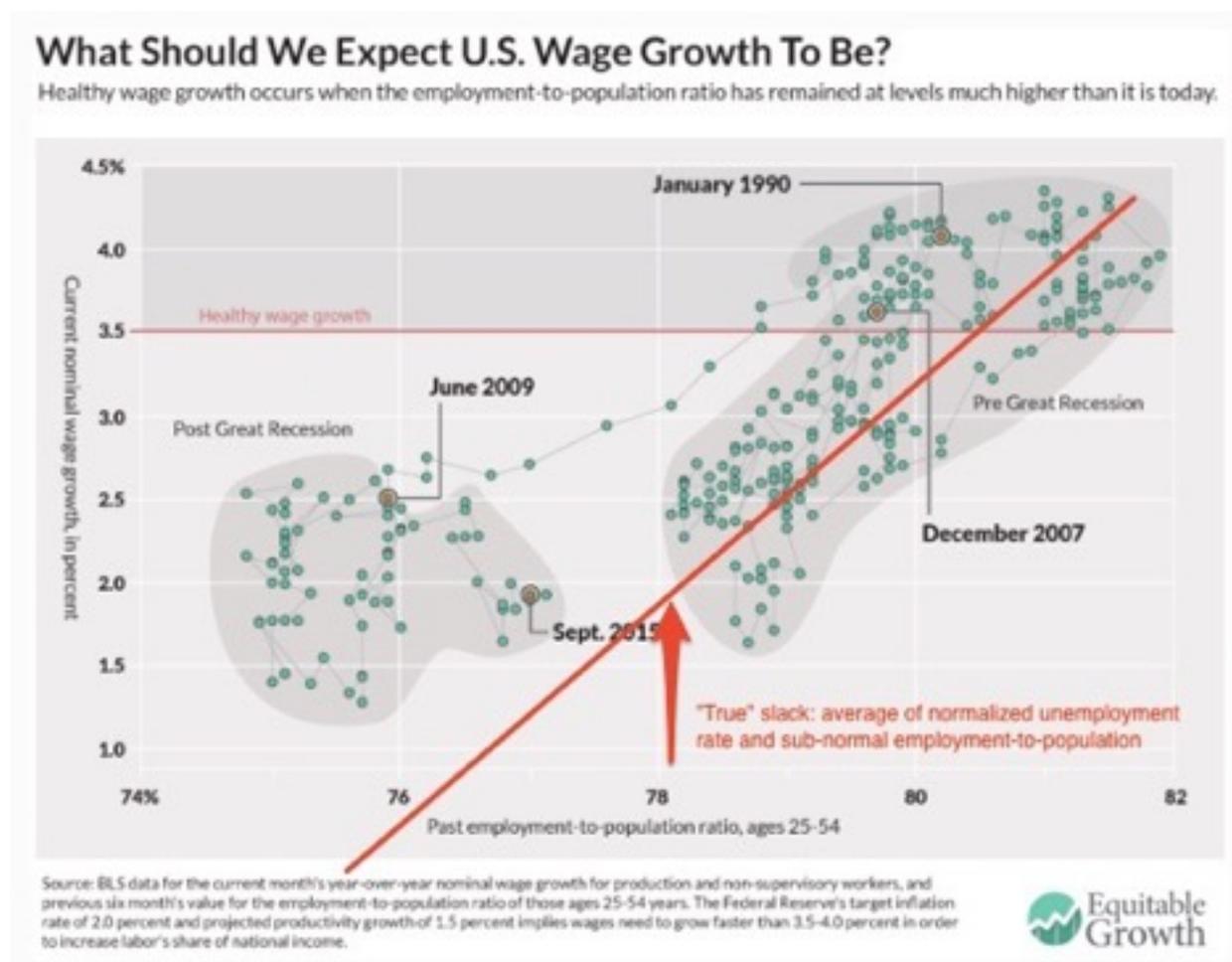


Section Exercise for April 18/19 with answers: Inflation

Economists believe that in the 1990s and 2000s and so far in the 2010s expectations of inflation have been anchored—that neither workers, consumers, investors, nor employers believe that inflation will rise much above or fall much below 2%/year. The figure below plots the relationship between the employment-to-population ratio for prime-age workers 25-54 and the annual rate of nominal wage growth in the U.S. economy, along with the relationship estimated between those two variables over the period 1990-2008:



1) If the prime-age employment-to-population ratio remains at 78 and the relationship returns to what it was between 1990 and 2007, what do you expect the rate of nominal wage growth to be?

It should be a bit less than 2%/year.

2) Suppose average productivity growth is 1.5%/year, and there is not going to be any great strengthening of unions or of worker bargaining power to make the wage share of income increase. Then the amount of wage pressure put on inflation will be equal to the rate of nominal wage growth minus the rate of average productivity growth. How much wage pressure would be put on inflation by a prime-age employment-to-population ratio of 78 if the relationship between prime-age employment and nominal wage growth returns to what it was between 1990 and 2007

It should be a 2%/year - 1.5%/year = 0.5%/year

3) Suppose average productivity growth is 1.5%/year, and the relationship between prime-age employment and nominal wage growth returns to what it was between 1990 and 2007. At what level of prime-age employment would there be 2.0%/year of wage pressure on inflation?

2%/year wage pressure on inflation would be generated by 3.5%/year wage growth, which occurs along the red relationship line when the prime-age employment-to-population ratio reaches 80.5%.

4) Suppose average productivity growth is 1.5%/year, and the relationship between prime-age employment and nominal wage growth returns to what it was between 1990 and 2007. If each 1%-pt increase in prime-age employment-to-population produces a 1.5% increase in real GDP, how much higher would real GDP be if prime-age employment-to-population were not 78% but high enough for the economy to be generating 2.0%/year of wage pressure on inflation? In an economy with a real GDP of \$18T/year, how much money is that?

80.5% - 78% = 2.5%; 2.5% x 1.5 = 3.75%; 3.75% x \$18T = \$0.675 trillion/year—that's \$2100/year of income for every citizen, not every worker.

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5) What arguments have you heard for why Janet Yellen's Federal Reserve is not aggressively pursuing even more extraordinary expansionary policies to increase employment and boost GDP right now?