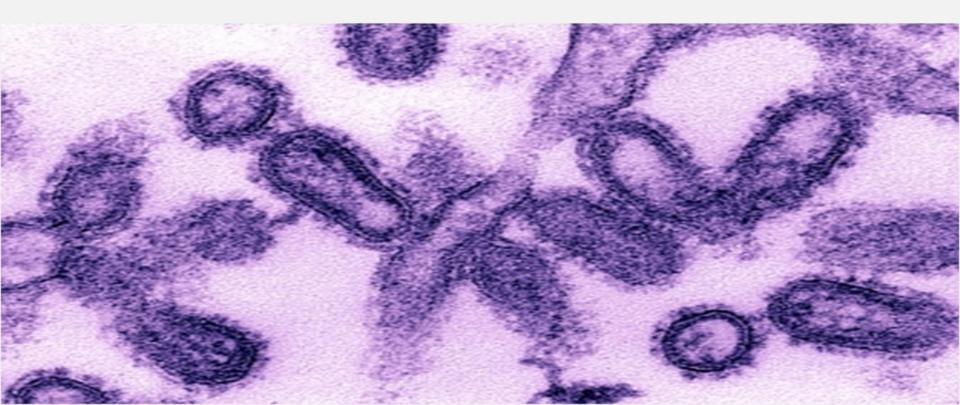
#### "All the City Was Dying" The Spanish Flu Pandemic of 1918-1919

Jessie Romero October 19, 2017

The views and opinions expressed are those of the presenter. They do not represent an official position of the Federal Reserve Bank of Richmond or the Federal Reserve System.



# **Econ Focus**

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Jesse Shapiro

Broadcasting

Exchange

#### The Missing Boomerang Buyers

Does it matter whether those who lost their homes during the crisis come back to the housing market?

Self-Driving The Future of Trucks and Jobs Small Colleges Interview with Janet Currie

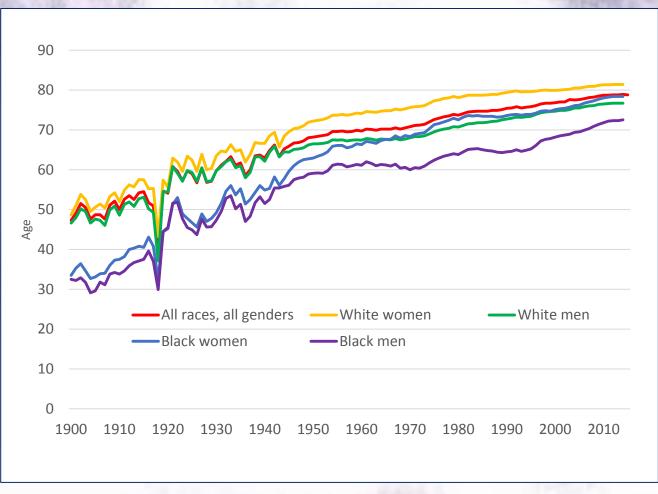


#### SPECIAL ISSUE

Economics Over the Life Cycle

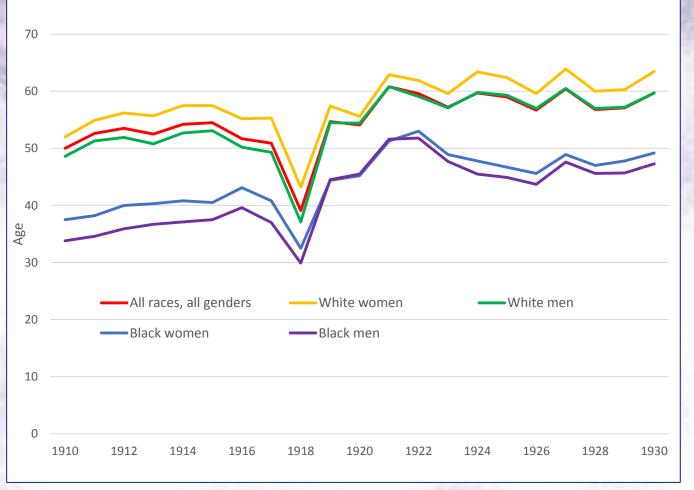
Millennials and Their Money Women at Work Life Cycle Hypothesis Gains and Losses in Life Expectancy Do Economists Ever Really Retire? Interview with Jonathan Parker

#### U.S. Life Expectancy at Birth 1900-2016



Source: CDC

#### U.S. Life Expectancy at Birth 1910-1930



Source: CDC

## Spanish Flu Mortality

Worldwide: 50-100 million United States: 675,000 (6.5 deaths/1,000)

Mexico: 300,000 (21 deaths/1,000) Indonesia: 1.5 million (30 deaths/1,000) South Africa: 300,000 (44 deaths/1,000)

## Three Waves in the United States March - April 1918

September - October 1918 (200,000 deaths in October alone)

December 1918 - March 1919









#### All the city was dying...



Y. M. C. A. READING AND WRITING RCOM, RECEIVING SHIP, COMMONWEALTH PIER, BOSTON, MASS.

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406 Eigl

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## The Flu in Baltimore

Sep. 24: Several cases reported at Fort Meade Within days, 1,900 ill
Sep. 26: 300 cases reported at Fort McHenry 1,150 cases at Aberdeen Proving Grounds First 10 civilian cases Health Commissioner Blake: "same old influenza"

- Oct. 5: 117 deaths in previous week
- Oct. 7: School board closes public schools
- Oct. 9: Blake bans public gatherings
- Oct. 10: New infections reach 1,962 in a single day
- Oct. 12: 563 deaths in previous week
- Oct. 16: 200+ deaths in a single day
- Oct. 31: More than 3,000 deaths in previous month
- Nov. 4: Schools reopen
- Dec. Third wave

By the end of 1918: 60,000 cases (est.) and 4,125 deaths

and L. R. Sollenberger. "FLU" HITS FIRE DEPARTME think 200 Men Short Because Of Illness

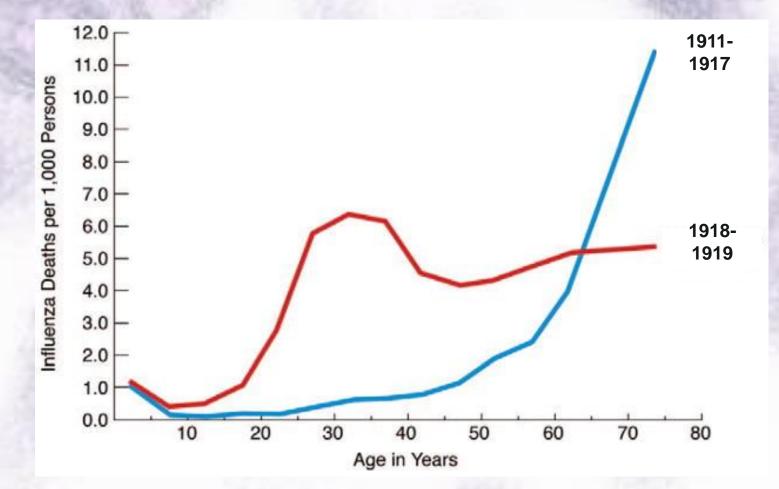
"Flu" Kills 77 At Camp Meade; City Reports Show 38 Deaths; Hopkins Suspends Its Classes

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bit of the	Physicians Are Overwhelmed With Cases-1.000 Employee Of The	trin Off





#### Flu Mortality by Age



Source: Morens et. al, 2010

## Mortality Patterns

Wide variation in mortality across states Wisconsin: 360/100,000 Pennsylvania: 757/100,000 Colorado: 681/100,000 Kansas: 423/100,000

Higher morbidity and mortality in urban areas

Wide variation in mortality across cities St. Louis, MO: 386/100,000 Kansas City, MO: 624/100,000 Baltimore: 559/100,000 Philadelphia: 748/100,000

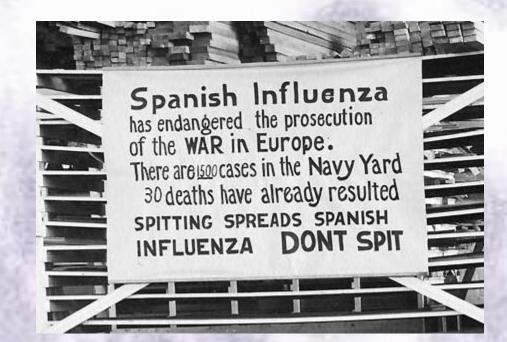
#### Coughs and Sneezes Spread Diseases



As Dangerous as Poison Gas Shells SPREAD OF SPANISH INFLUENZA MENACES OUR WAR PRODUCTION

U. S. Public Health Service Begins Na tion-wide Health Campaign.







#### TR in Baltimore During Liberty Loan Drive, 1918

#### September 1918 Producer unknown

#### 08996666699999966999663996689

# Citizens---A Crisis Is Here!

THE INFLUENZA EPIDEMIC has interfered with all group meetings

-OF THE-

#### Fourth Liberty Loan

The Government calls upon YOU not to forget YOUR duty to the FIGHTERS IN FRANCE.

Subscribe at any Bank, Trust Company and show your patriotism by doing it TODAY!

CITY LIBERTY BOND COMMITTEE Headquarters 45 North George Street.

1930666666**6**6

York, Pa.

### Long(er)-Term Effects

Demand shock Labor supply shock Mild recession August 1918 – March 1919 Depression 1920 – 1921 Physical/mental problems for children in utero

### **Emotional Shock**

"Why do narratives affect economics? Because when we want to understand a depression or recession, for instance, we have to understand why some people will stop spending. Recessions happen when people stop buying things: they don't buy a new car; they don't buy a new house. So why not? They might say they stopped spending because recession struck, but that doesn't tell me why the recession started."

"There was a background then of horrible recent events: World War I, which ended only 14 months before the start of the depression, an influenza epidemic even more deadly than the war that started during the war and was not quite over, and a series of postwar race riots in the United States... hugely unsettling narratives that could have led to a sense of economic uncertainty that might have discouraged discretionary spending of households and slowed down hiring decisions of firms around the world."

-Robert Shiller

### "Destroyer and Teacher"

Development of county health boards Hospital construction and upgrades Validation of "germ theory" - and a boon for advertisers Informing responses to present-day epidemics

