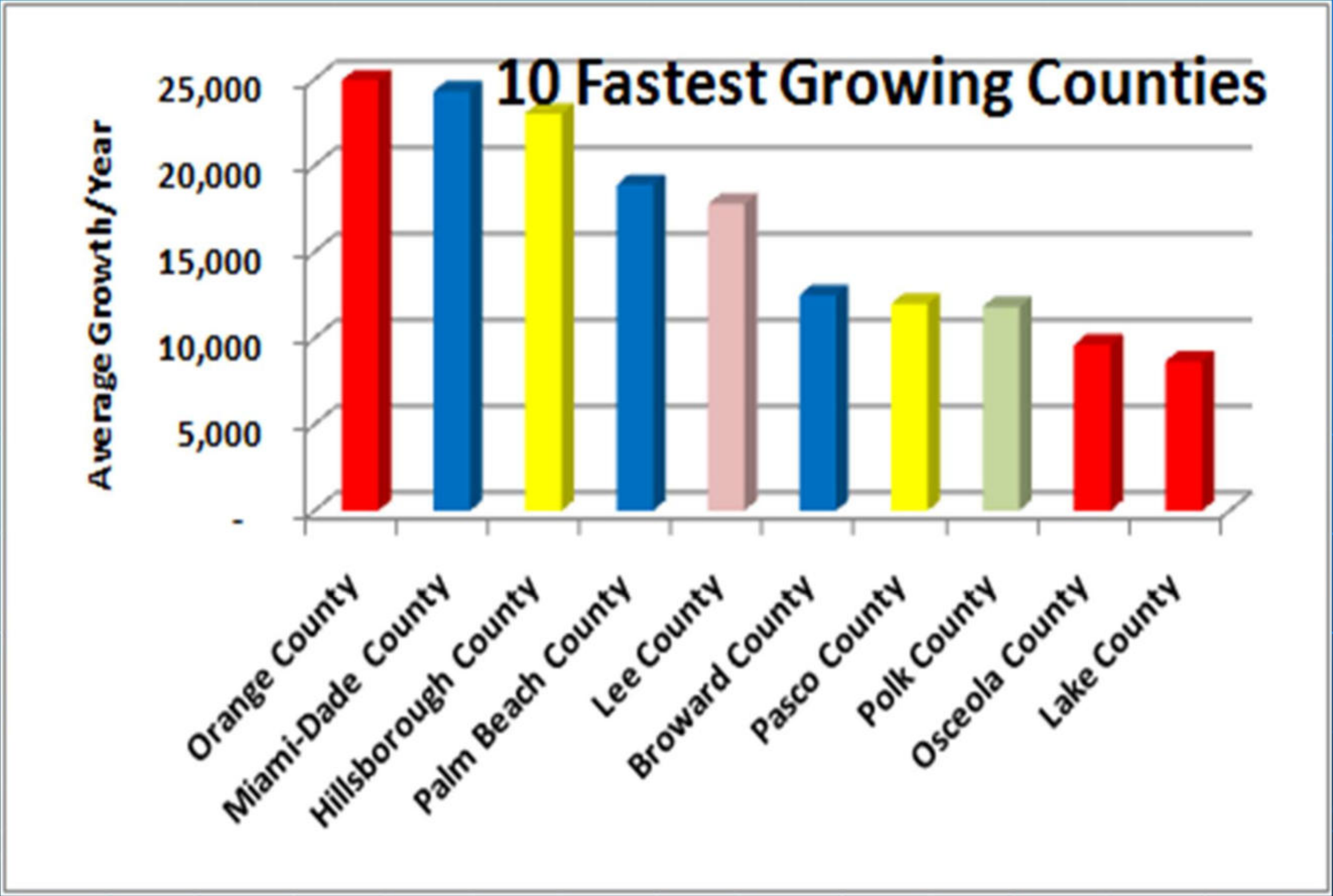
- 22.59% of all U.S. population 65+ moves each year
- Aging boomers will cause the number of migrants 65+ to soar from 2000 through 2030 from 8 million to 16 million per 5-year intervals
- 10.5% of all movers 65+ moved to Florida 1995-2000
- This share will erode over time
- But the demographic wave of boomers overwhelms the erosion of share to Florida
- Florida will receive an increasing number of 65+ migrants from 2000-through-2030

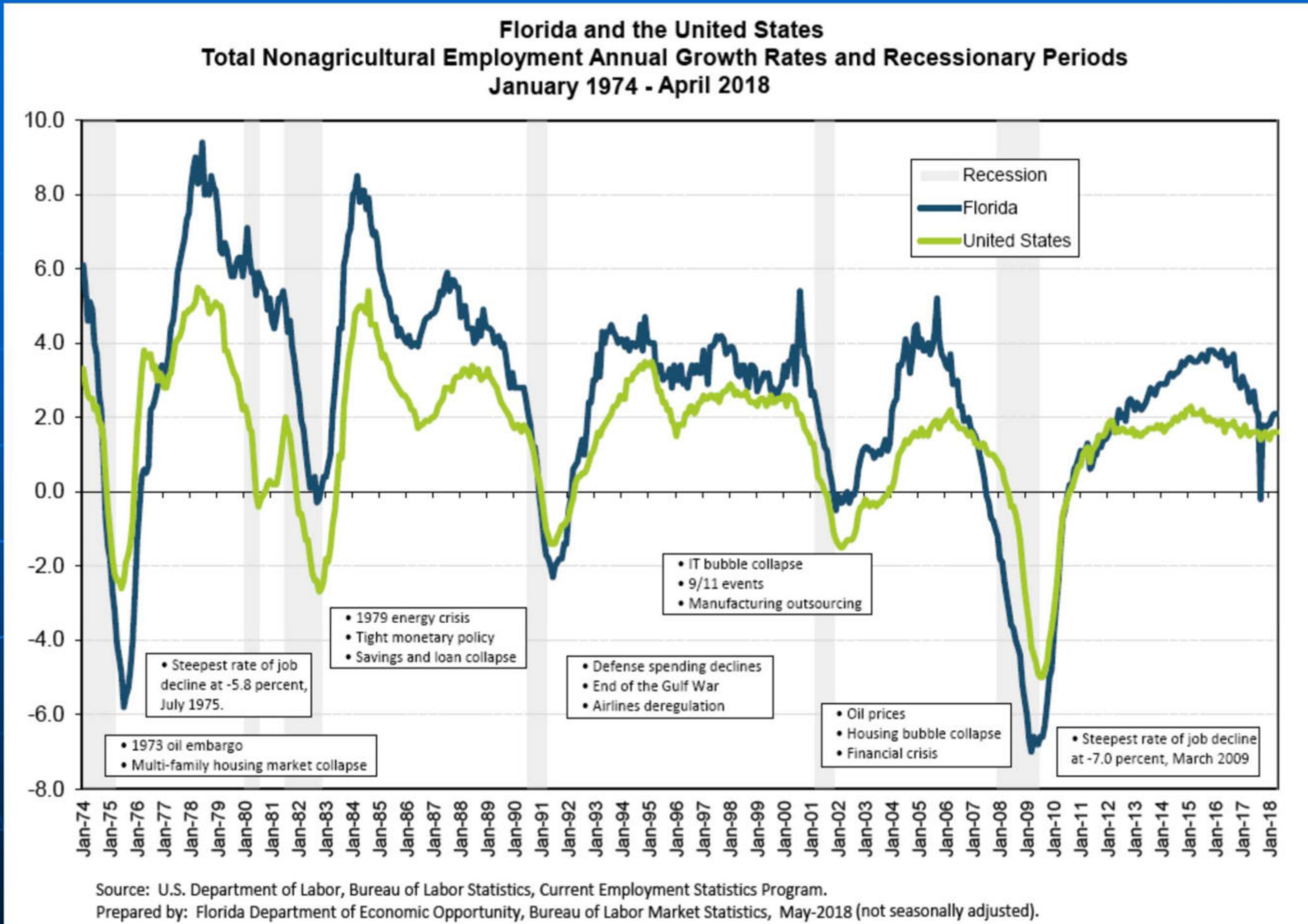
More People 65+ But Fewer Will Move/Retire



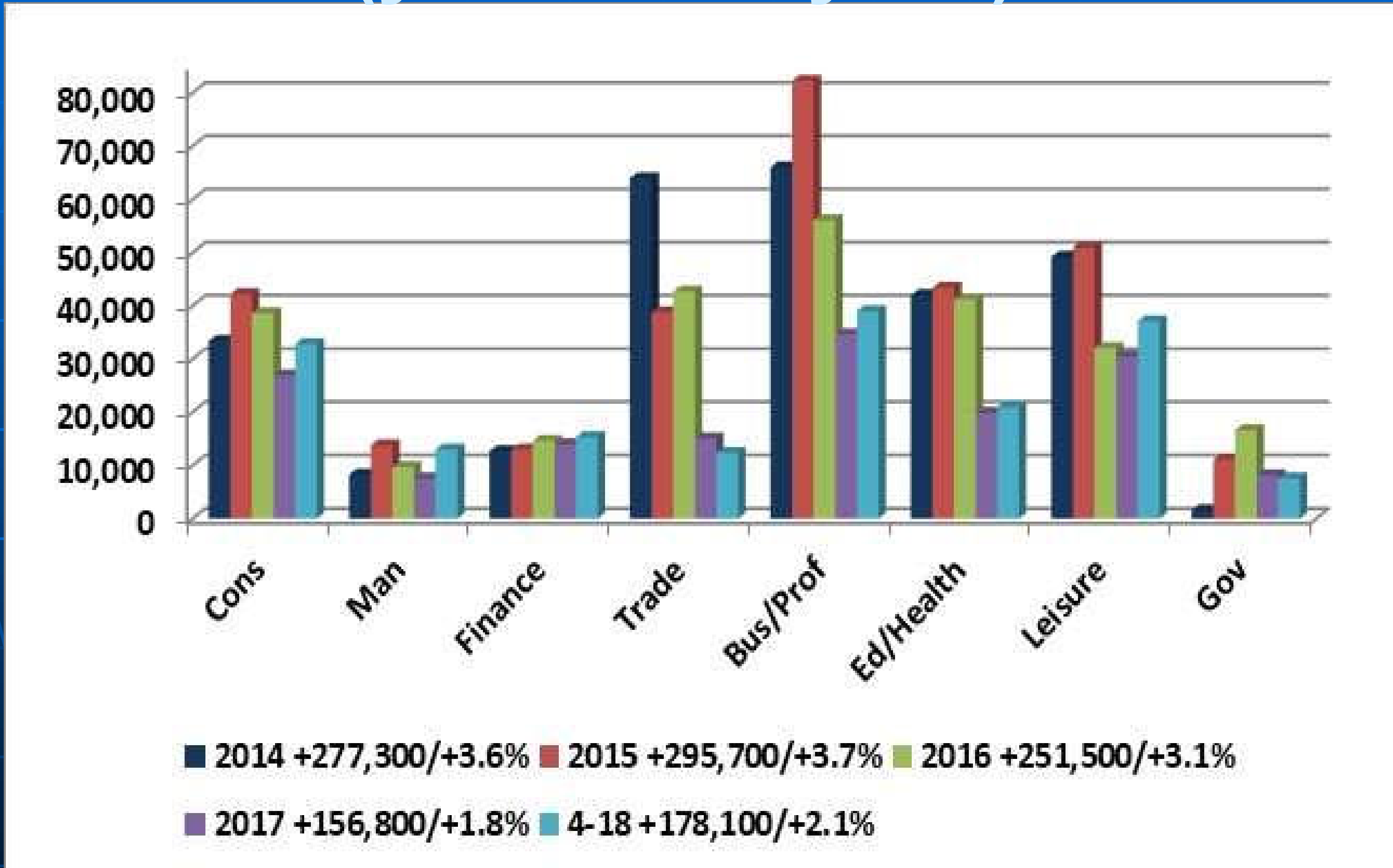
Where Will Growth Occur? Drive Time Approach


Florida Population Growth
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
Average
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015


10 Fastest Growing Counties
Average Growth/Year
25,000
20,000
15,000
10,000
5,000
-
Orange County
Miami-Dade County
Hillsborough County
Palm Beach County
Lee County
Broward County
Pasco County
Polk County
Osceola County
Lake County


Florida and the United States
Total Nonagricultural Employment Annual Growth Rates and Recessionary Periods
January 1974 - April 2018
Recession
Florida
United States
10.0
8.0
6.0
4.0
2.0
0.0
-2.0
-4.0
-6.0
-8.0
• Steepest rate of job decline at -5.8 percent, July 1975.
• 1973 oil embargo
• Multi-family housing market collapse
• 1979 energy crisis
• Tight monetary policy
• Savings and loan collapse
• Defense spending declines
• End of the Gulf War
• Airlines deregulation
• IT bubble collapse
• 9/11 events
• Manufacturing outsourcing
• Oil prices
• Housing bubble collapse
• Financial crisis
• Steepest rate of job decline at -7.0 percent, March 2009
Jan-74 Jan-75 Jan-76 Jan-77 Jan-78 Jan-79 Jan-80 Jan-81 Jan-82 Jan-83 Jan-84 Jan-85 Jan-86 Jan-87 Jan-88 Jan-89 Jan-90 Jan-91 Jan-92 Jan-93 Jan-94 Jan-95 Jan-96 Jan-97 Jan-98 Jan-99 Jan-00 Jan-01 Jan-02 Jan-03 Jan-04 Jan-05 Jan-06 Jan-07 Jan-08 Jan-09 Jan-10 Jan-11 Jan-12 Jan-13 Jan-14 Jan-15 Jan-16 Jan-17 Jan-18
Source: U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics Program.
Prepared by: Florida Department of Economic Opportunity, Bureau of Labor Market Statistics, May-2018 (not seasonally adjusted).

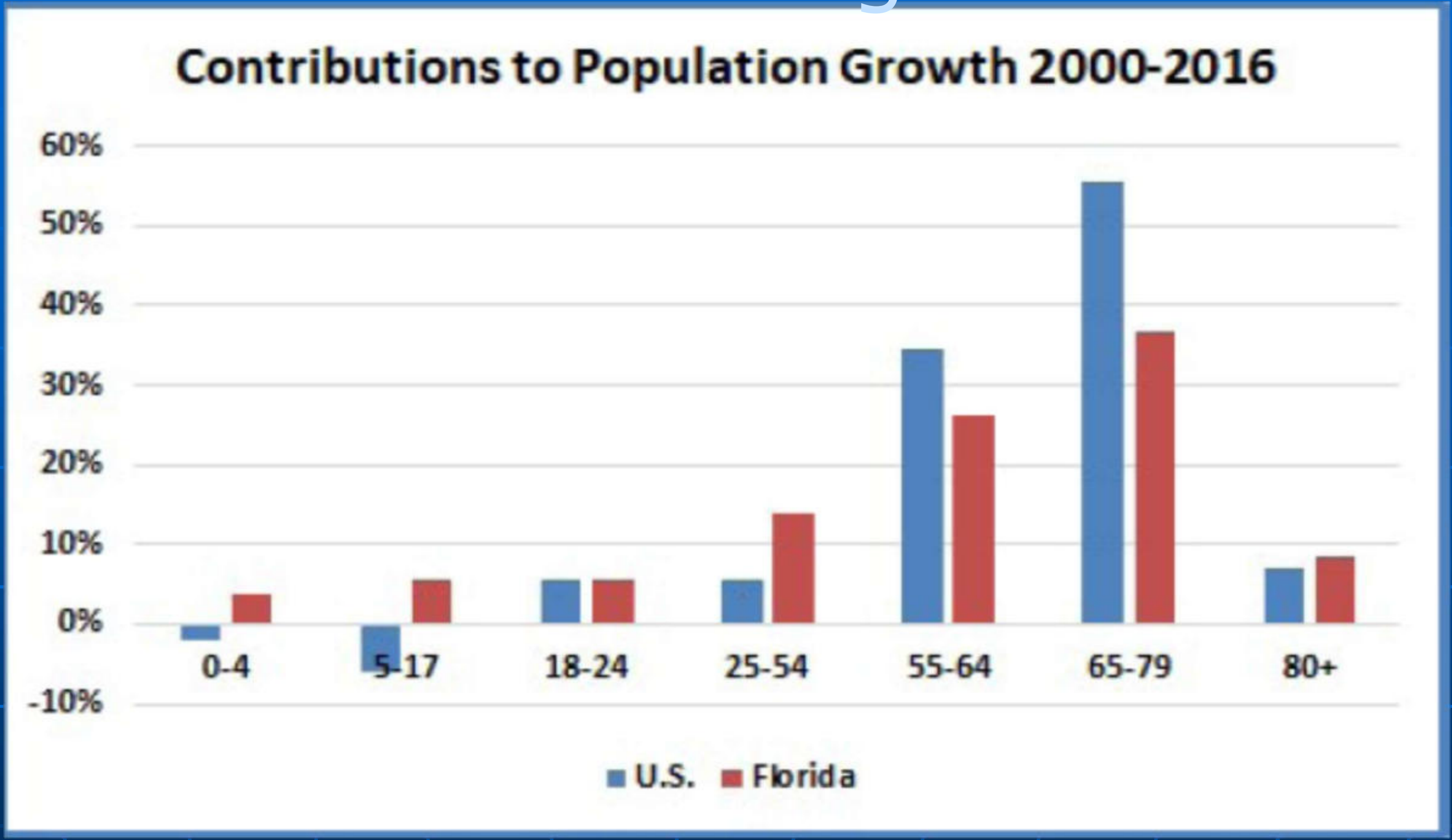
Job Growth (year-over-year)



Unemployment Rates

MSA/MD	LABOR FORCE	EMPLOY-MENT	UNEMPLOYMENT LEVEL	UNEMPLOYMENT RATE
	APRIL 2018			
Cape Coral-Fort Myers MSA	338,188	327,525	10,663	3.2%
Crestview-Fort Walton Beach-Destin MSA	129,635	126,096	3,539	2.7%
Deltona-Daytona Beach-Ormond Beach MSA	300,676	290,085	10,591	3.5%
Gainesville MSA	145,427	140,985	4,442	3.1%
Homosassa Springs MSA	48,155	45,888	2,267	4.7%
Jacksonville MSA	768,338	744,004	24,334	3.2%
Lakeland-Winter Haven MSA	297,852	286,743	11,109	3.7%
Miami-Fort Lauderdale-West Palm Beach MSA	3,157,156	3,041,373	115,783	3.7%
Fort Lauderdale-Pompano Beach-Deerfield Beach MD	1,032,334	999,530	32,804	3.2%
Miami-Miami Beach-Kendall MD	1,401,126	1,341,714	59,412	4.2%
West Palm Beach-Boca Raton-Delray Beach MD	723,696	700,129	23,567	3.3%
Naples-Immokalee-Marco Island MSA	174,140	168,784	5,356	3.1%
North Port-Sarasota-Bradenton MSA	366,480	355,146	11,334	3.1%
Ocala MSA	134,980	129,511	5,469	4.1%
Orlando-Kissimmee-Sanford MSA	1,323,482	1,282,973	40,509	3.1%
Palm Bay-Melbourne-Titusville MSA	268,534	259,353	9,181	3.4%
Panama City MSA	96,409	93,274	3,135	3.3%
Pensacola-Ferry Pass-Brent MSA	223,744	216,360	7,384	3.3%
Port St. Lucie MSA	212,222	204,058	8,164	3.8%
Punta Gorda MSA	71,110	68,510	2,600	3.7%
Sebastian-Vero Beach MSA	63,728	61,207	2,521	4.0%
Sebring MSA	36,191	34,621	1,570	4.3%
Tallahassee MSA	193,818	187,531	6,287	3.2%
Tampa-St. Petersburg-Clearwater MSA	1,532,322	1,482,780	49,542	3.2%
The Villages MSA	30,522	29,024	1,498	4.9%
Florida (Not Seasonally Adjusted)	10,202,000	9,854,000	348,000	3.4%
Florida (Seasonally Adjusted)	10,204,000	9,807,000	398,000	3.9%
United States (Not Seasonally Adjusted)	161,280,000	155,348,000	5,932,000	3.7%
United States (Seasonally Adjusted)	161,527,000	155,181,000	6,346,000	3.9%

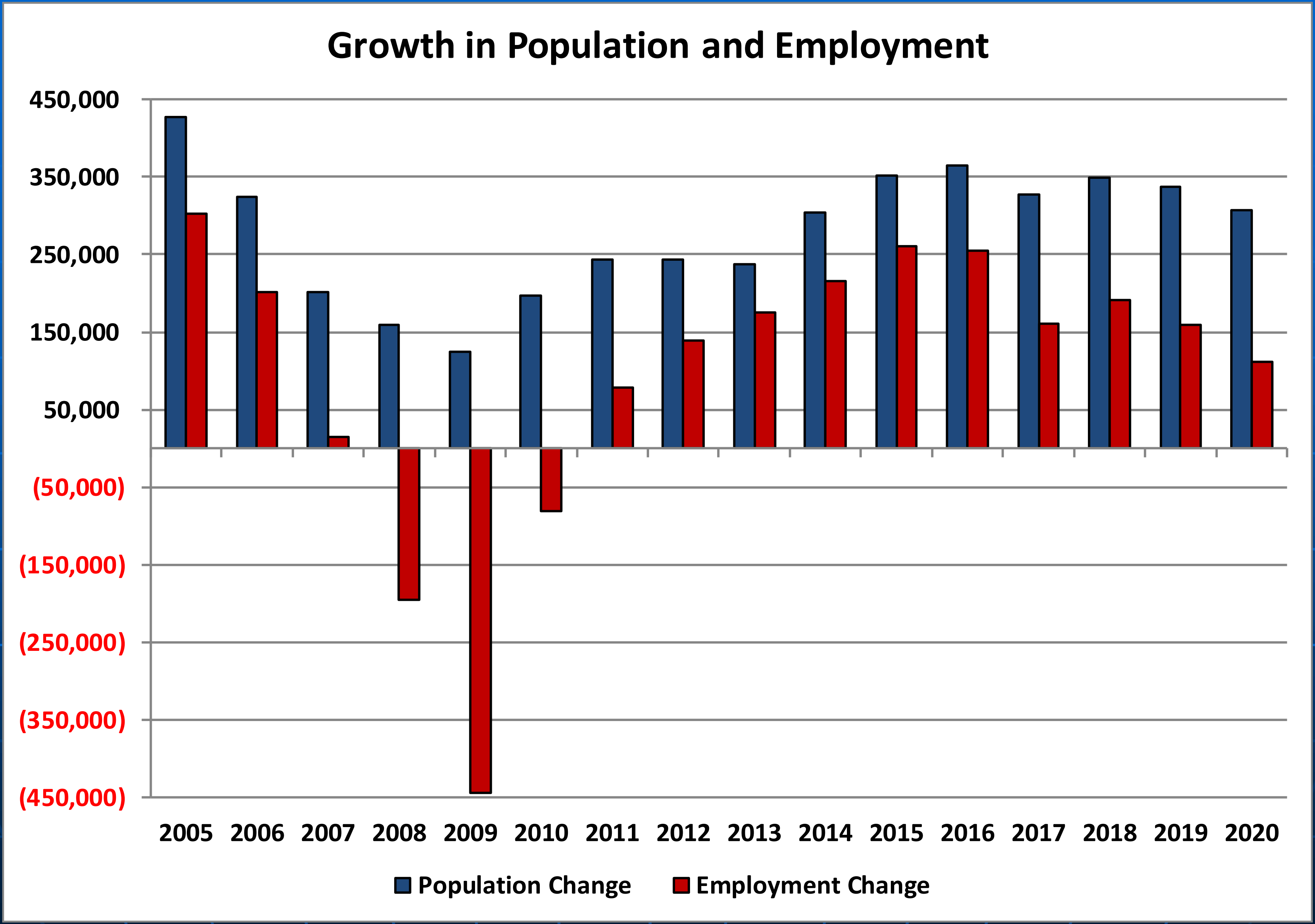
Growth in Older Age Cohorts

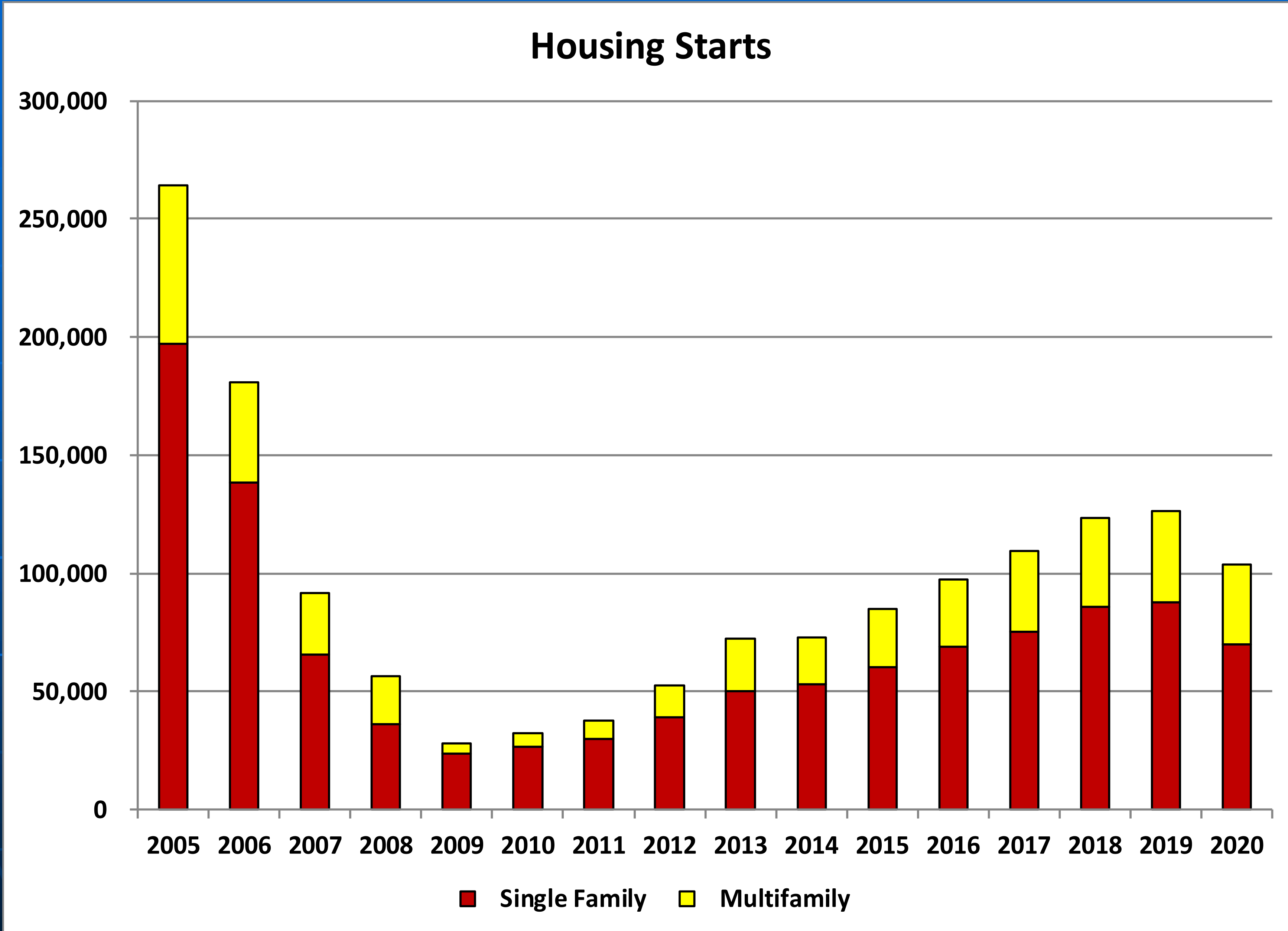


- Slower GDP Growth
- Higher Public Costs

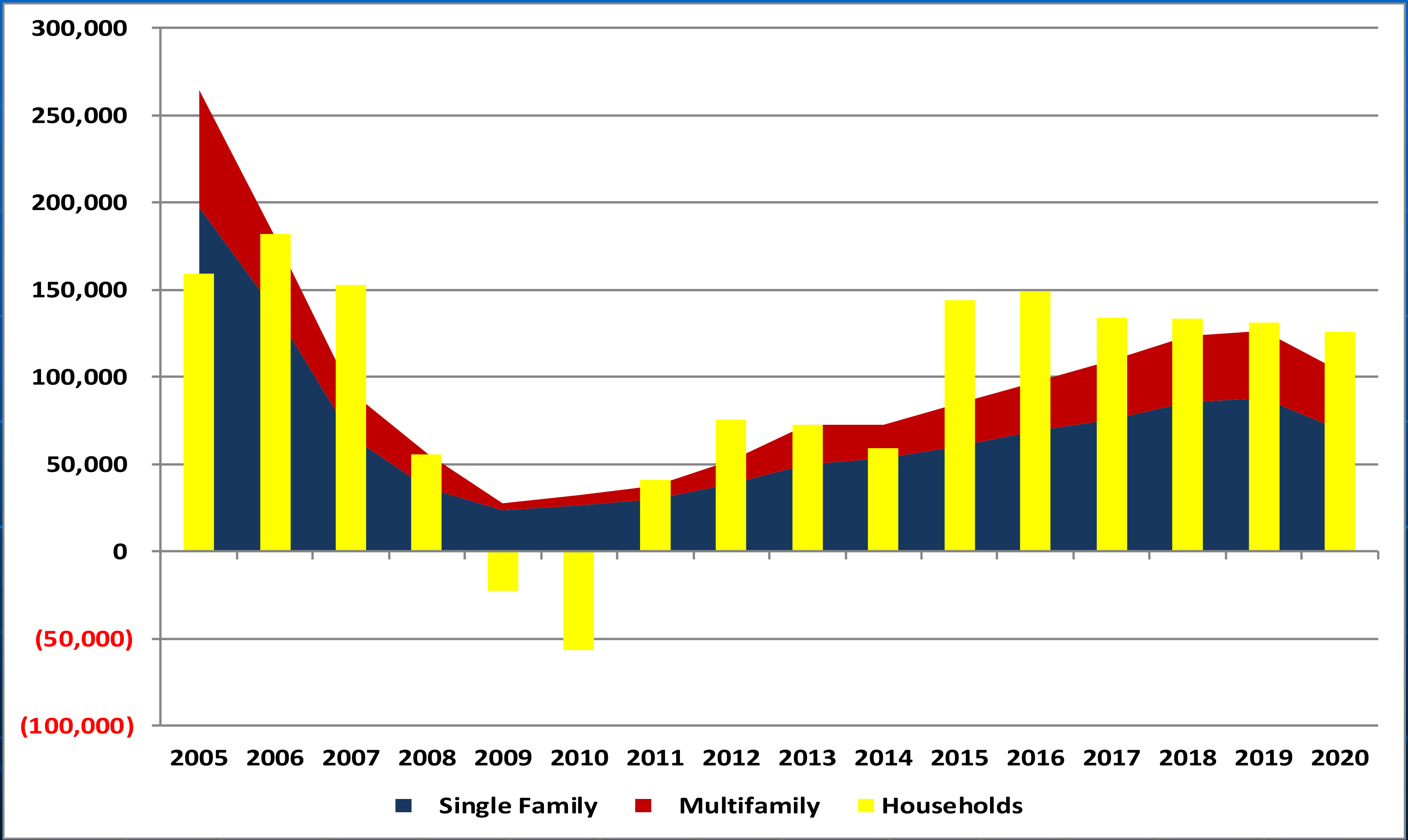
Has Florida Lost its Competitive Edge?

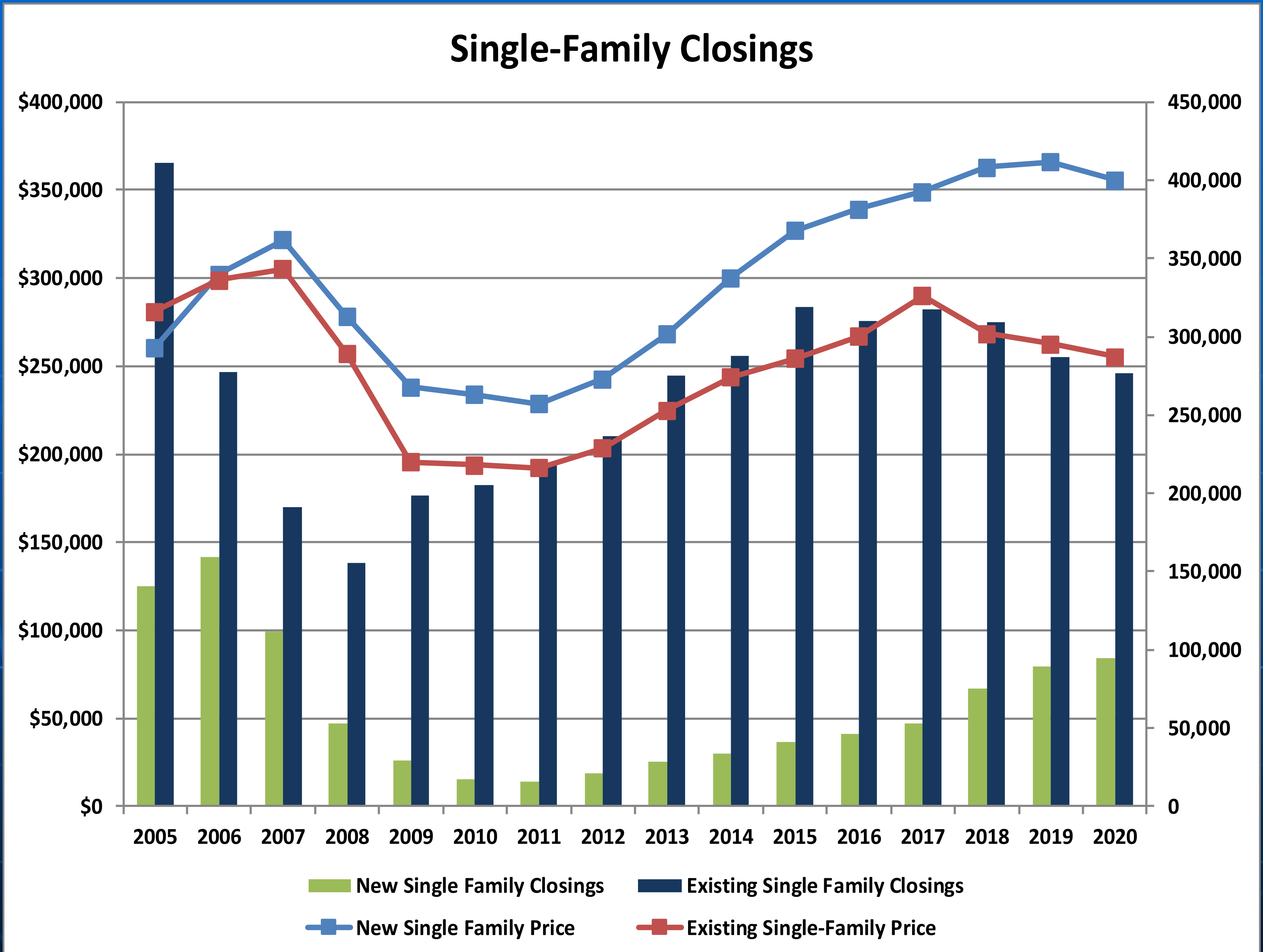
- Some attractive areas built out
- Unbridled impact fees
- Poor land use policies – Failure of Growth Management
- Expensive property insurance market
- Faulty property tax system
- High cost/duplication local government services (police, fire, ems, planning)

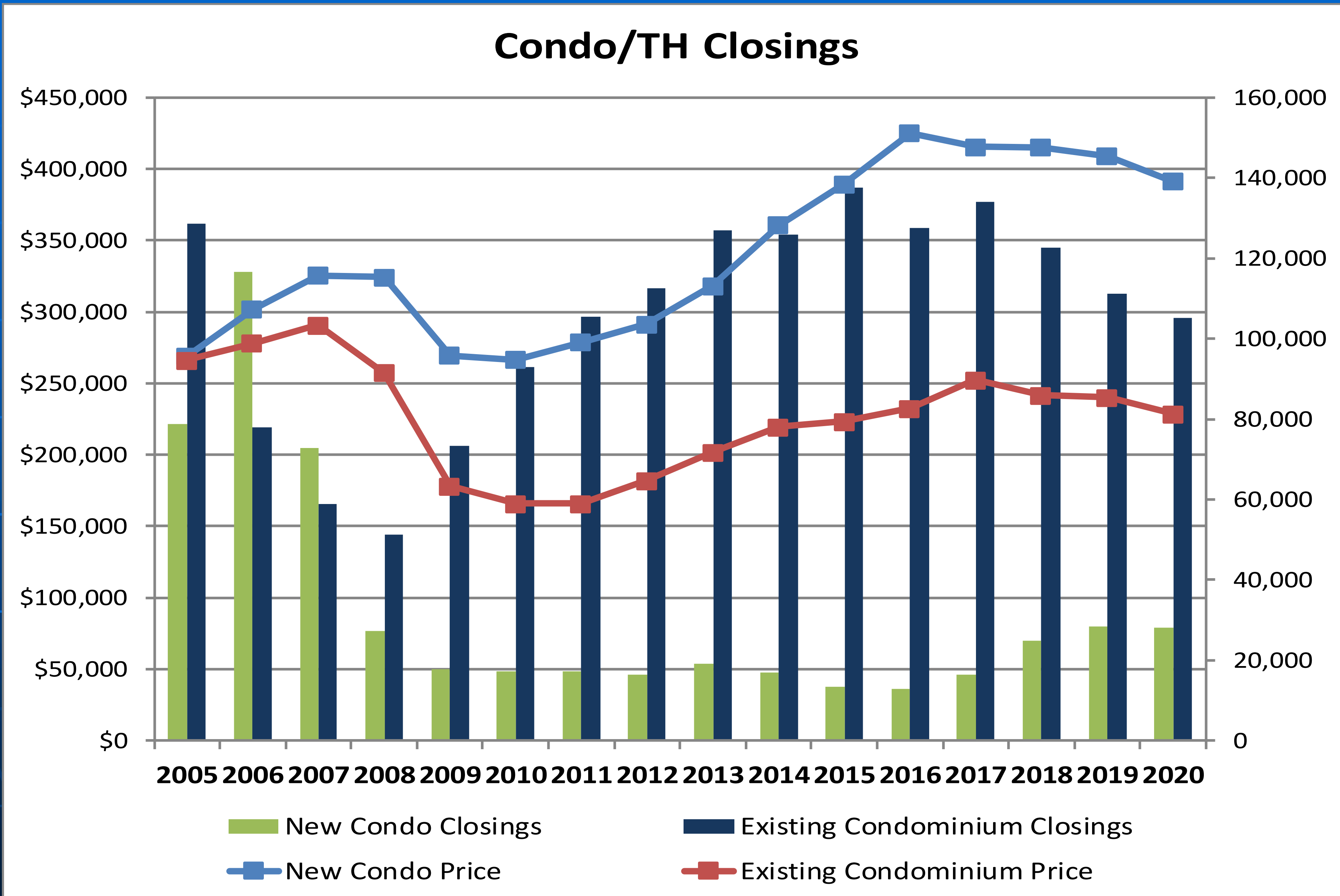

Growth in Population and Employment
450,000
350,000
250,000
150,000
50,000
(50,000)
(150,000)
(250,000)
(350,000)
(450,000)
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Population Change
Employment Change

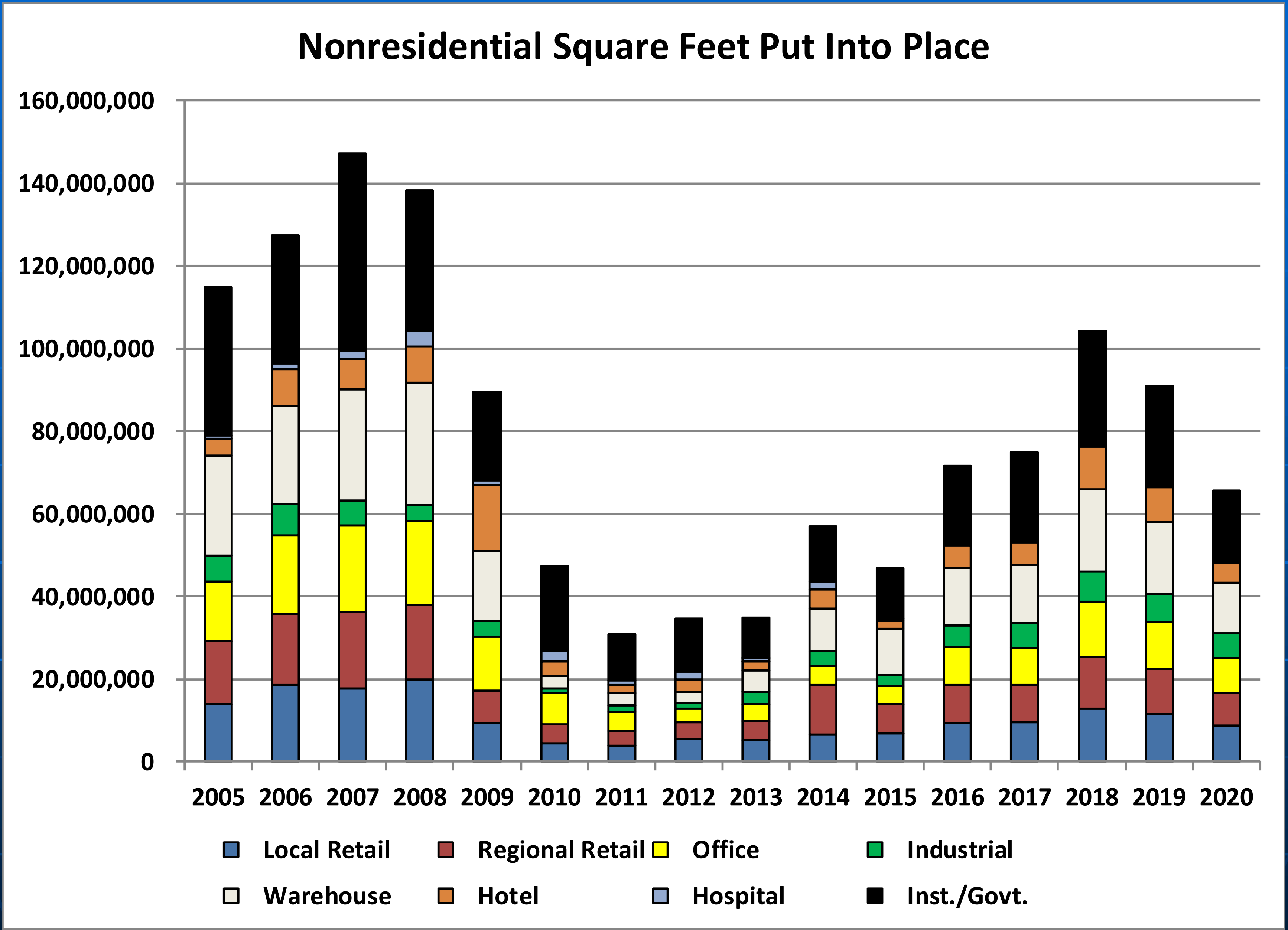

Housing Starts
300,000
250,000
200,000
150,000
100,000
50,000
0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
Single Family
Multifamily

Housing Market Supply/Demand Balance




Single-Family Closings
$400,000
$350,000
$300,000
$250,000
$200,000
$150,000
$100,000
$50,000
$0
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
New Single Family Closings
Existing Single Family Closings
New Single Family Price
Existing Single-Family Price


Condo/TH Closings
$450,000
$400,000
$350,000
$300,000
$250,000
$200,000
$150,000
$100,000
$50,000
$0
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
New Condo Closings
Existing Condominium Closings
New Condo Price
Existing Condominium Price



Nonresidential Square Feet Put Into Place
160,000,000
140,000,000
120,000,000
100,000,000
80,000,000
60,000,000
40,000,000
20,000,000
0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
Local Retail
Regional Retail
Office
Industrial
Warehouse
Hotel
Hospital
Inst./Govt.

QUESTIONS?