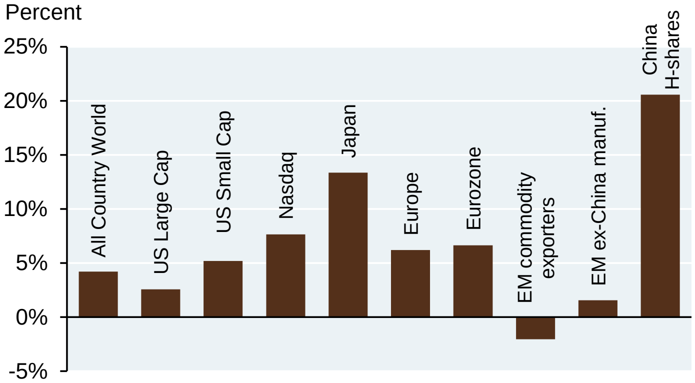
Topics: Mid-year wrap-up; All eyes on rebel Janet Yellen; Spain; graphical look at the NBA

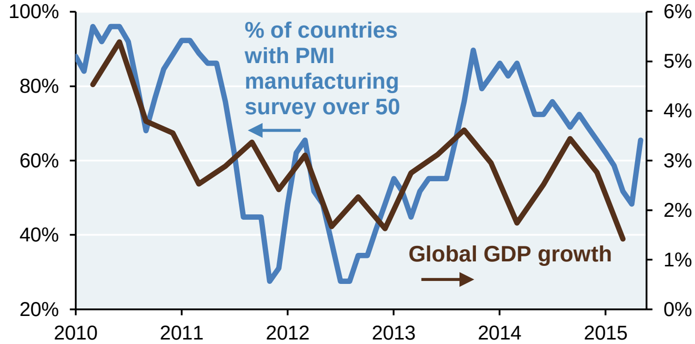
With mid-year approaching, it's time to take stock of 2015. As shown, equity market returns have generally been positive despite one of the weakest global GDP outcomes in Q1 since the expansion began. Q2 should be better given a modest pickup in leading manufacturing indicators, but even so, it looks like the world is growing at ~2.5% despite oceans of monetary stimulus designed to reignite it.

YTD total returns in USD on major equity markets/regions



Source: Bloomberg. June 5, 2015.

Very low global growth; modest bounce in leading manuf. indicators a positive, but still a world growing at ~2.5%



Source: Markit. J.P. Morgan Securities LLC. May 2015.

Regarding equities, it has been a strange year. The rise in some equity markets appears less related to economic and profit fundamentals and more related to policy changes boosting cross-border flows and equity asset allocation (Japan, China), central bank interventions in bond and equity markets (Europe, Japan), and prospects for inclusion in global equity index categories (China). We covered these topics earlier this year, as outlined below[1]:

The mini-renaissance in Europe: April 1
In 2015-2016, the European Central Bank plans to purchase 2.5x more bonds from the market than the net new supply from European governments, driving real bond yields negative in many countries. Over the last few months, we have seen improving European business surveys, bank lending, retail sales, credit creation, corporate earnings revisions, intra-Eurozone financial flows and employment. The improvement in intra Euro-zone flows is notable since it had been steadily declining since 2008. Next stop: how will Europe do now that the Euro is no longer falling, and both oil prices and interest rates are rising.

The mental gymnastics required to explain Chinese equity market increases via profits or growth: April 23
Falling economic and profit growth is coinciding with policy changes designed to facilitate cross-border flows between Hong Kong and the mainland, a surge in local margin debt, and rising speculation regarding onshore Chinese equity markets being included in MSCI Global Equity Indices.

Changes in Japanese corporate governance and the ongoing intervention by the BoJ: May 13
The Bank of Japan has bought *equities* once every 3 days over the past two years; 75% took place when equity markets opened weaker. BoJ equity holdings are now almost as large as those held by Japan's largest private shareholder, Nippon Life. Japan is also rallying due to mandated increases in state-controlled pension fund allocations to equities, and speculation around changes in corporate governance that could unleash Japan's massive corporate cash stockpile (which is 2x US levels as a % of market capitalization or GDP).

[1] Other topics covered this year: the onset of fiscal restructuring in Italy (the ambitious Renzi agenda and steep headwinds it faces) and faltering restructuring in Illinois (in light of the State Supreme Court rejection of the Governor's plan to modify pensions) [May 13]. Special Eye on the Market issue on the oil price decline [January 26]. Low volatility market-neutral hedge funds as an antidote to financial repression [February 10].

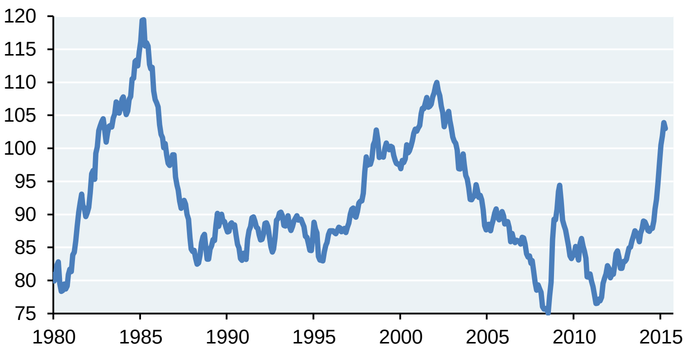
In the US, even the continued sharp rise in debt issuance used to finance buybacks, special dividends and M&A has not been enough to drive equity markets higher. Despite worsening wars and insurgencies this year, they're not the proximate cause of market or growth weakness in developed or developing economies. As per the table, the growth, market and banking sector footprint of these hotspots is much smaller than their population. In my view, **the charts below from prior Eye on the Market notes are the primary reasons for slower growth and more muted market gains this year**.

War zone countries as a % of total world...	
Population	11.7%
Oil production	9.0%
Foreign direct investment	3.8%
GDP	3.0%
Trade	2.6%
Gross capital formation	2.4%
Corporate profits	0.8%
Equity market capitalization	0.7%
Interbank claims	0.5%
Portfolio investment inflows	0.4%

Sources: IMF, United Nations, BP, MSCI, Bloomberg, BIS, World Bank, WTO. 2014.

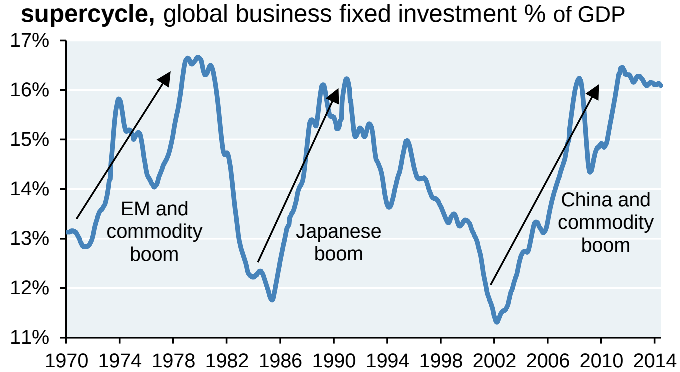
- **the surge in the dollar**, as weakness in the rest of the world is foisted upon the US via the transmission mechanism of super-easy monetary policy in Europe, Japan and increasingly, China
- **the end of the global fixed investment boom** linked to Chinese infrastructure growth and commodity consumption
- **the high level of aggregate economy-wide debt** in the wake of the financial crisis, leaving less room for fiscal stimulus to complement weak private sector demand
- **the elevated level of market sentiment and investor positioning** heading into 2015
- Not shown, but could have been: the Q1 collapse in US productivity (output per hours worked), capping the worst 5-year run since the early 1980's

The surge in the dollar
USD real broad effective exchange rate, Index



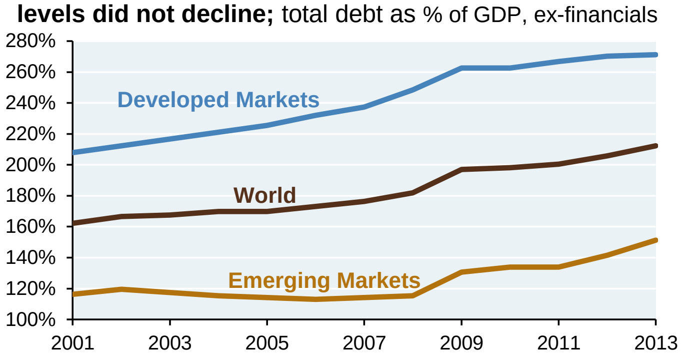
Source: J.P. Morgan. April 2015.

The end of the China/commodity capital spending supercycle, global business fixed investment % of GDP



Source: Bridgewater Associates. June 2015.

Despite a painful recession, overall economy-wide debt levels did not decline; total debt as % of GDP, ex-financials



Source: International Center for Monetary and Banking Studies, *"Deleveraging? What Deleveraging?"* September 2014.

Market sentiment and positioning elevated heading into 2015

Measure	Percentile vs. history: Dec-14	Since
American Association of Individual Investors bull/bear ratio	91	1987
Investors Intelligence Newsletter Advisory Sentiment	94	1963
NAAIM Active Managers Sentiment	98	2006
Net long stock-bond position of futures markets participants	98	1993
Bank of America hedge fund net long/short exposure	99	2005

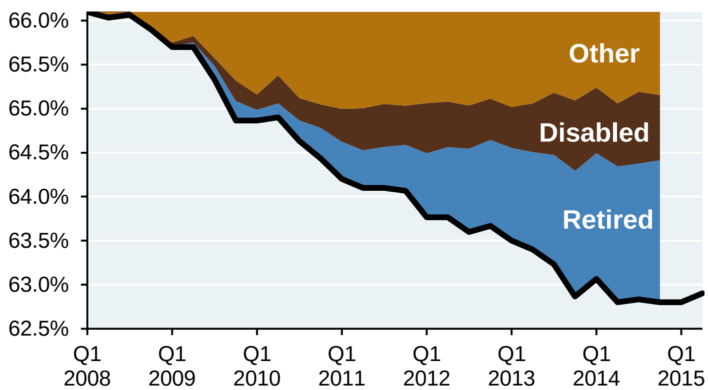
Sources: J.P. Morgan Asset Management, American Association of Individual Investors, Investors Intelligence, National Assoc. of Active Investment Managers, J.P. Morgan Securities, Bank of America Merrill Lynch Global Research.

It feels to me like most of this year's equity market gains have already been earned, particularly with the Fed poised to raise interest rates, a topic we discuss in the next section.

All eyes on Janet Yellen as the Fed contemplates higher policy rates

It can't be much fun to be Janet Yellen right now. [Small consolation: she is not Arthur Burns, with Nixon threatening her to keep Fed policy loose or else[2]]. My guess is that the chart below is what keeps her up at night: **the labor force participation rate, which hasn't risen much since its 2008 decline**. As a result, rising labor demand may result in wage inflation much earlier in the cycle than usual.

Labor market dropouts by category
Labor force participation rate, percent



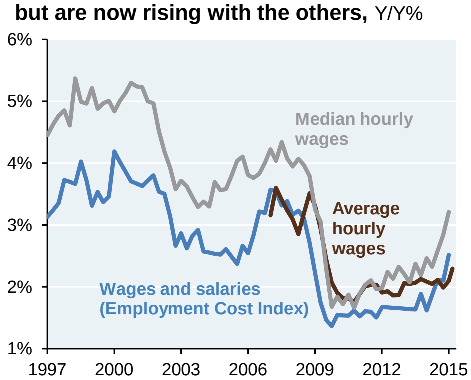
Source: Federal Reserve Bank of Philadelphia, Shigeru Fujita. Q4 2014.

Improving labor markets have drawn some discouraged workers back into the job market, but the **pool of available workers is smaller than what the labor force participation rate implies at first glance**. Analysts at the Philadelphia Fed studied the components of the decline, and found that over two thirds is related to those declaring themselves "disabled" or "retired", reducing the likelihood of them re-entering the labor force. As a result, the pool of available workers that could re-enter the labor force and temper wage inflation is less than one third of the size implied by the decline in the overall participation rate.

That may explain why in a May 22 speech, Yellen disagreed with the view (like the one advanced by the IMF last week) that the Fed not raise rates until 2016: "*Because of the **substantial lags** in the effects of monetary policy on the economy…delaying action to tighten monetary policy until employment and inflation are already back to our objectives would risk overheating the economy*."

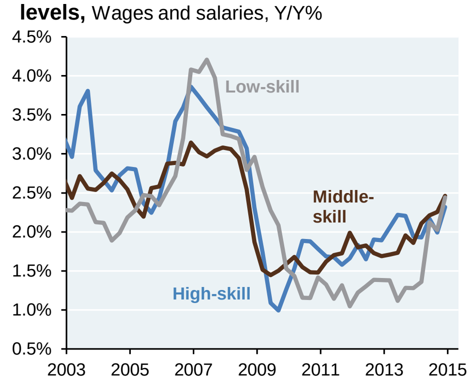
To support Yellen's point of view, **consider the measures of wage inflation shown below**. They're not over-heating, but the rising trends are clear. To be balanced about this, most measures of *goods* price inflation are low (the most recent core personal consumption expenditures deflator rose 1.2% with housing inflation the outlier at 2.9%). Nevertheless, the Fed is facing a miniature labor stagflation, if one were to define that as modestly rising wage inflation coinciding with low economic growth.

Average hourly earnings were stagnant, but are now rising with the others, Y/Y%



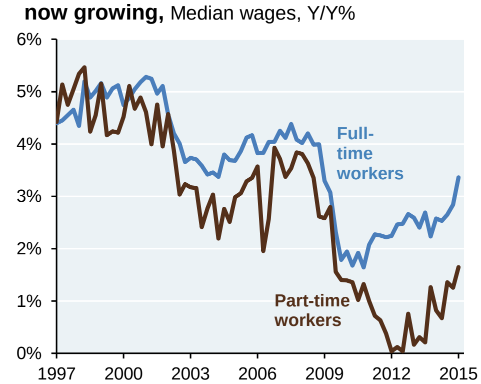
Source: BLS, Empirical Research Partners. Q1 2015.

Wage growth broadening, rising across skill levels, Wages and salaries, Y/Y%



Source: BLS, Empirical Research Partners. Q1 2015.

After prolonged weakness, part-time wages now growing, Median wages, Y/Y%



Source: Atlanta Fed, Empirical Research Partners. Q1 2015.

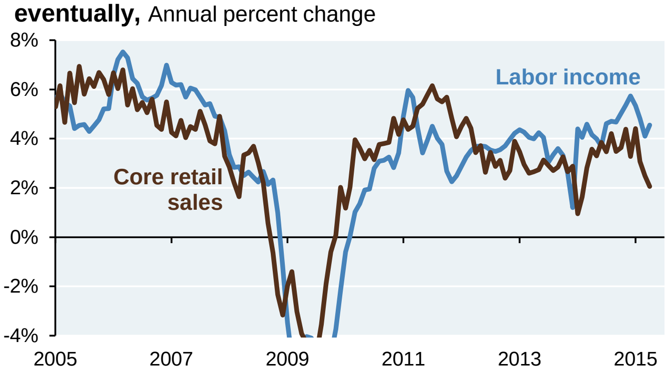
[2] When Fed chair Arthur Burns resisted pressure from Nixon to guarantee full employment, the White House planted negative stories about him in the press. Nixon's people also floated stories about diluting the Fed Chairman's power by doubling the Board's members. Nixon wrote to Burns: "There is no doubt in my mind that if the Fed continues to keep the lid on with regard to increases in money supply and if the economy does not expand, the blame will be placed squarely on the Fed." In 1971, H.R. Haldeman spoke about the effectiveness of Nixon's strategy: "**We have Arthur Burns by the [*expletive deleted*] on the money supply**". All things considered, Nixon was *Richard the III* without the hump.

My guess is that we see one or two Fed hikes between now and next March, with the Yellen-chaired Fed taking a break after that to see how the US economy responds. **Fed hikes may be seen as rebellion** by members of the progressive community who were big backers of Janet Yellen and very vocal opponents of the President's first choice for Fed chair (Larry Summers):

- Josh Bivens, research and policy director for the Economic Policy Institute, argues that the Fed should look for 3.5% nominal wage growth before raising rates
- Jared Bernstein, senior fellow at the Center on Budget & Policy Priorities, also believes that the Fed should wait for 3.5% nominal wage growth before hiking
- A progressive coalition under the umbrella organization "Fed Up" (www.whatrecovery.org) is pushing the Fed to prioritize employment over inflation and not raise interest rates. The group points to large gaps in both changes in unemployment and changes in median household wealth along racial lines. The organization staged a protest against a Fed hike at the Fed's Jackson Hole meeting last year.

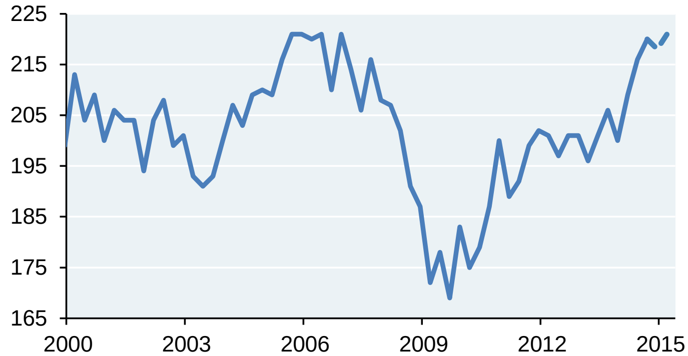
In any case, the best hope for US growth: a revival in consumer spending. Despite rising labor incomes and signs that parts of the economy have normalized (e.g., steady pace of new business formation), retail sales remain weak. We expect to see an increase in consumer activity later this year from currently depressed levels, and for a combination of consumer and housing activity to result in second half US GDP growth of 2.5%. The Fed has a tough choice to make if the US economy rebounds, and a tougher one if it doesn't. Either way, the question of the US economy's ability to withstand higher rates looks like it will now come to a head. Markets will probably move sideways until this question is settled.

Rising labor incomes should boost retail sales, eventually, Annual percent change



Source: Census Bureau, BEA, JPMAM. April 2015.

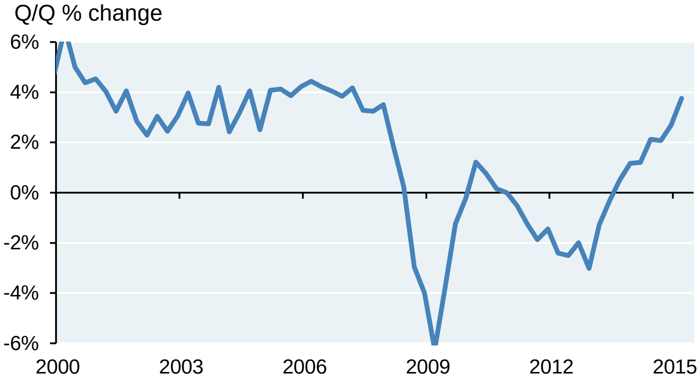
US business formation aiding in economic expansion
Private establishment births, quarterly, thousands



Source: BLS, Morgan Stanley. 1Q 2015.

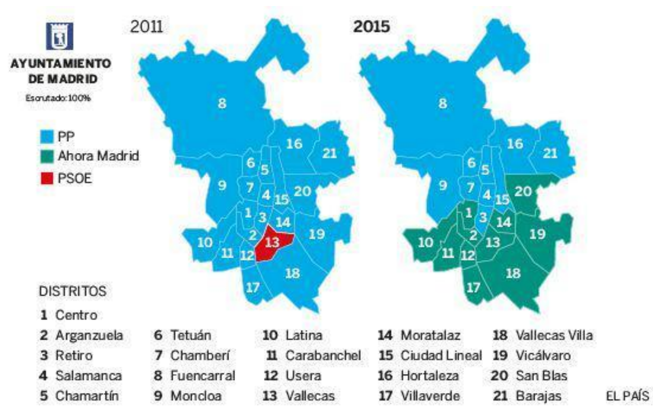
A quick comment on Spain: first, consider these two images

Spanish real GDP growth
Q/Q % change



Source: Instituto Nacional de Estadistica. Q1 2015.

Anti-establishment party electoral success in Madrid



Using traditional measures, Spain is recovering: its GDP is rising at one of the fastest rates in Europe, employment gains are strong (confirmed by the rise in social security contributions), consumer confidence hit a record high in March and construction activity is growing again. But Spain's "Stalingrad" approach to economic recovery has exacted a price in the form of unemployment that is still over 20% and an economy that is still 5% smaller than it was 7 years ago (the US and UK are 10% and 7% larger). In recent regional elections, Spain's right-wing Popular Party suffered its worst defeat in 20 years as anti-establishment Podemos-backed parties made huge inroads in Madrid, Barcelona, Coruna, the conservative bastion of Valencia, Andalusia, Galicia, etc. With general elections coming in November, Spanish equities (which lost half of their YTD gains after the regional election results) may remain volatile.

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Sources

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"*Before the Fall: An Inside View of the Pre-Watergate White House*", William Safire, 2005

"*Monetary Policy and the Great Inflation in the United States: The Federal Reserve System and the Failure of Macroeconomic Policy*", Thomas Mayer, 1999

"*Progressives Do Not Take The Fed Seriously. Meet The People Trying To Change That*", Daniel Marans, June 4, 2015

Janet Yellen May 22nd speech, Providence Chamber of Commerce, "*The Outlook for the Economy*"

Appendix: The best players in NBA history, shown on a playing style trichotomy chart

A brief departure from markets. I was looking to get my 13-year old son interested in learning about what statistics can do. He loves basketball, so we built a database of all 3,700 players in NBA history since 1951, scoring each player based on two factors:

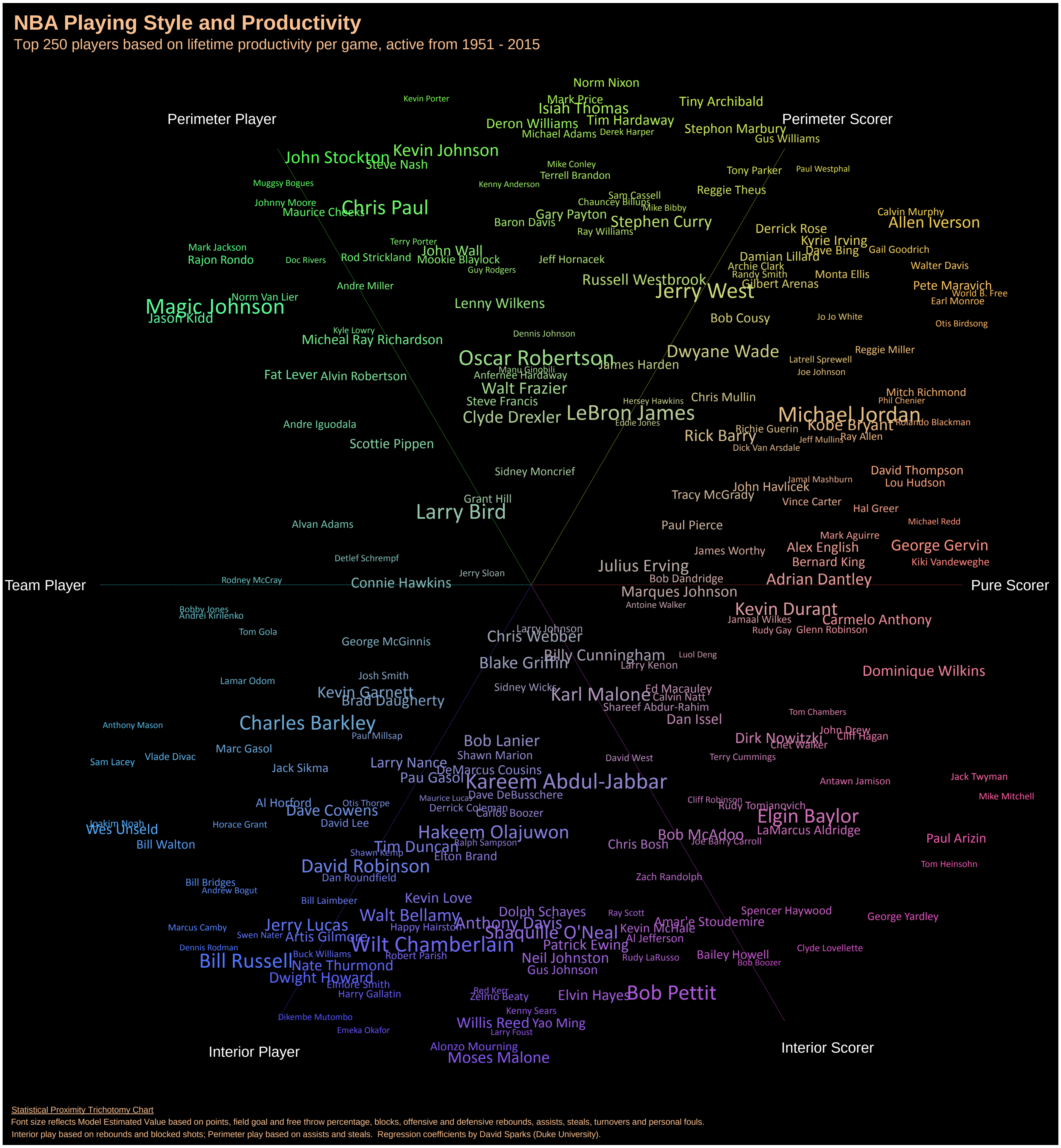
Model Estimated Value. A statistician I spoke with at Duke University regressed decades of player stats against margin of team victory, and determined the implied value of offensive rebounds, defensive rebounds, blocks, steals, assists, steals and total points, and the negative implied value from missed shots, missed free throws, personal fouls and turnovers. Using these results, one can compute a player's lifetime MEV across all seasons, or lifetime MEV per game played.

Relative playing style. Every NBA player can be differentiated according to how often they shoot, rebound, pass, block and make assists. There are three pure playing styles: Shooting, Perimeter Play (assists and steals) and Interior Play (blocks and rebounds). Now, imagine a clock (which is actually a polar coordinate chart). At 3 o'clock, pure shooters are shown (e.g., Carmelo Anthony, George Gervin). At 7 o'clock, pure interior players are shown (e.g., Bill Russell, Dikembe Mutombo). At 11 o'clock, pure perimeter players are shown (e.g., John Stockton, Steve Nash). Computationally, players with more balanced relative play show up in in the middle (Julius Erving, Chris Webber, Larry Bird and Blake Griffin).

Putting it all together, you get the **Playing Style Trichotomy chart** shown on the next page. The chart plots the top 250 players in NBA history according to playing style and with font size denoting **lifetime MEV *per game***. The per game approach gives an inherent advantage to younger players, since many will not be able to keep up their productivity for their entire career and will tail off at the end. But it's interesting to compare them with players from prior eras. A complementary chart can be created which shows lifetime productivity (not per game) in which newer players drop off and more older players appear. The chart can also be generated for one team (e.g., the best 50 Knicks of all time).

My son and I presented a poster-sized version to VP of NBA operations Kiki Vandeweghe (ex-Denver Nugget and Knick). He liked it, but that may be influenced by the fact that he made the top 250 list and saw his name on the chart.

Zoom in to see some of the smaller names in higher resolution



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