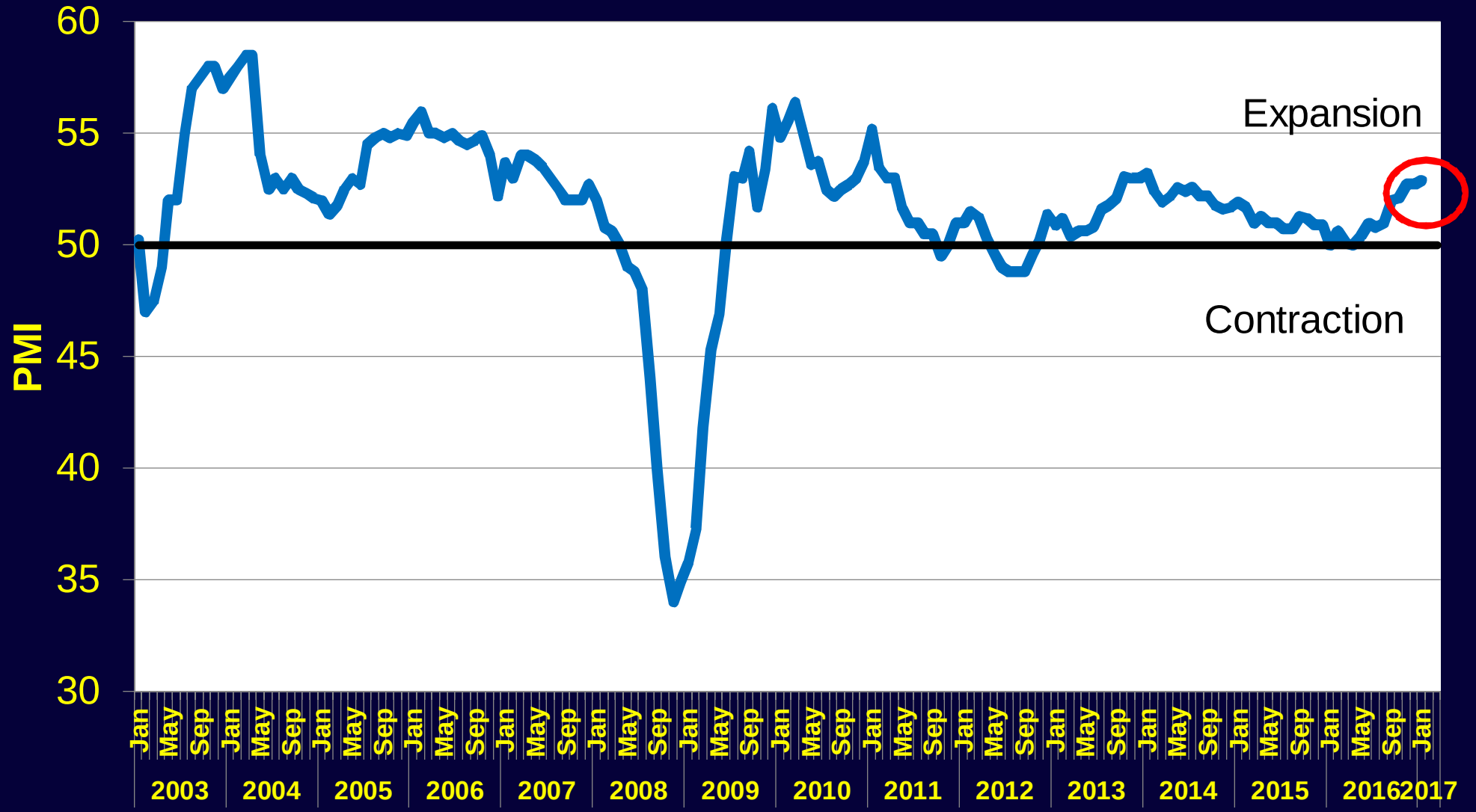
Chart 1

Global "Purchasing Managers" Index

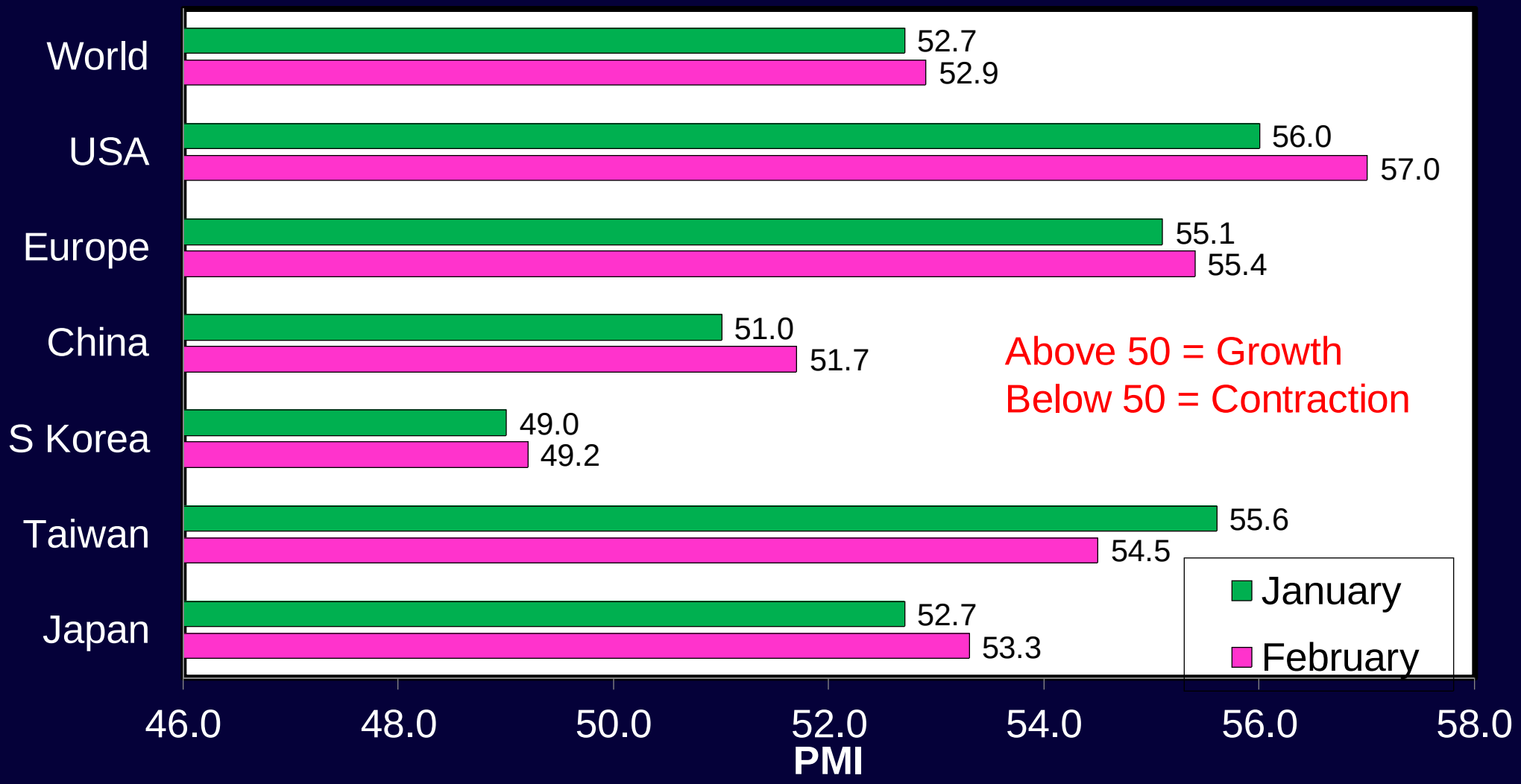
Diffusion Index, >50 = Growth



Markit Economics

Chart 2

Purchasing Managers' Indices
February vs. January 2017

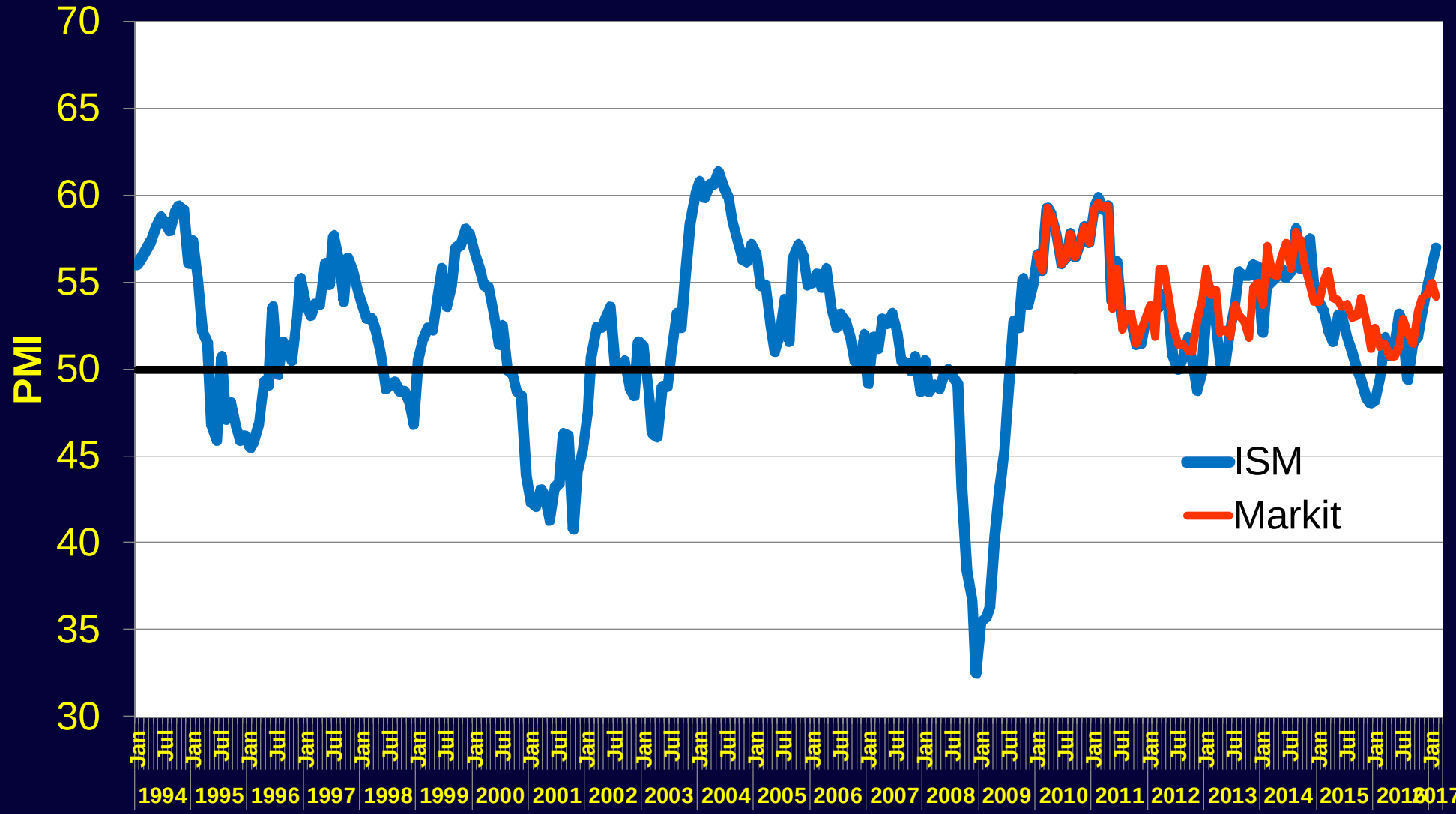


Markit Economics, JPMorgan and ISM

Chart 3

U.S "Purchasing Managers" Indices
ISM vs. Markit Economics

Diffusion Index, >50 = Growth

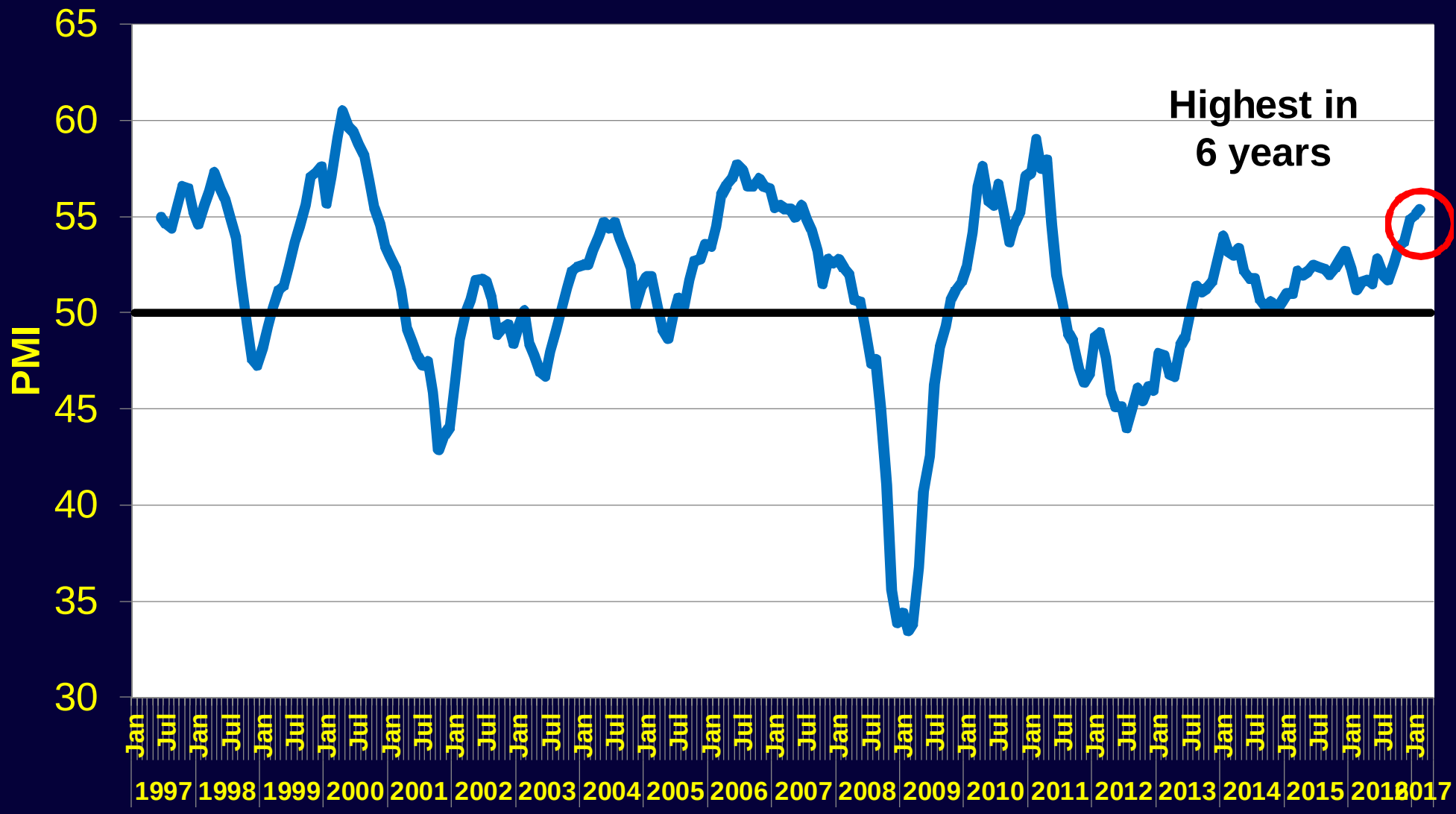


Markit Economics & ISM

Chart 4

Eurozone "Purchasing Managers" Index

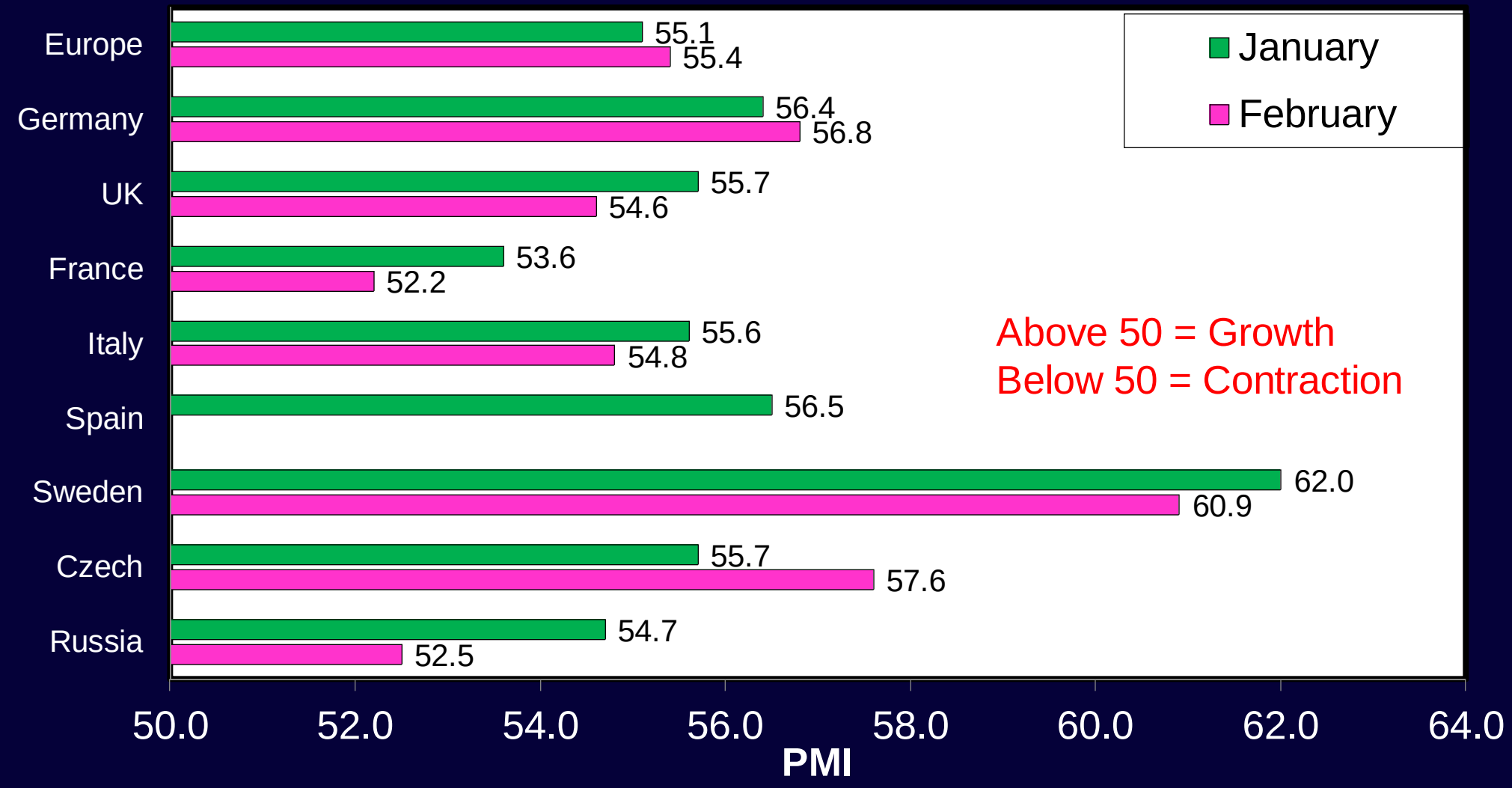
Diffusion Index, >50 = Growth



Markit Economics

European Purchasing Managers' Indices
February vs January 2017

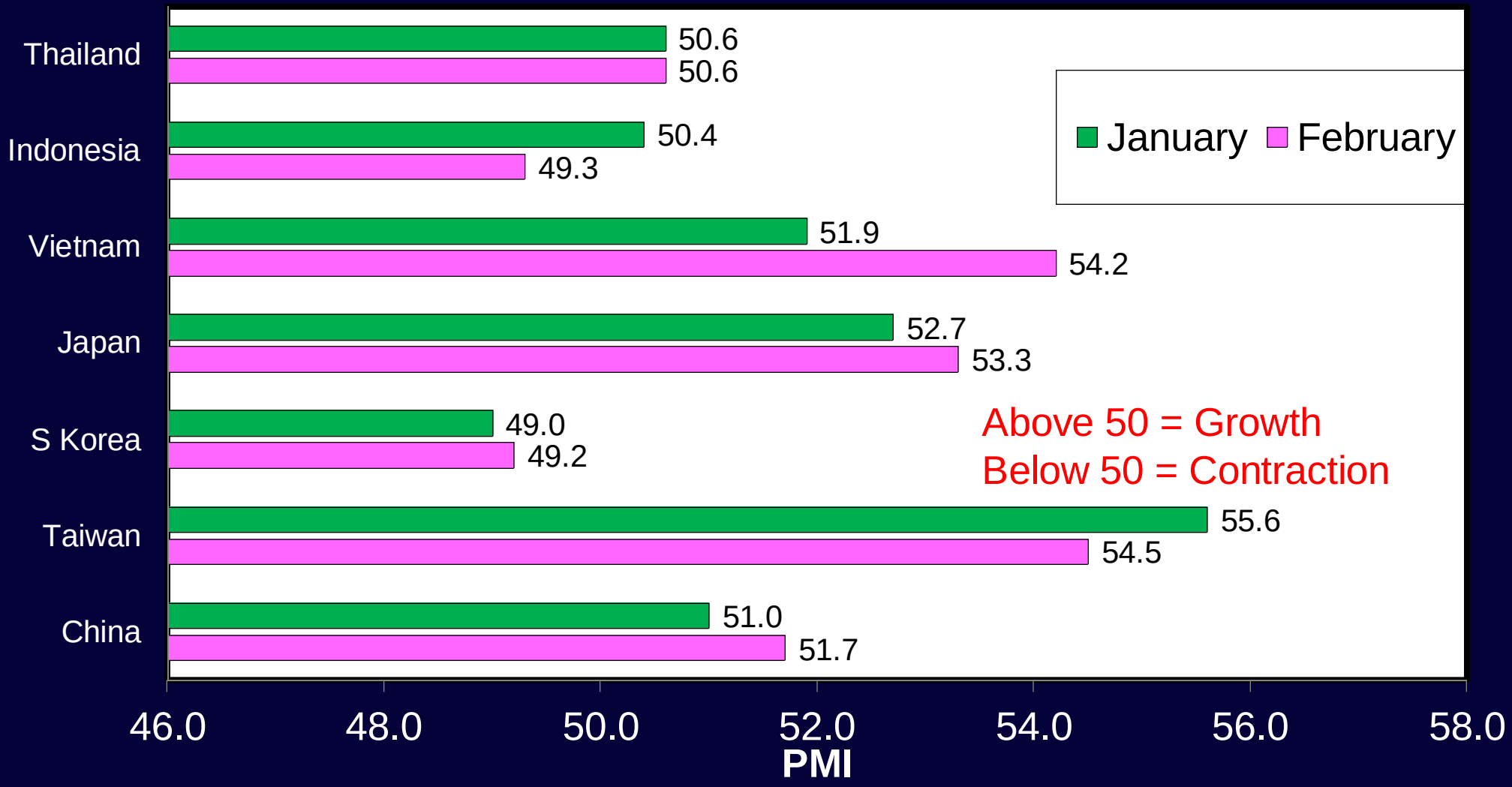
Chart 5



Markit Economics

Chart 6

Asian Purchasing Managers Indices
February vs. January 2017

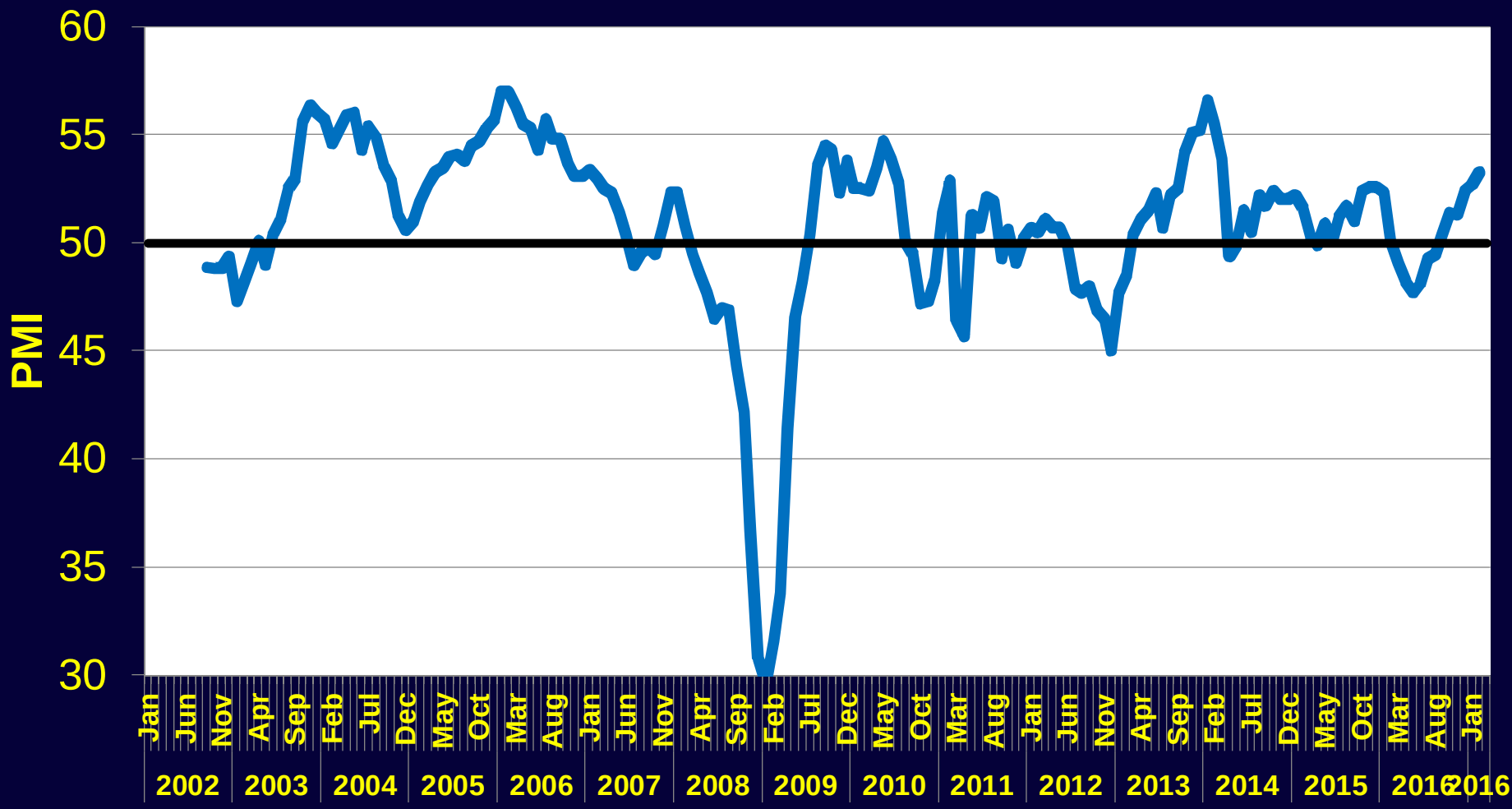


Markit Economics

Chart 7

Japan "Purchasing Managers" Index

>50 = Growth



Nomura/JMMA

Chart 8

China "Purchasing Managers" Index

>50 = Growth

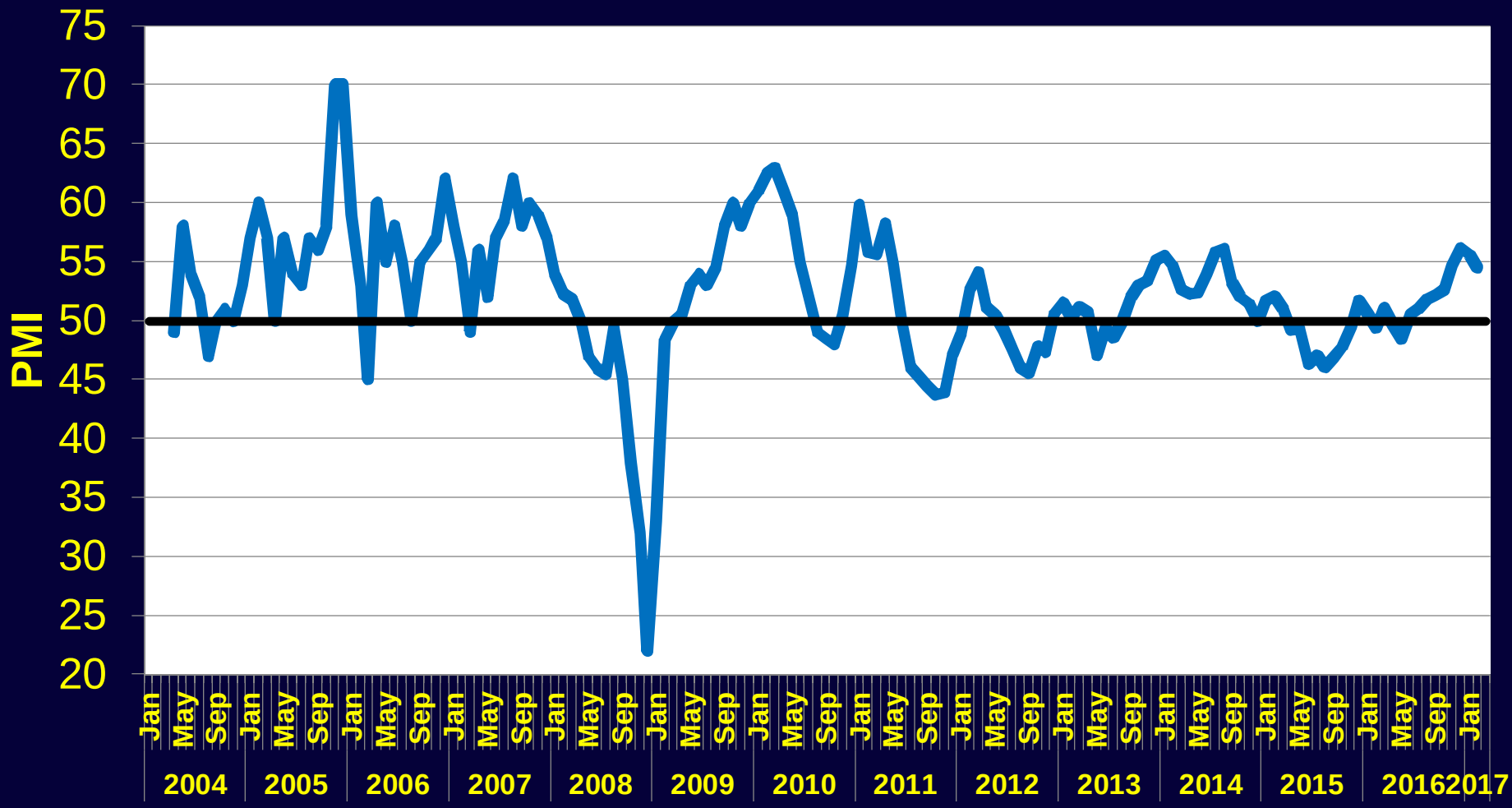


Markit Economics

Chart 9

Taiwan "Purchasing Managers" Index

>50 = Growth

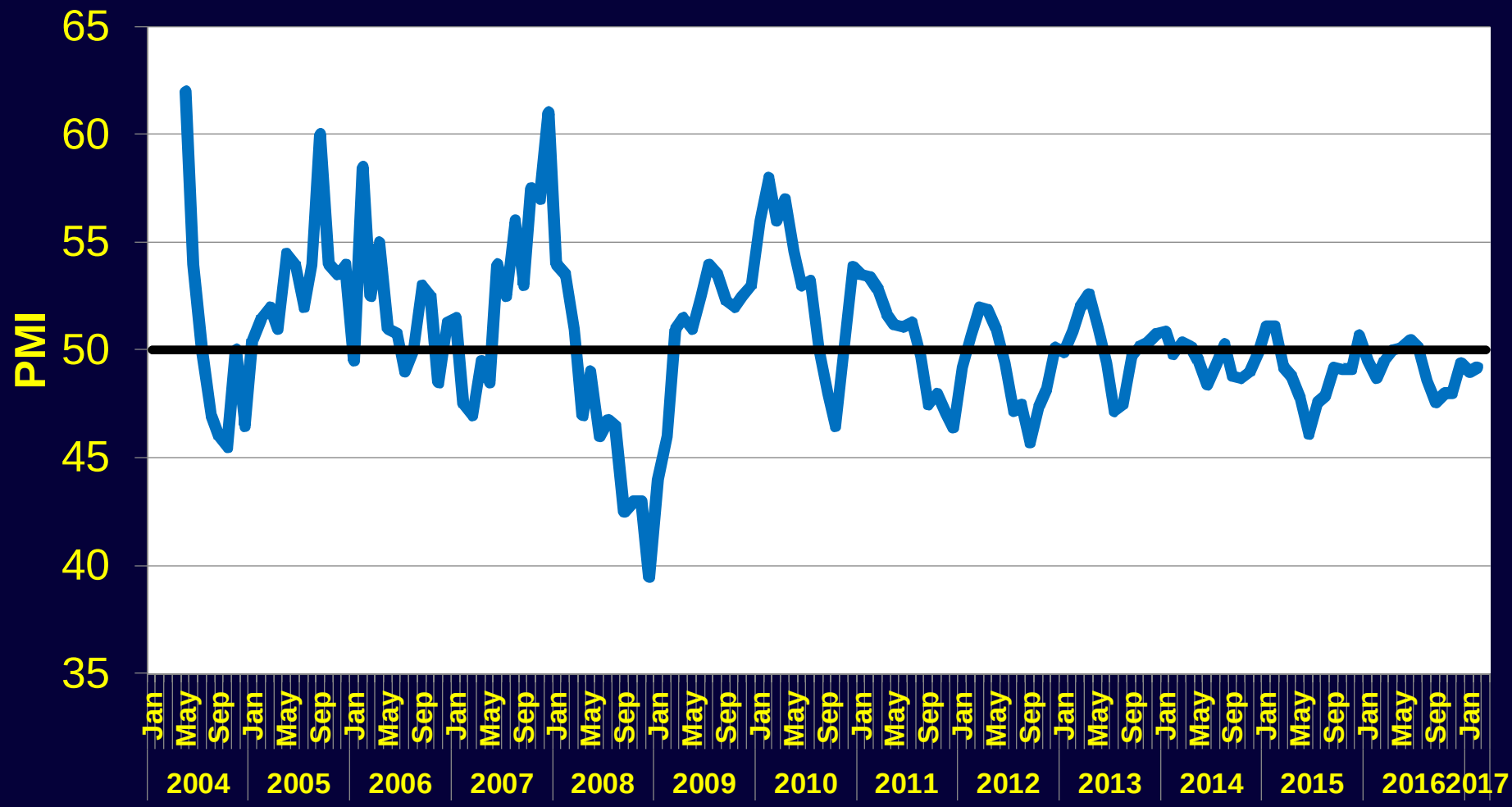


Markit Economics

Chart 10

S Korea "Purchasing Managers" Index

>50 = Growth

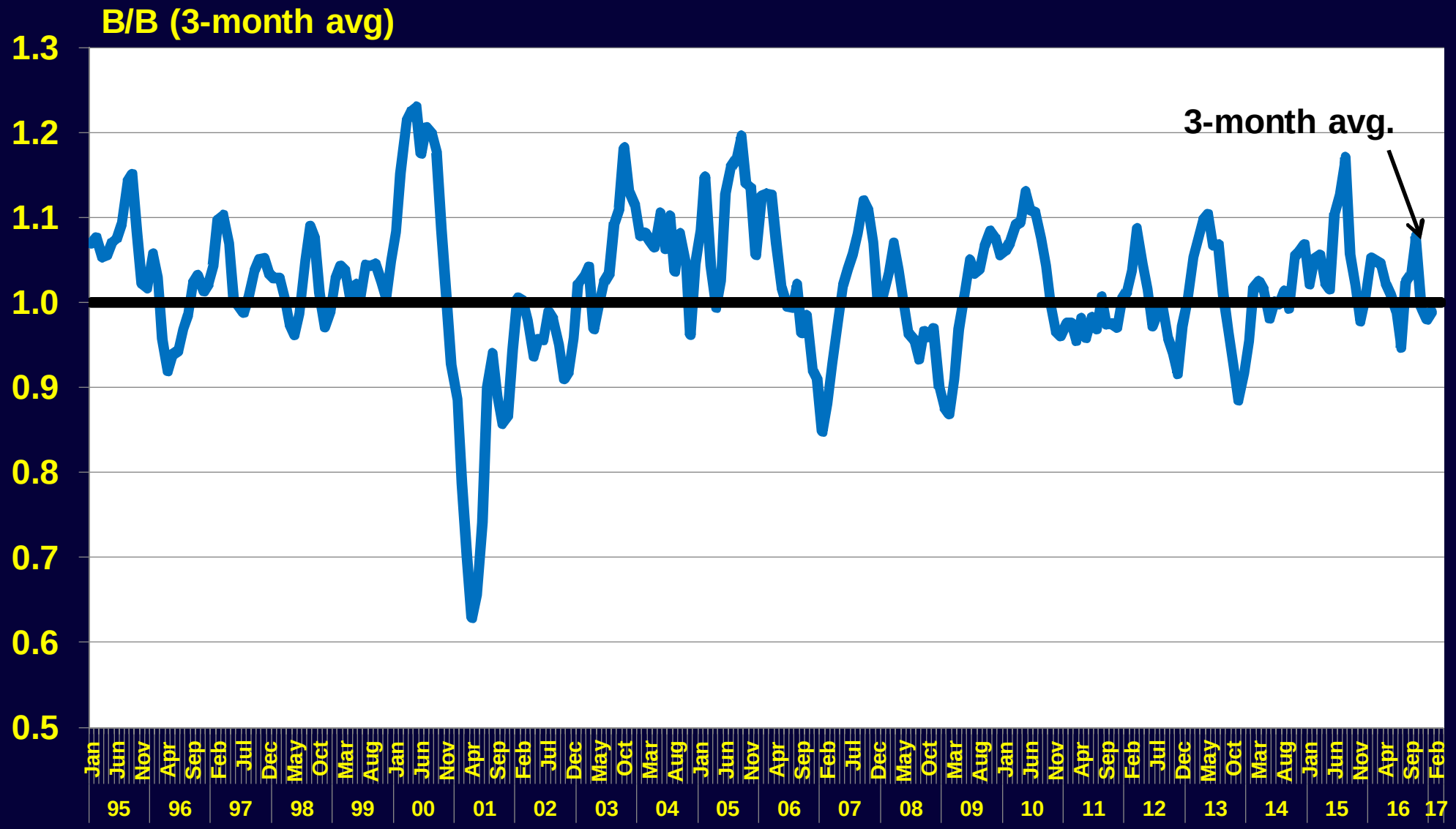


Markit Economics

Chart 11

Rigid & Flexible PCB Book/Bill

N. America



IPC

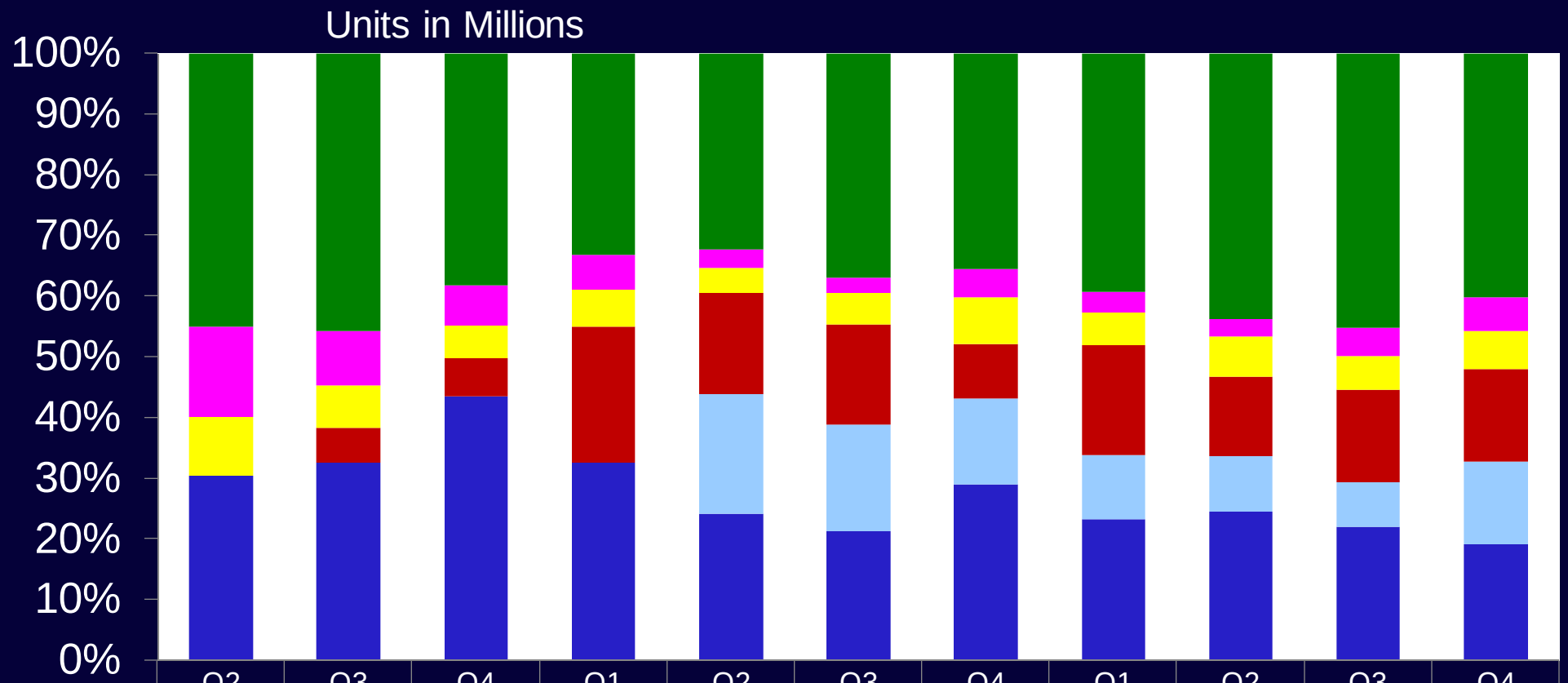
Chart 12

2017F Major Capital Spenders

2017 Rank	Company	2015	2016	2017F	17/16 Chg%
1	Samsung	13,010	11,300	12,500	11%
2	Intel	7,326	9,625	12,000	25%
3	TSMC	8,089	10,249	10,000	-2%
4	SK Hynix	6,011	5,188	6,000	16%
5	Micron + Inotera in 2017	4,500	5,760	5,000	-13%
6	SMIC	1,401	2,626	2,300	-12%
7	UMC	1,899	2,842	2,000	-30%
7	GlobalFoundries	3,985	1,500	2,000	33%
9	Toshiba	1,745	1,840	1,900	3%
10	Sandisk/WD	1,460	1,750	1,800	3%
11	ST	467	607	1,050	73%
	Top 11 Total	49,893	53,287	56,550	6%
	Others	15,339	14,695	15,755	7%
	Total Cap Spending	65,232	67,982	72,305	6%

Chart 13

Wearable Vendors
Global % Share of Largest Suppliers



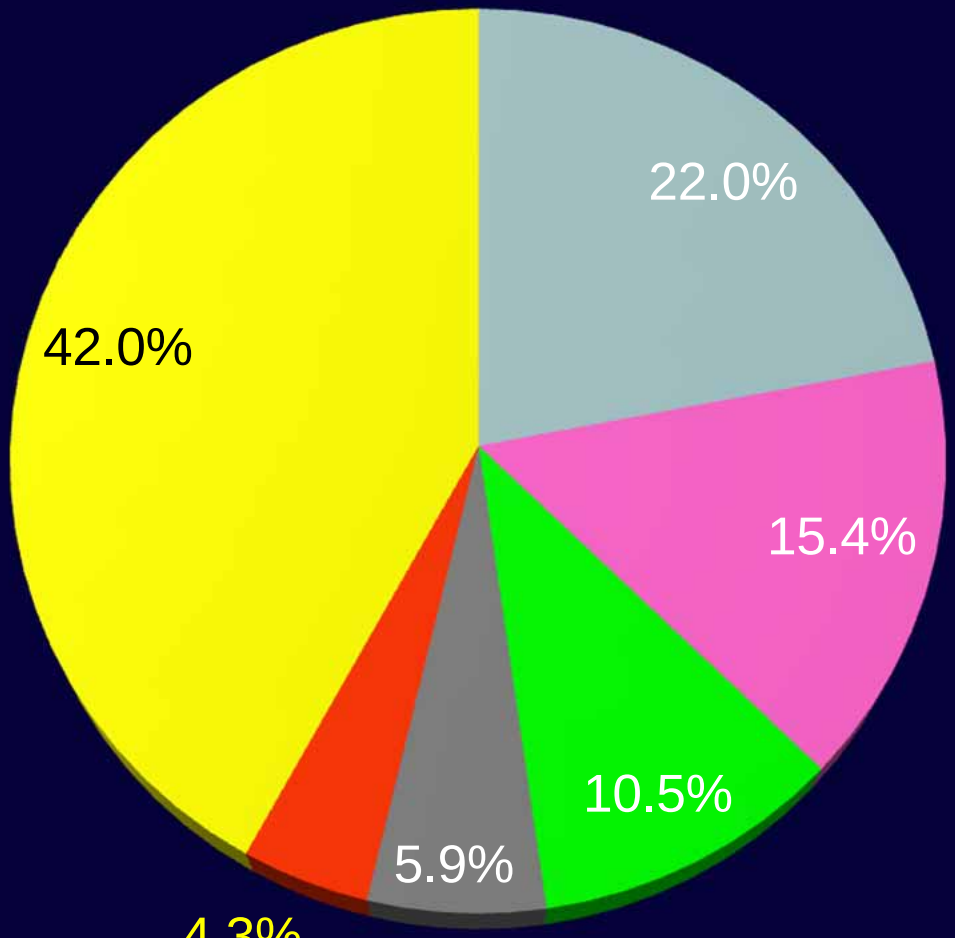
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	2014			2015				2016			
Others	45.0	45.9	38.1	33.1	33.3	37.0	35.5	39.2	43.8	45.3	40.1
Samsung	14.9	9.0	6.7	5.8	3.1	2.4	4.7	3.4	2.9	4.6	5.6
Garmin	9.7	7.0	5.3	6.1	4.2	5.3	7.6	5.4	6.5	5.5	6.2
Xiaomi		5.7	6.3	22.4	17.2	16.4	9.1	18.0	13.2	15.3	15.2
Apple				0.0	20.3	17.5	14.1	10.6	9.1	7.2	13.6
Fitbit	30.4	32.8	43.6	32.6	24.9	21.4	29.0	23.3	24.6	22.1	19.2

IDC 3/17 & prior reports

Chart 14

Wearable Device Vendors 2016

Units



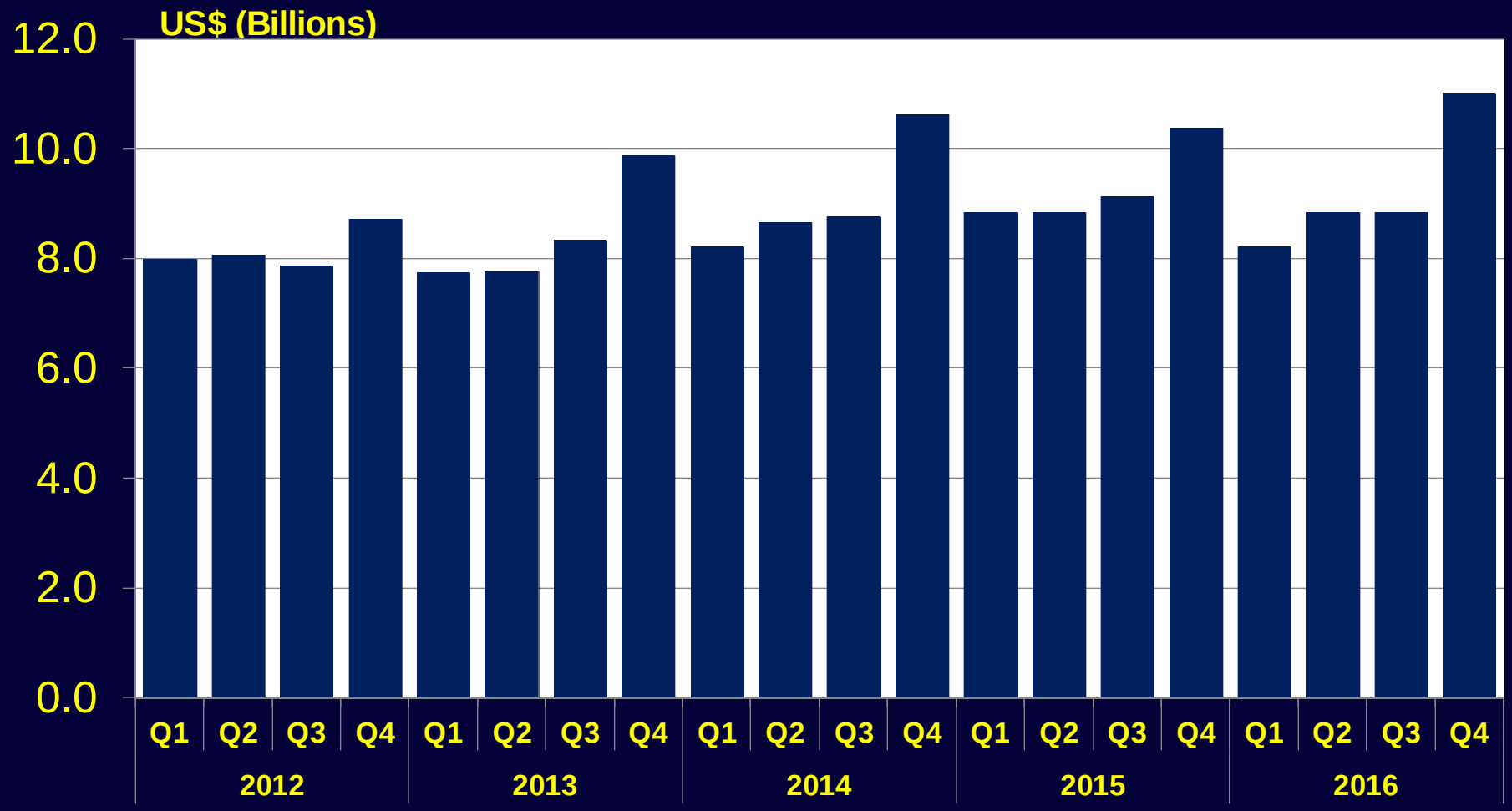
2015 Total
81.9 Million Units

2016 Total: 102.4 Million Units

IDC 3/17

Chart 15

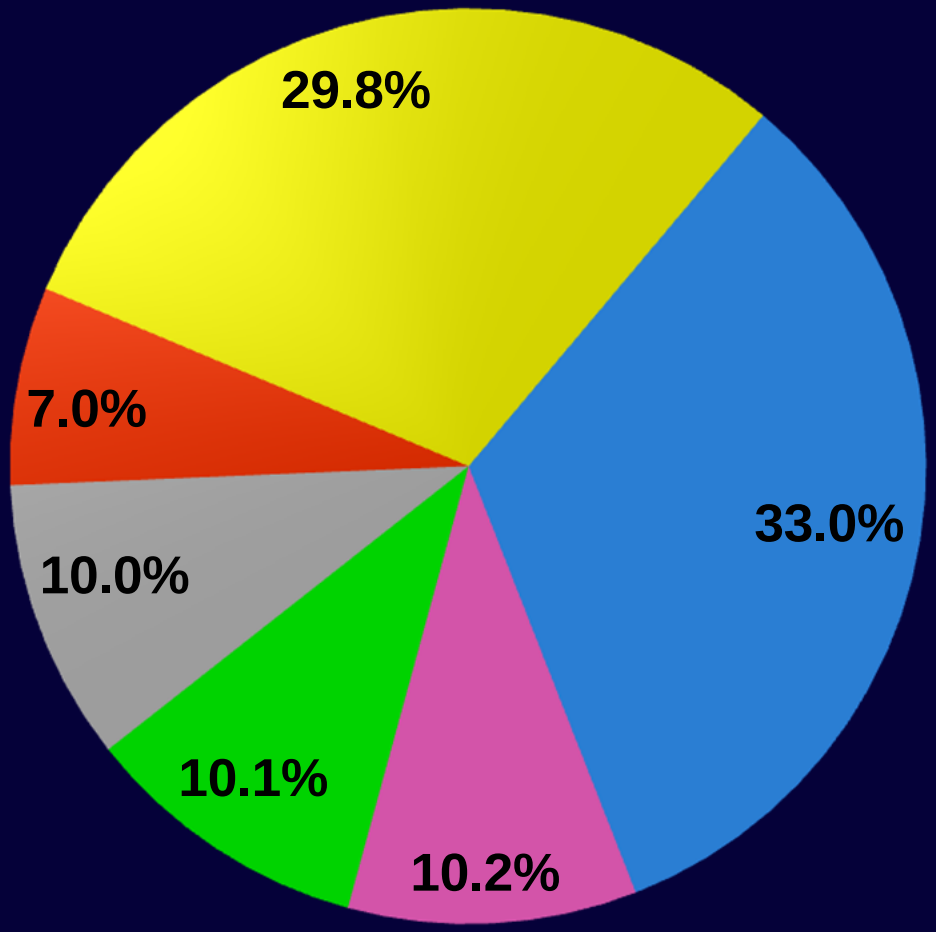
World Total Enterprise Disk Storage Revenue



IDC 3/17 & prior

Chart 16

World Total External Enterprise Disk Storage Systems Revenue 4Q'16

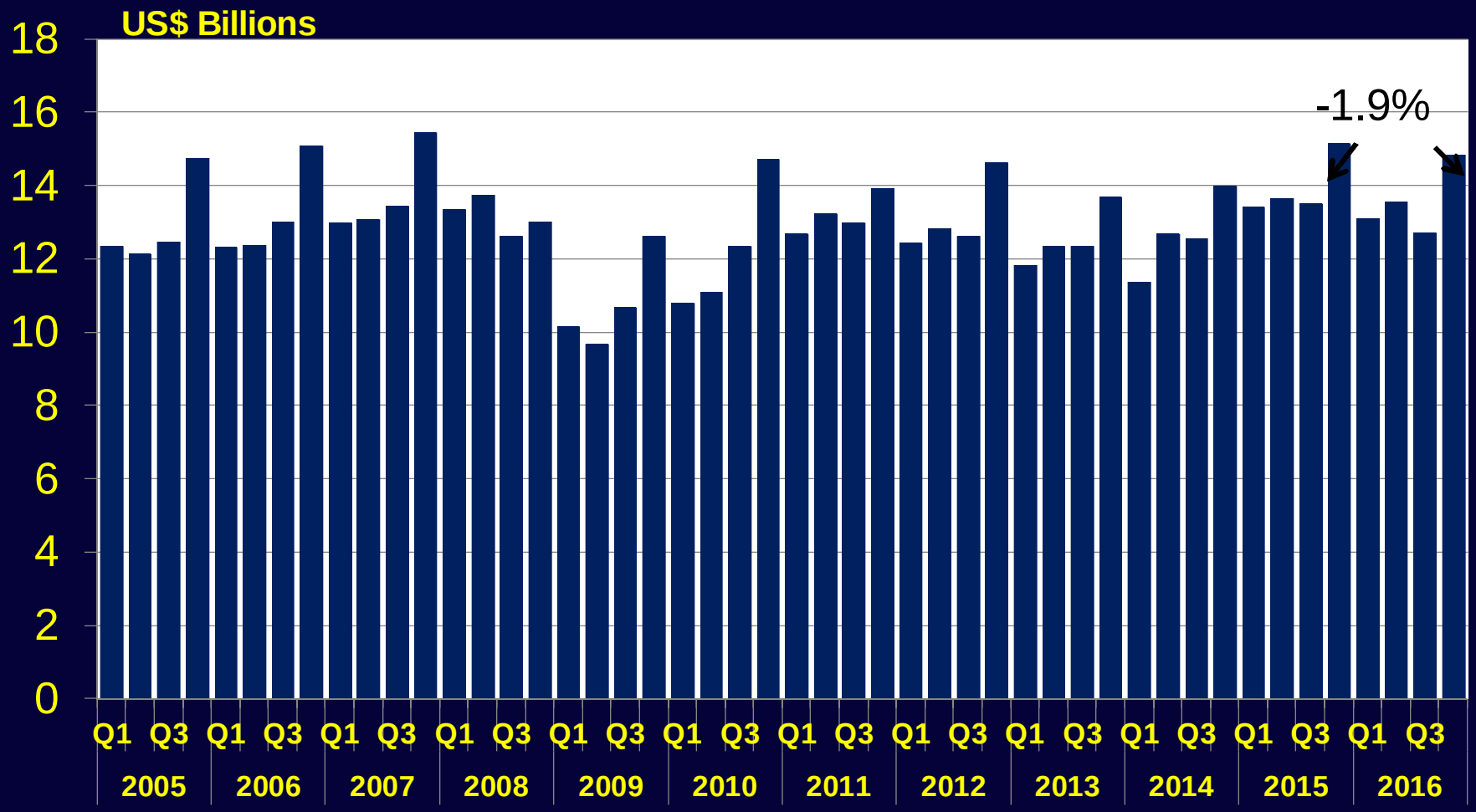


TOTAL: $6,449 Million

IDC 3/17

Chart 17

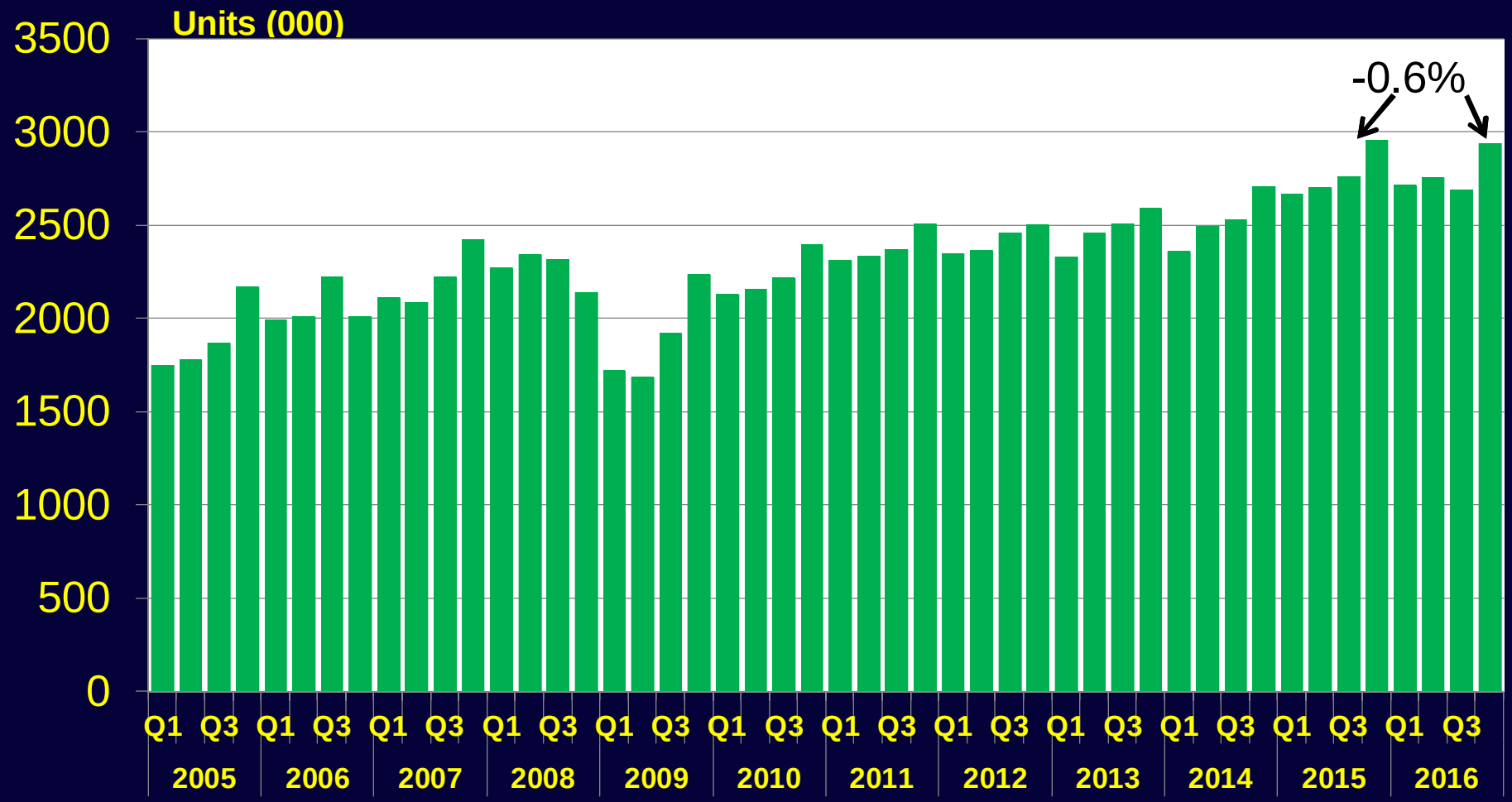
World Server Shipment Revenue



Gartner 3/17 & prior reports

Chart 18

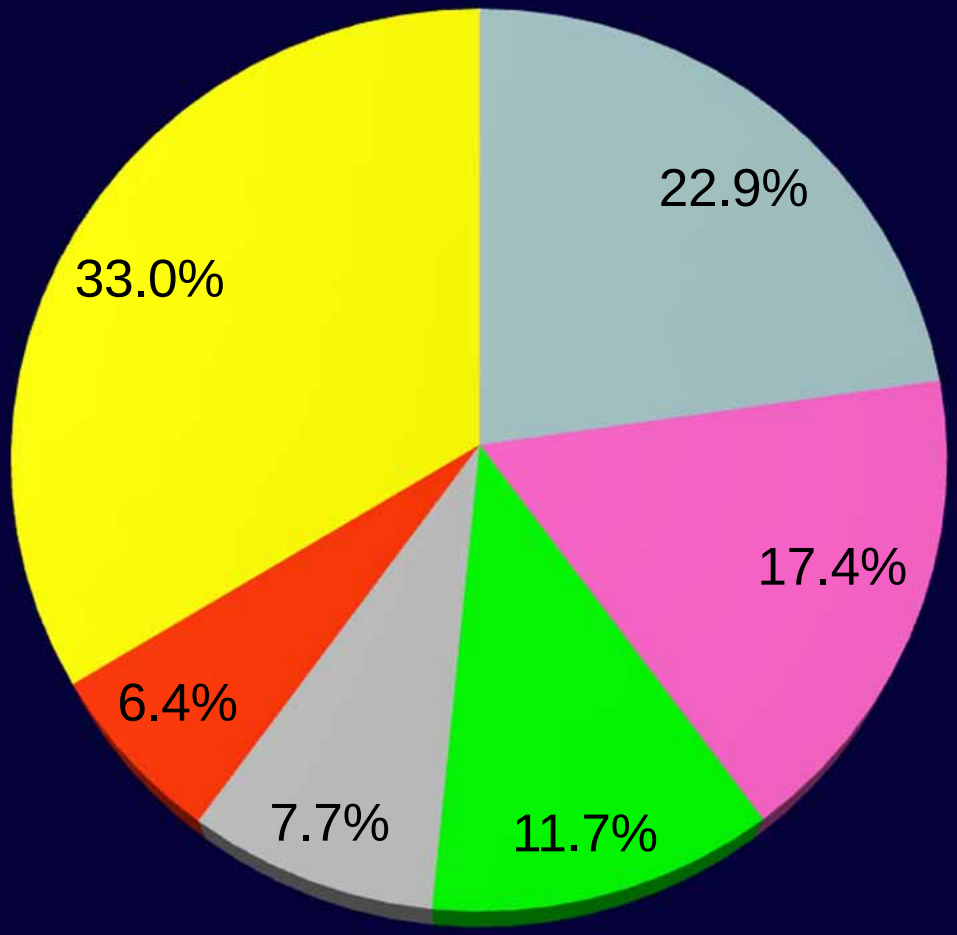
World Server Shipment Units



Gartner 3/17 & prior reports

Chart 19

World Server Shipments 4Q'16

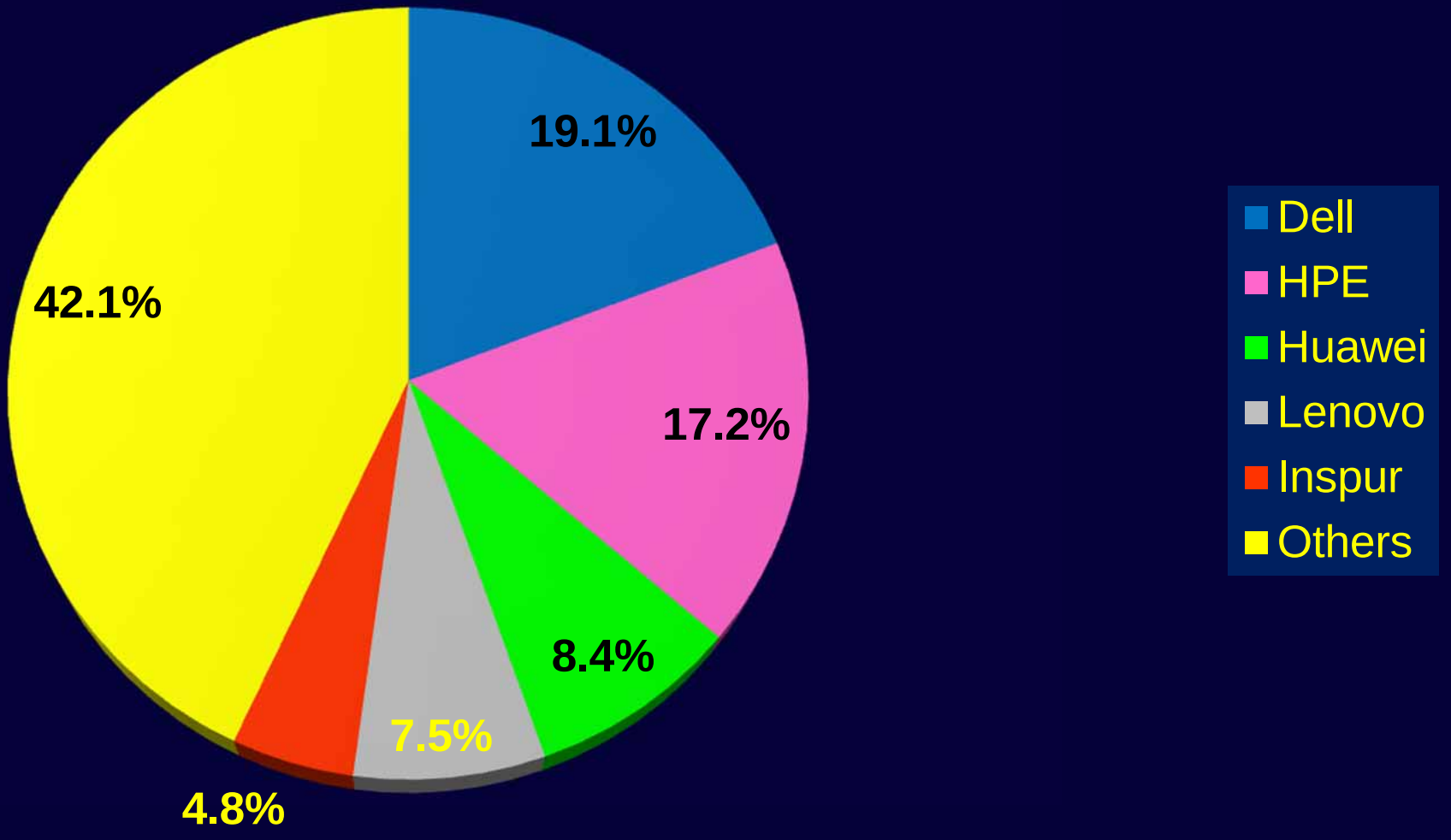


TOTAL: $14.8 Billion

Gartner 3/2017

Chart 20

World Server Shipments 4Q'16

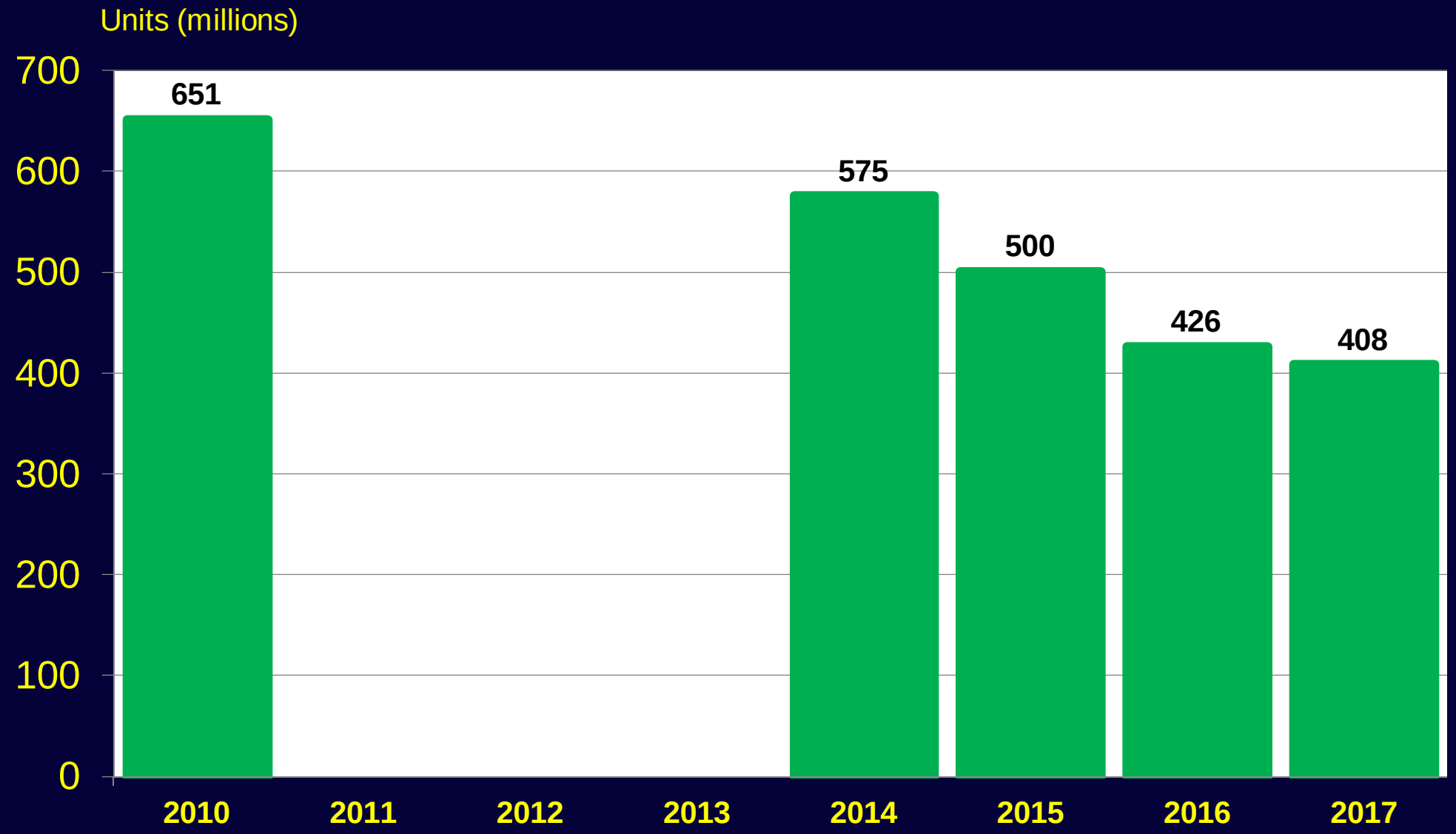


TOTAL: 2.939 Million Units

Gartner 3/17

Chart 21

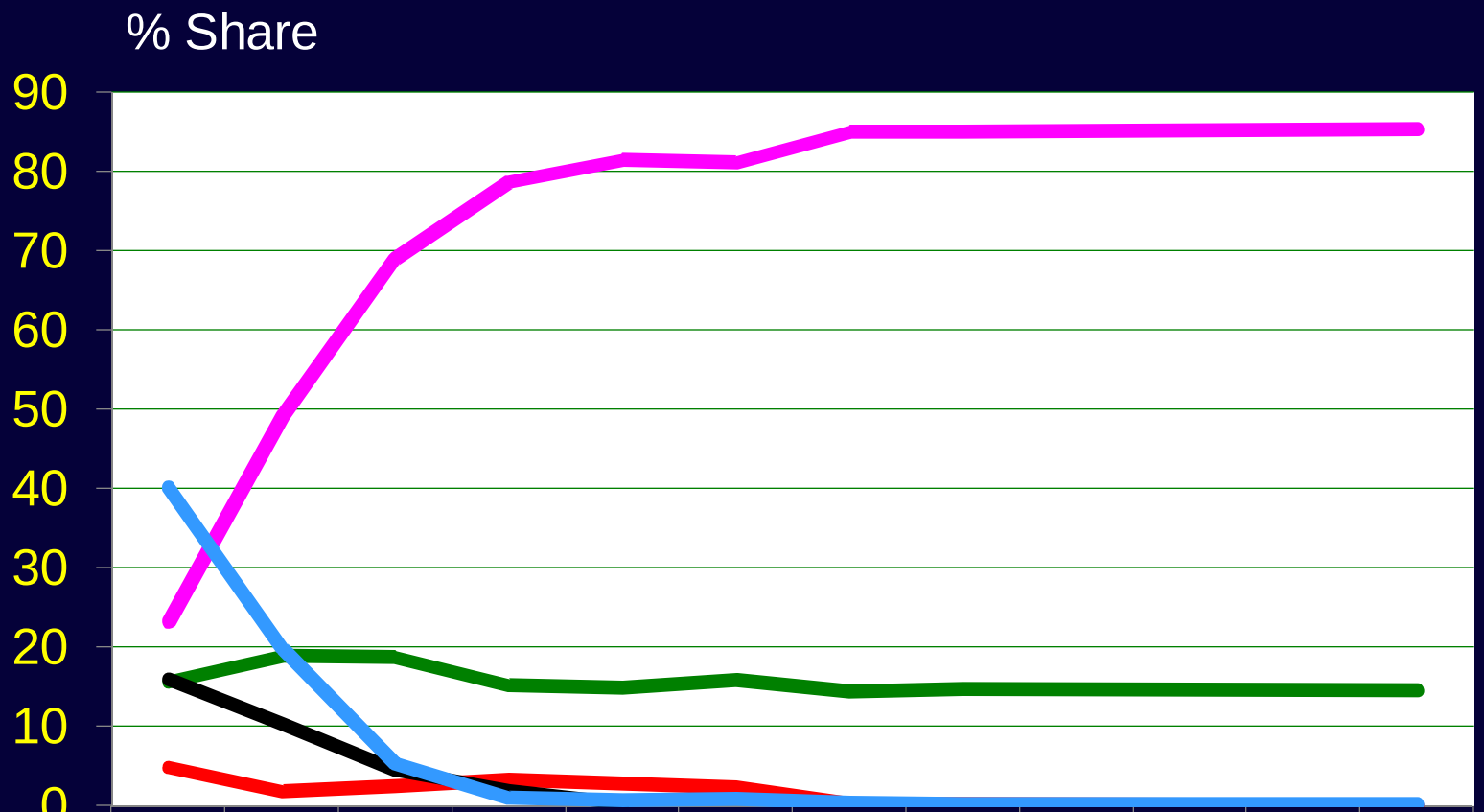
World Hard Disk Forecast



The Information Network 3/2016; Seagate 5/2016, Digitimes 3/17

Chart 22

World Smartphone Market

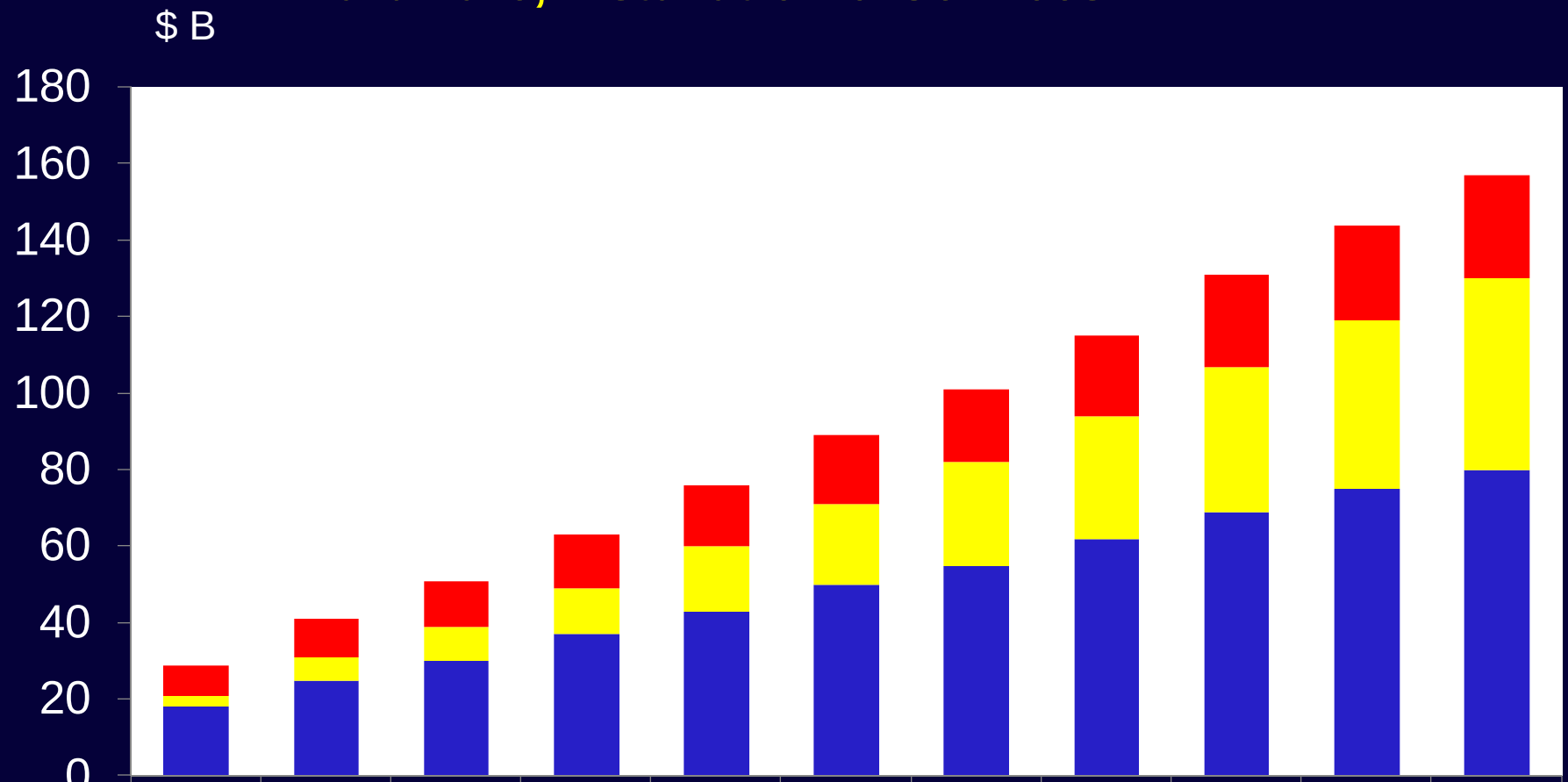


	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Android	23.3	49.2	69.0	78.8	81.5	81.2	85.0	85.0				85.3
Windows Phone	4.9	1.8	2.5	3.3	2.7	2.2	0.4	0.1				0.0
iOS	15.6	18.8	18.7	15.1	14.8	15.8	14.3	14.7				14.6
Blackberry OS	16.0	10.3	4.5	1.9	0.4							
Others	40.2	19.8	5.4	1.0	0.6	0.8	0.3	0.1				0.1

IDC 3/17 & prior reports

Chart 23

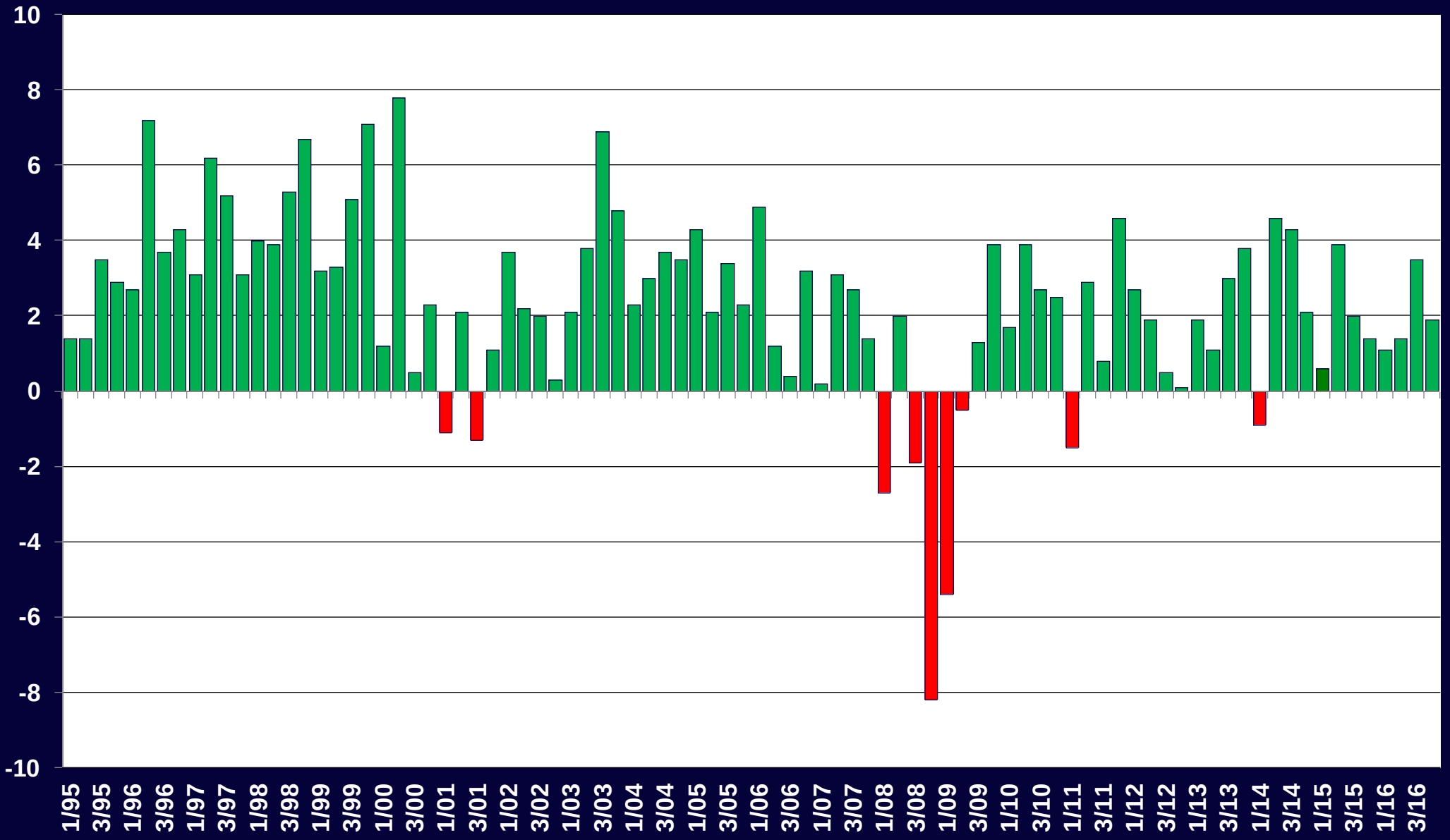
Total Global Consumer Spending on Smart Home Systems & Services
Hardware, Installation & Services



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Instalatiuon Fees	8	10	12	14	16	18	19	21	24	25	27
Services	3	6	9	12	17	21	27	32	38	44	50
Hardware	18	25	30	37	43	50	55	62	69	75	80

Chart 24

U.S. GDP Growth
% Change vs. Prior Quarter (Chained 2009 $)



www.bea.gov/national/