

2018 Global Outlook

What Goes Up Will Always Come Down?

Francis Tan

UOB Global Economics & Markets Research

25th January 2018

Some Stuff To Ponder, And Puzzles To Solve

Where Are We On The Business Cycle?

Will Stock Markets Continue to “Cheong”?

Will Interest Rates Continue to Move Higher?

Is the US Economy Really Better?

Are Households Feeling Good?

If So, Why Aren't Prices Higher? Why Aren't
Workers Paid More?

Why Were Asian Currencies So Strong In 2017? How About 2018? Where's
the SGD going?

Will There Be More En-Blocs Millionaires This Year?

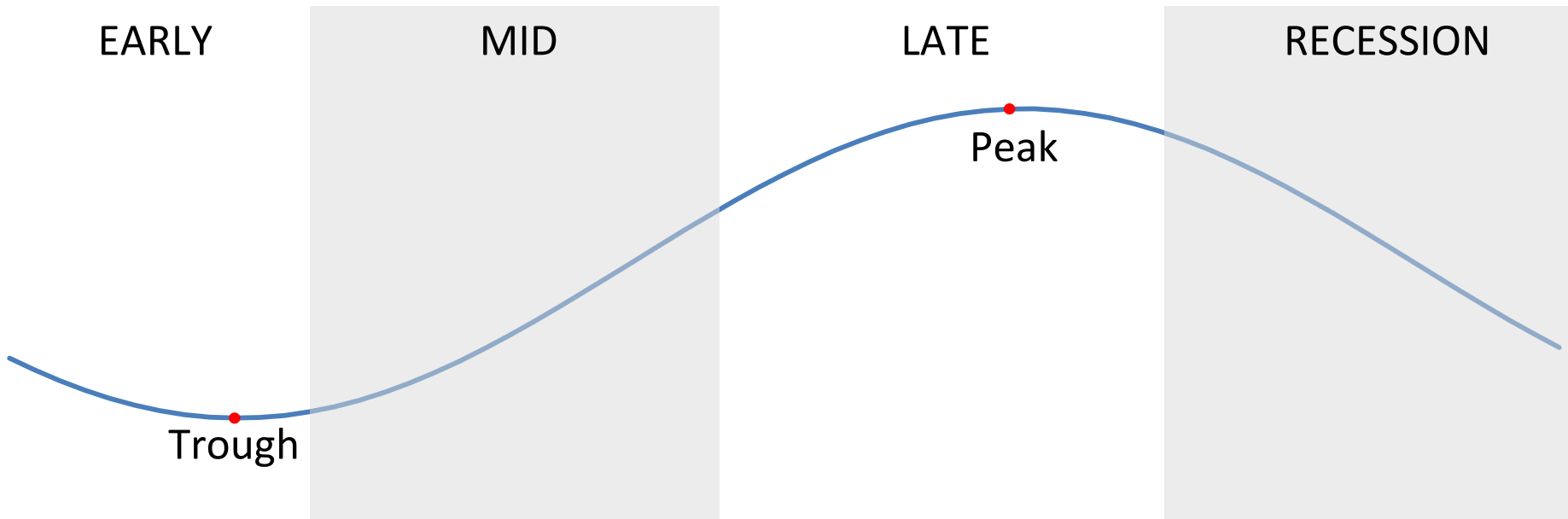
History Does Not Repeat Itself...












But It Rhymes

Mark Twain

The Business Cycle Always Rhymes

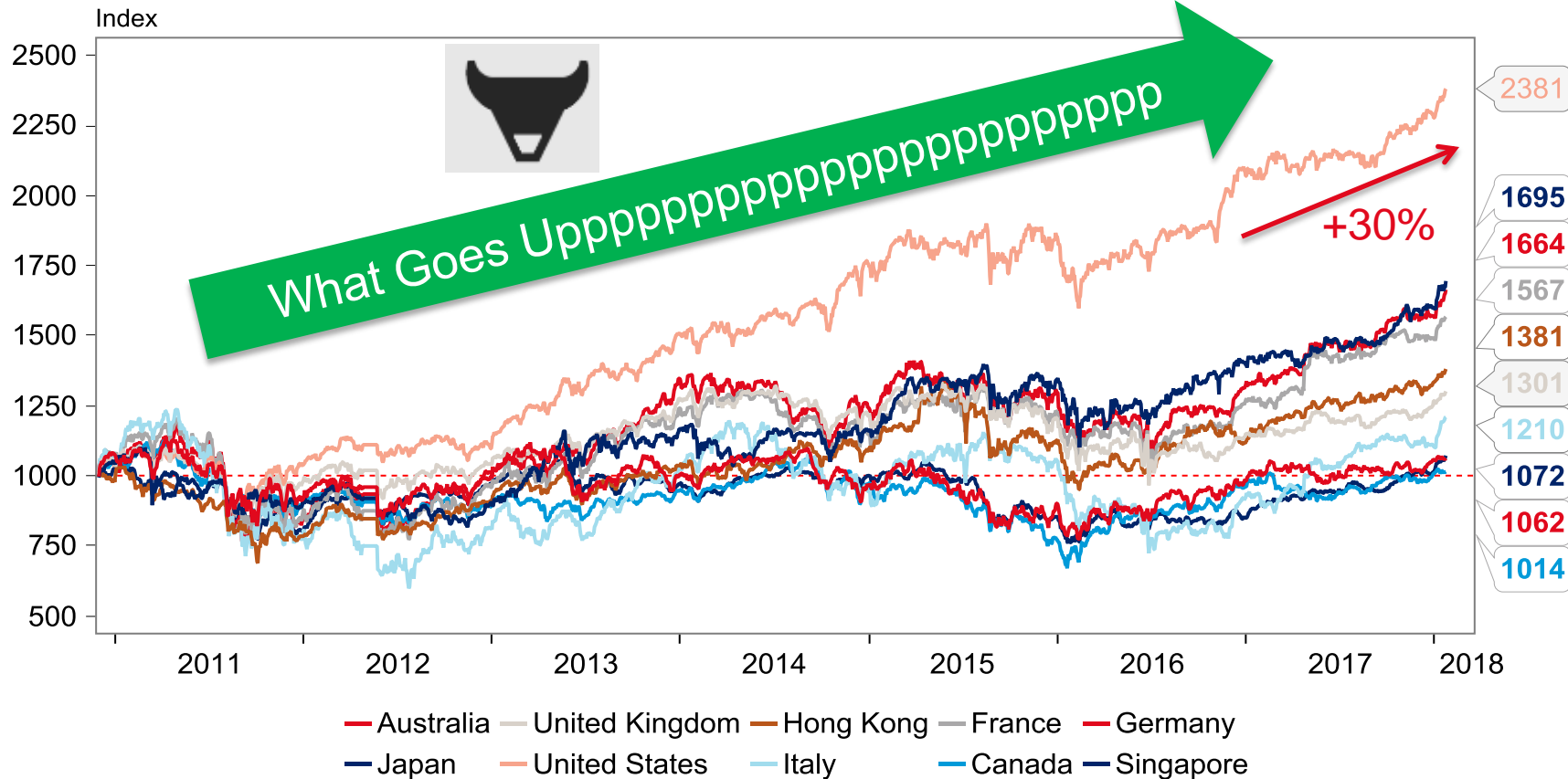
EARLY	MID	LATE	RECESSION
Fiscal/Monetary stimulus	Fiscal/Monetary stimulus slows	Fiscal/Monetary tightening	Fiscal/Monetary stimulus
Economic growth starts increasing	Economic growth slows, still positive	Economic growth peaks, stagnates, slows	Economic growth & mfg contracts, retail drops
Employment picks up, confidence improves	Stronger employment growth, confidence continues to grow	Unemployment at lowest levels, wages increasing, tight lab mkt	Unemployment shoots up, wages contract, confidence declines
Corporate profits increases strongly	Margins peaking, management buys back shares to boost profits	Earnings disappoints though expectations remain high	Earnings contract, Bank lending drops



	Early	Mid	Late	Recession		Early	Mid	Late	Recession
 Financials	Buy	Buy	Sell	Hold	 Materials	Buy	Buy	Sell	Hold
 Industrials	Buy	Buy	Hold	Sell	 Energy	Sell	Buy	Buy	Hold
 Consumer Discretionary	Buy	Hold	Sell	Sell	 Telecom	Sell	Hold	Buy	Buy
 Aerospace	Buy	Hold	Sell	Sell	 Healthcare	Sell	Hold	Buy	Buy
 Technology	Buy	Buy	Sell	Sell	 Utilities	Sell	Sell	Buy	Buy
 Consumer Staples	Sell	Hold	Buy	Buy					

Lots of Exuberance In Markets. As Much As It Looks Like There's Only One Direction...

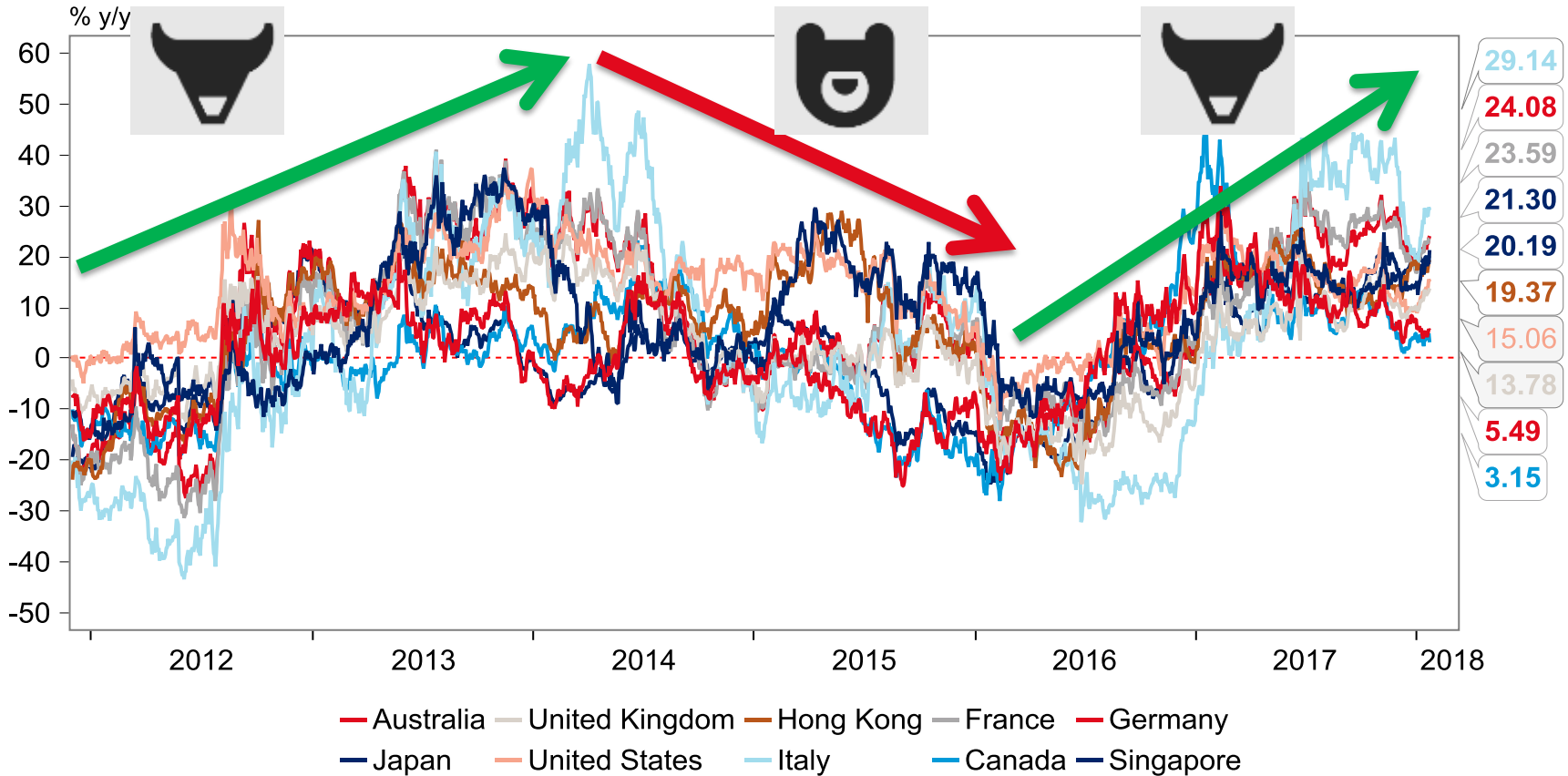
Selected MSCI Equity Indices (Dec 2010 = 1000)



Source: Macrobond, UOB Global Economics & Markets Research

Markets Do Move In Cycles...It's All About Sentiments & Psychology... Or, "Animal Spirits"

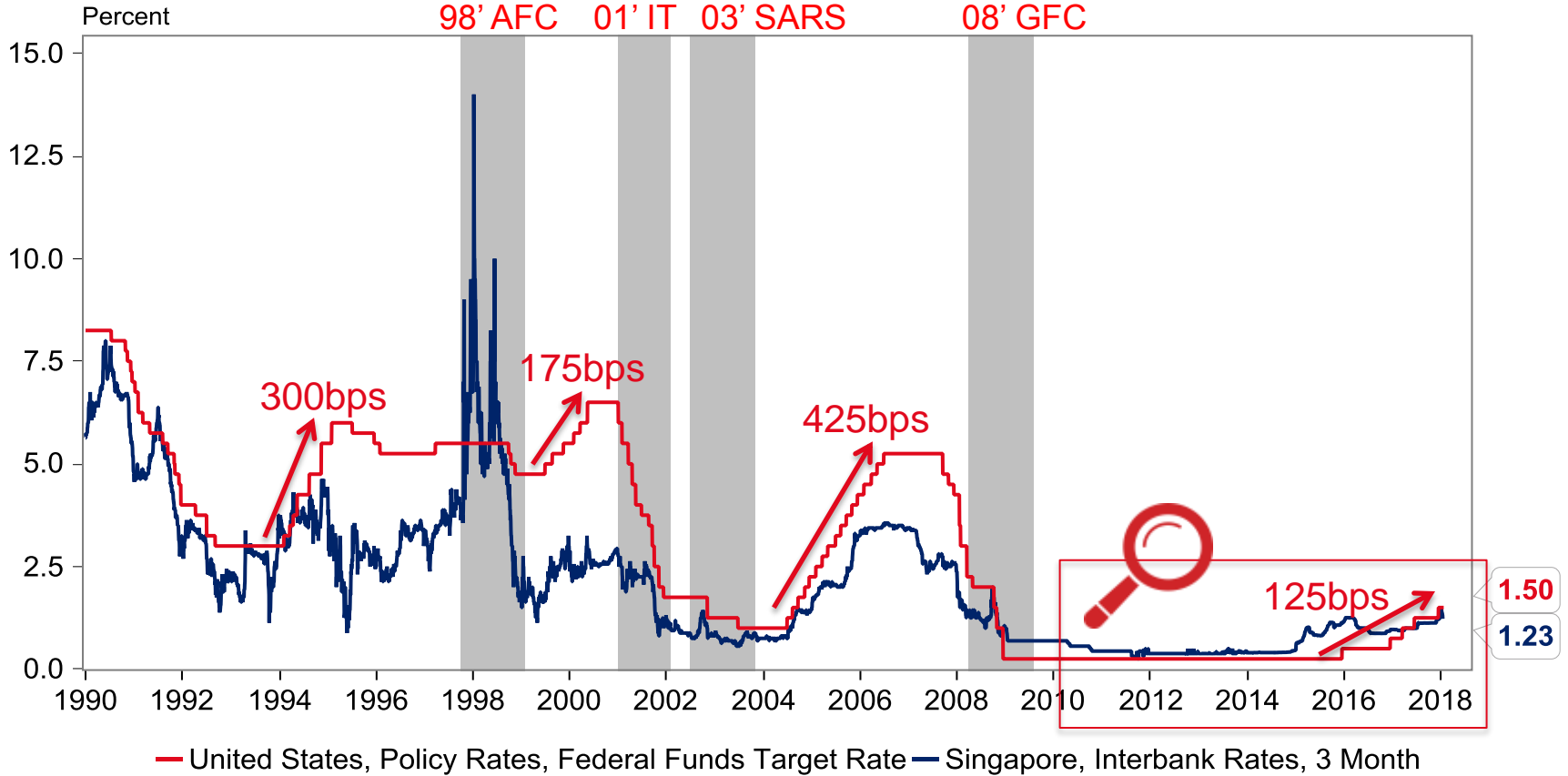
Selected MSCI Equity Indices (Dec 2010 = 1000)



Source: Macrobond, UOB Global Economics & Markets Research

Domestic Interest Rates Are Rising → Fast/Slow?

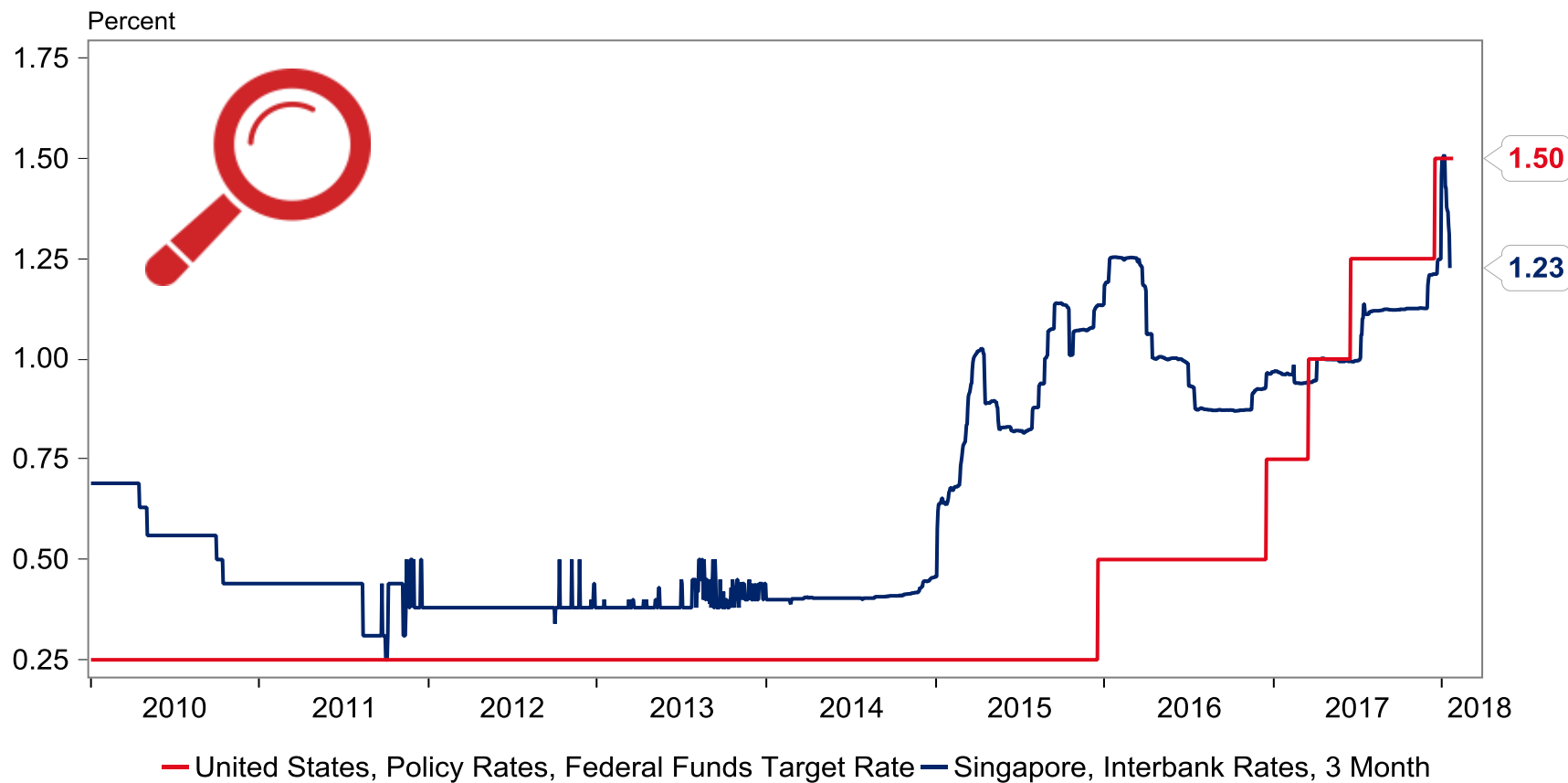
United States & Singapore Interest Rates



Source: Macrobond, UOB Global Economics & Markets Research

Domestic Interest Rates Are Rising → Fast/Slow?

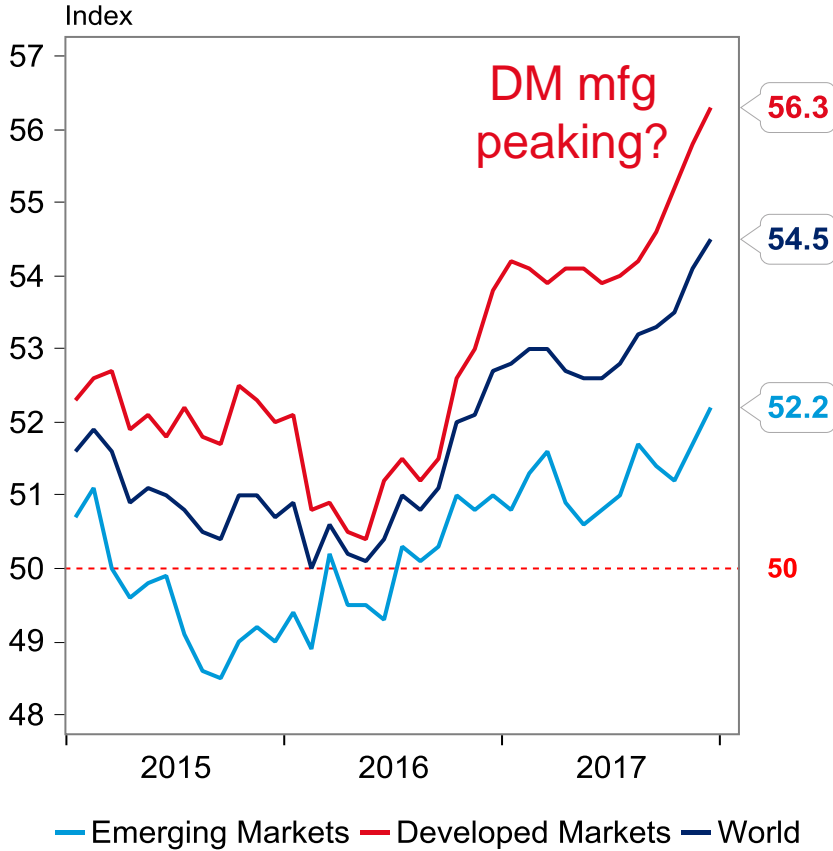
United States & Singapore Interest Rates



Source: Macrobond, UOB Global Economics & Markets Research

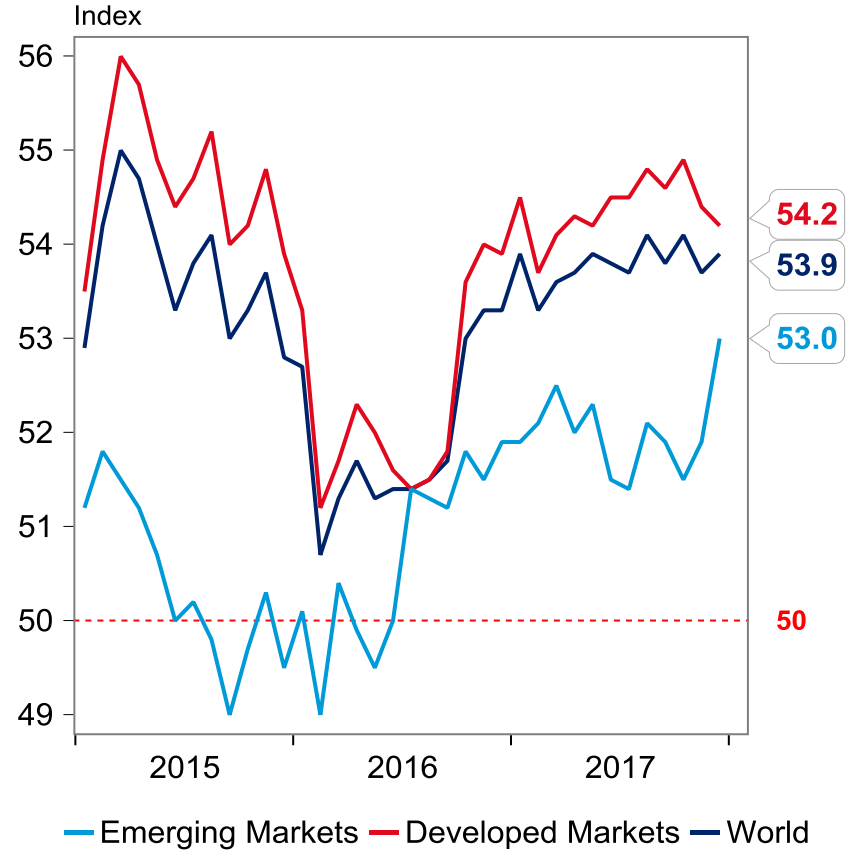
Improvement in PMIs in Developed Markets Faster Than Emerging Markets, But Could be Peaking

DM & EM Mfg PMI



Source: Macrobond, UOB Global Economics & Markets Research

DM & EM Svc PMI



Source: Macrobond, UOB Global Economics & Markets Research

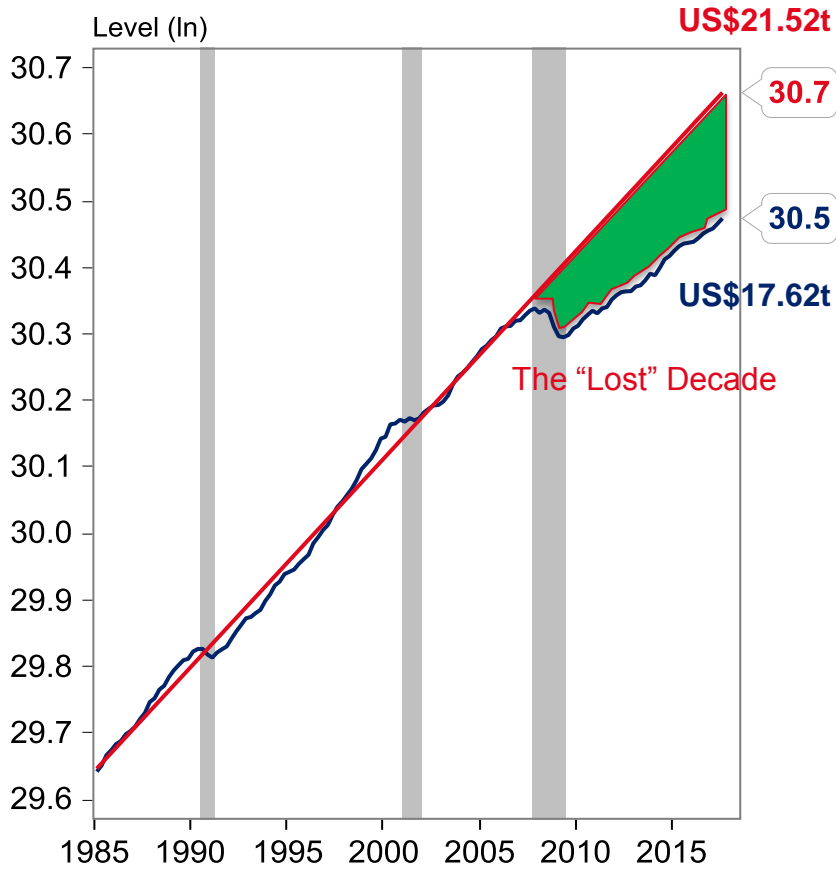


US: As The Cycle Matures Further

Are Things Looking Better?

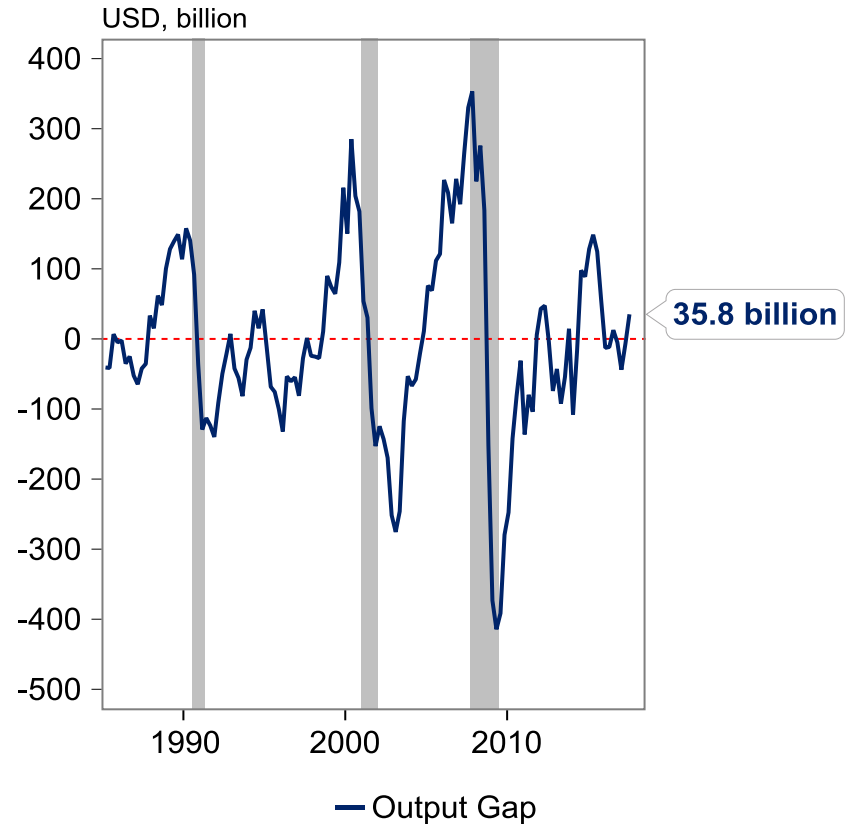
Improvement In US GDP Since 2H 2016 & Positive Output Gap Will Heighten Fed's Hawkish Senses in 2018

US Real GDP



Source: Macrobond, UOB Global Economics & Markets Research

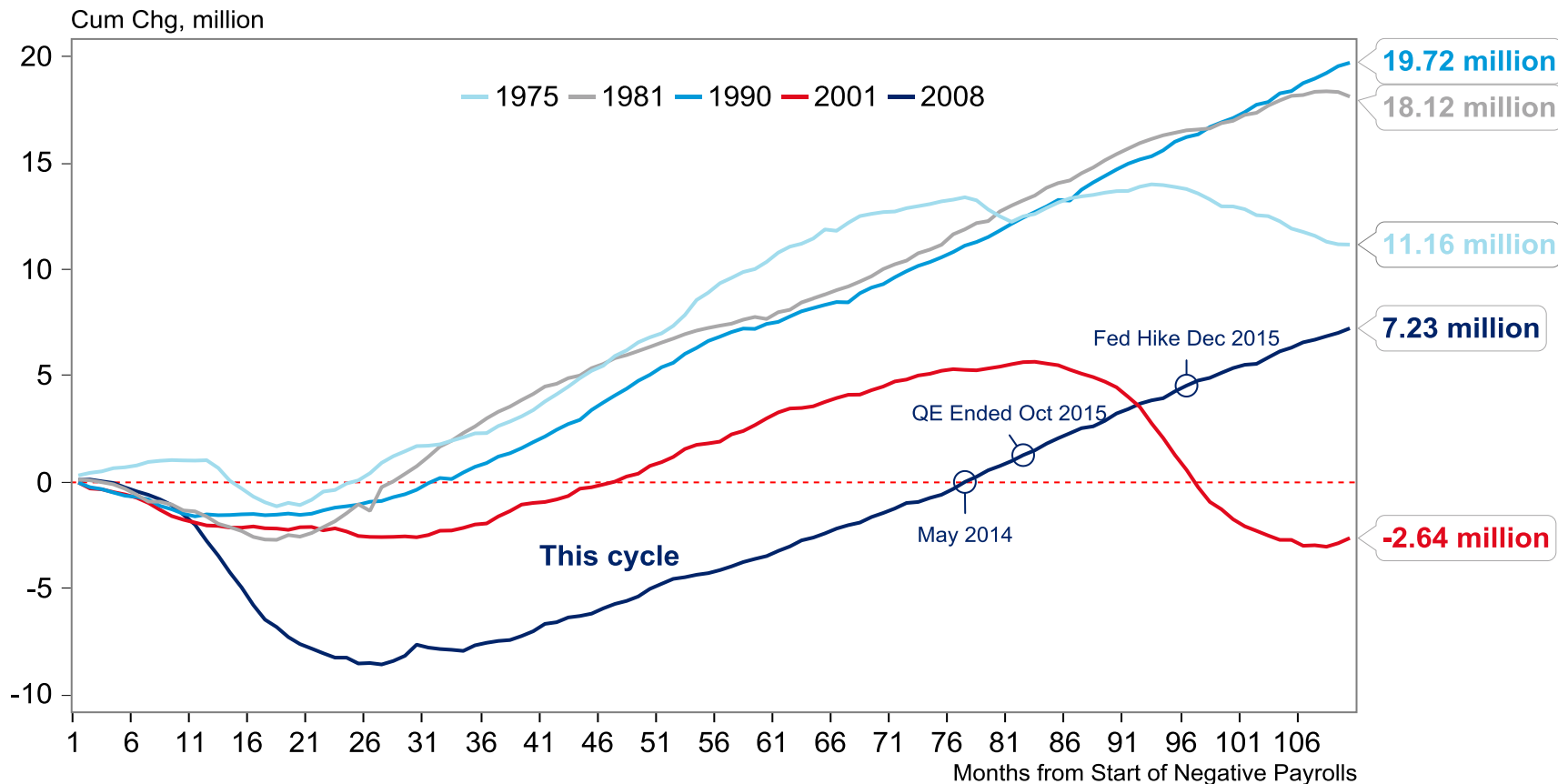
US Output Gap



Source: Macrobond, UOB Global Economics & Markets Research
Calculated using HP-Filter

US Payrolls Continues To Gain Strongly During This Cycle

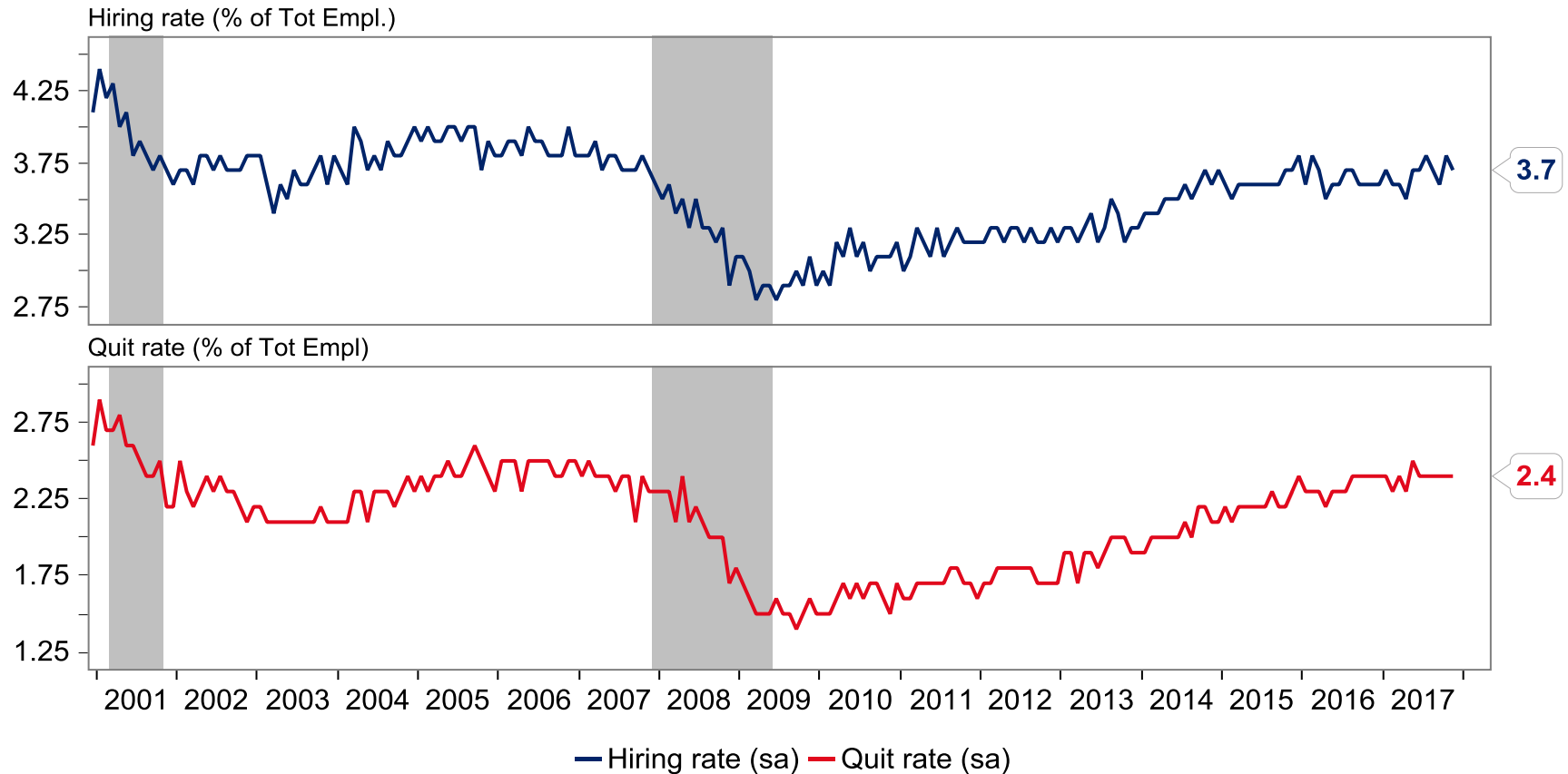
Recovery Trend Of US Non-Farm Payrolls During Previous Recessions



Source: Macrobond, UOB Global Economics & Markets Research

Labour Market Vibrancy Indicators Pointing To Reduced Slack

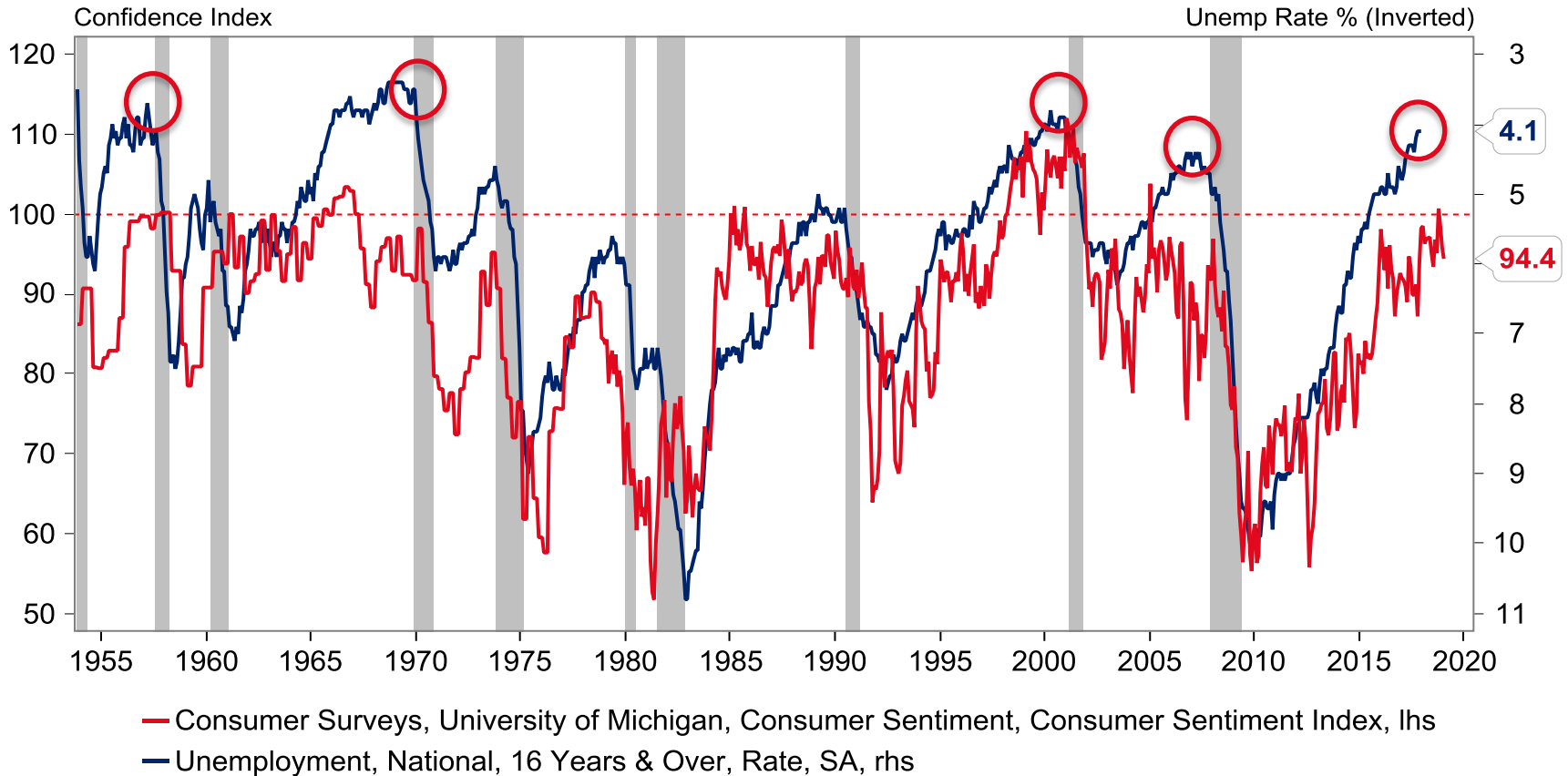
US Labour Market Conditions



Source: Macrobond, UOB Global Economics & Markets Research

And The US Consumer Is A lot More Confident While The Labour Market Gets Tighter

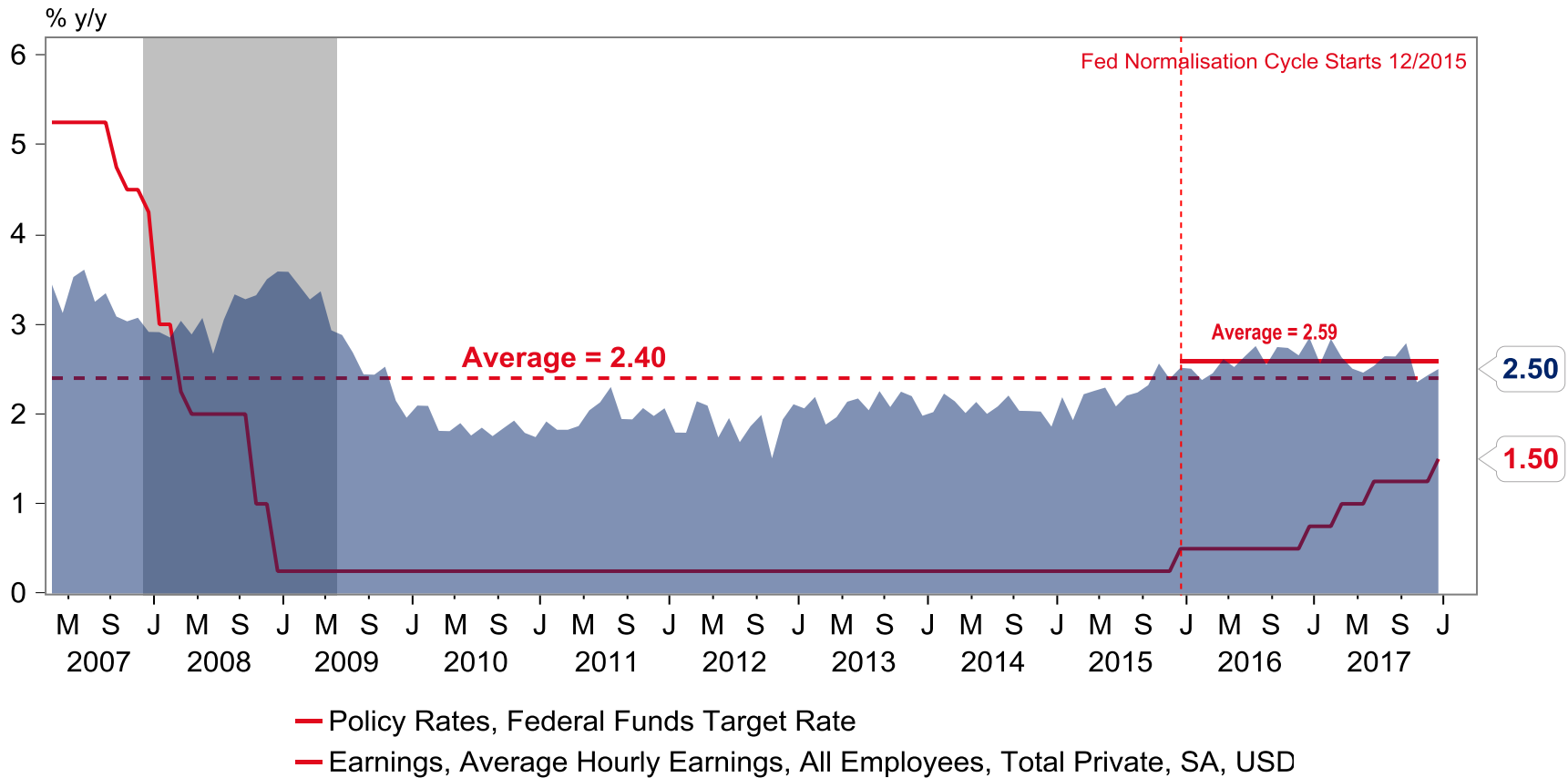
US Consumer Confidence & Unemployment Rate (12m Lead)



Source: Macrobond, UOB Global Economics & Markets Research

Wage Growth Has Not Been Up to Expectations, Even UOB Though Labour Market Is Deemed To Be “Tight”.

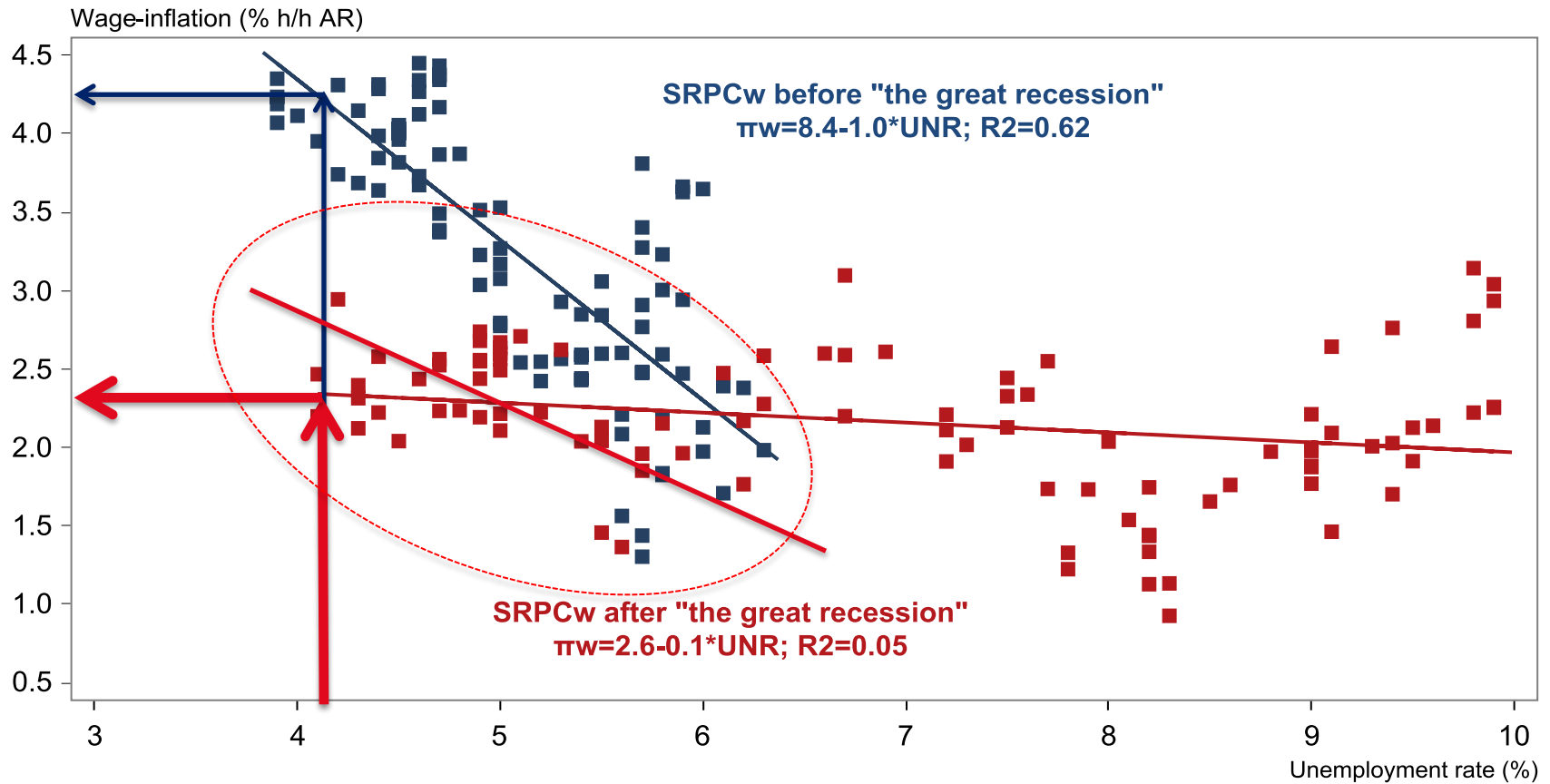
US Average Hourly Earnings % y/y



Source: Macrobond, UOB Global Economics & Markets Research

Improving Unemployment Rates Has Not Translated Into Higher Wages

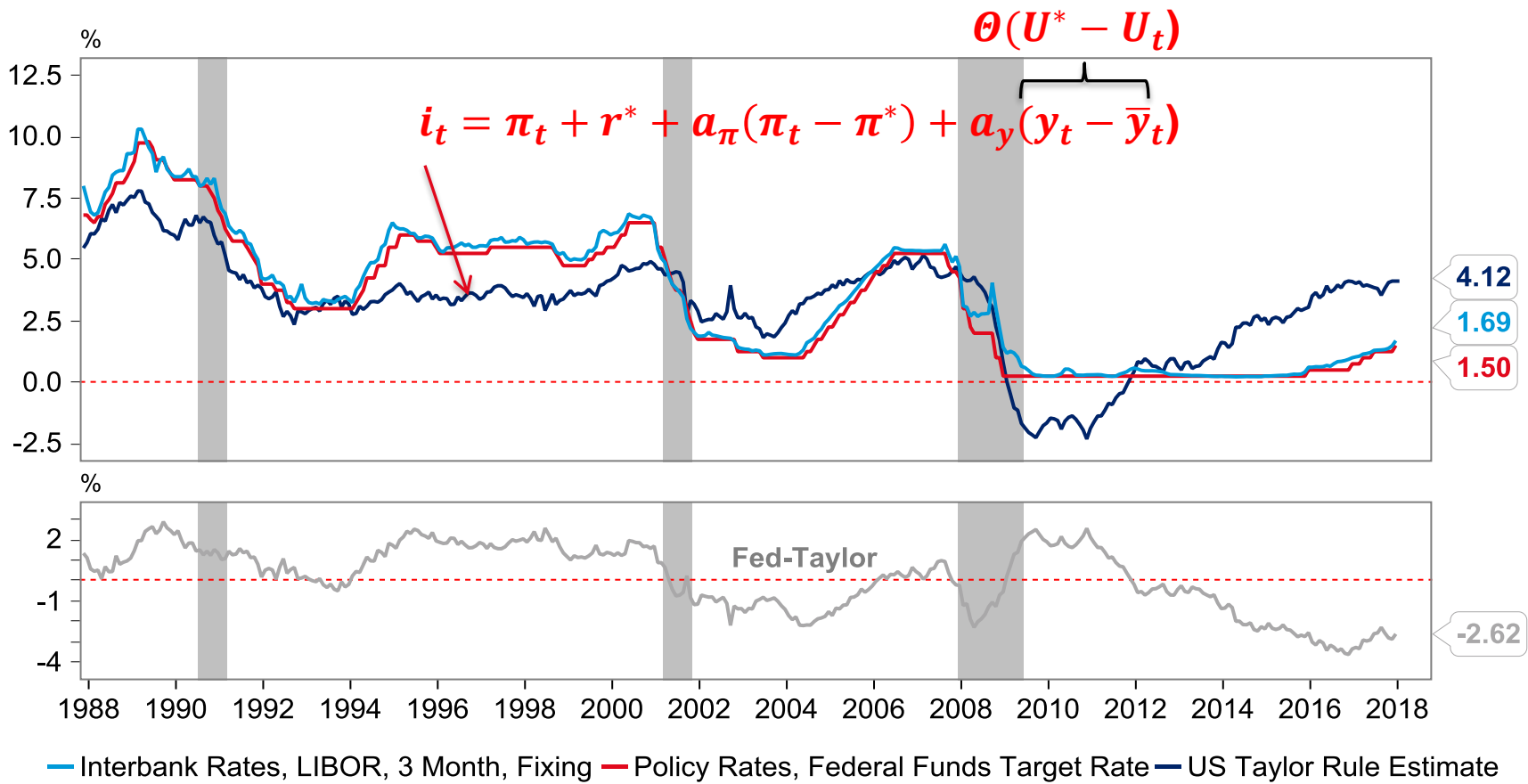
Us Phillips Curve



Source: Macrobond, UOB Global Economics & Markets Research

If Fed Really Follows The Taylor Rule, FFTR Would Be Much Higher (Luckily Janet's Surname Is Not Taylor!)

US Fed Funds Target Rate and Taylor Rule Estimates



Source: Macrobond, UOB Global Economics & Markets Research



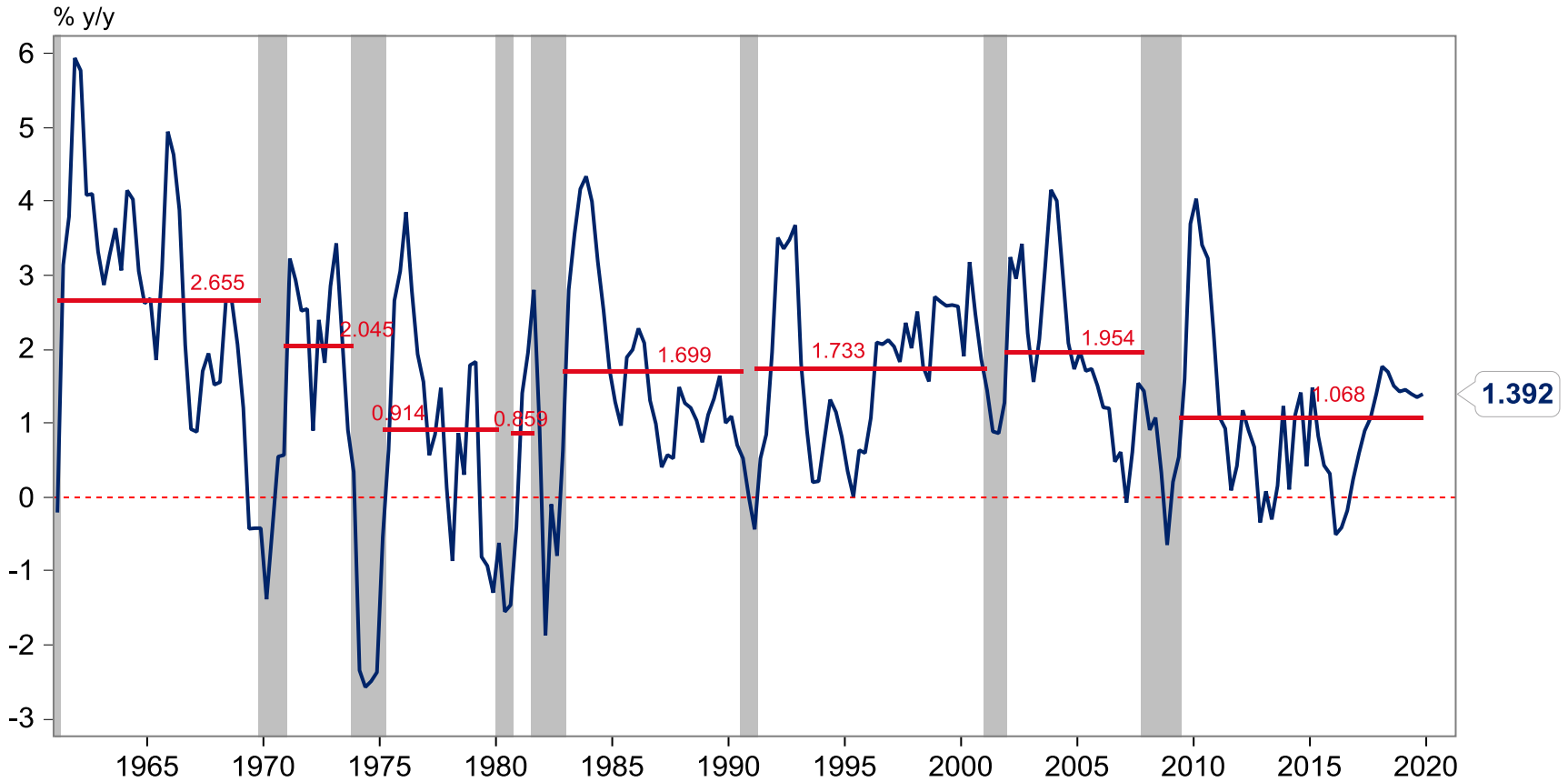
US: How About Wage Inflation?

Hiring is Up, Labour Market is Tight,
Why Aren't Wages Rising Faster?



It's Simple → Labour Productivity Growth Is Low! As Employment Share In Low Productivity Sectors Grew

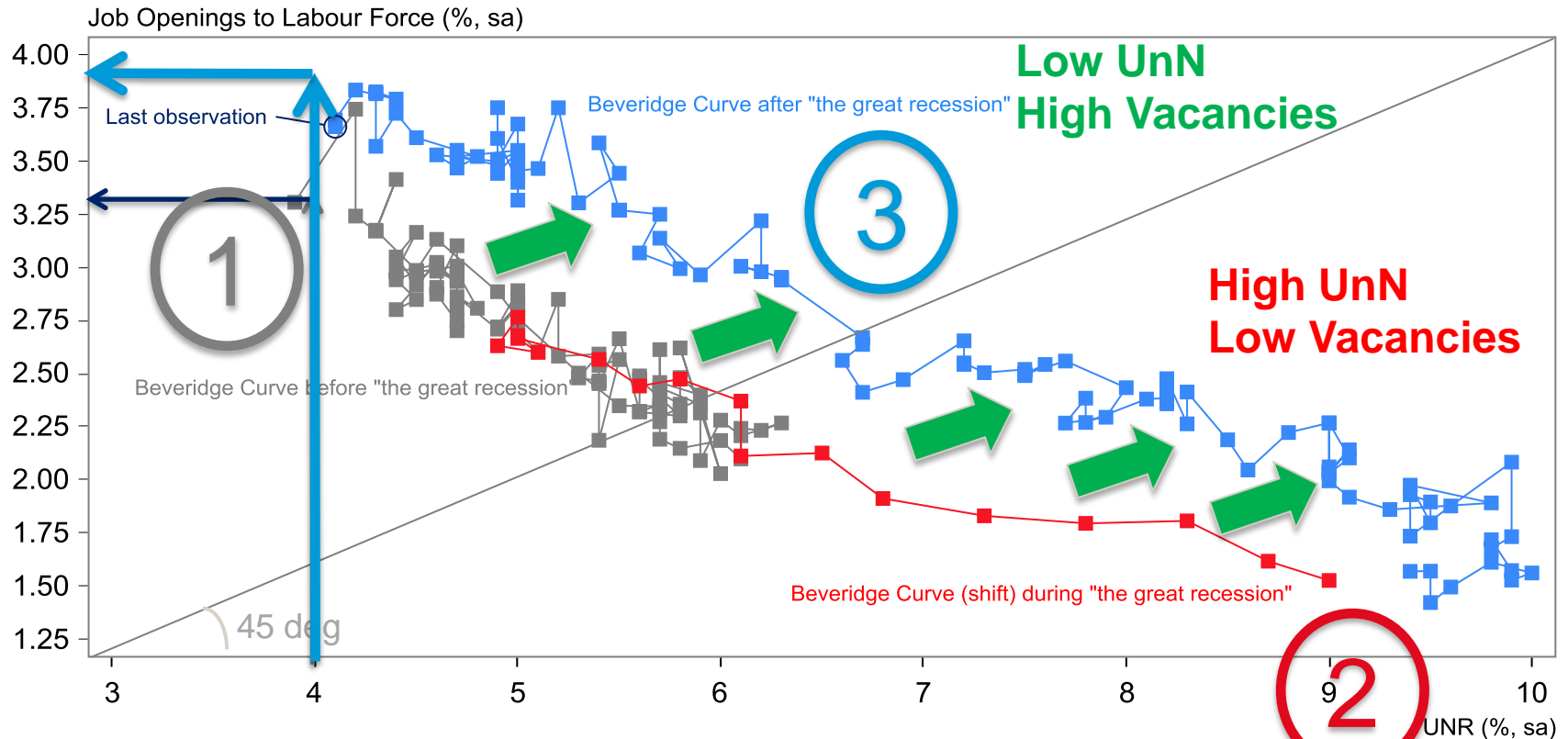
US Labour Productivity Growth



Source: Macrobond, UOB Global Economics & Markets Research

Moreover, Increased Incidence of Jobs Mismatches After GFC → Why? It's All About The Skills Set

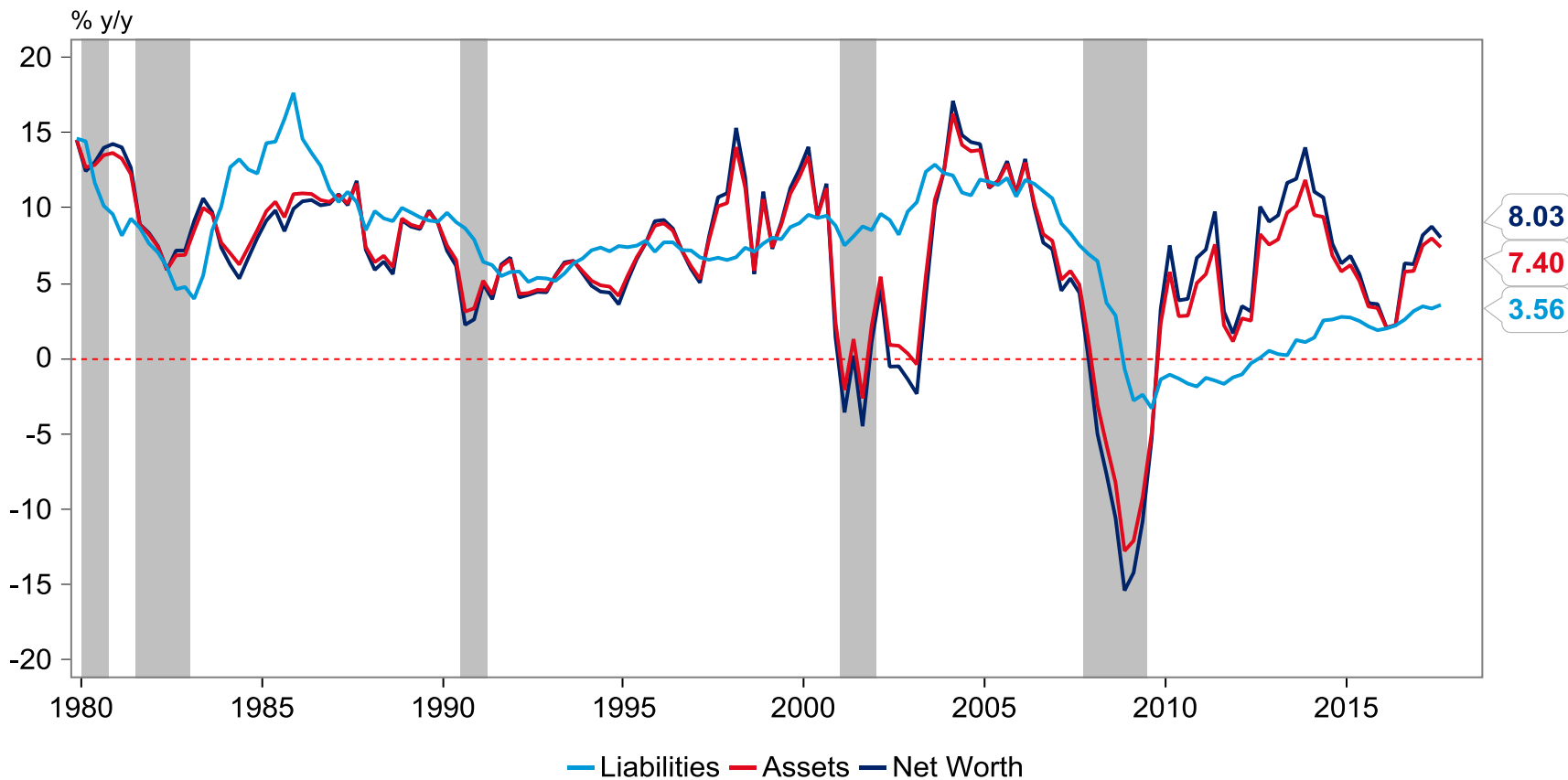
The US Beveridge Curve



Source: Macrobond, UOB Global Economics & Markets Research
 Note: Data series from Jan 2000 - present
 Definition of recession from NBER

US Households Are Healthier In Terms of Financials

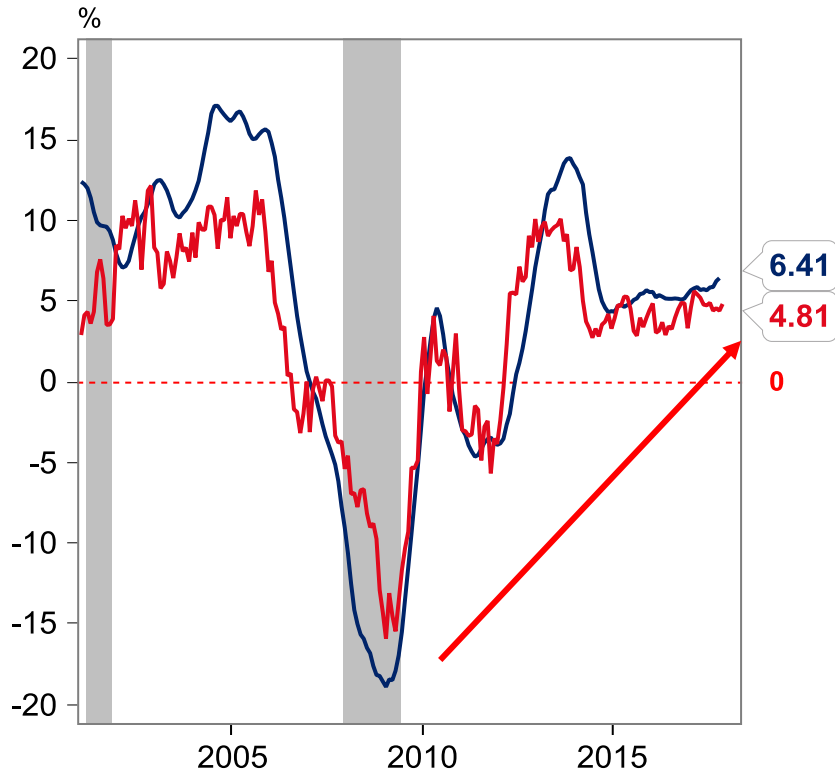
US Households & Non-profits Balance Sheet



Source: Macrobond, UOB Global Economics & Markets Research

In Part Due To Higher Home Prices, But...

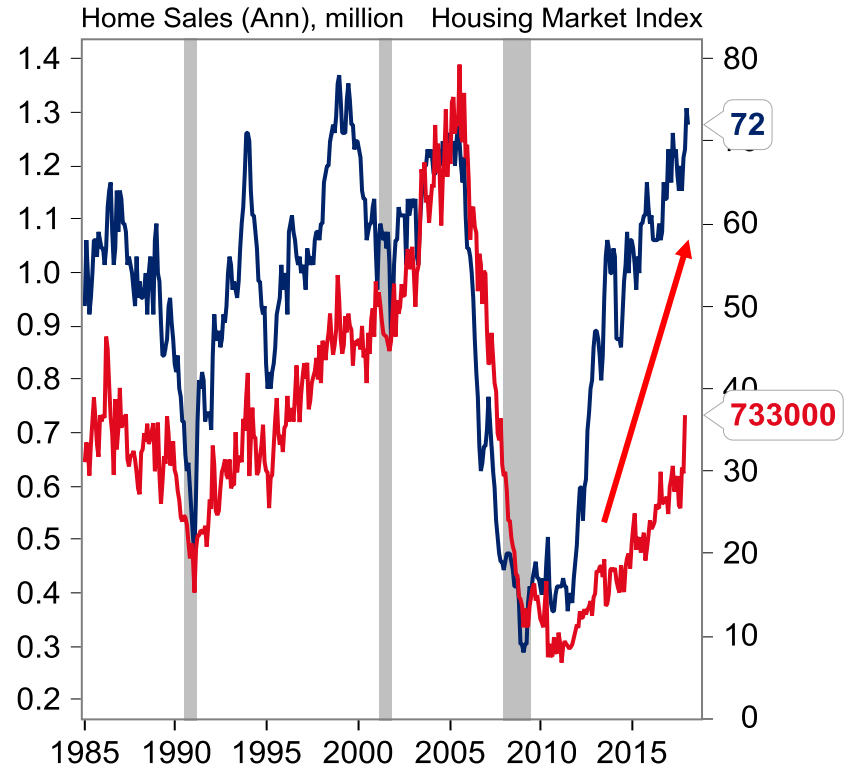
US Home Price Indices



— Average Sales Price of Existing Homes, United States, USD, NAR, Prices, Overall
 — Real Estate Price Index, Composite 20, SA, Index, S&P/Case-Shiller Home Price Index, Price I...

Source: Macrobond, UOB Global Economics & Markets Research

US New Home Sales

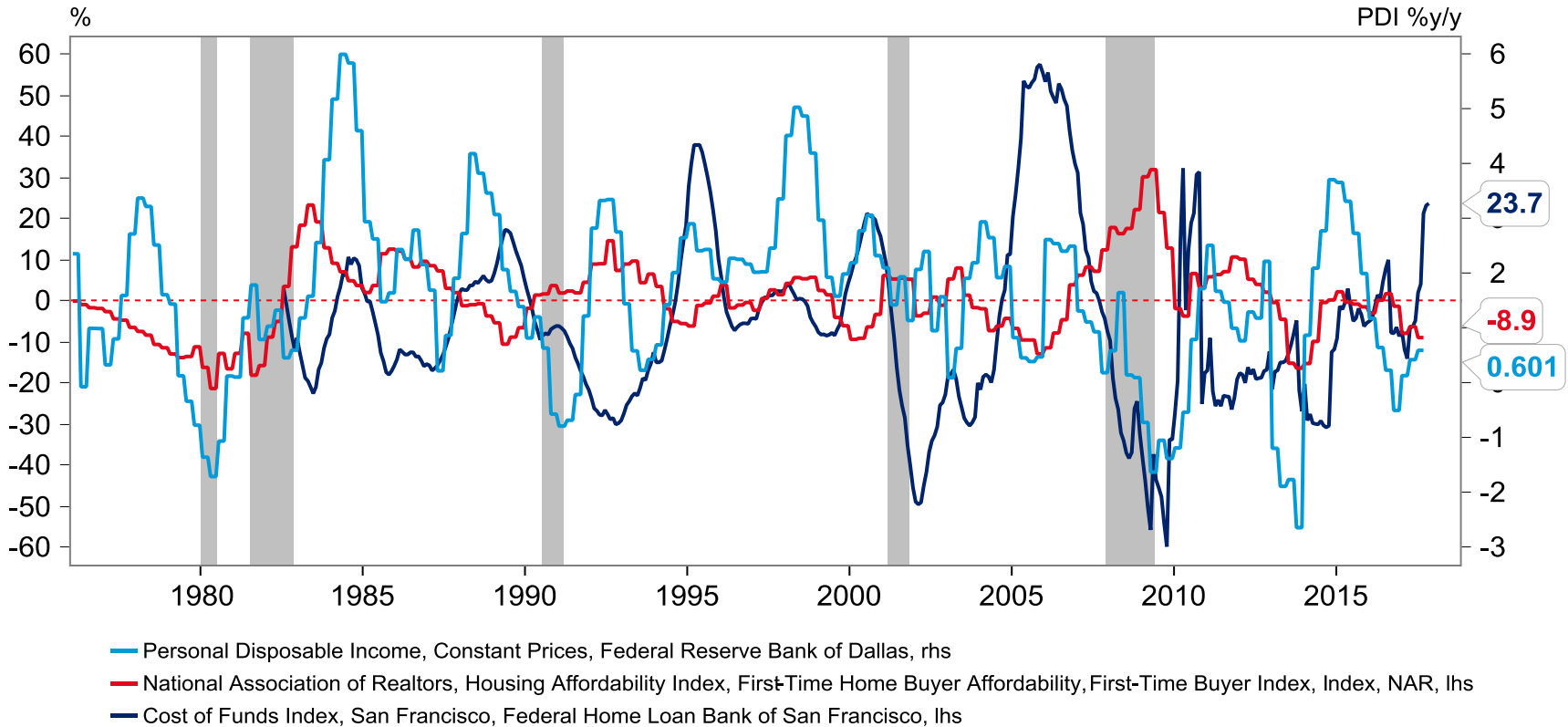


— Real Estate Transactions, Number, Houses, New, Total, AR, U.S. Census Bureau, Vo..
 — Real Estate Indicators, Housing Market Index, NAHB - Wells Fargo, National Associa...

Source: Macrobond, UOB Global Economics & Markets Research
 Source: Bloomberg, (Monthly Data)

...Wages Growing Slower; Cost of Funds Rising Faster → Homes Get Increasingly Unaffordable

US Home Affordability

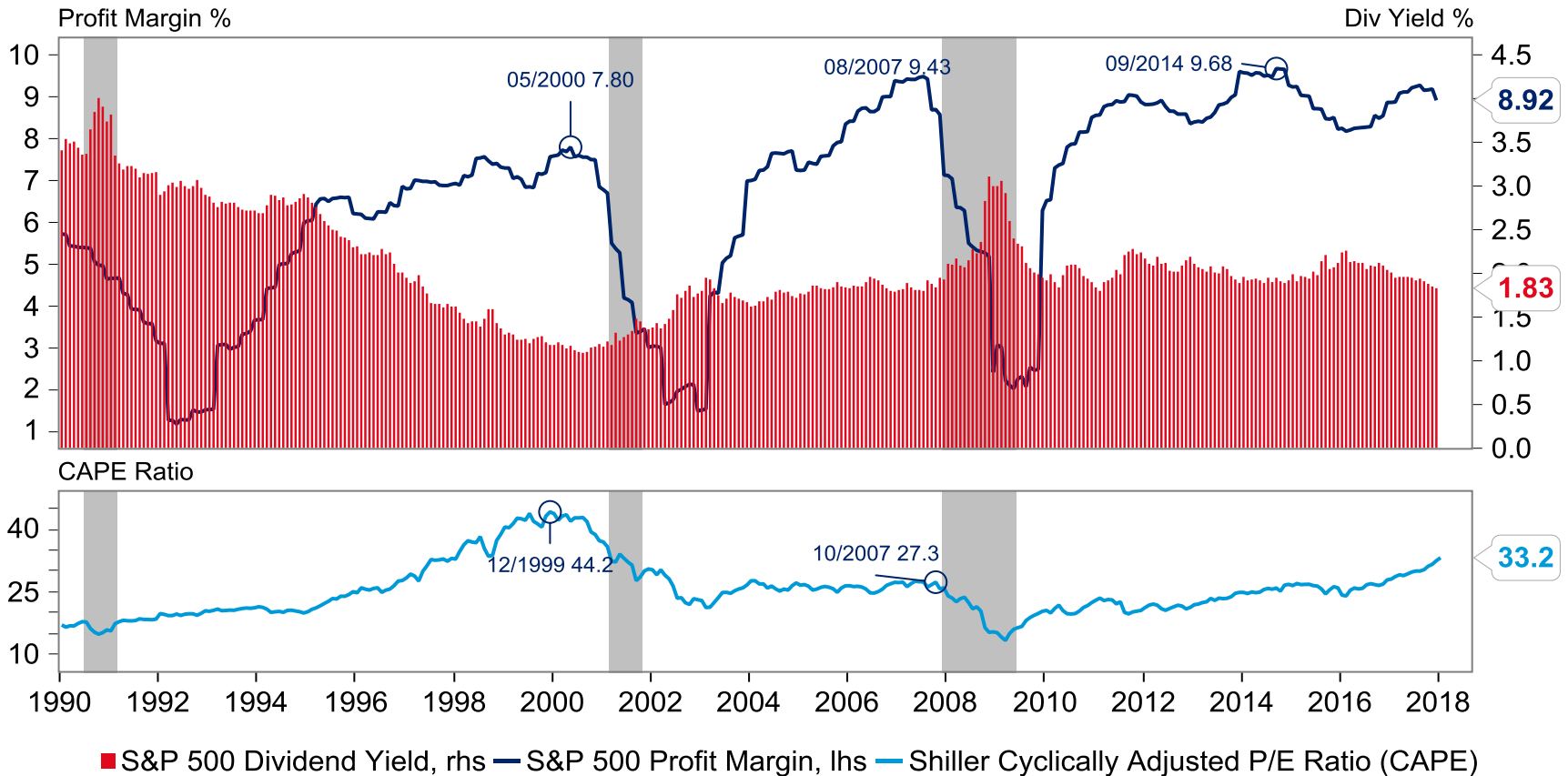


Source: Macrobond, UOB Global Economics & Markets Research

Affordability Index = An index above 100 signifies that family earning the median income has more than enough income to qualify for a mortgage loan on a median-priced home, assuming a 20 percent down payment.

American Corporates Still At Healthy Levels, But No Doubt, Valuations Are Rising By The Day

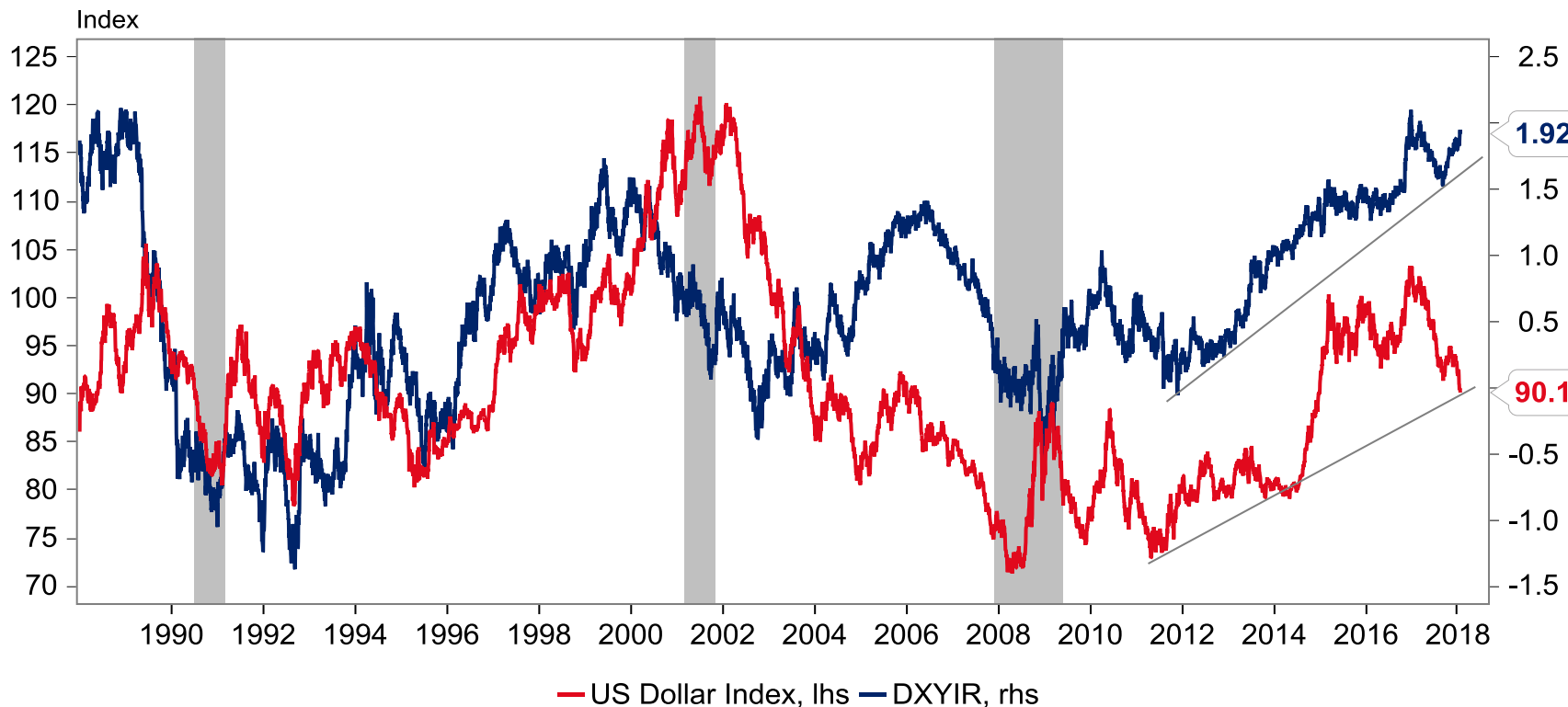
S&P 500 Corporate Profits, Dividends, and Valuations



Source: Macrobond, UOB Global Economics & Markets Research

Fed Rate Hike & Weaker Asian Manufacturing Will Boost DXY

DXY and UOB DXY Interest Rate Spread



Source: Macrobond, UOB Global Economics & Markets Research

Note: The UOB DXY interest rate spread shows the interest rate difference between the 10-year U.S. Treasury bond and similar benchmark yields in Germany, Japan, Britain, Canada, Sweden and Switzerland, with the average weighted by DXY basket weighting.

Market Pricing-In Stronger SGD Before Apr 18, And Likely Will Ease After MAS Meeting

UOB SGD NEER



Source: Bloomberg (Daily Data)

USDSGD → Have Faith!

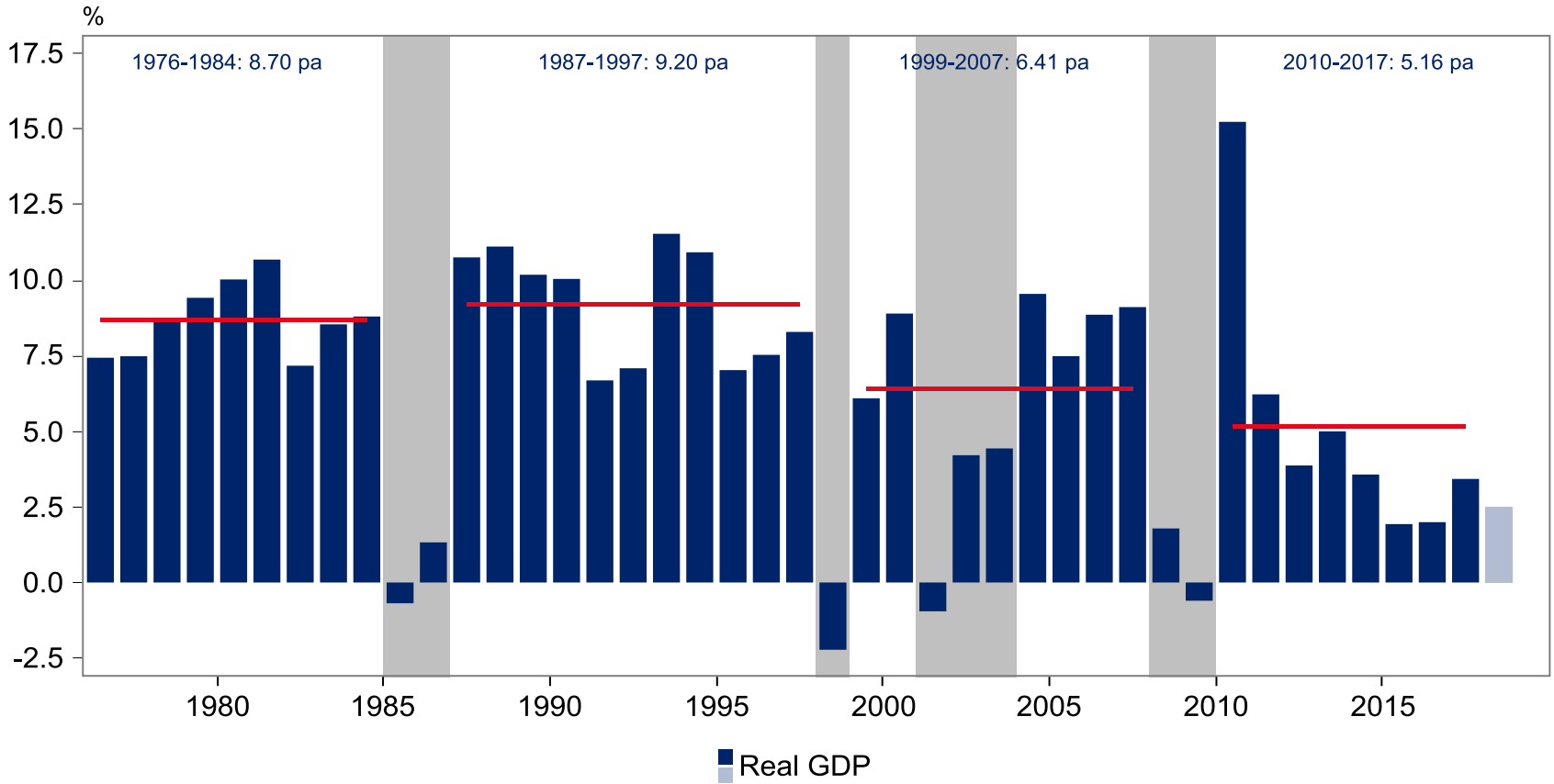




Economic Conditions in SG

Slower Growth During This Recovery Cycle

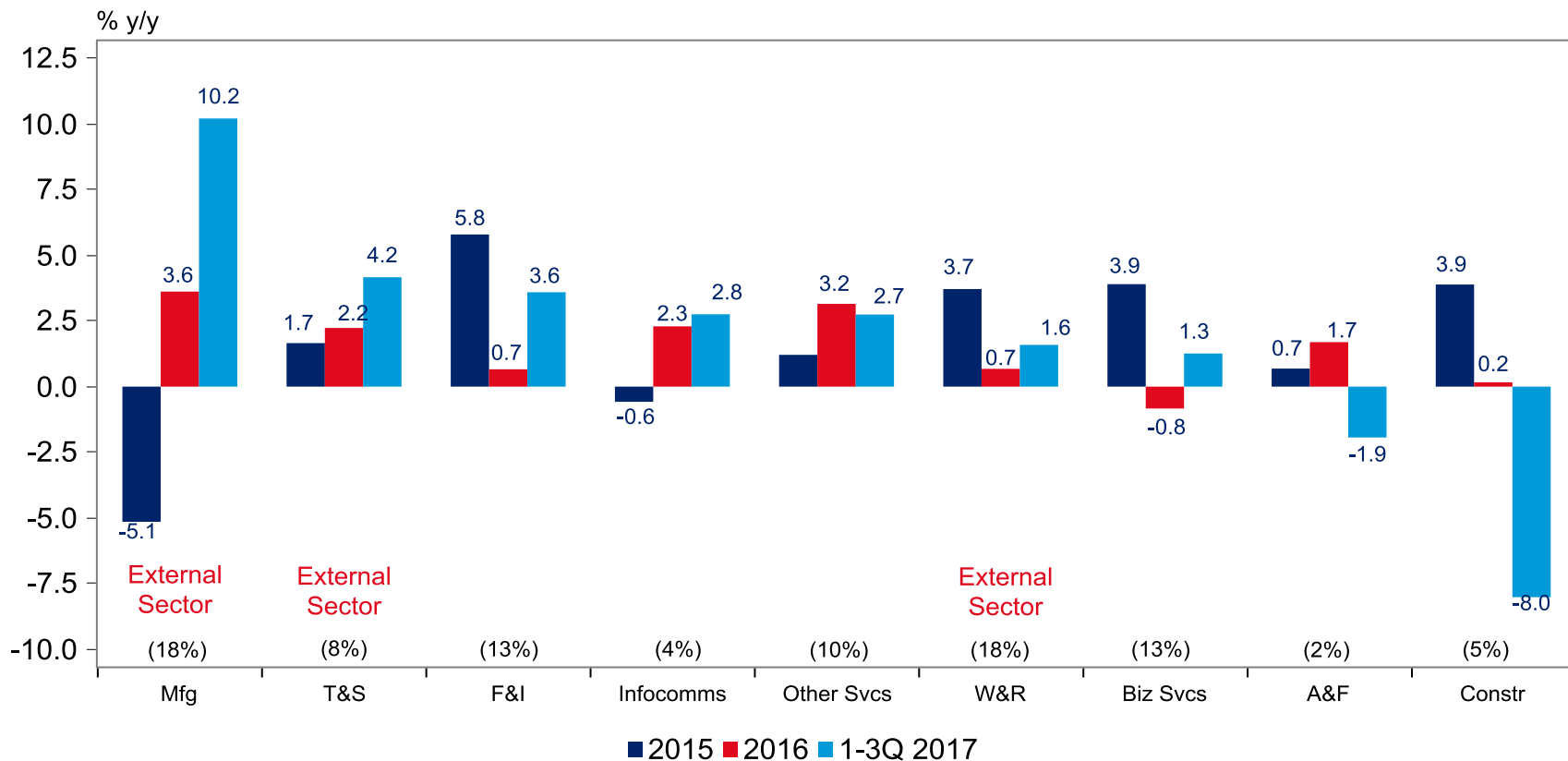
Singapore's Real GDP



Source: Macrobond, UOB Global Economics & Markets Research

External Sectors Are Picking Up Very Strongly

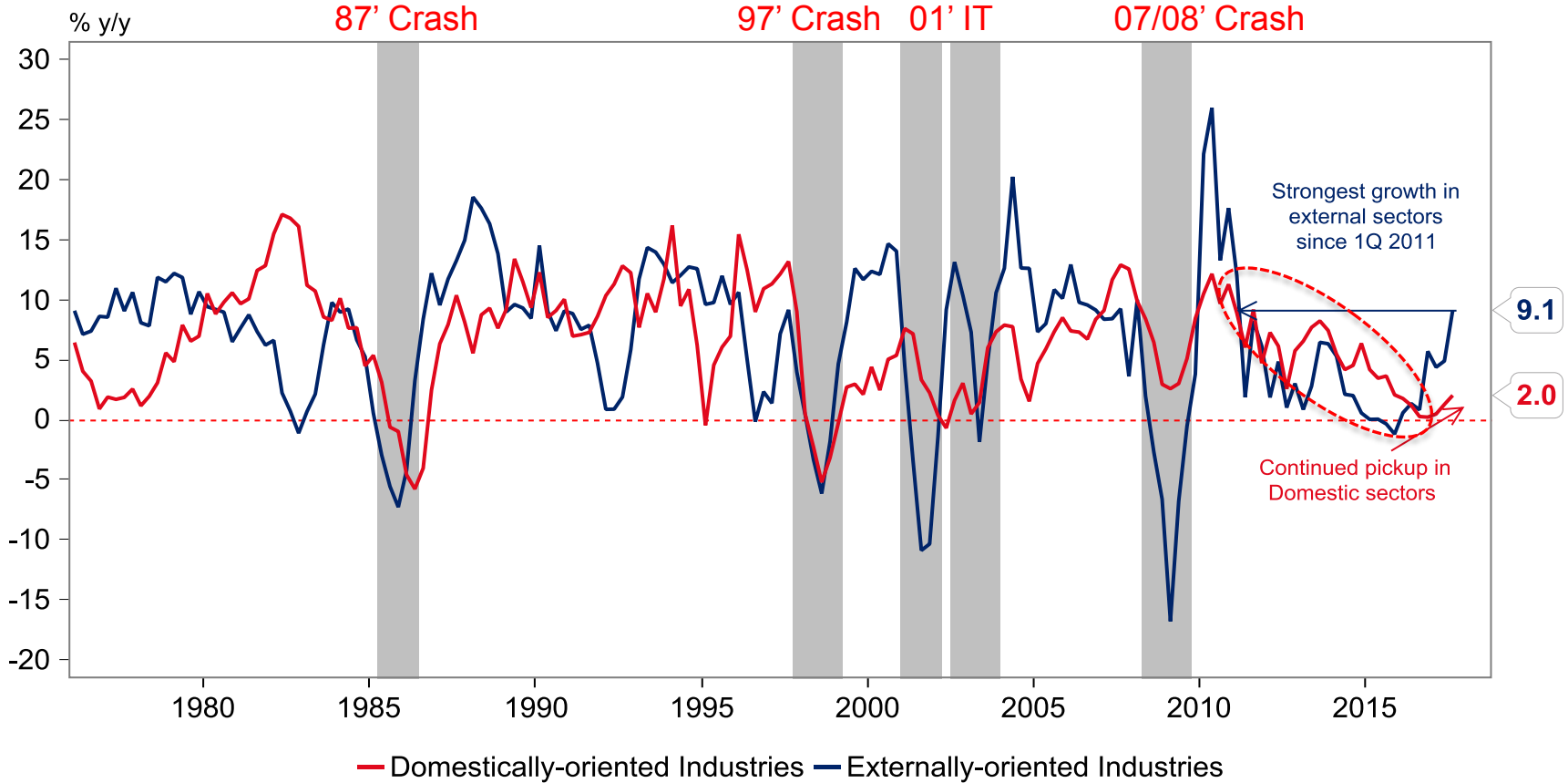
Singapore's Real GDP (Production)



Source: Macrobond, UOB Global Economics & Markets Research
 Note: Percentages in parantheses represent sector's share of real GDP

Recent Pickup in External Sectors Spilling Over to Domestic Sectors

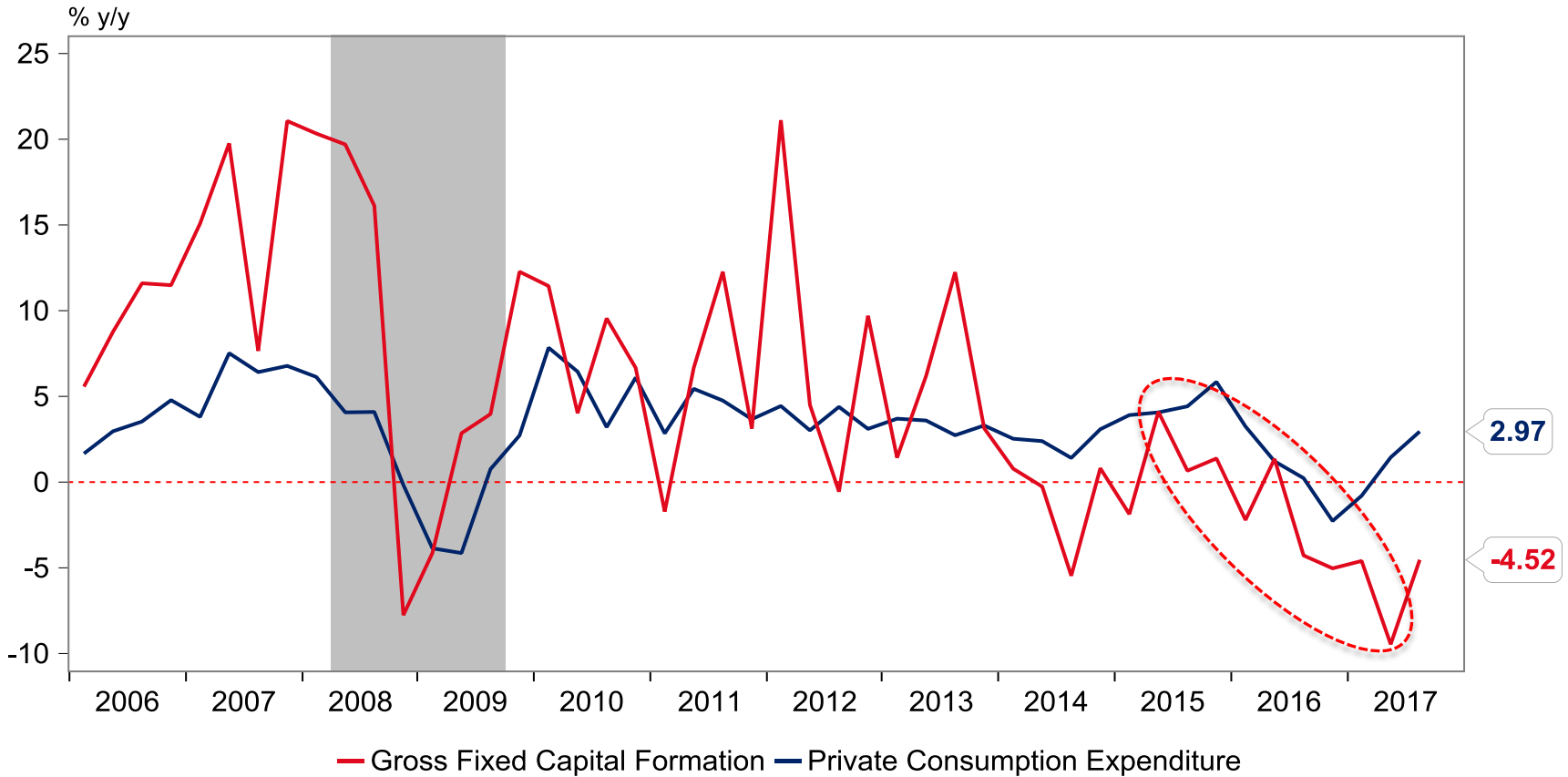
Singapore's Real GDP (External vs Domestic Sectors)



Source: Macrobond, UOB Global Economics & Markets Research

Resurgence in Domestic Consumption, But Investments Still Sluggish

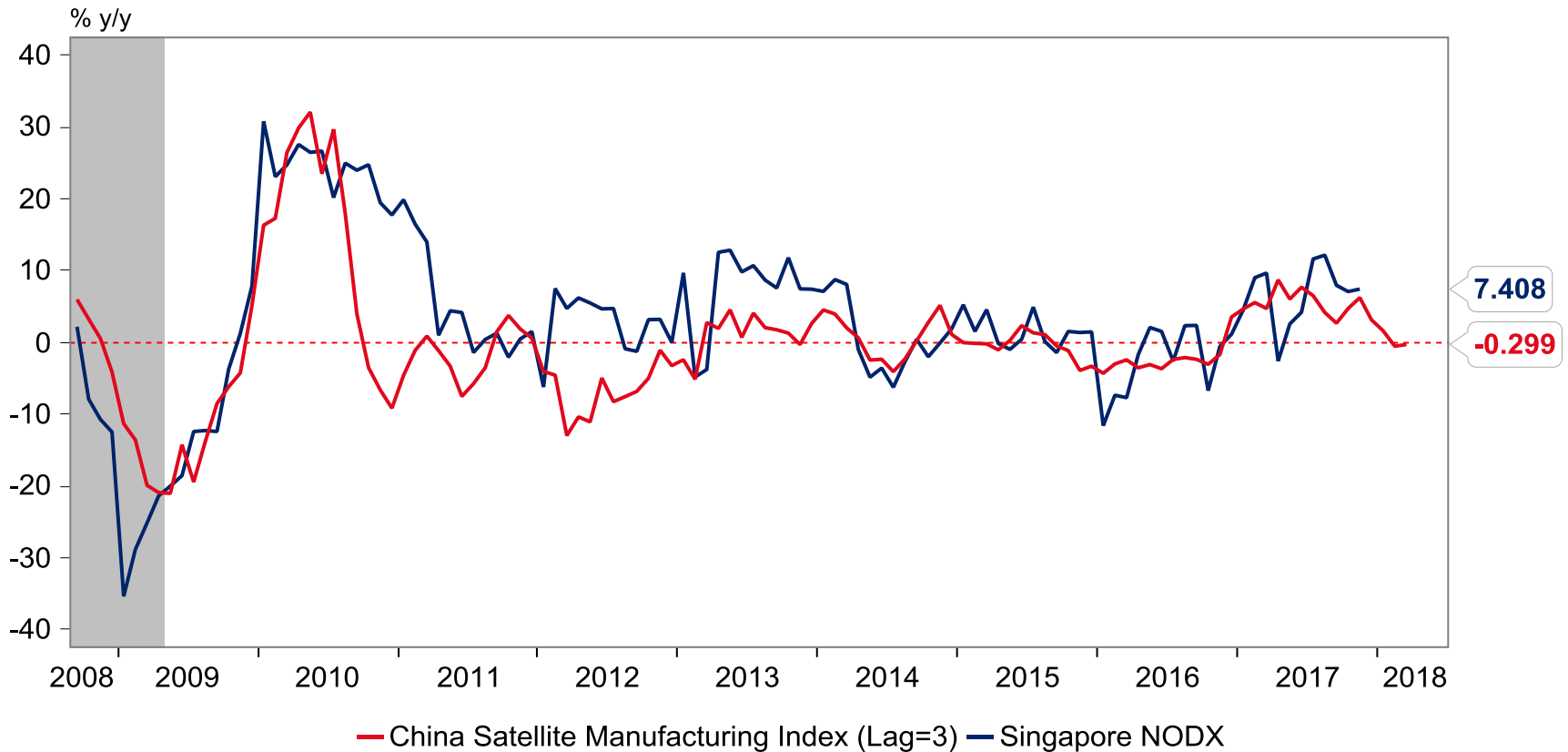
Singapore's Real GDP (Expenditure)



Source: Macrobond, UOB Global Economics & Markets Research

China's Mfg As A Mildly Positive Leading Indicator For SG NODX

China Satellite Manufacturing Index & Singapore Non-Oil Domestic Exports

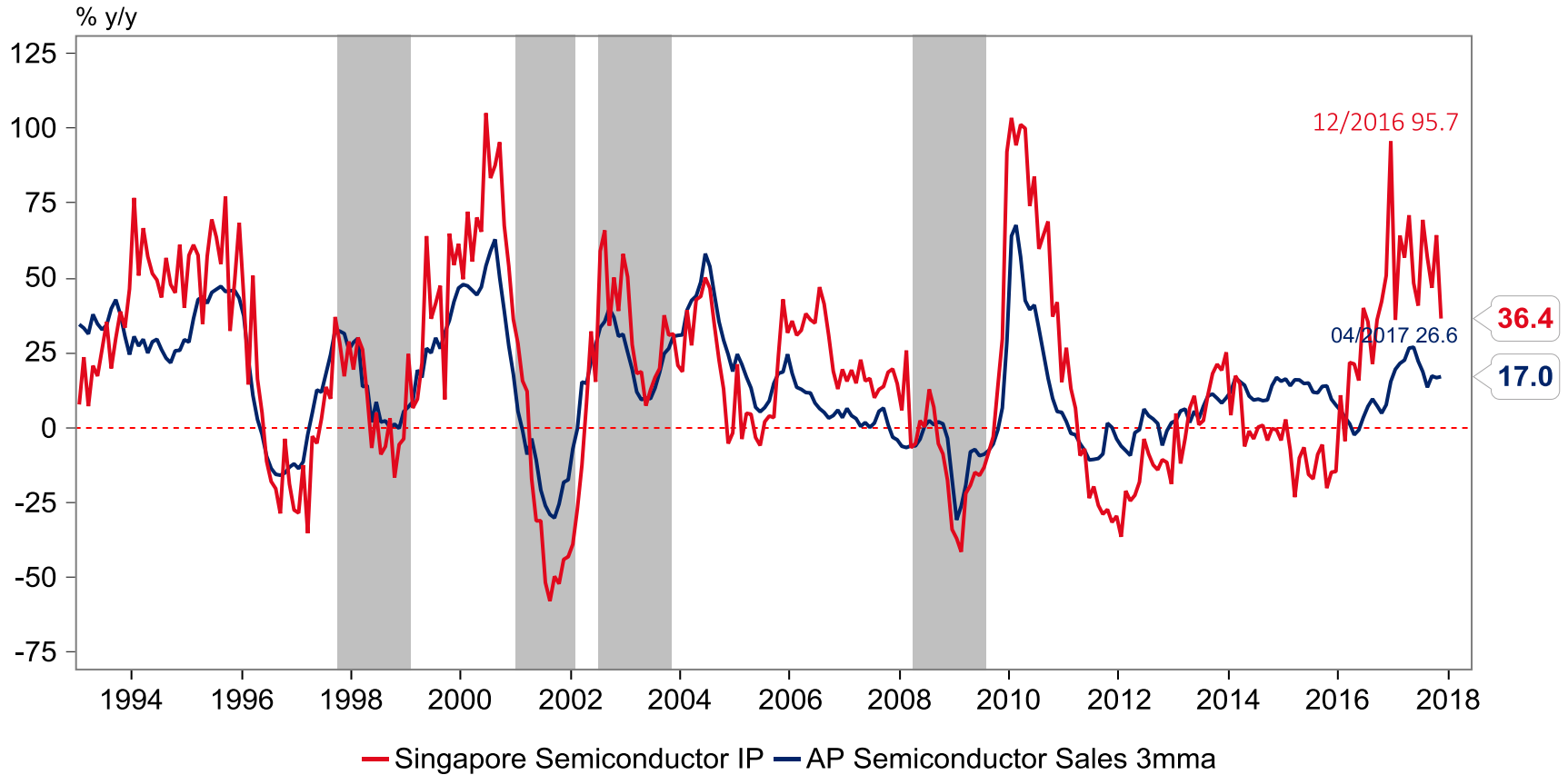


Source: Bloomberg, UOB Global Economics & Markets Research

Note: Satellite Mfg is based on analysing more than 6,000 industrial sites in China, from 2.2 billion observations over 500,000 sqkm spanning 14 years

Slower Growth For Semiconductor Output Expected In 2018

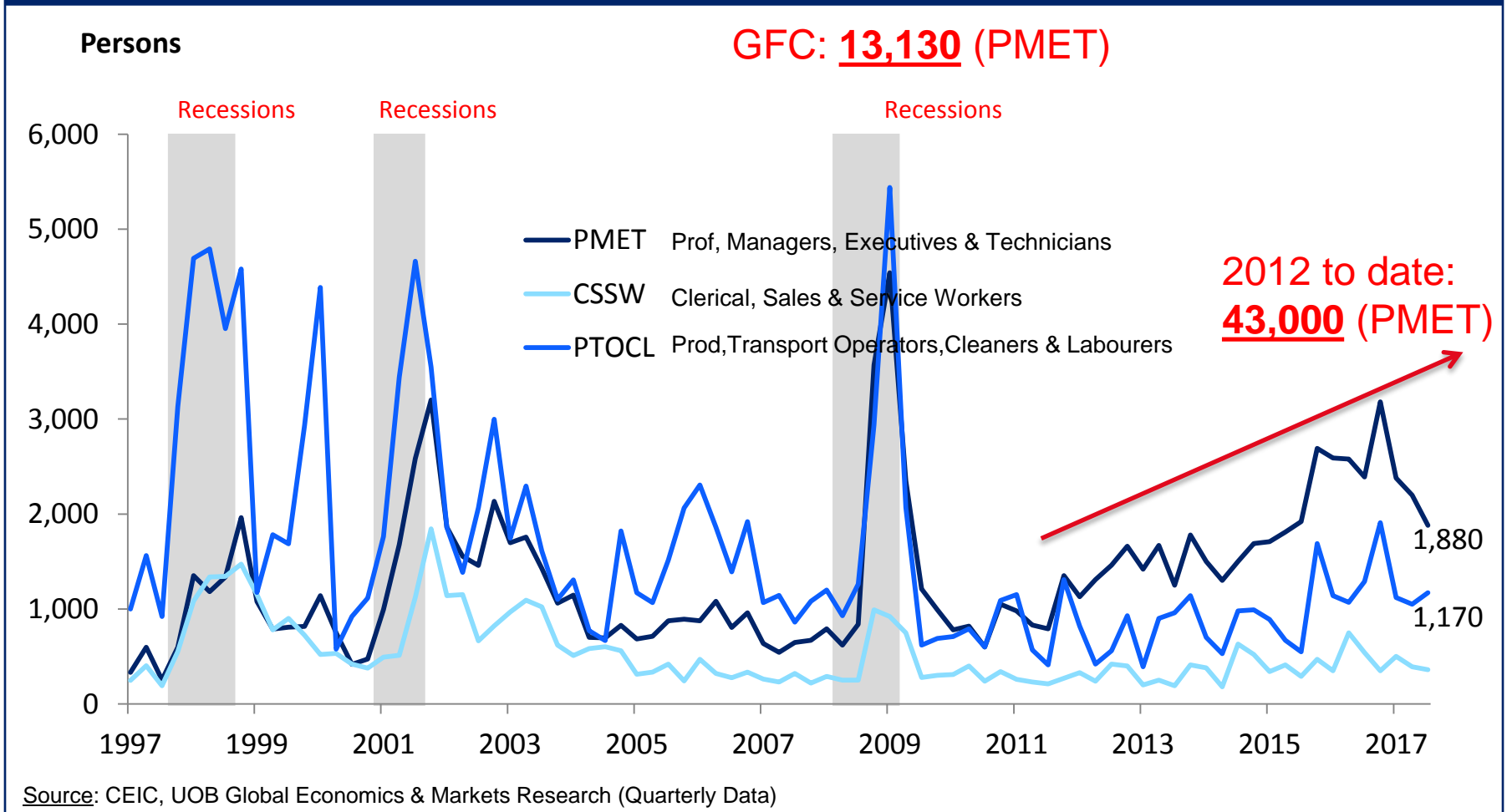
Asia Pacific Semiconductor Sales vs Singapore Semiconductor IP



Source: Macrobond, UOB Global Economics & Markets Research

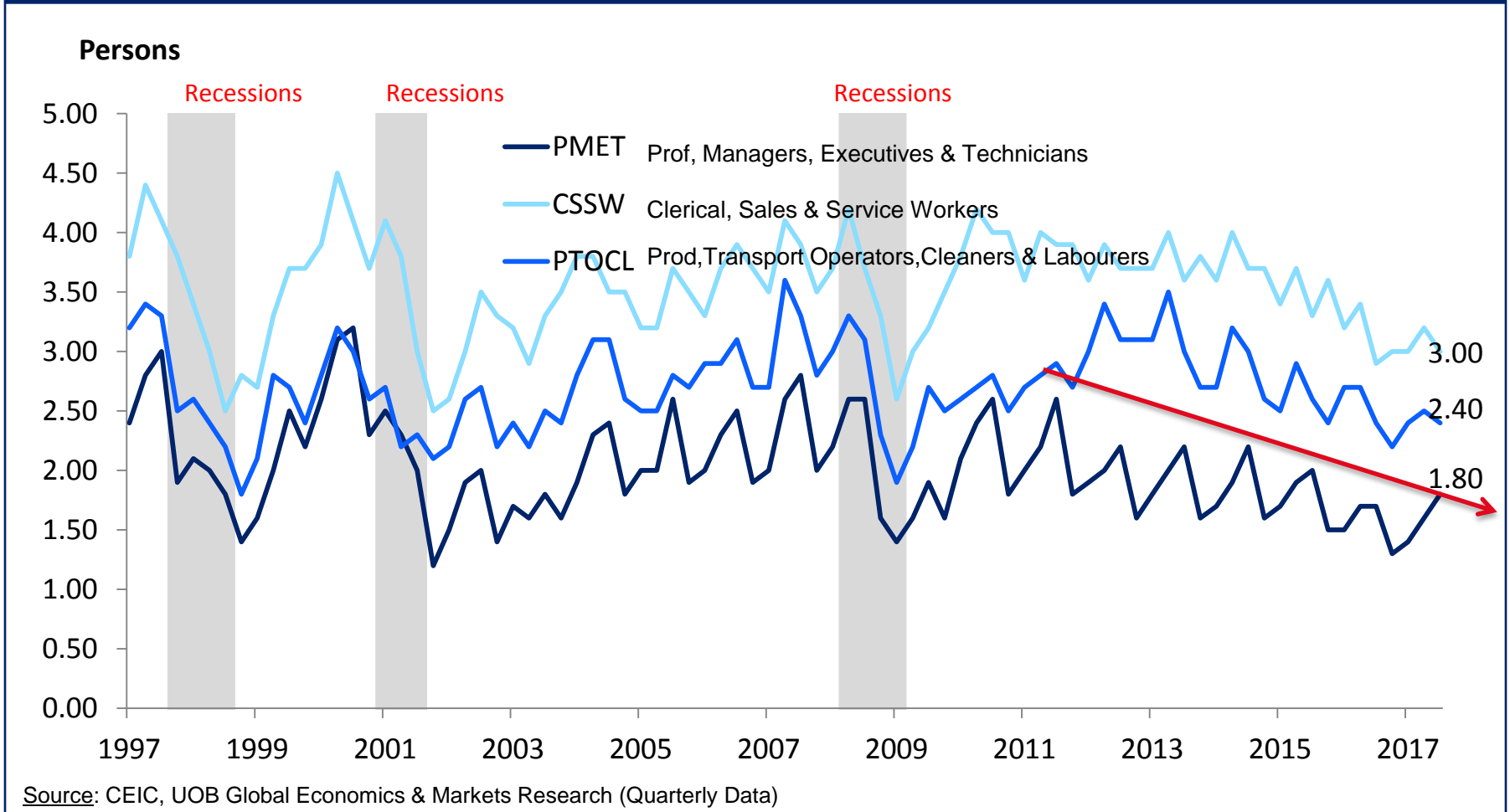
Falling Retrenchment Numbers Amongst PMETs Is A Good Sign

Number of Retrenched Workers by Profession



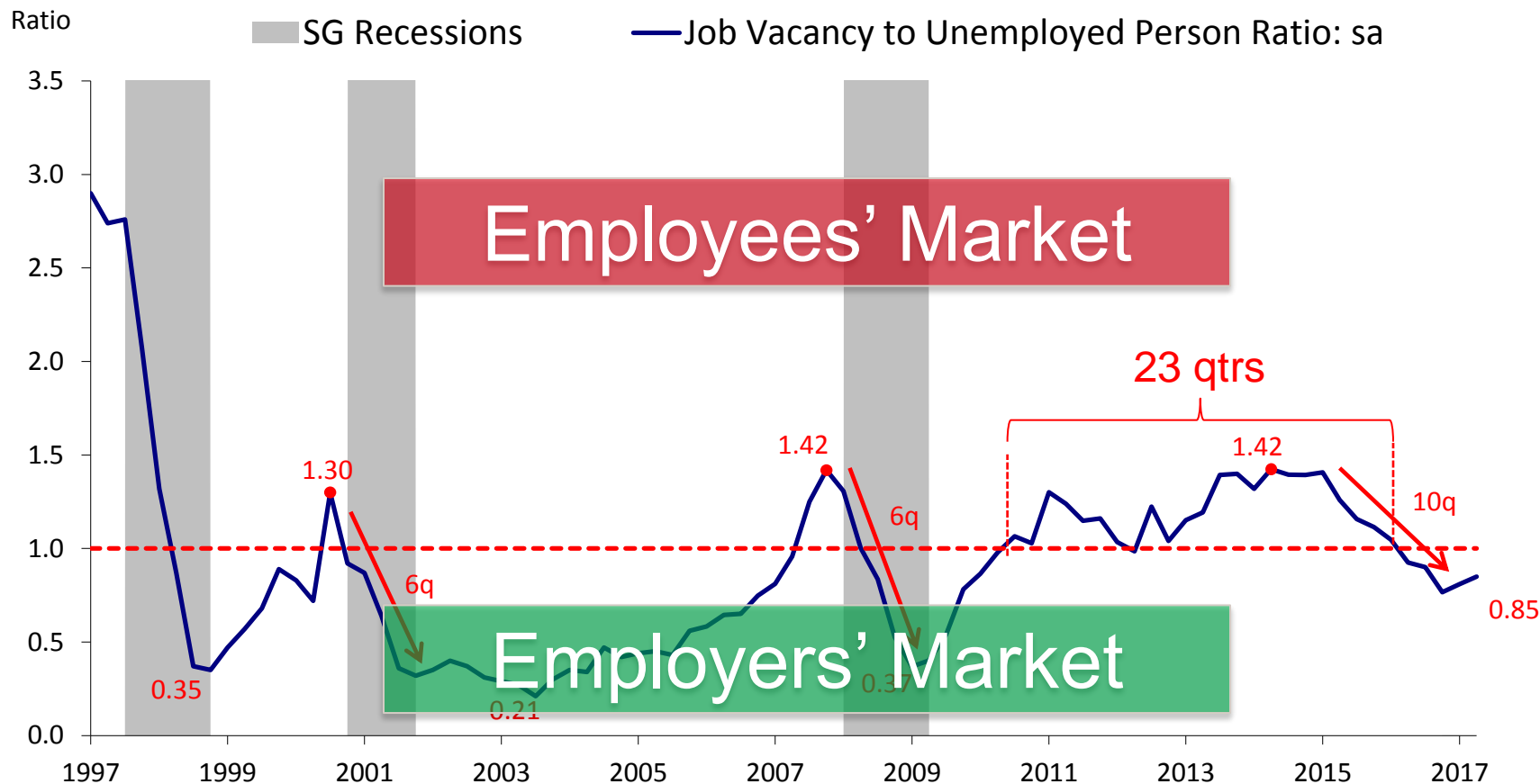
While Employers Are Holding On To Staff, They Are Hesitant In Hiring More

Job Recruitment Rate



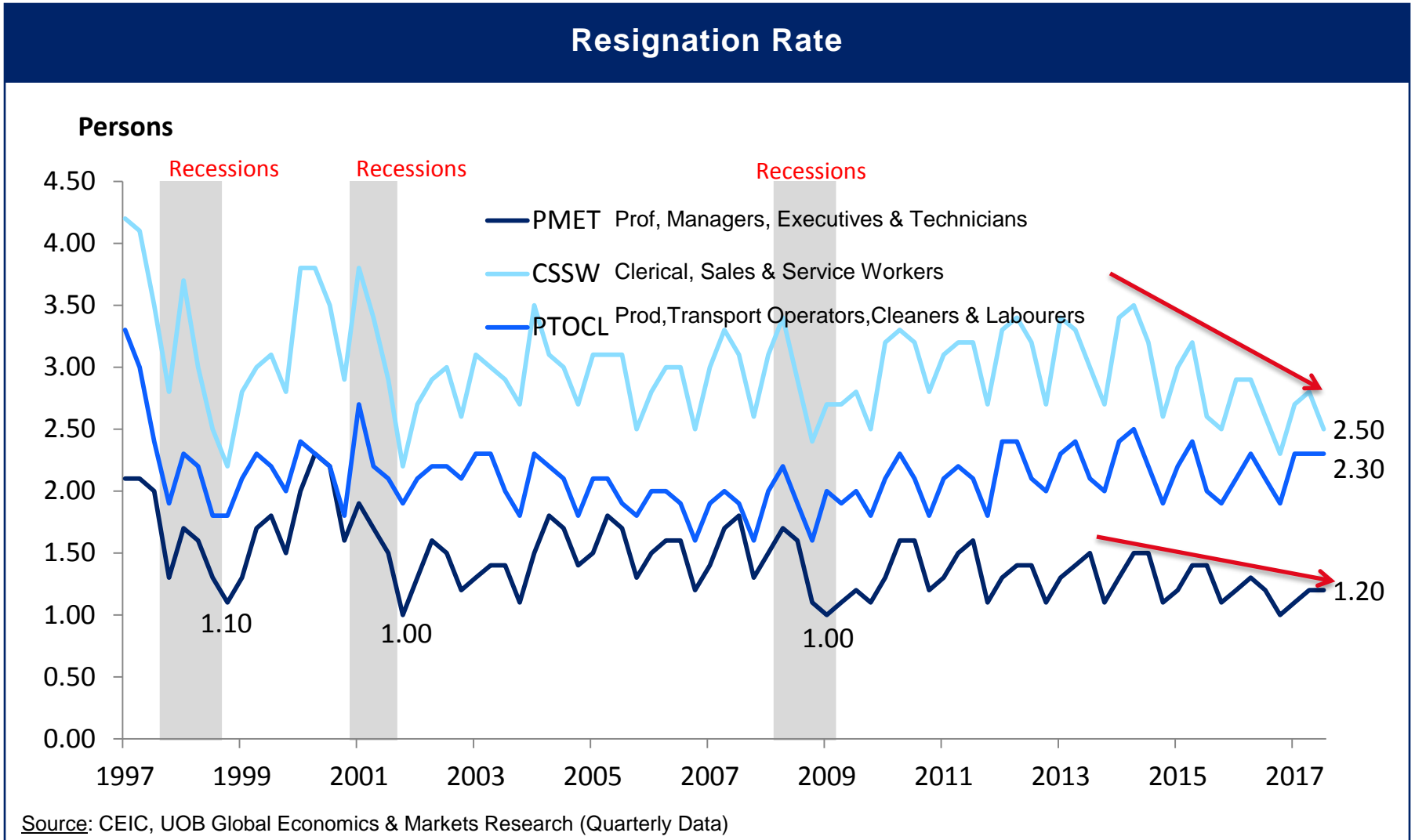
Slight Improvement In Labour Market Tightness, But It's Basically Still An Employers' Market

Job Vacancy-to-Unemployed Ratio



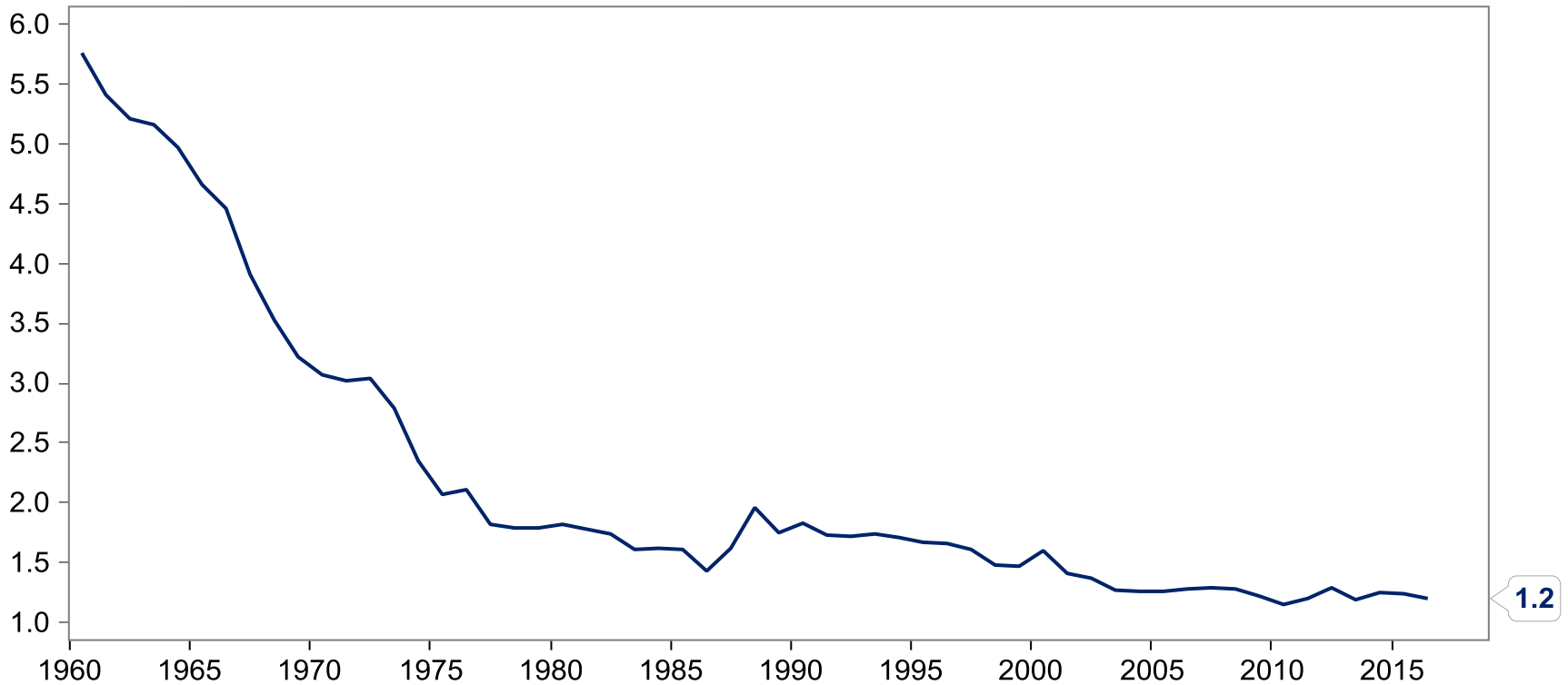
Source: CEIC (Quarterly Data)

And Employees Are Hanging On To Their Jobs Dearly, Esp. PMETs



What is This?

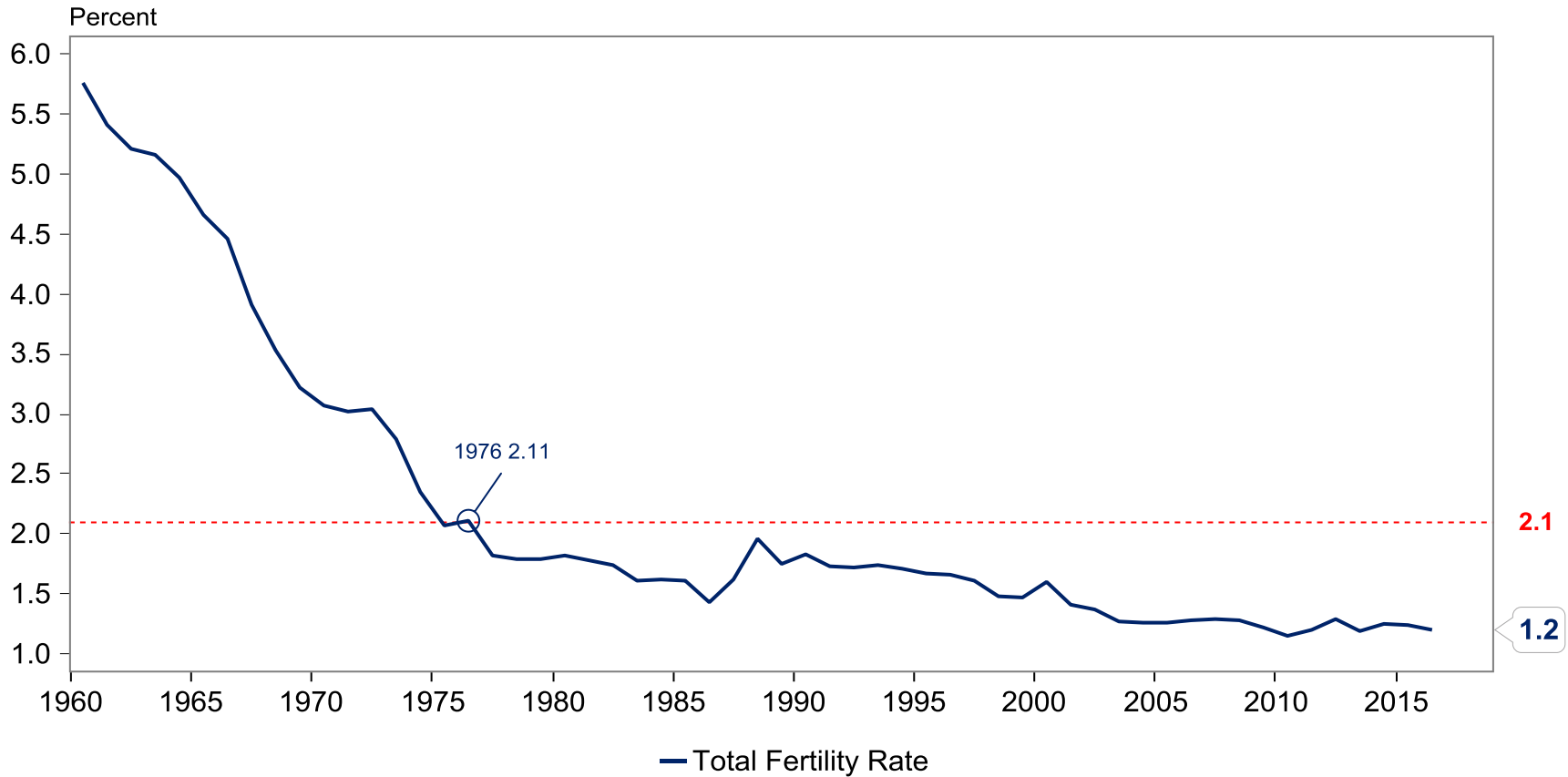
????



Source: Macrobond, UOB Global Economics & Markets Research

On Average, Every 10 New Couples Have 12 Children

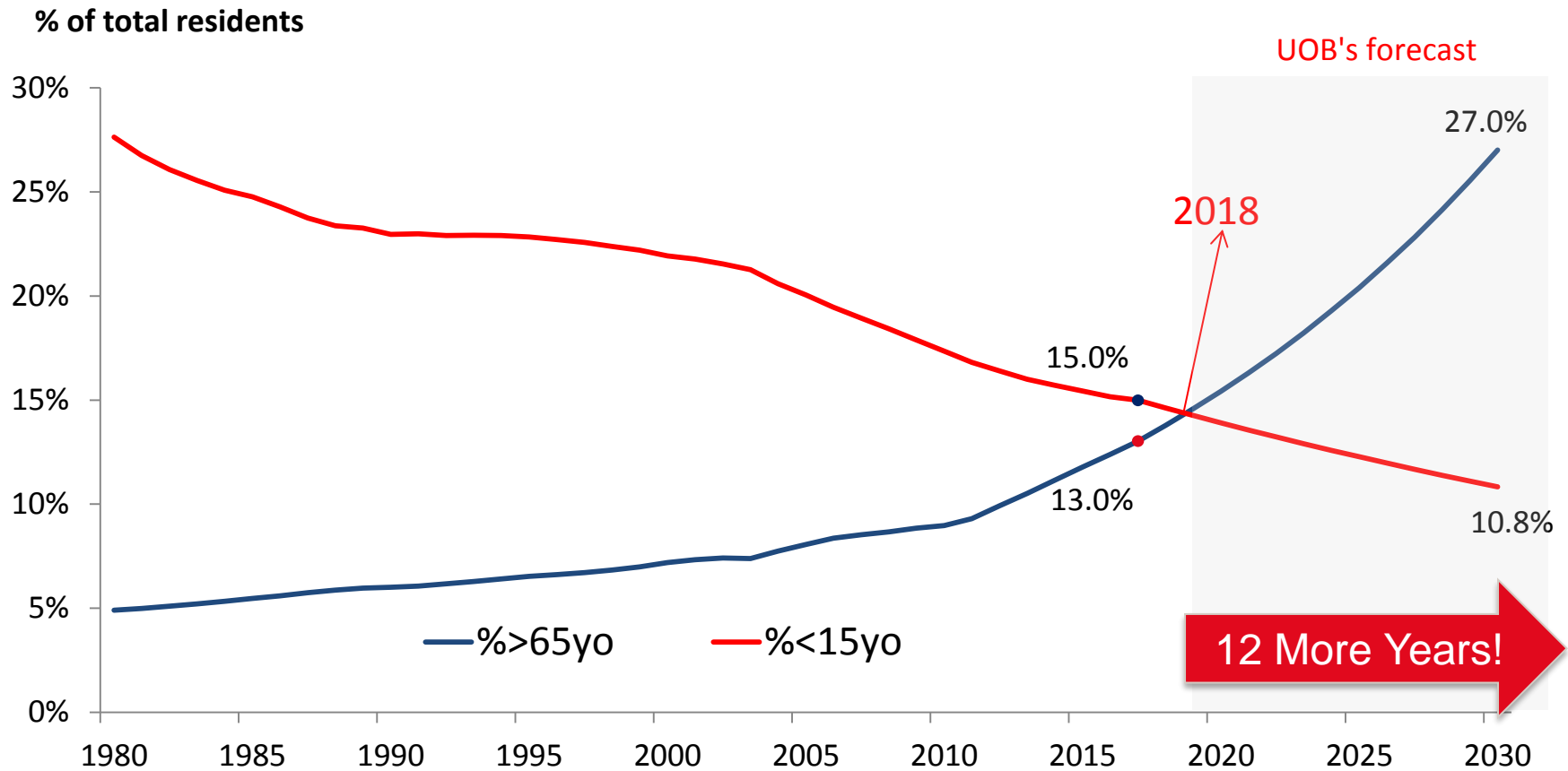
Singapore's Total Fertility Rate



Source: Macrobond, UOB Global Economics & Markets Research

Longer Term Challenges

Singapore's <15yo and >65yo as % of Total Resident Population



Source: CEIC



S'pore's 'demographic time bomb' starts ticking next year: UOB report

By FARAH MOHAMMAD

Axcess News

Business News



Singapore's Aging Population a Major Concern in 2018

Singapore's

By Michelle Jamrisko

December 5, 2017, 8:06 PM

Singap bomb'

→ Popula

→ Faster

UOB economist ex
says raising GST is



© THU, DEC 07, 2017 - 5

VIVIEN SHIAO

THE Star ONLINE

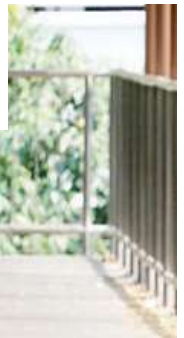


ess

018

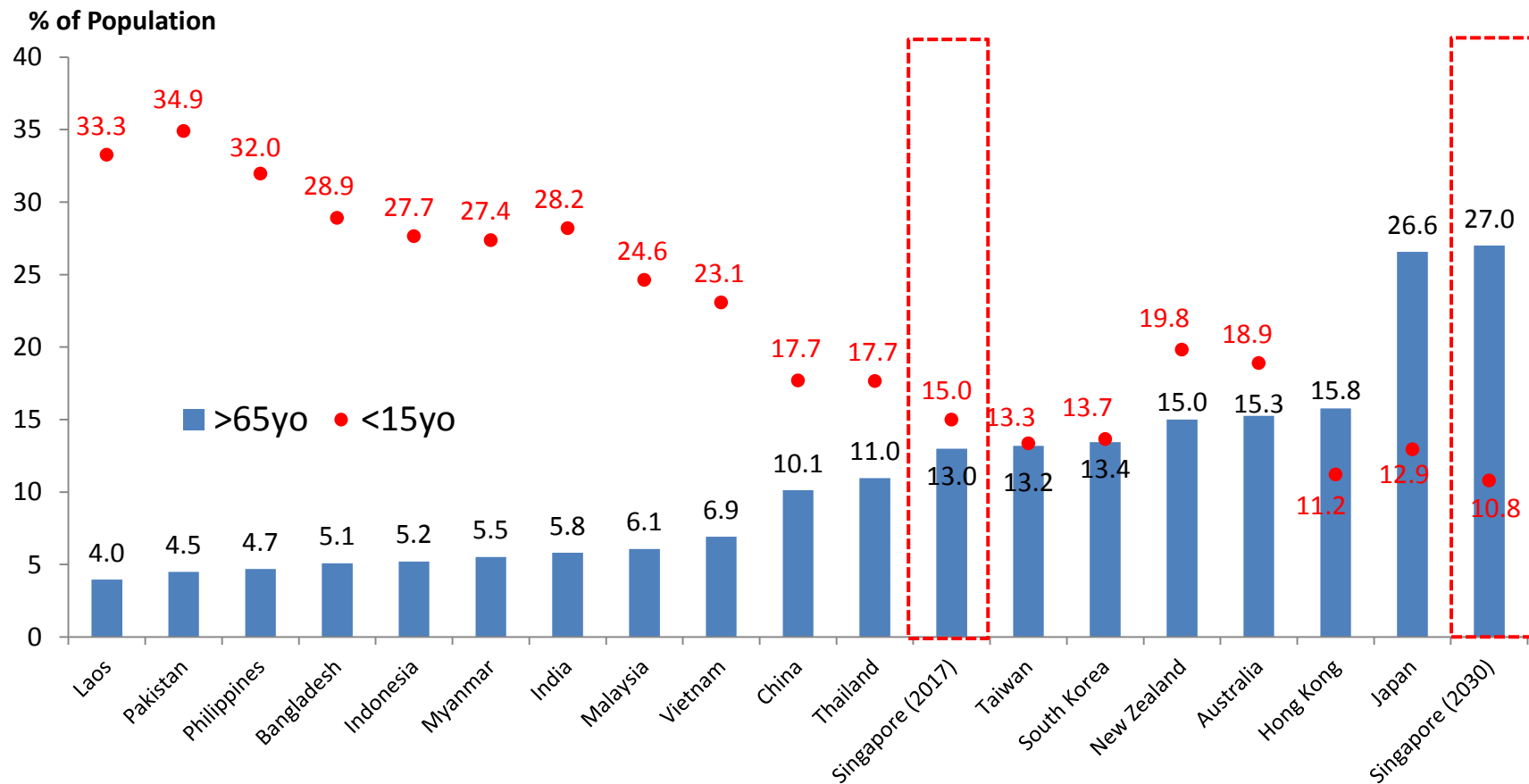
IES

omist



Strong Demographics Is On ASEAN's Side, But Not For Some

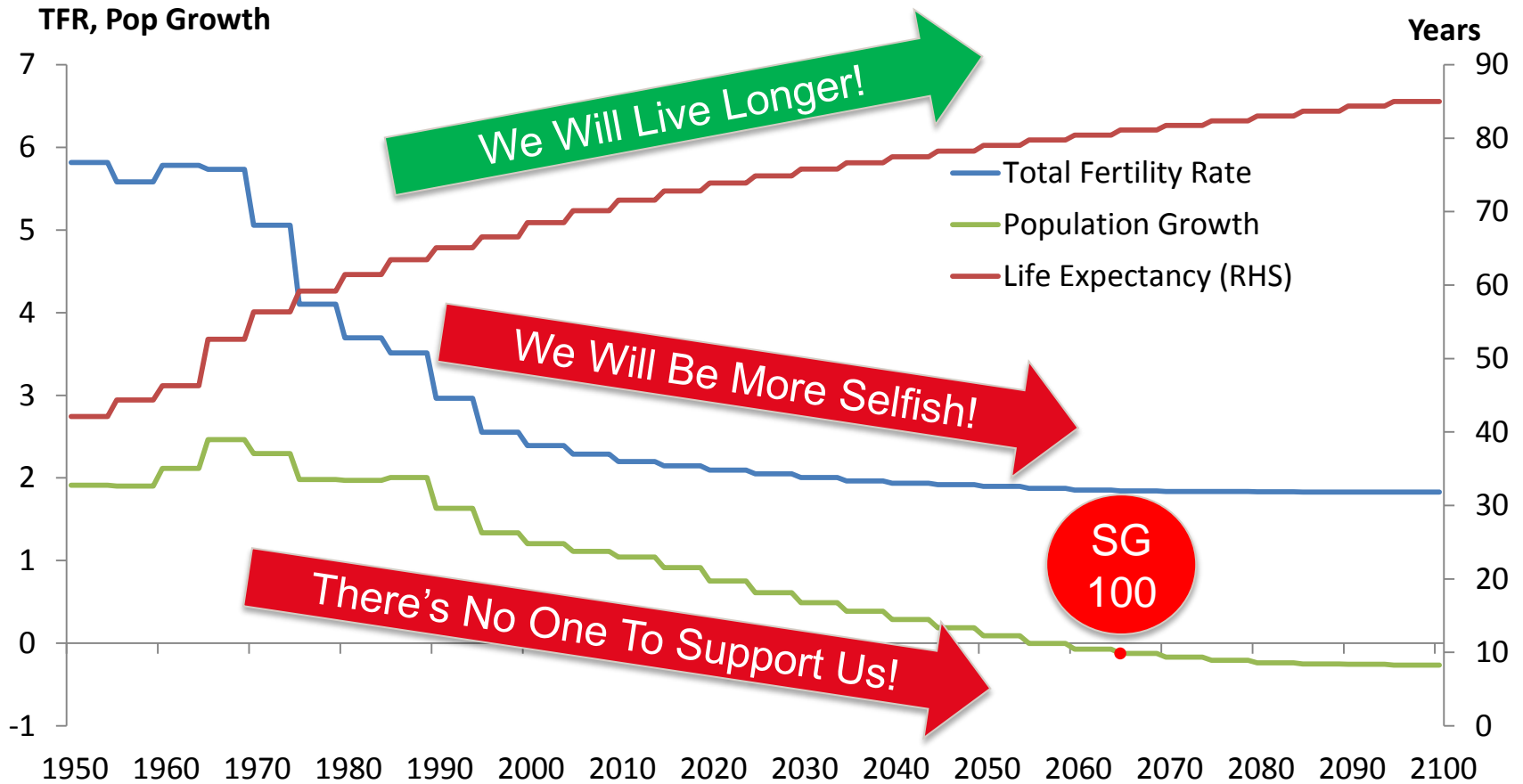
% of Population >65yo and <15yo (2016)



Source: Bloomberg, UN Census Bureau (Annual Data)

Demographics Dividends or Costs?

Selected Demographics Indicators in Asia



Source: UN Population Prospects (Annual Data)

Two fre Goodbye, Shunfu: Residents of HUDC estate sold en bloc hold corridor party with S\$218m reserve

Kiemie

Dur
leas



The 90
procee

The site of
Gardens w



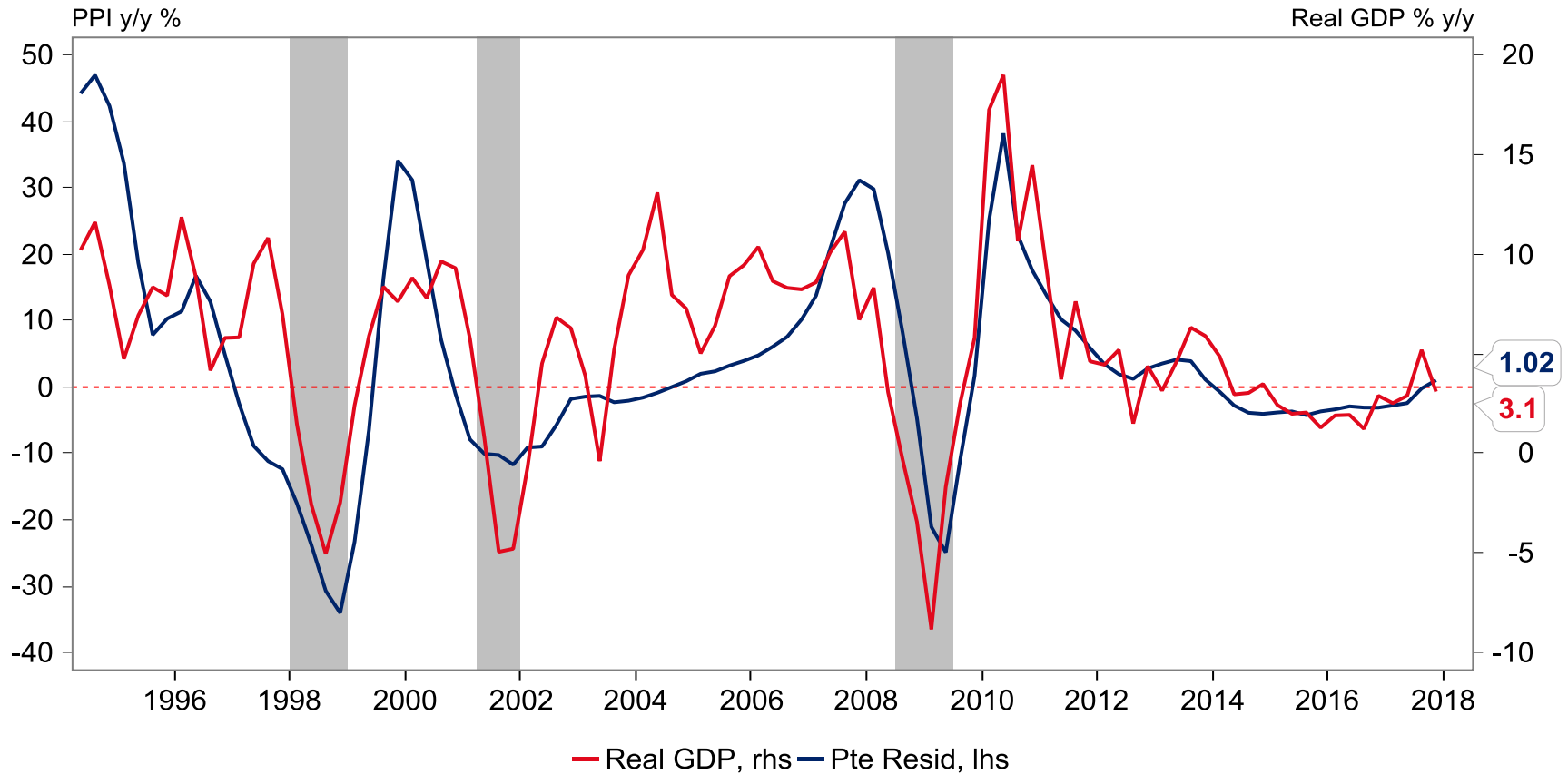
1 of 7 Sixth-floor residents at Block 317 in Shunfu Ville taking a group photograph during a corridor farewell party organised by long-time resident Law Kian Yan (bottom right, in black), 41. As most families had already moved out, some of the tables and chairs used at the party were taken from the dumpster downstairs and thrown away after the party was over. ST PHOTOS: MARK CHEONG

sale

Who Says GDP Is NOT Important?

High Income Growth = High Property Price Growth

Real GDP and URA Property Price Index



Source: Macrobond, UOB Global Economics & Markets Research

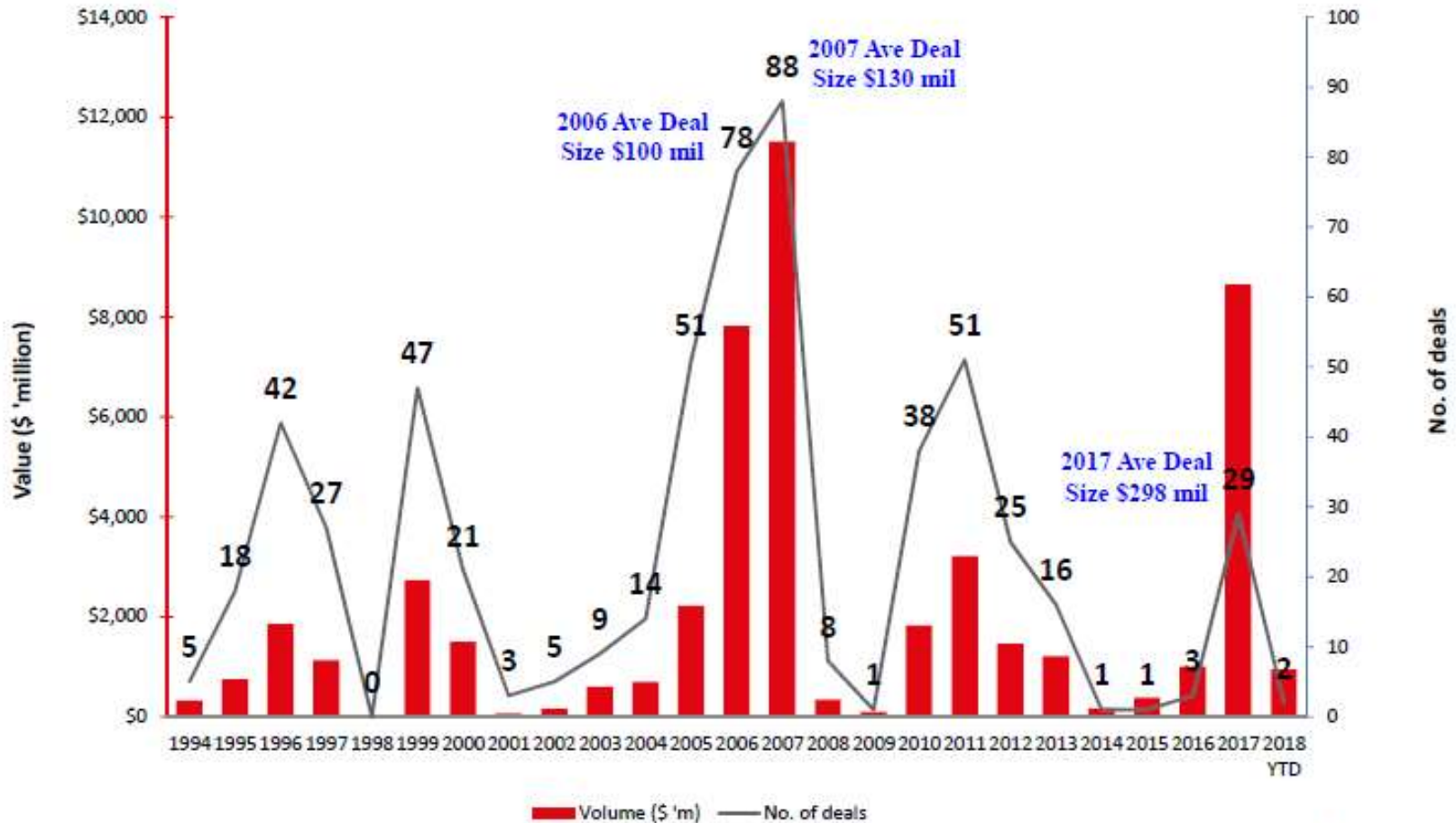
Some statistics



- Over **580** collective sales since 1994.
- Total value more than **\$50 billion** by 2018YTD.
- Last run in 2006/07 saw record 166 sites sold, valued over \$19 billion – prime market led.
- 2016/17 – mass market led cycle.
- 2017 volume \$8.65 billion surpassed 2006 to be the **No. 2 highest in value**.
- Average deal size **\$298 million**, almost tripled that of 2006, or 2.3 times that of 2007.

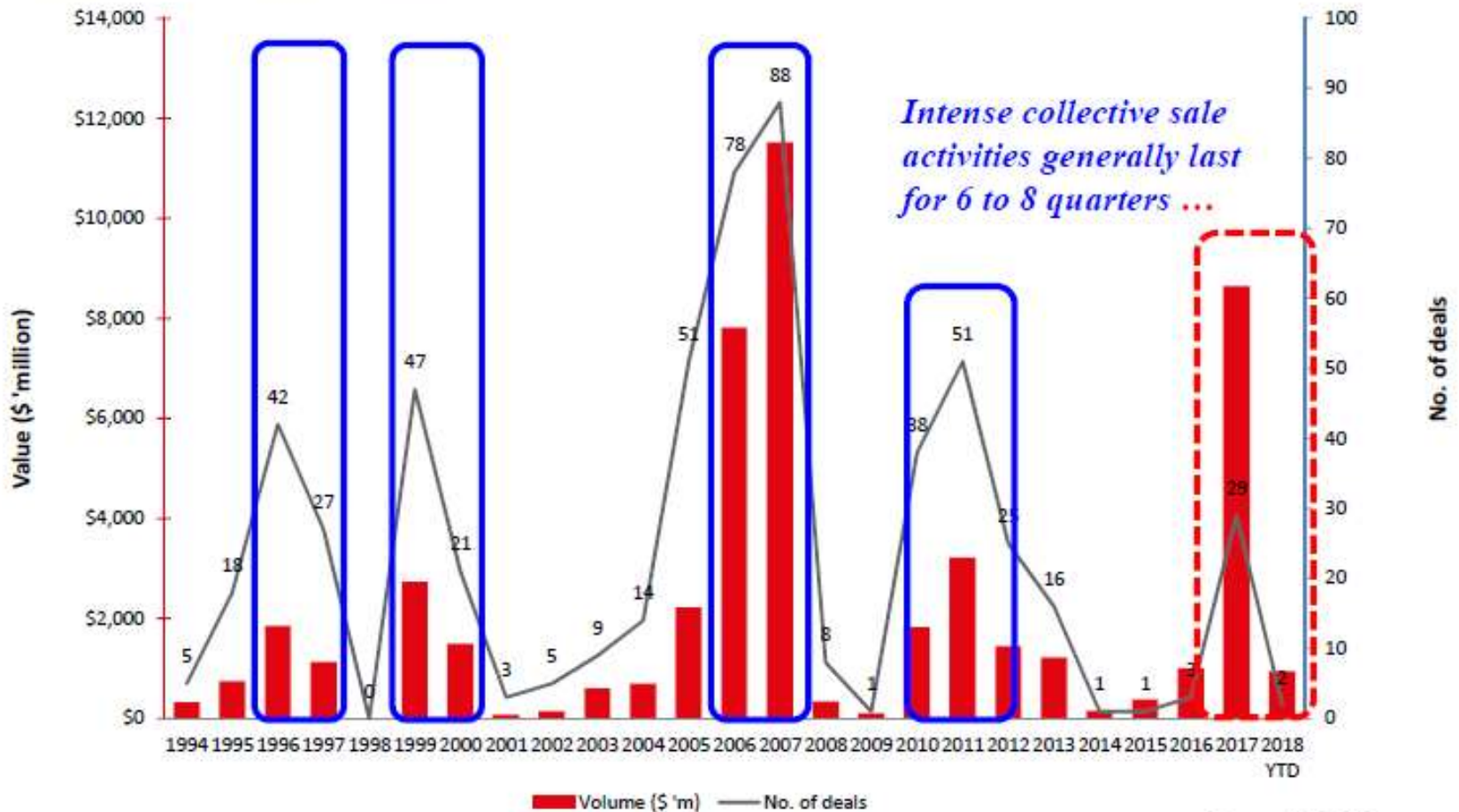


Successful Collective Sales (1994 - 2018 YTD)



Source: JLL, 22 January

Collective Sales (1994 - 2018YTD)



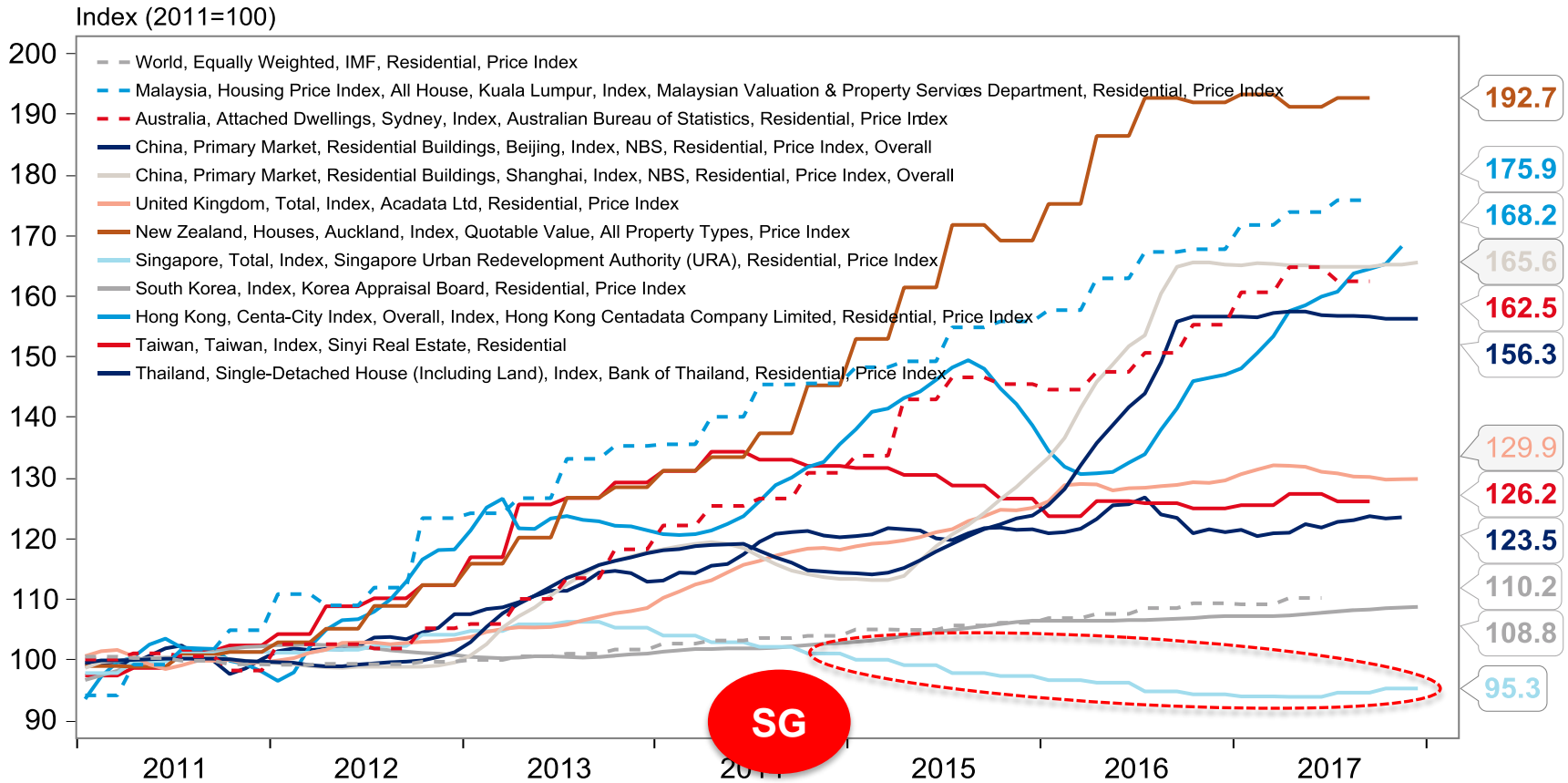
Source: JLL, 22 January



4 Factors Supporting SG Property Prices

1: Relative “Value” of Singapore’s Private Property

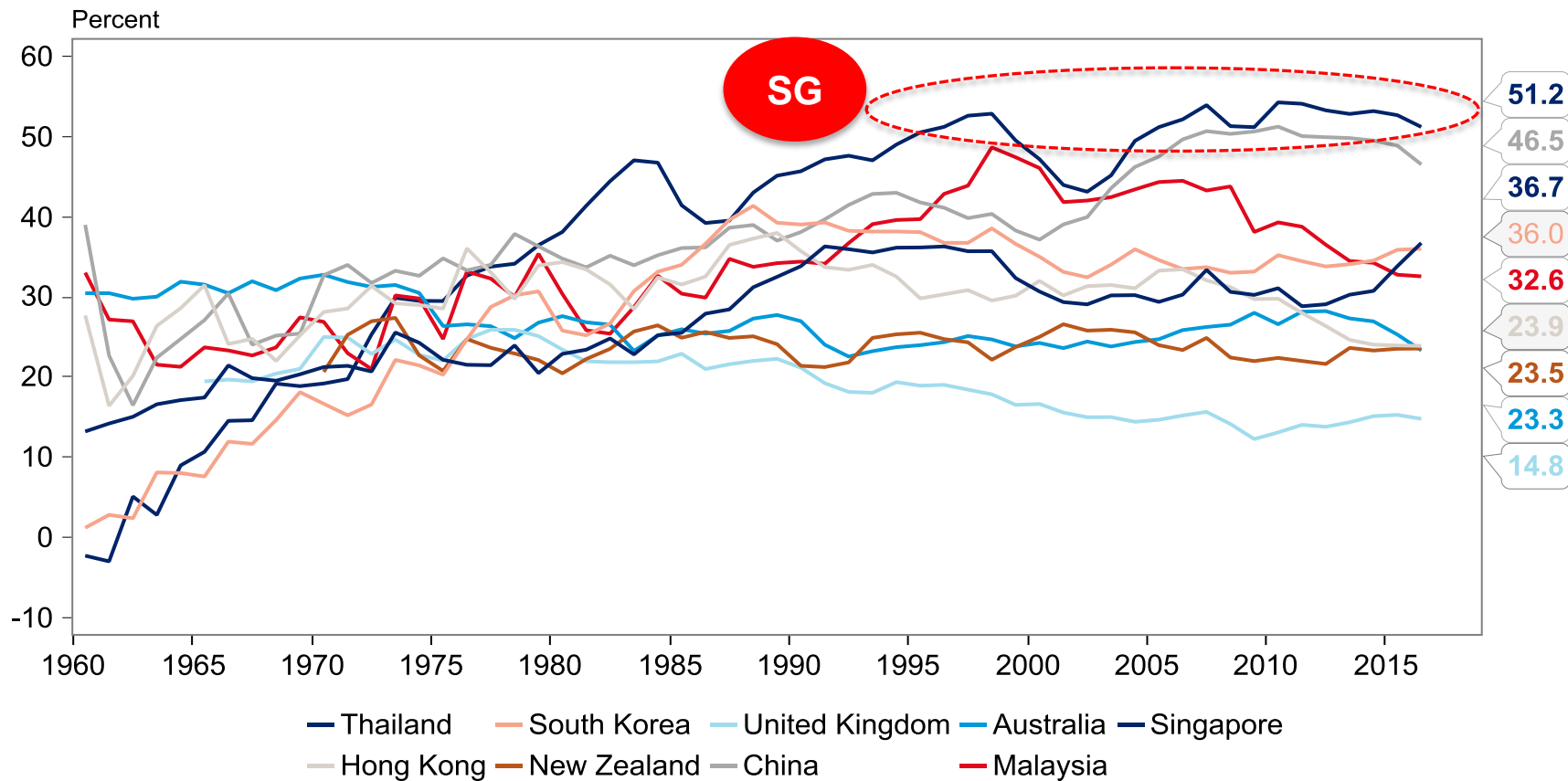
Selected Property Prices (2011 = 100)



Source: Macrobond, UOB Global Economics & Markets Research

2: Singapore Has One Of The Highest Savings Rate

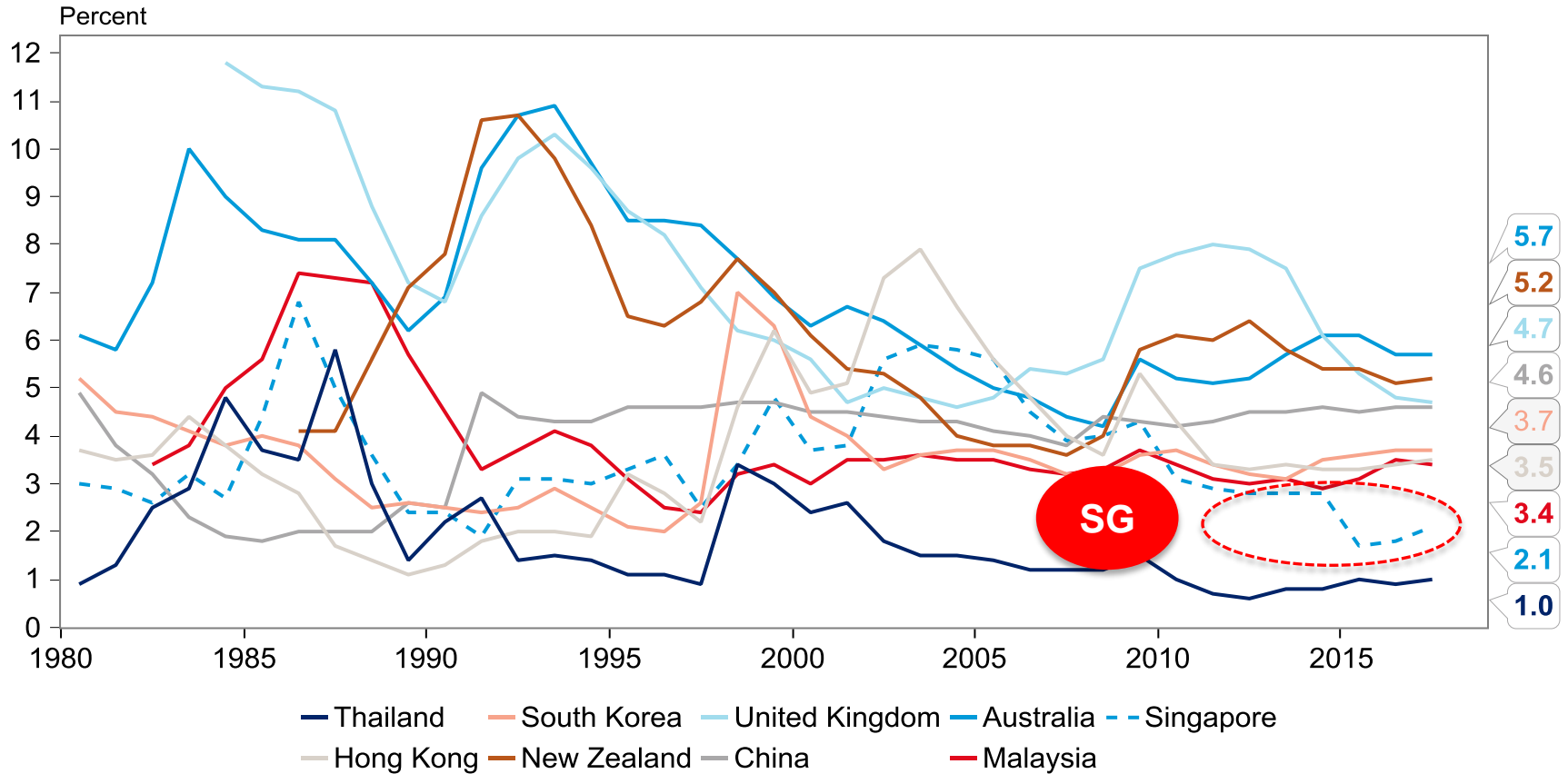
Selected Gross Domestic Savings As % of GDP



Source: Macrobond, UOB Global Economics & Markets Research

3: And One Of The Lowest Unemployment Rates

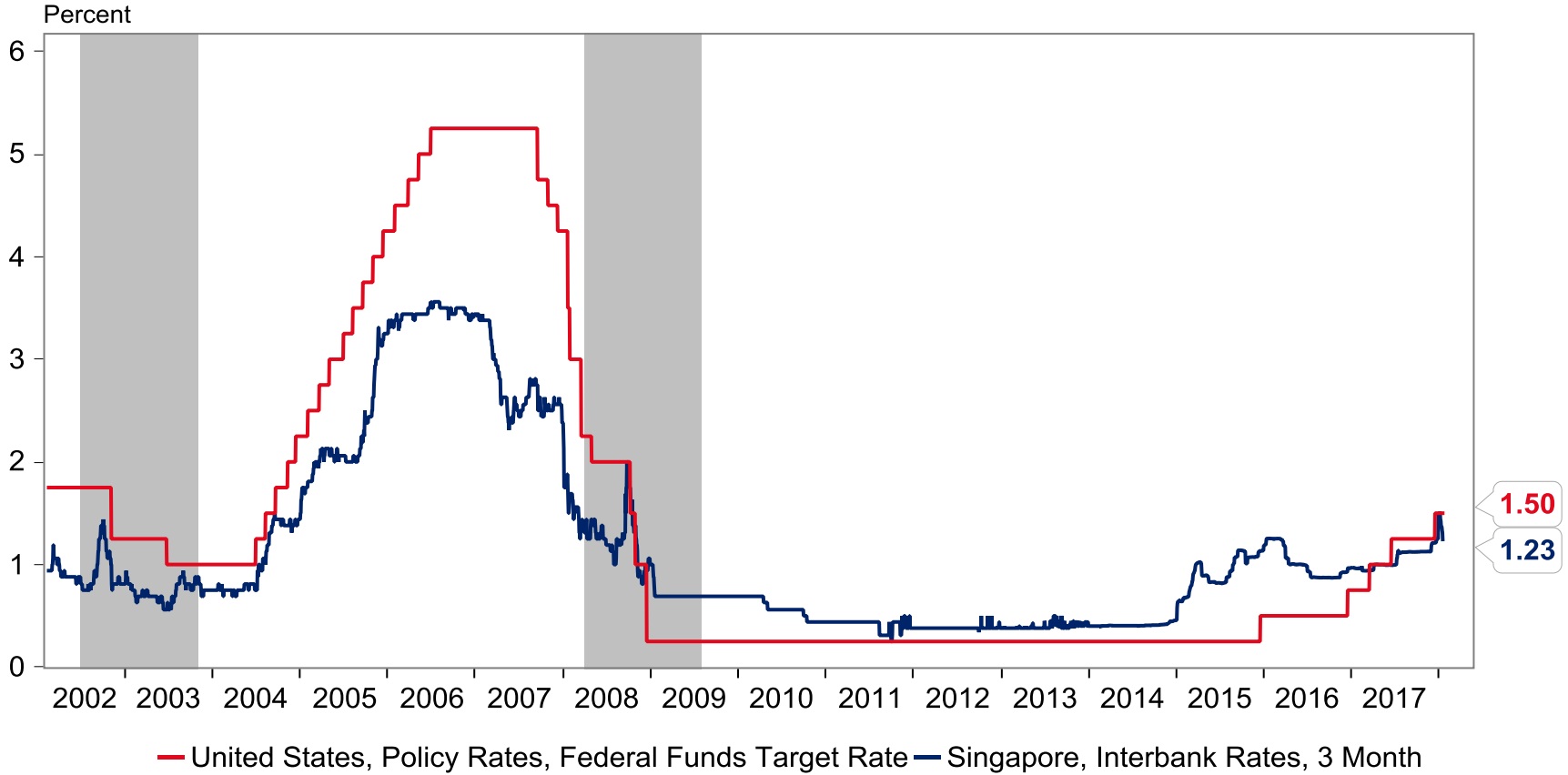
Selected Unemployment Rates



Source: Macrobond, UOB Global Economics & Markets Research

4: Though Interest Rate Climbing, Not Like The Previous Tightening Cycle

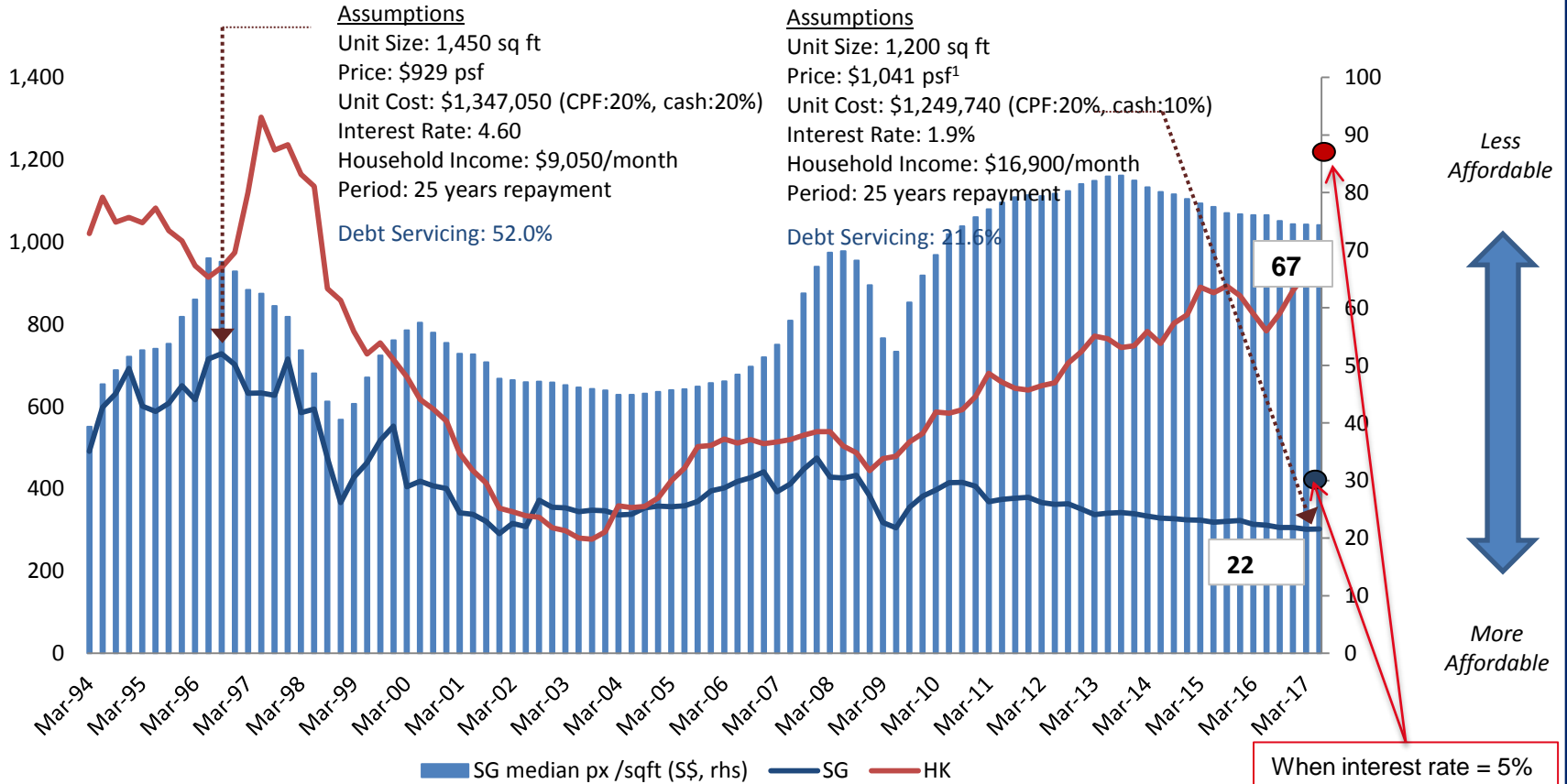
3m SIBOR and US FFTR



Source: Macrobond, UOB Global Economics & Markets Research

Low Mortgage Debt Service Ratio due to Low Interest Rates, High Income Growth and Smaller Units

Debt Servicing Ratio Between SG and HK



Note: SG calculation based on median condo prices for 110 sqm, 70% LTV and loan tenor of 25 yrs, median resident household income living in private properties .

HK calculation based on 45 sqm area, 70% LTV and loan tenor of 20 yrs, median household income

Source: URA, CEIC, HK SAR Finance Secretary's Office, Singapore Statistics, UOB Global Economics & Markets Research Estimates

Affordability Comparison (2016)

Rule-of-Thumb for affordability in global city-states is 4x for overall system, and 7-8x for private residential

Description	Singapore HDB BTO (Non-Mature Town)	Singapore HDB Resale	Singapore Condominium	Hong Kong Class B**	Malaysia KL (Avg House price)
Price per sqm	S\$2,867	S\$5,031	S\$11,228	HK\$123,659	RM6,244
Average House Size (sqm)	90*	90*	110	56	120
Assumed House Cost	S\$258,000	S\$452,826	S\$1,235,117	HK\$6,924,923	RM749,305
Average Monthly Household Income	S\$8,846***	S\$11,589***	S\$16,900***	HK\$35,000	RM6,500
House Price vs Income Ratio	2.4	3.3	6.1	16.4	9.6
Description	China National	China Beijing	China Tianjin	China Shanghai	Taiwan Taipei City
Price per sqm	RMB7,475	RMB27,497	RMB12,830	RMB24,747	NT\$218,547
Average House Size (sqm)	90	90	90	90	90
Assumed House Cost	RMB672,750	RMB2,474,730	RMB1,154,700	RMB2,227,230	NT\$19,669,230
Average Monthly Household Income	RMB3,970	RMB8,755	RMB5,679	RMB9,050	NT\$97,600
House Price vs Income Ratio	14.1	23.6	16.9	20.5	16.8

Source: Singapore DOS, UOB Global Economics & Markets Research

Assume 2 working adults in a household where household income data is not available.

*Ave 4-room HDB

China: 2016 average monthly household income refers to disposable income; property prices from Ministry of Commerce

**Ave private residences in HK, Kowloon and New Territories

***Singapore -- Based on national median income, average national income and median resident employed household income for those living in condos and pte flats respectively

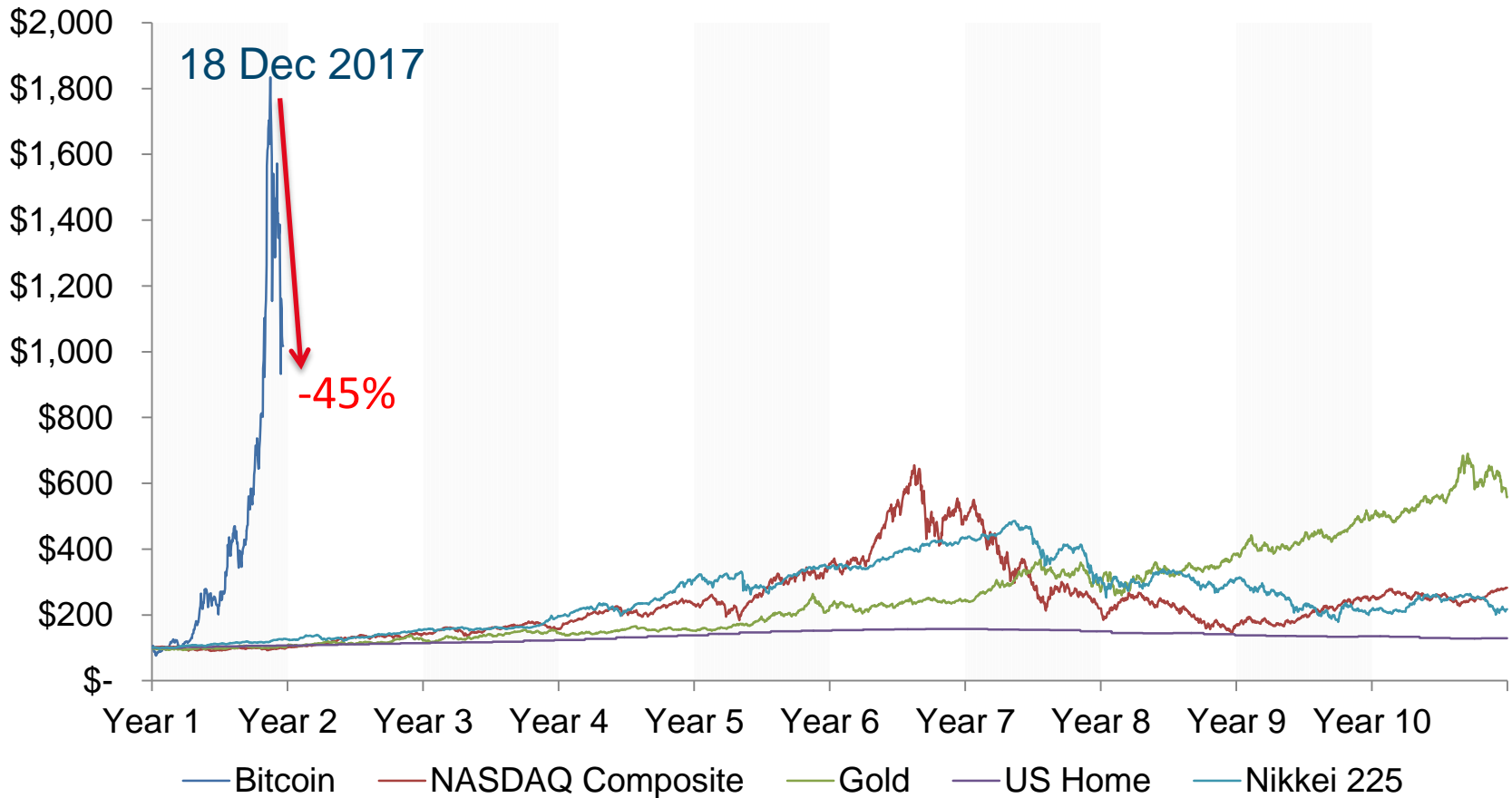
Selected Assets Prices



Source: Bloomberg, UOB Global Economics & Markets Research Est

What Bubble?

Selected Assets Prices



Source: Bloomberg, UOB Global Economics & Markets Research Est

As Bitcoin Sinks, Crypto Bros Party Hard on a Blockchain Cruise

By **Blake Schmidt**

January 19, 2018, 1:29 PM GMT+8

- Enthusiasts cruised from Singapore to Thailand this week
- 'Buy The Dip' t-shirt, drones, Bitcoin-themed rap music



Latest ICO in TOWN!!



US

- Better payroll numbers did not translate into higher wage gains as productivity growth remains low, skills mismatches worsened post-GFC, and the pass-through to consumer prices (if any) were negated by the still-low commodities prices, falling services prices, and labour-saving technology adoption.
- US is at the late stage of the business cycle. Will lower corporate taxes extend the business cycle?

ASIA

- Manufacturing cycle turning down. Will impact current account balance. Policymakers need to be more accommodative. Asian currencies will trend lower into 2018. We are bearish on the ADXY.

SG

- We are getting older, faster than ever. Govt expenditure will rise. Need to seek higher revenue (higher taxes or more immigrants?), or reduce cost further.

Question & Answer Session

Contact Details

Francis Tan

UOB Global Economics & Markets Research

francis.tan@uobgroup.com



About The Speaker

Francis is an economist with the United Overseas Bank's Global Economics & Markets Research team. His interest is in the field of development and financial economics, where he is passionate about the future development and economic opportunities for ASEAN nations via financial innovation. While going about his daily research work running economic models and crafting reports, he also provides regular economics commentaries in both English and Mandarin on TV and Radio and is frequently quoted in the print media.

Before joining UOB in 2012, Francis was an investment strategist at Phillip Capital where he used macroeconomics, business cycle theories, market timing and technical analyses to develop a systematic top-down investment approach for discretionary portfolios. Prior to that, Francis served as an Investment Manager in the wealth management arm of the Royal Bank of Scotland. His career also included stints as an economist at the Ministry of Trade and Industry and the Singapore Tourism Board, where he specialised in Tourism Economics.

Francis obtained the Bachelor of Social Science (Honours) in Economics in 2002 and the Master of Social Science in Applied Economics in 2003 from the National University of Singapore.

Continuing his academic interests in the field of applied economics, Francis had also contributed a chapter titled "Tourism Demand in Singapore: Estimating Neighbourhood Effects" in the Handbook of Tourism Economics published in 2013, and had published a paper titled "Growth and Environmental Quality in Singapore: Is There Any Trade-off?" in the "Ecological Indicators" journal in 2014.

Thank You

