

No more presidents in my family

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abstract

We investigate the popularity of given names in United States, 1880-2011. The data are taken from the website of U.S. Social Security Administration. We demonstrate that the fashion of naming babies after the actual American president passed away in 60's. Yet, the fashion of naming babies after a favourite actor or actress persists. A new index is proposed to treat the effect quantitatively.

outline

- Motivation
- The data: presidents and celebrities
- How to measure the personal impact?
- The results
- Discussion and summary

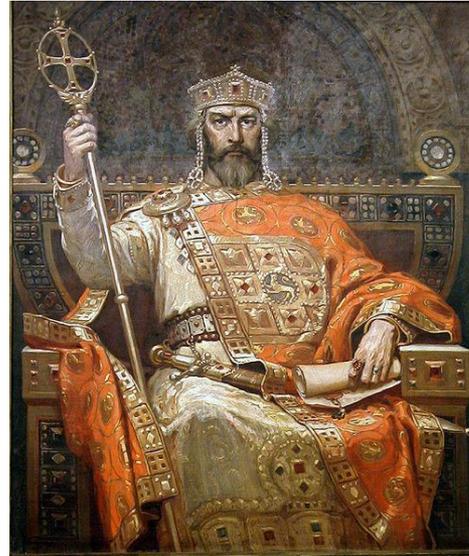
Motivation – cult of personality



Totmes III (Horus),
1481 -1425 BC



Divus Augustus,
63 BC –14 AD



Tsar Simeon I, 864-927



“For two years, the entire world paid an almost divine homage to the victor of the Marne. The baggage-master literally bent under the weight of the boxes, of the packages and letters which unknown people sent him with a frantic testimonial of their admiration. I think that outside of General Joffre, no commander in the war has been able to realize a comparable idea of what glory is.”

[W. Lippmann, Public Opinion, 1921]



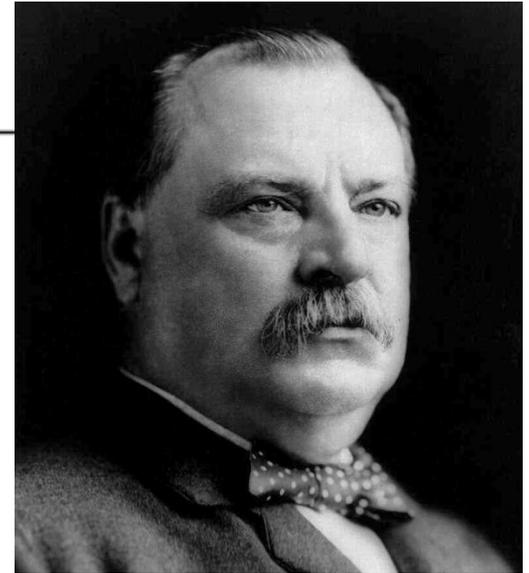
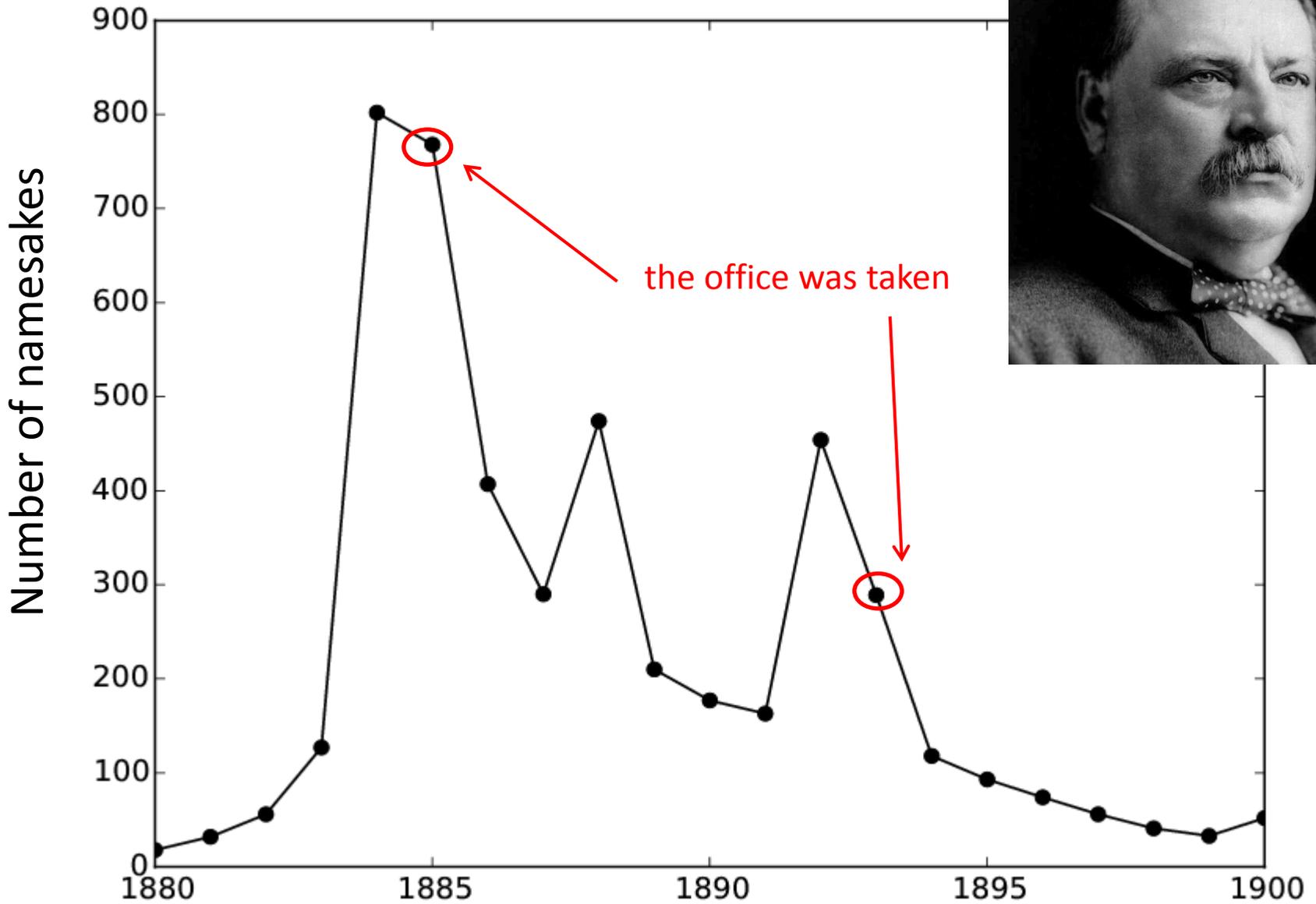
General Joffre,
Commander-in-Chief of French Army
BY UNDERWOOD & UNDERWOOD, N.Y.

Joseph Joffre, 1852-1931

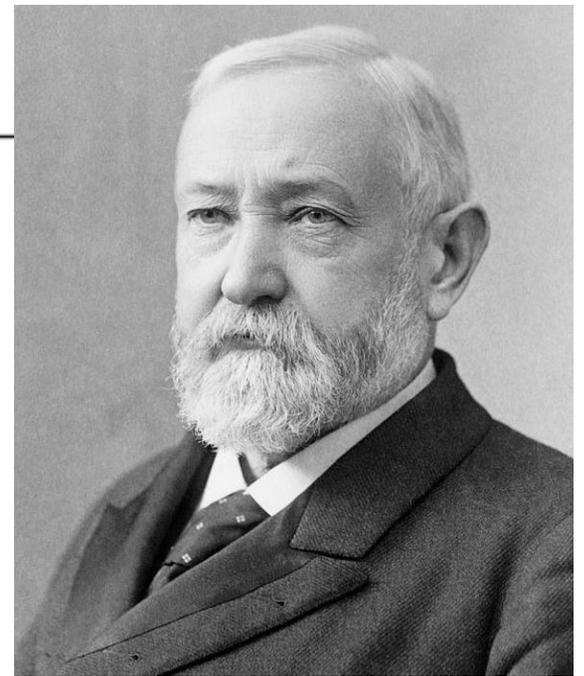
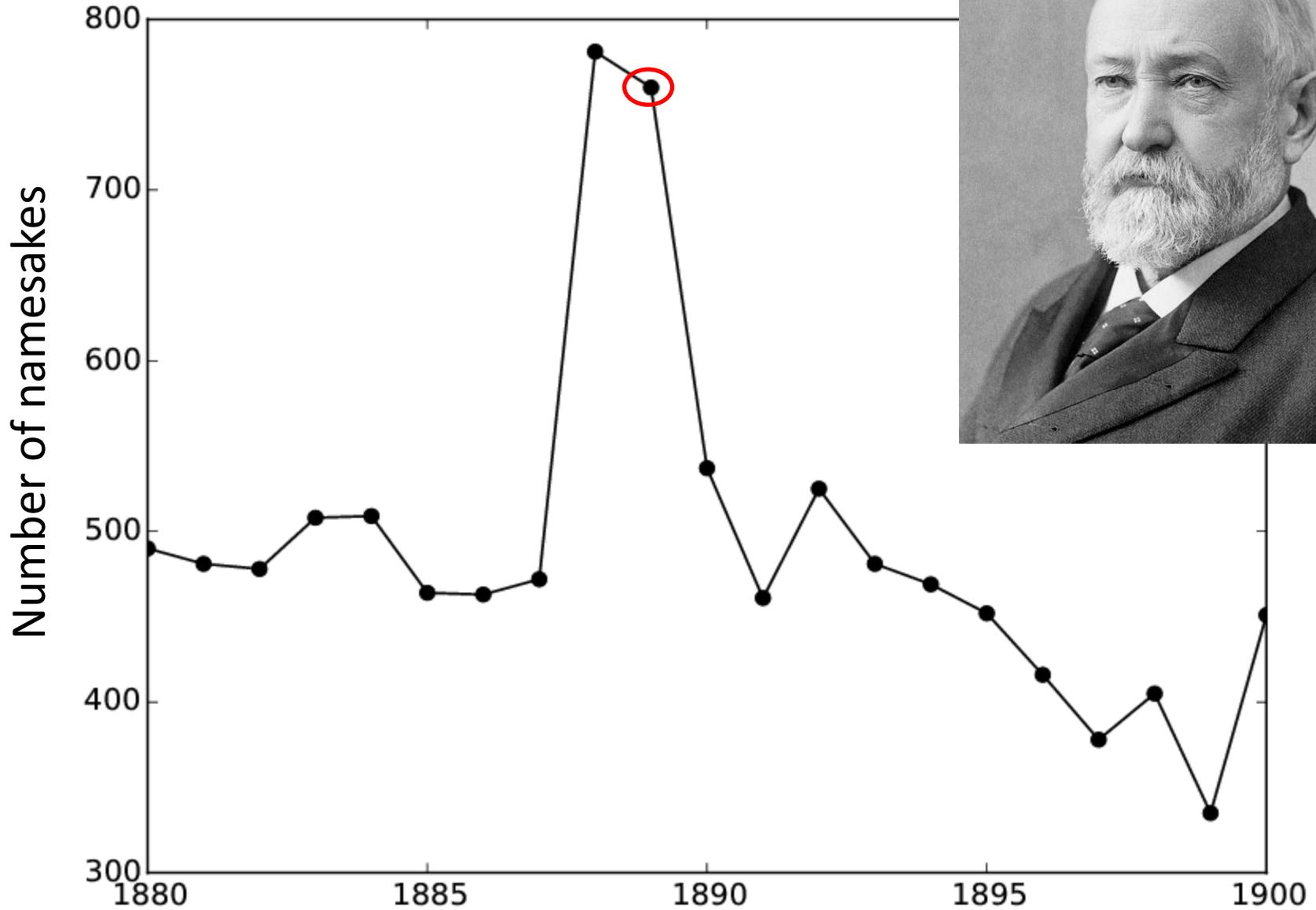


Cult of personality - how does it die out? Under which conditions?

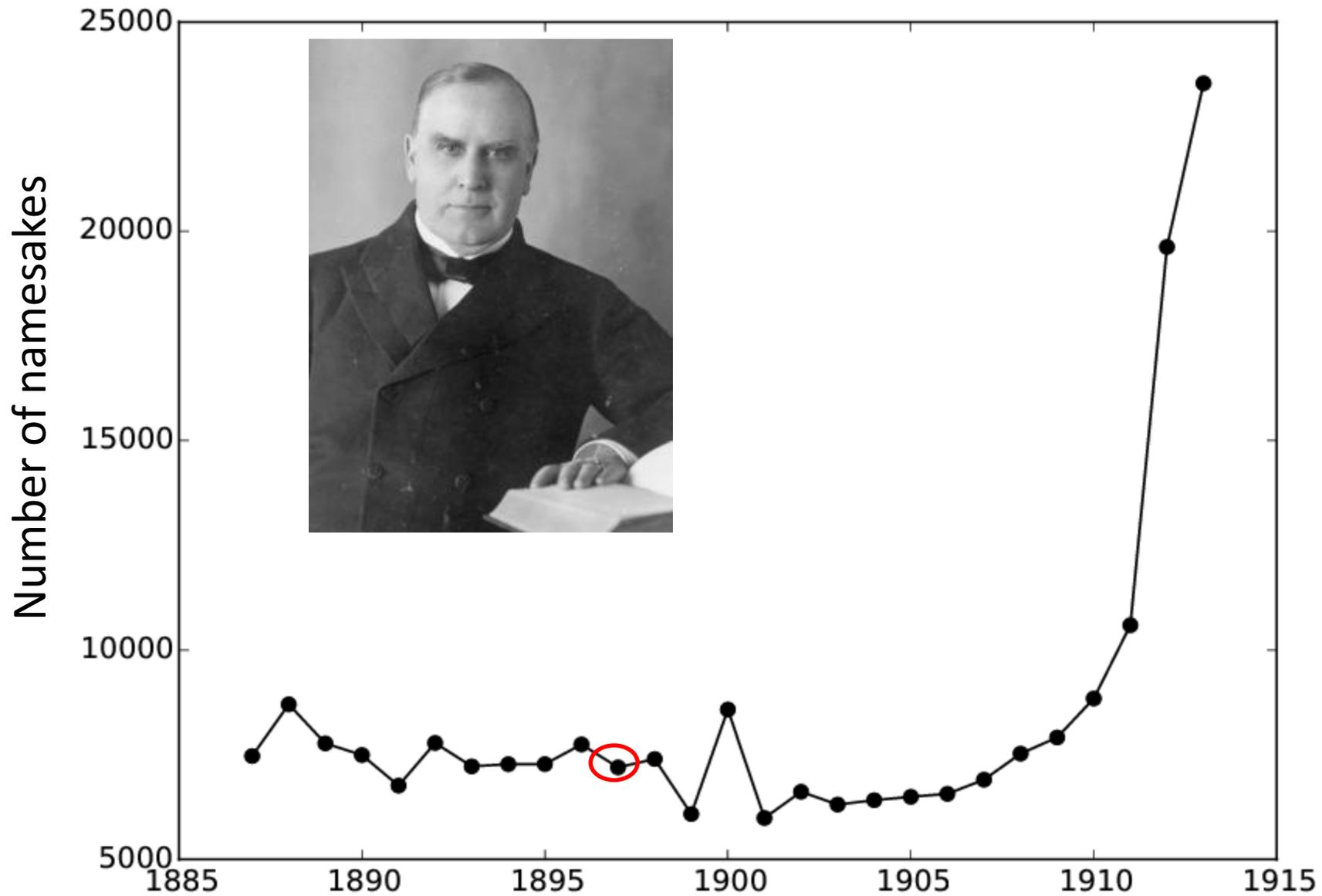
Grover Cleveland, 1885-89, 1893-97



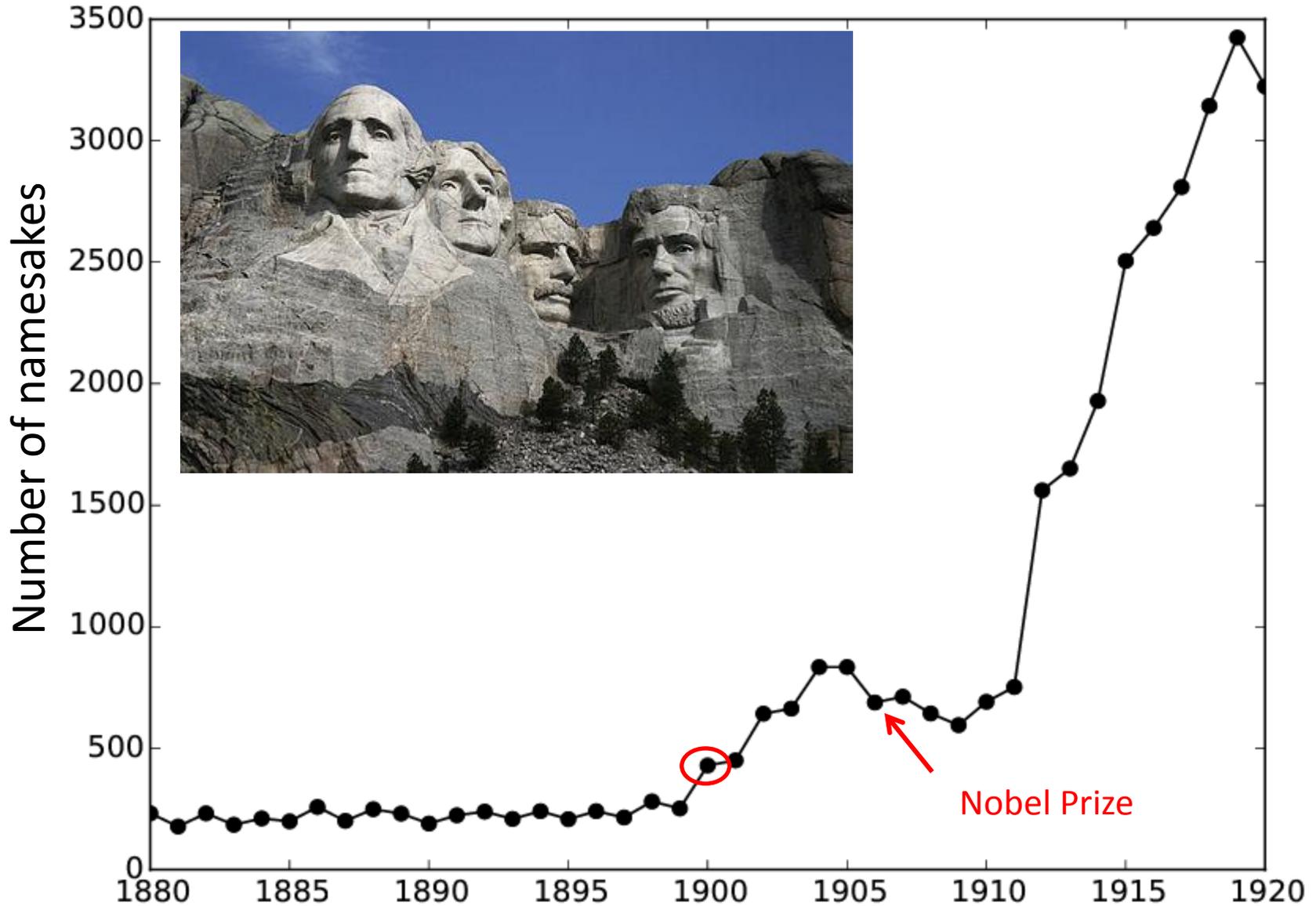
Benjamin Harrison, 1889-93



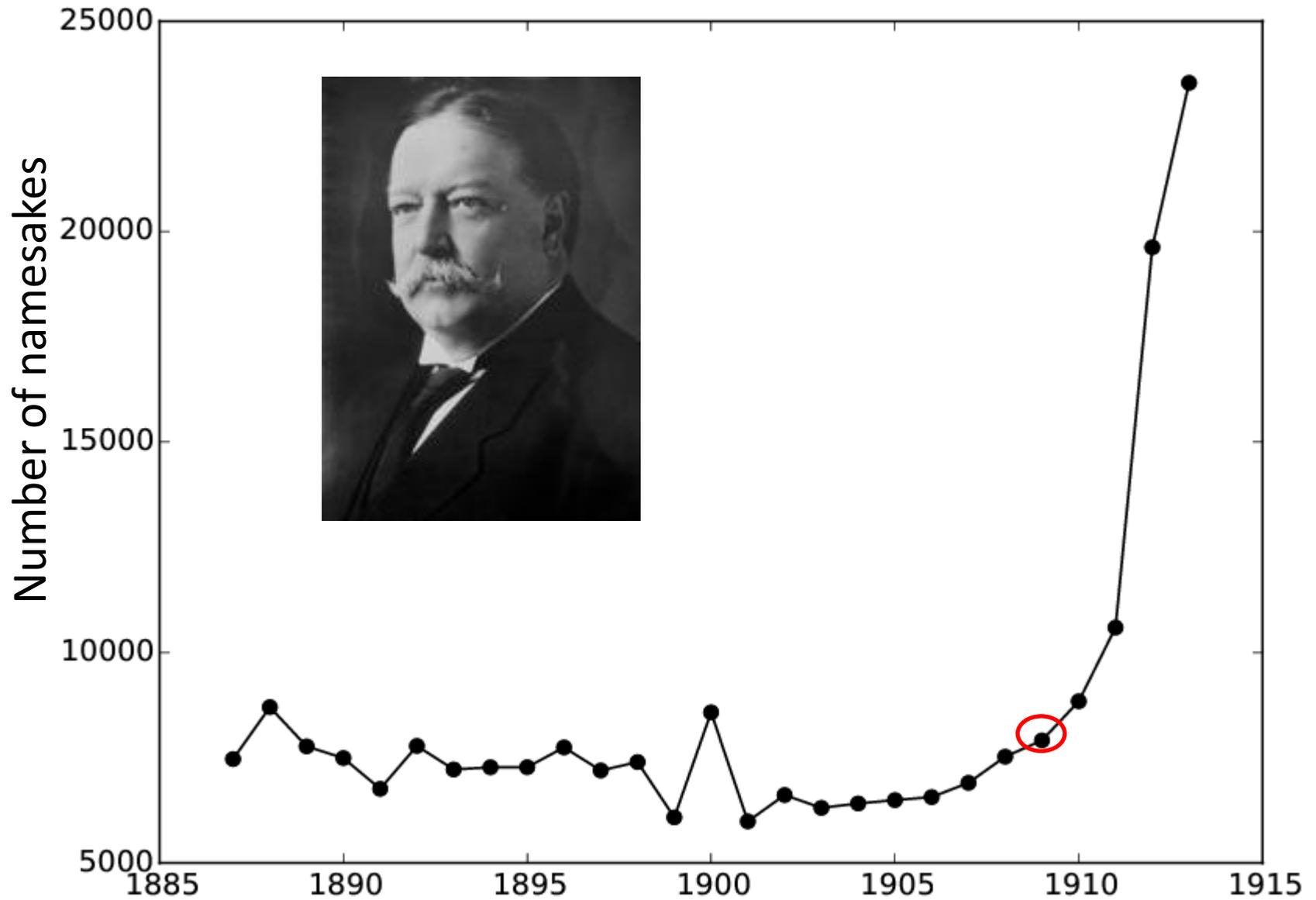
William Mc Kinley, 1897-1901



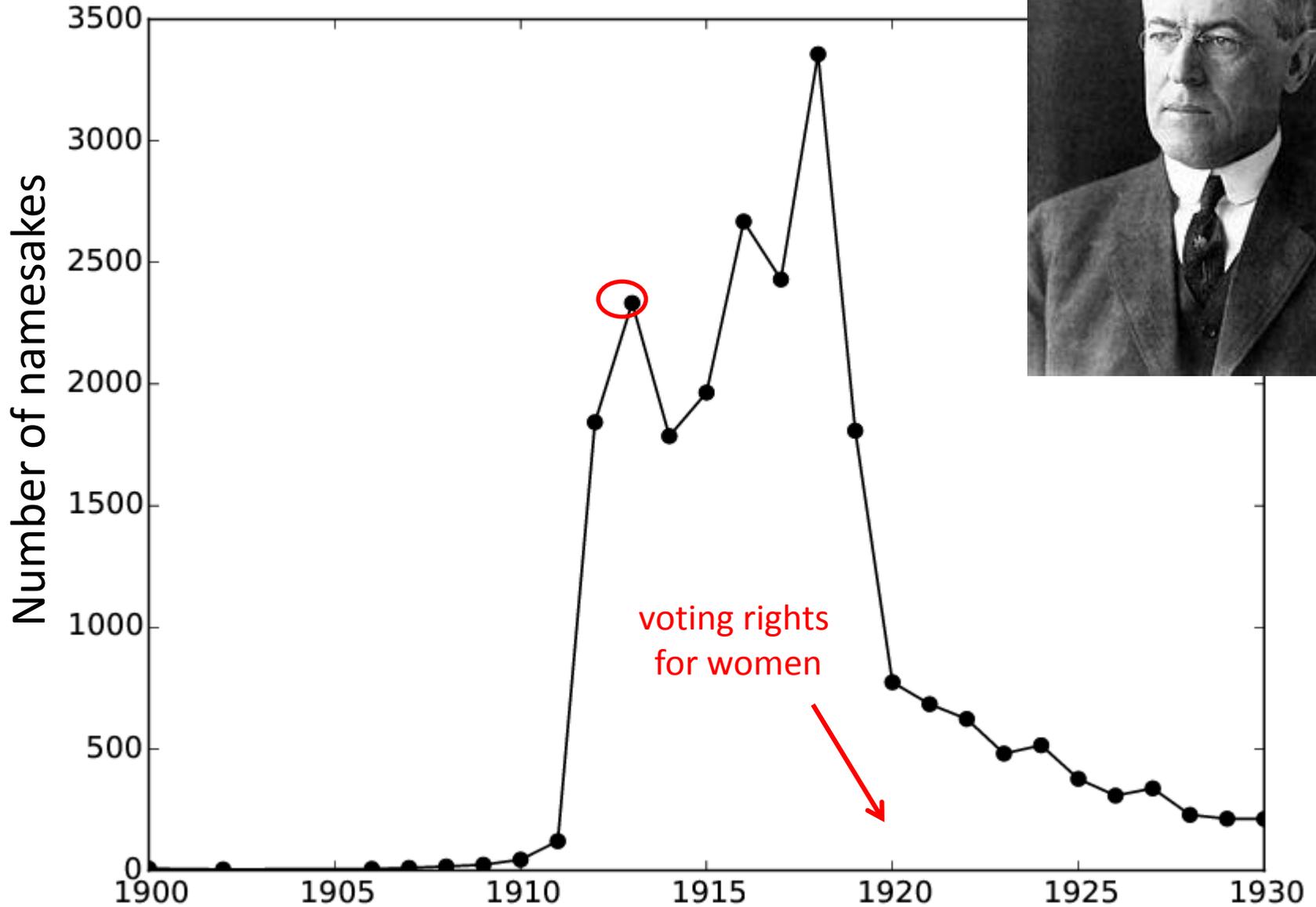
Theodore Roosevelt, 1901-09



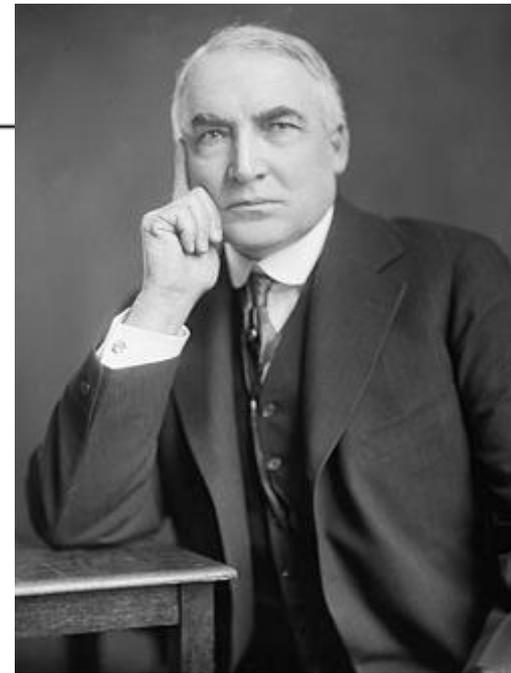
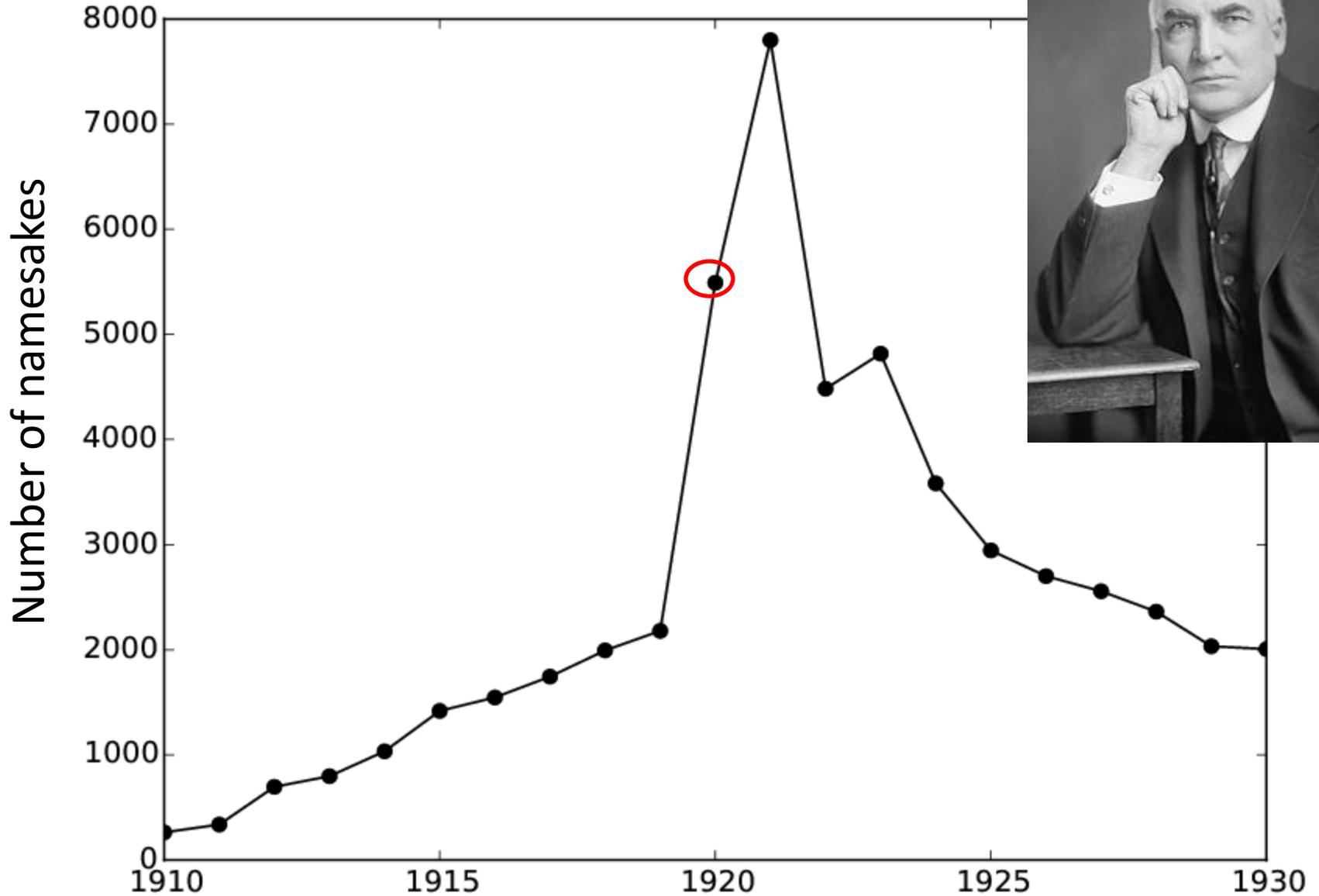
William H. Taft, 1909-13



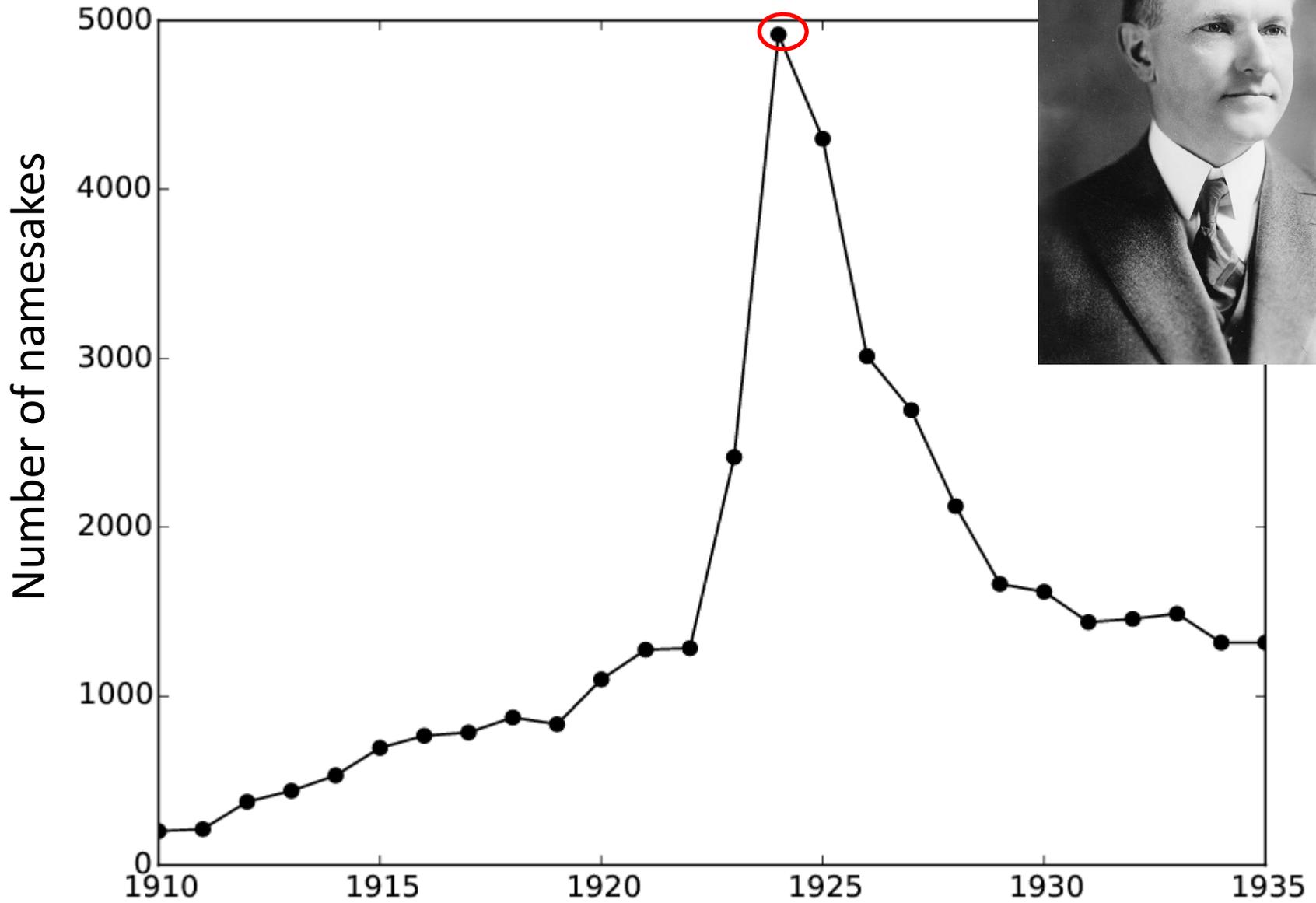
Woodrow Wilson, 1913-21



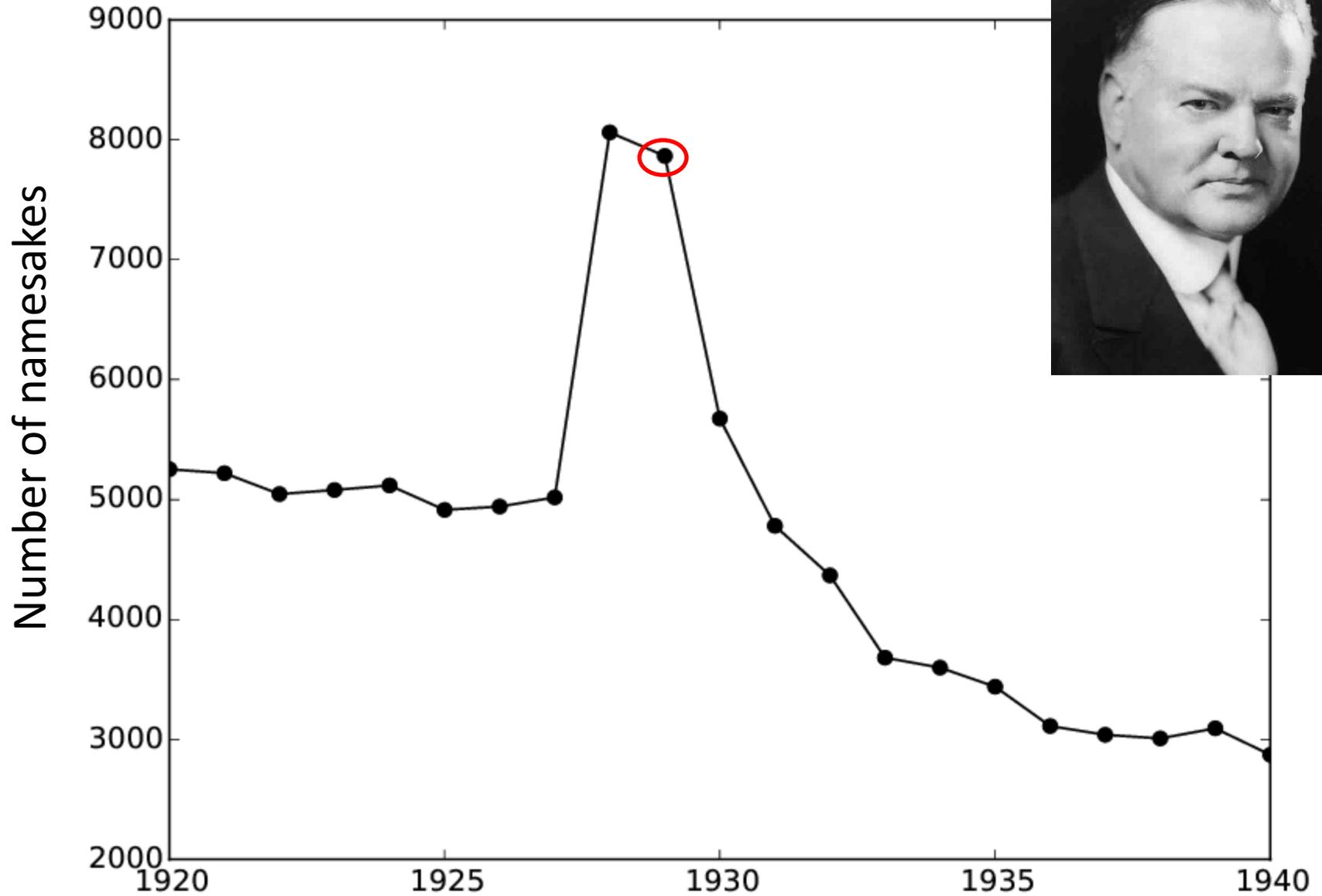
Warren G. Harding, 1921-23



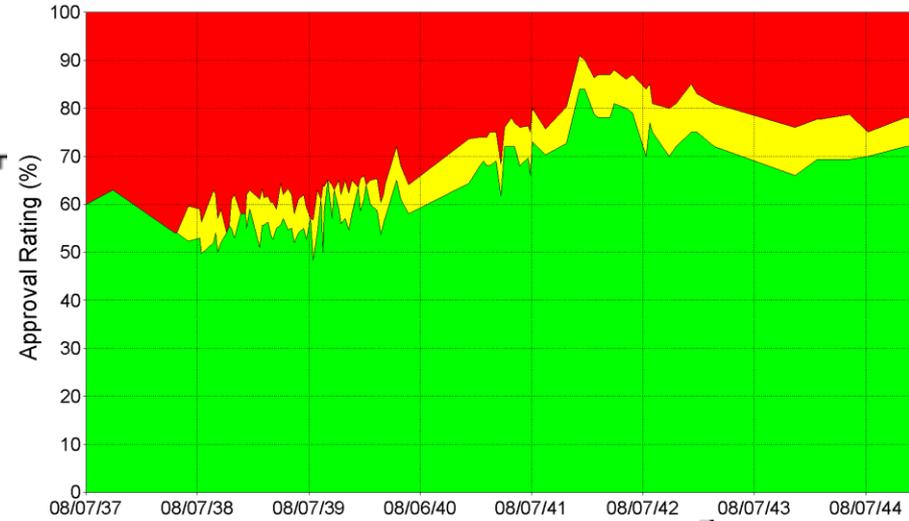
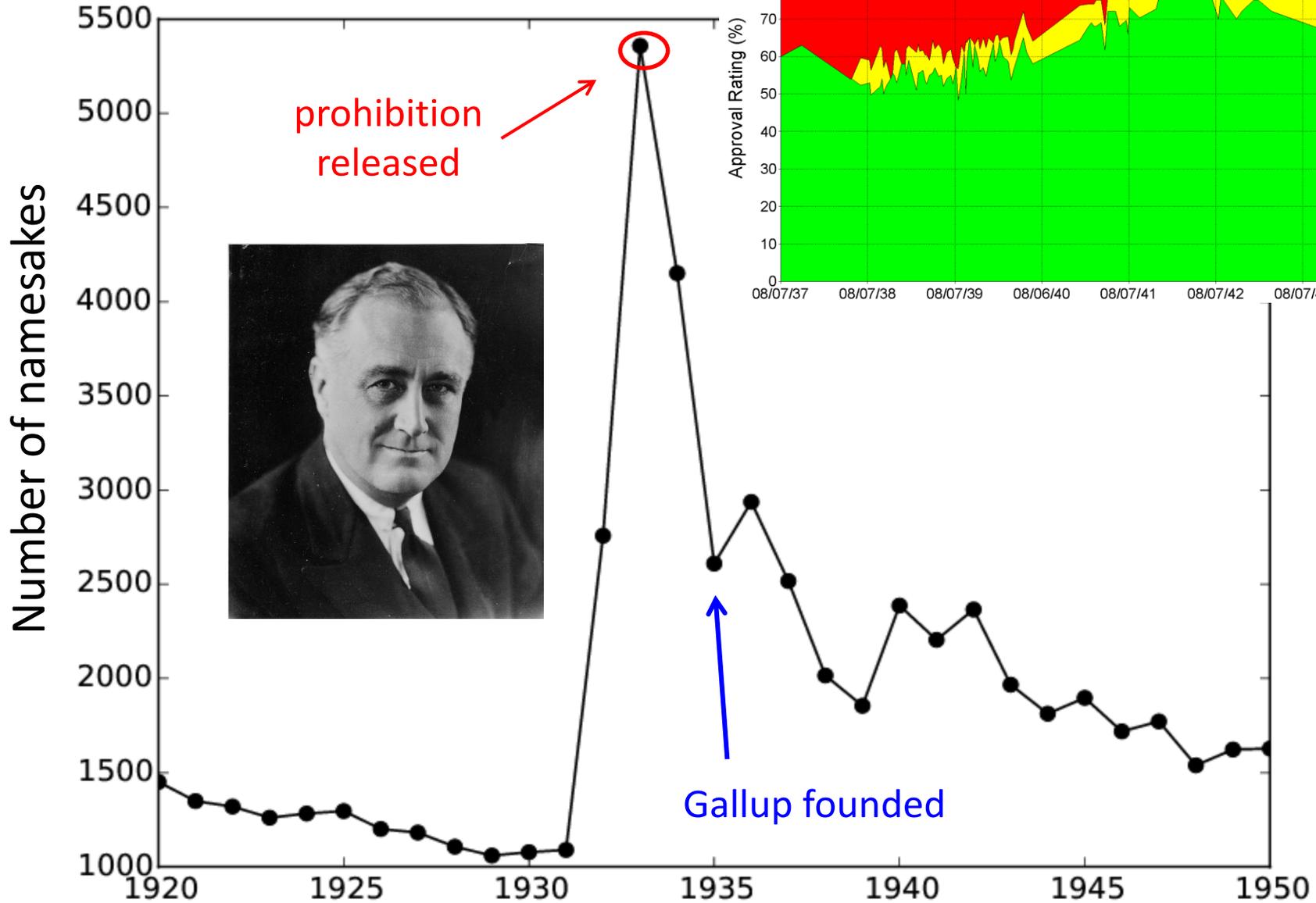
Calvin Coolidge, 1923-29



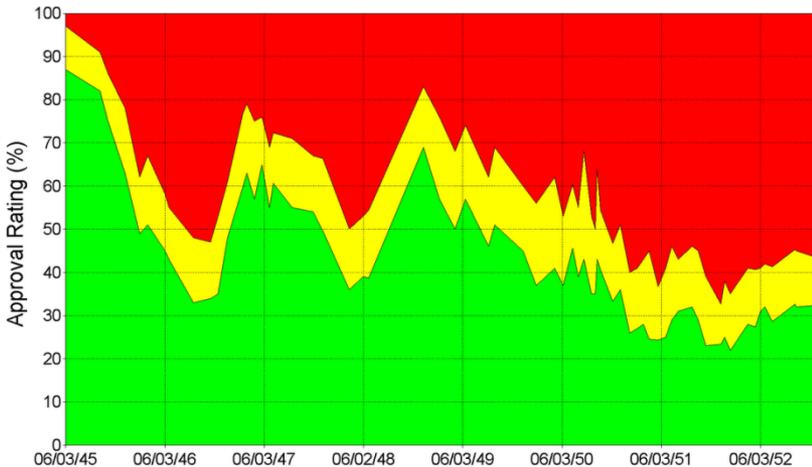
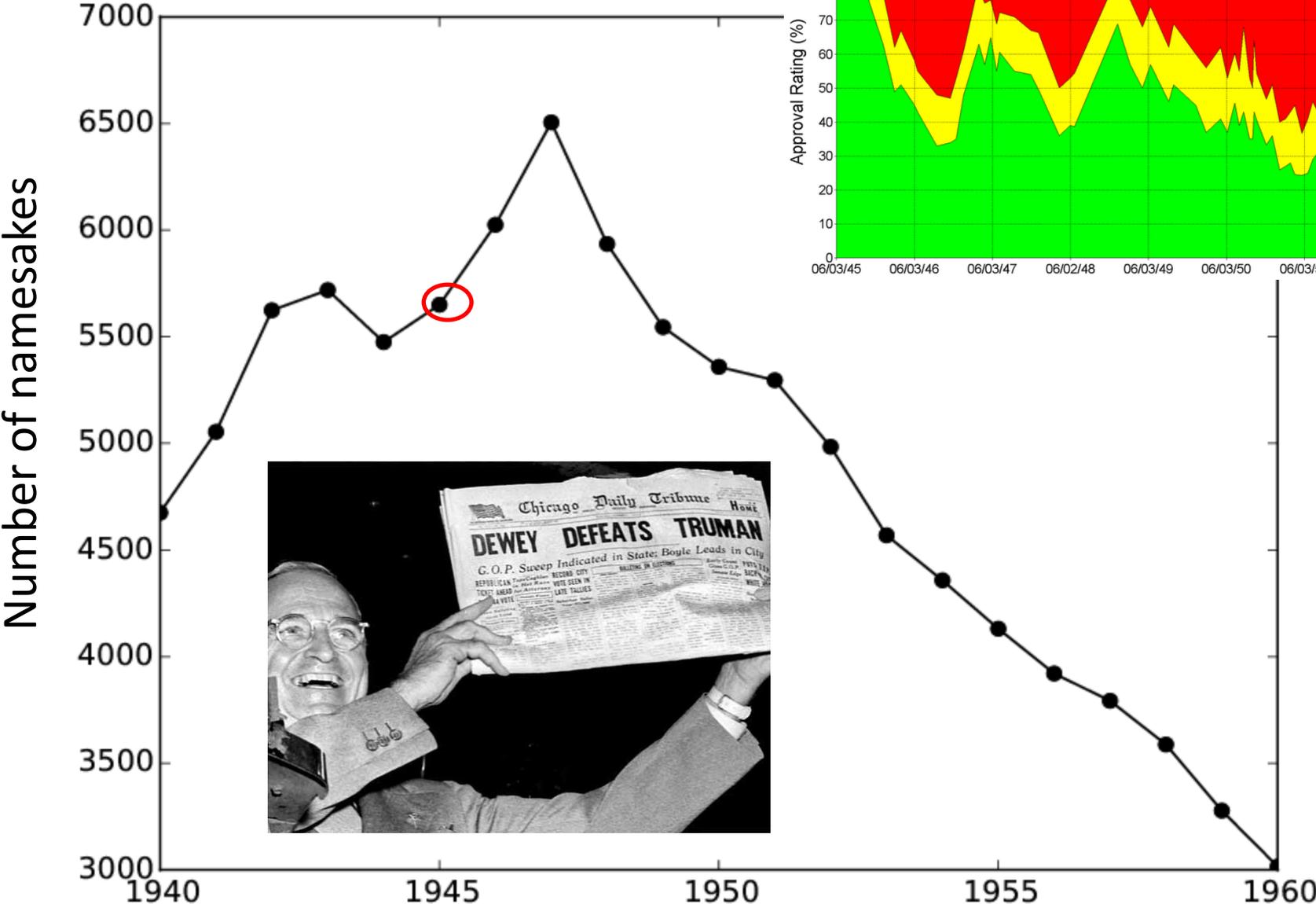
Herbert Hoover, 1929-33



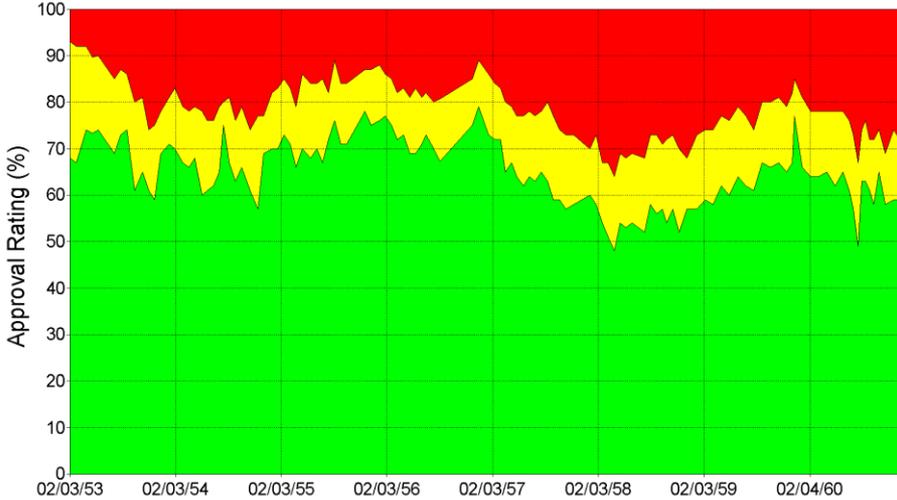
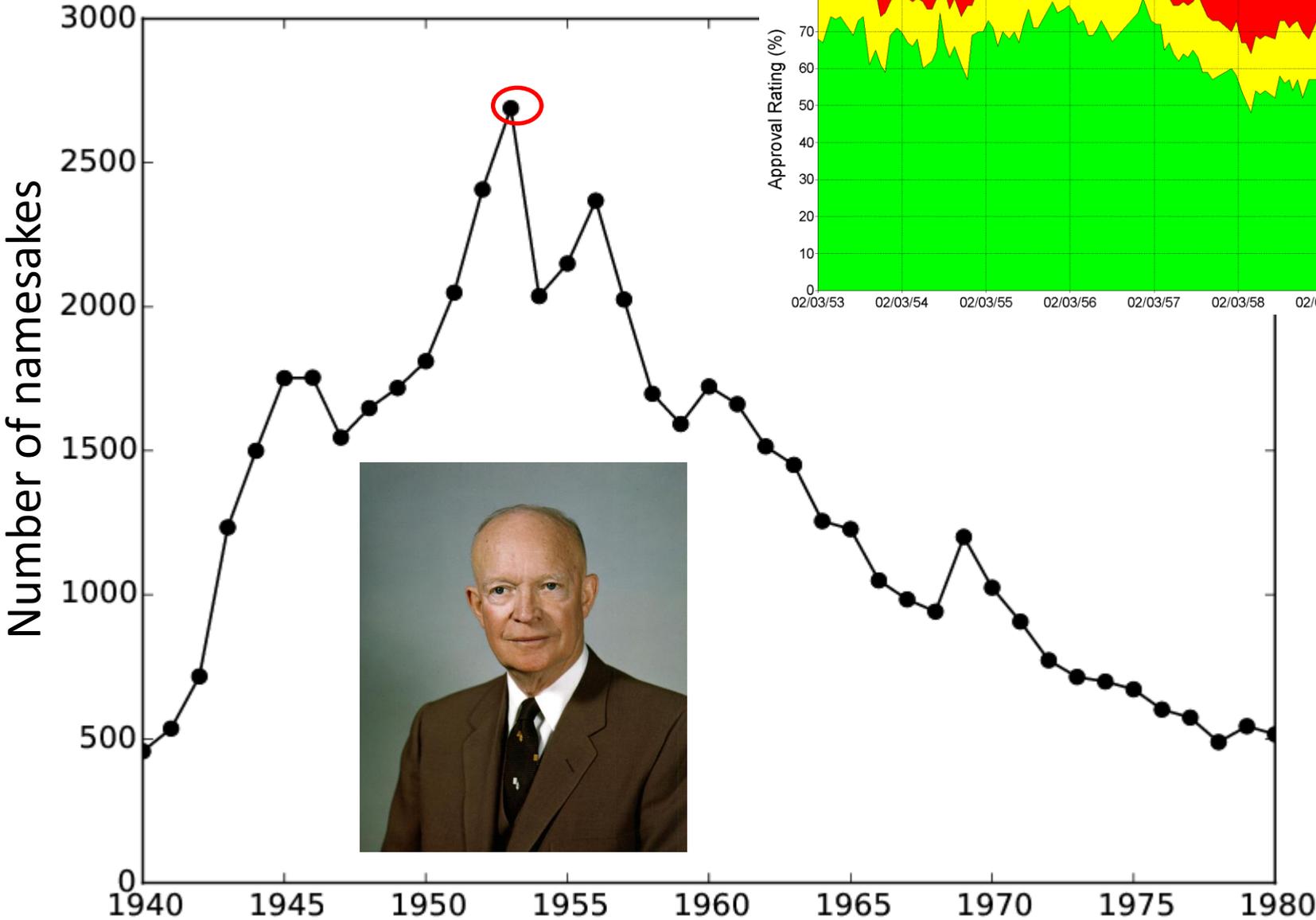
Franklin D. Roosevelt, 1933-45



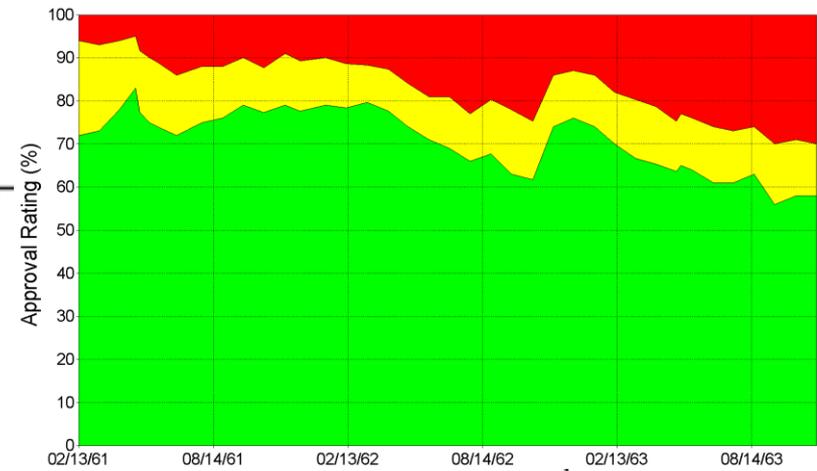
Harry Truman, 1945-53



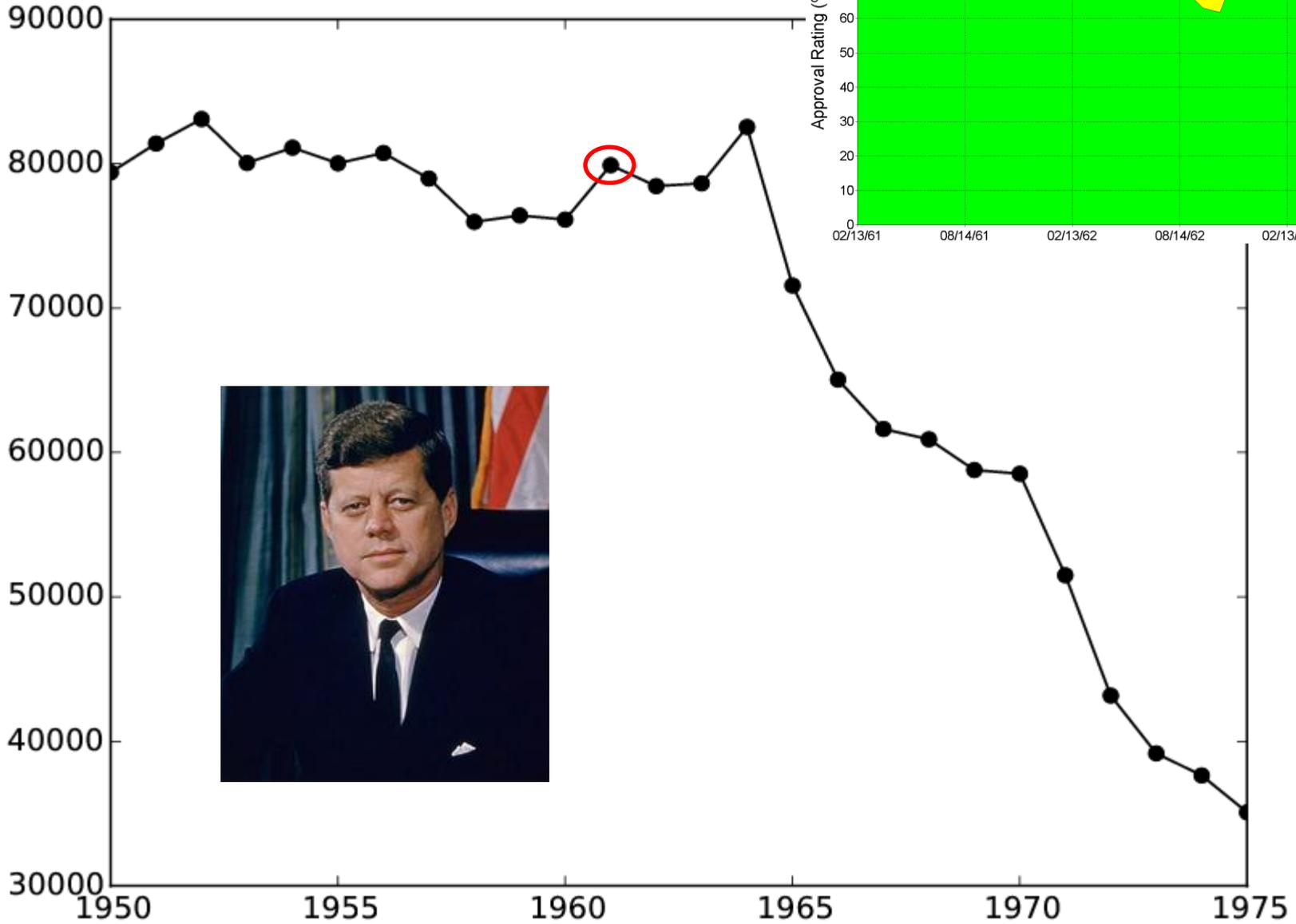
Dwight Eisenhower, 1953-61



John F. Kennedy, 1961-63



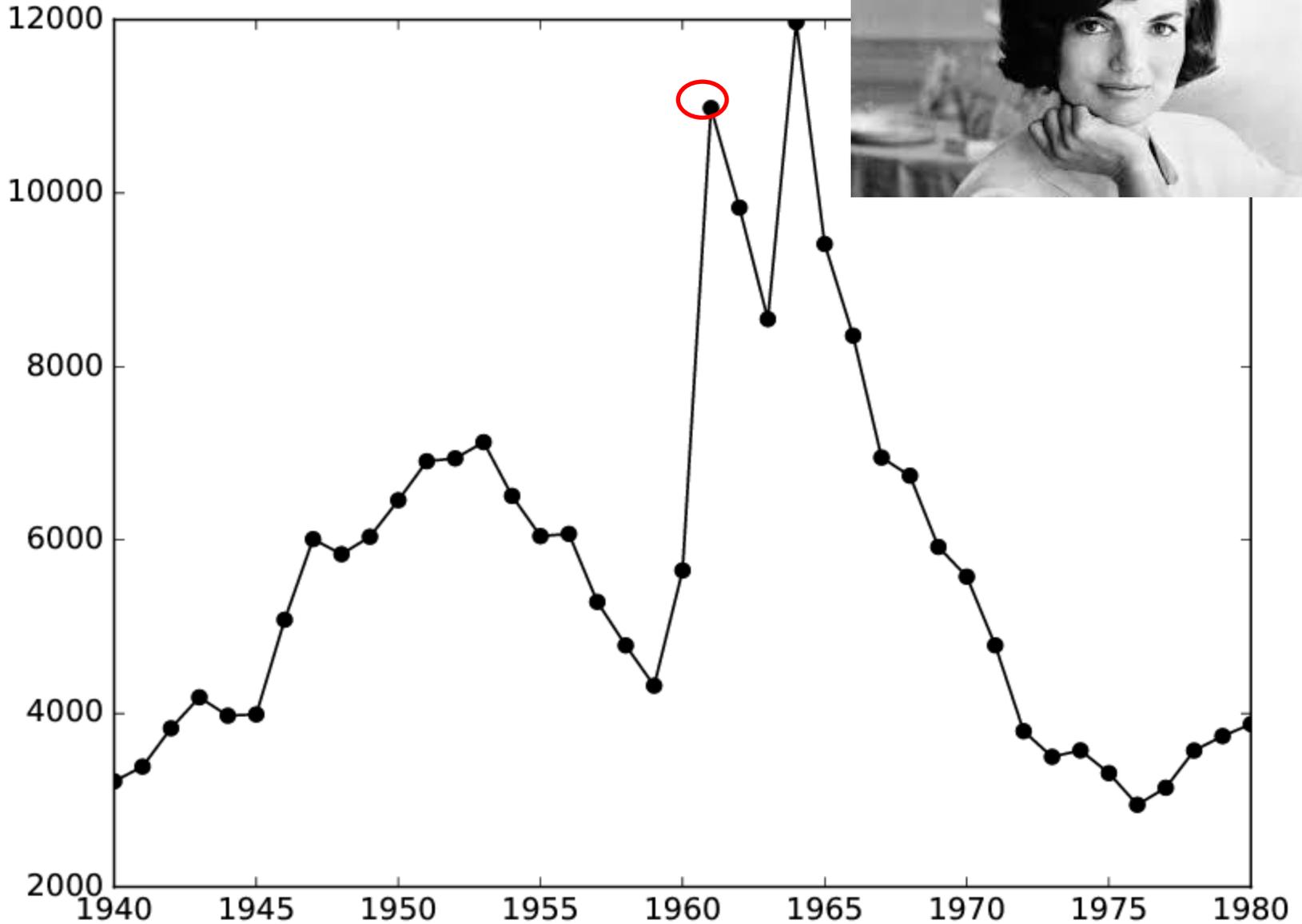
Number of namesakes



Jacqueline

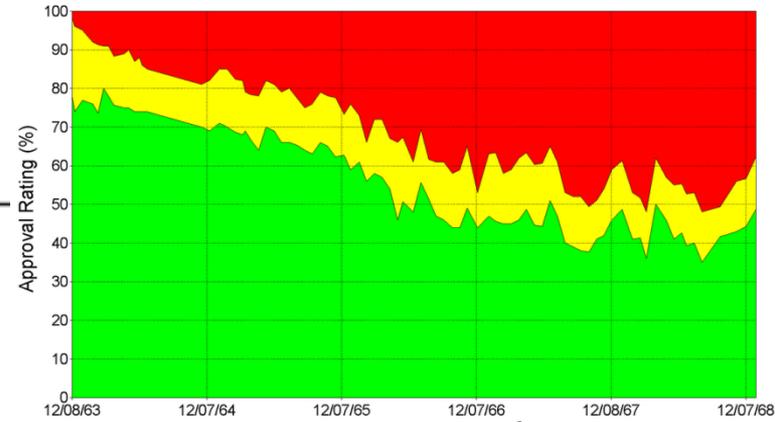


Number of namesakes



Lyndon B. Johnson, 1963-69

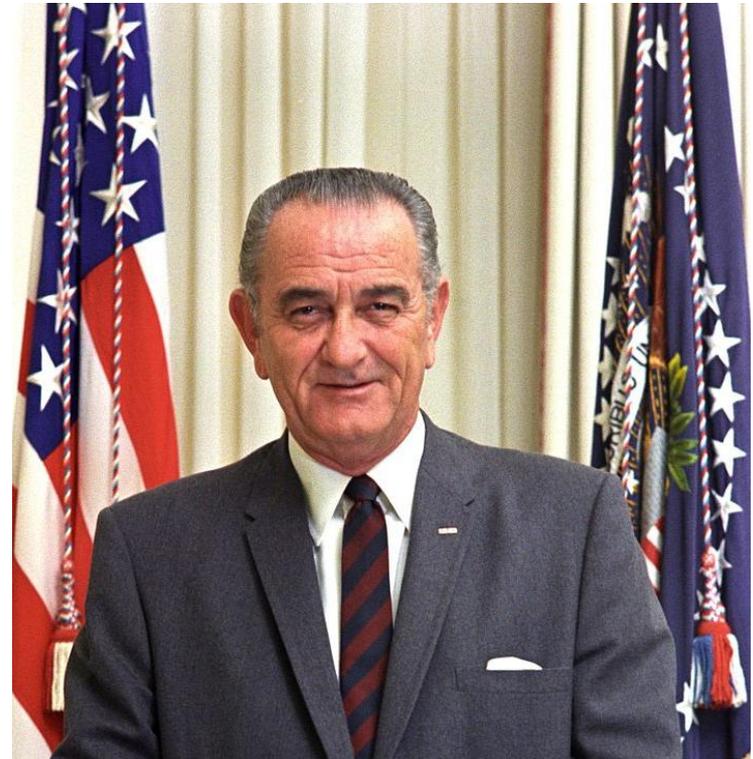
Number of namesakes



Johnson Cult

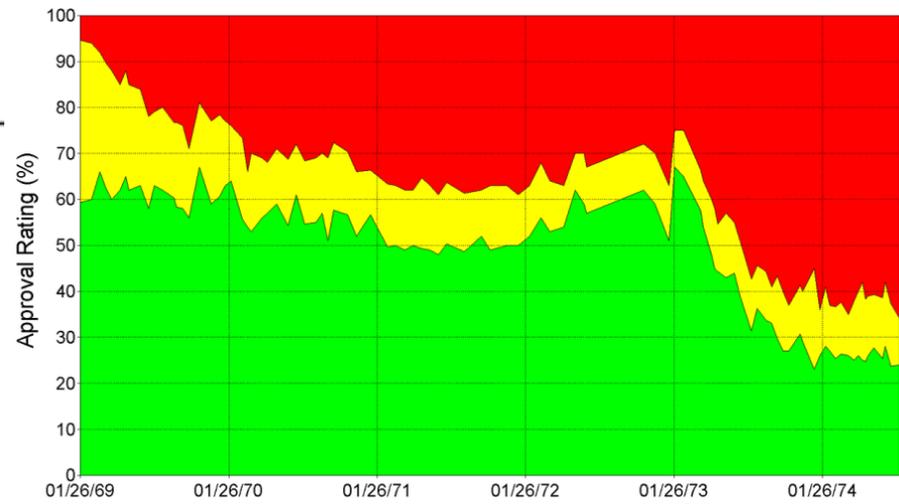
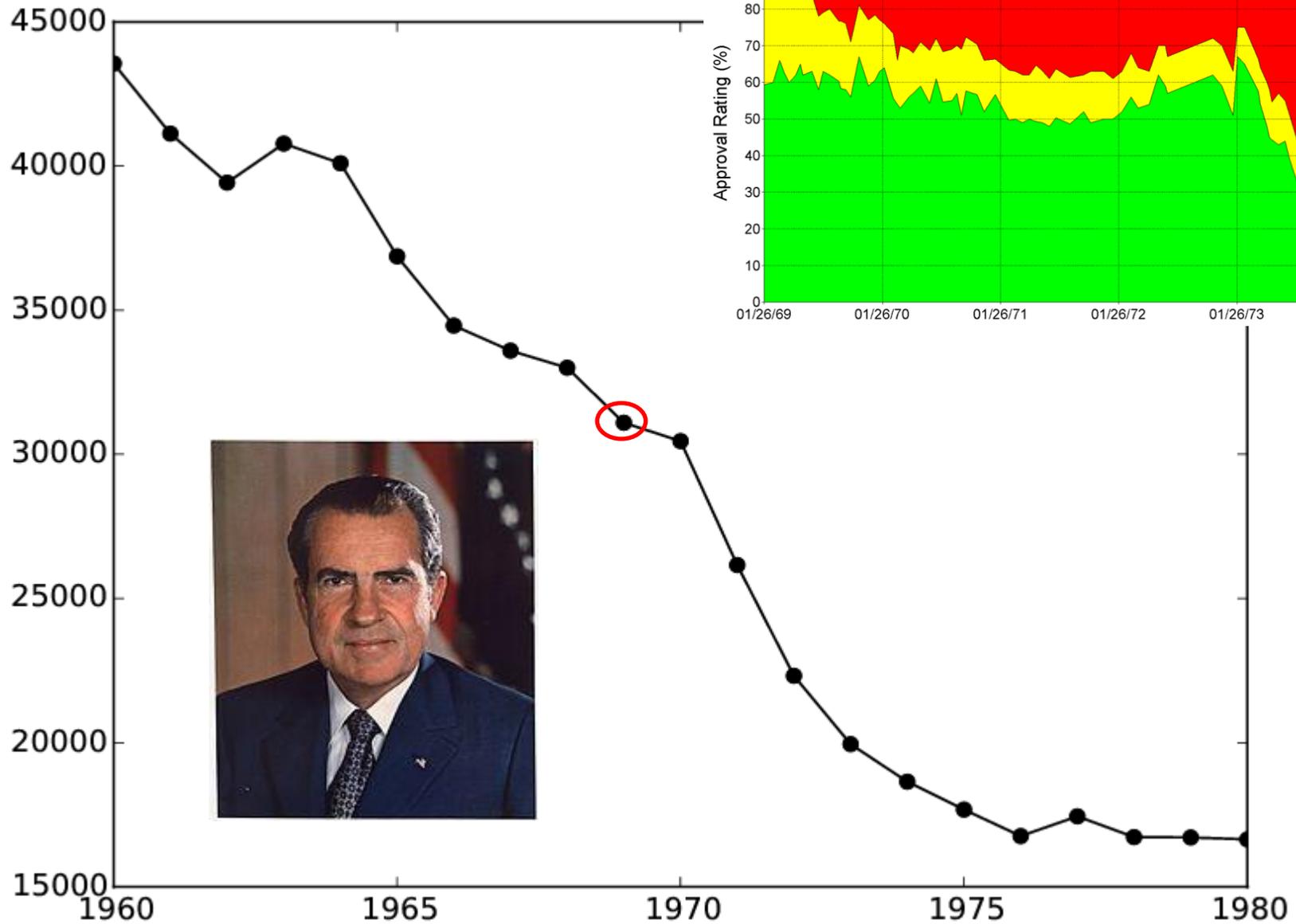
„In February, 1964, the territory of Papua and New Guinea held elections to choose representatives to the newly formed House of Assembly. In New Hanover about half the population of 7,000 refused to follow the prescribed balloting procedure and instead proclaimed, through spokesmen and blackboard announcements, that they all wanted to vote for only one man: Johnson of America.”

[D. K. Billings, Oceania 40/1 (1969) 13]

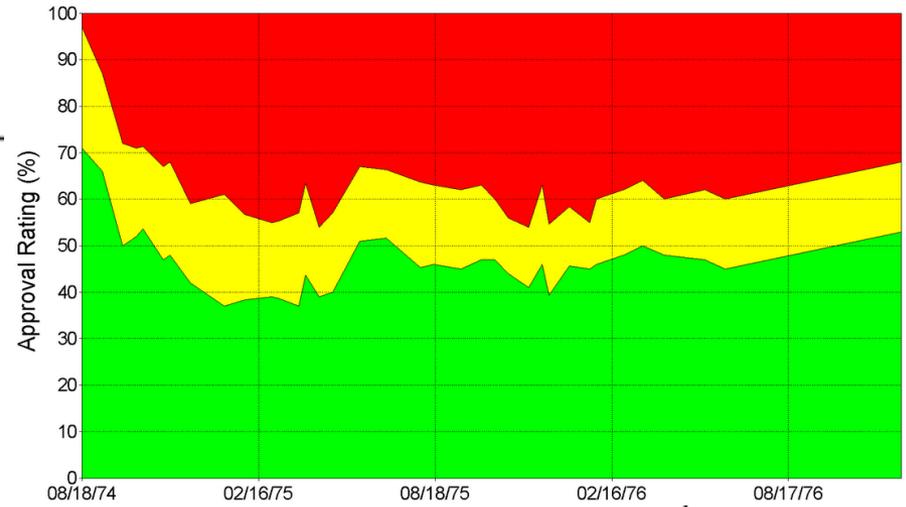
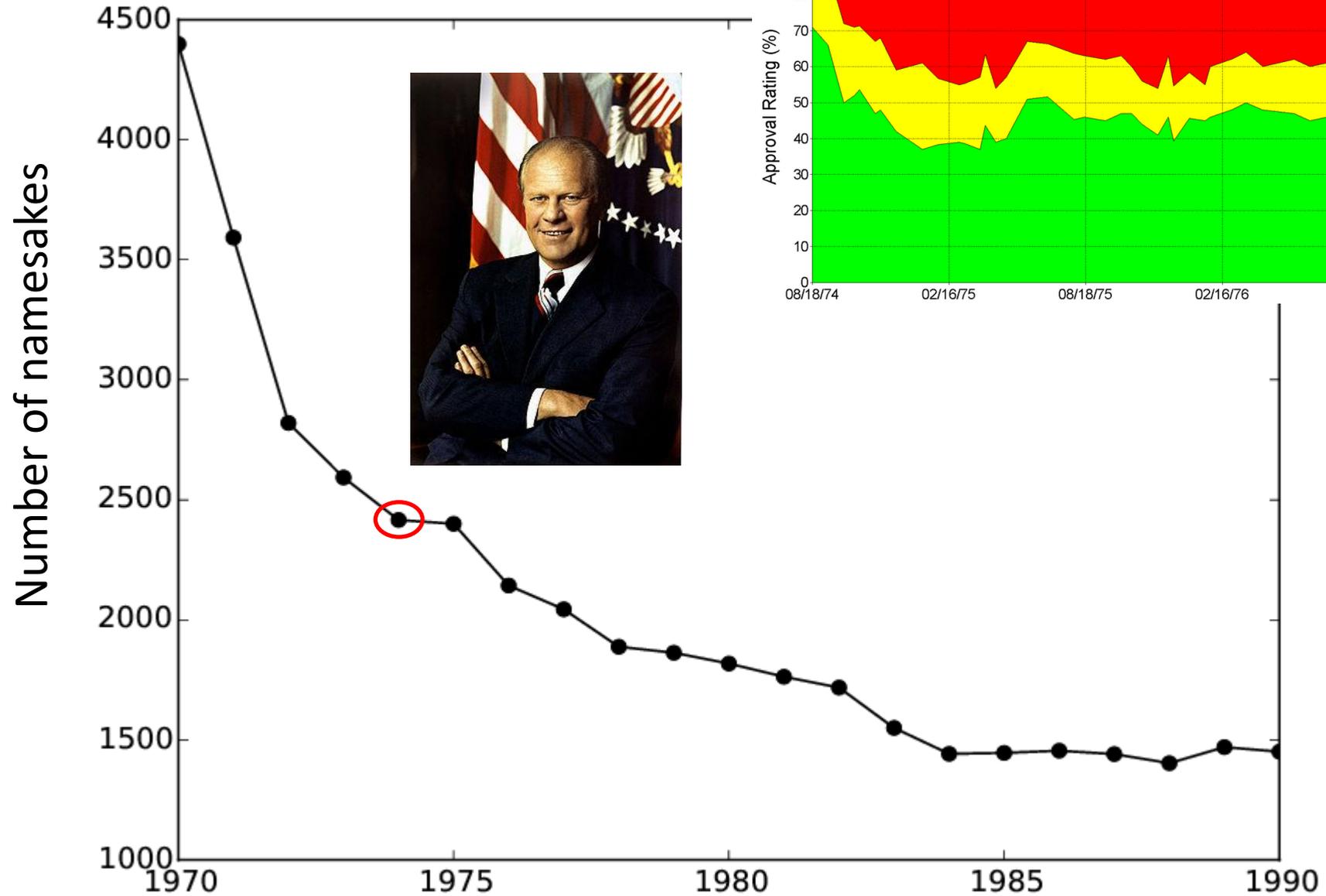


Richard Nixon, 1969-74

Number of namesakes

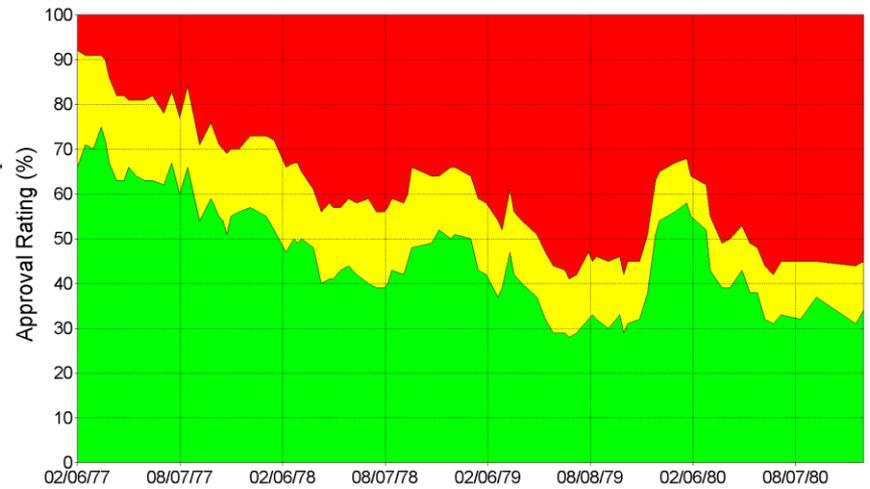
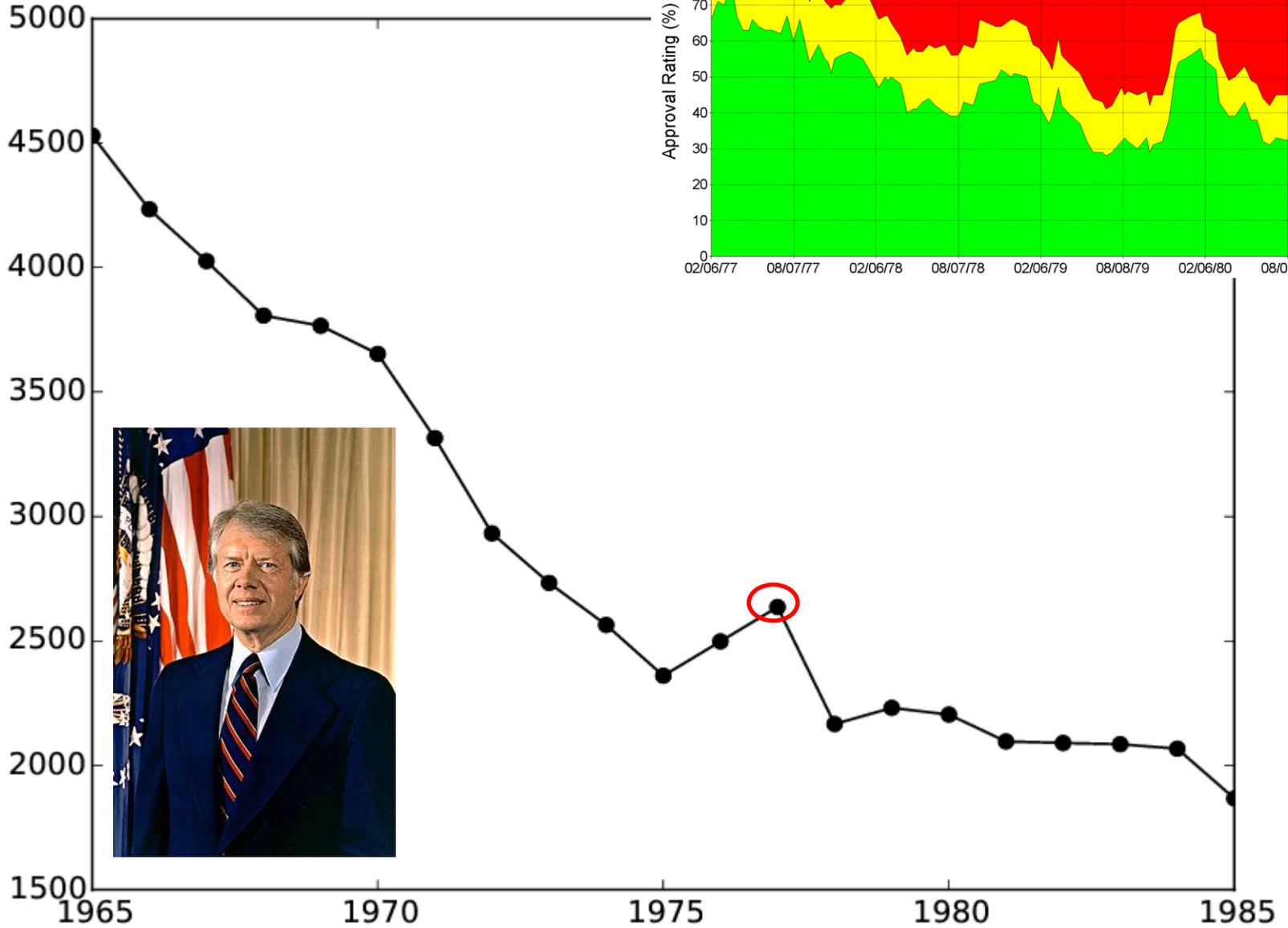


Gerald Ford, 1974-77



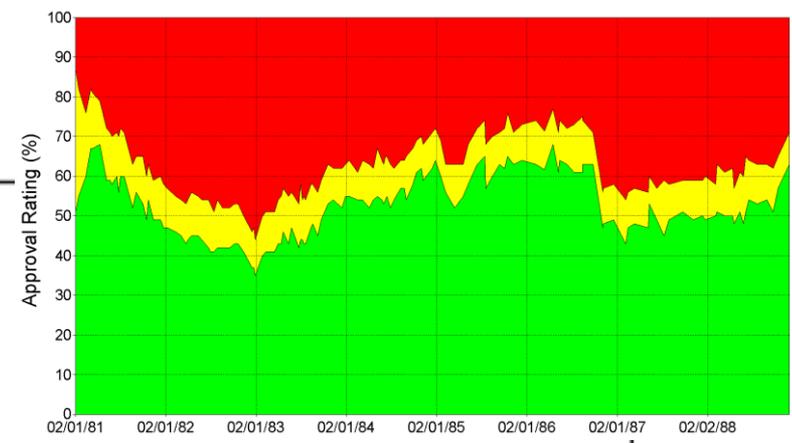
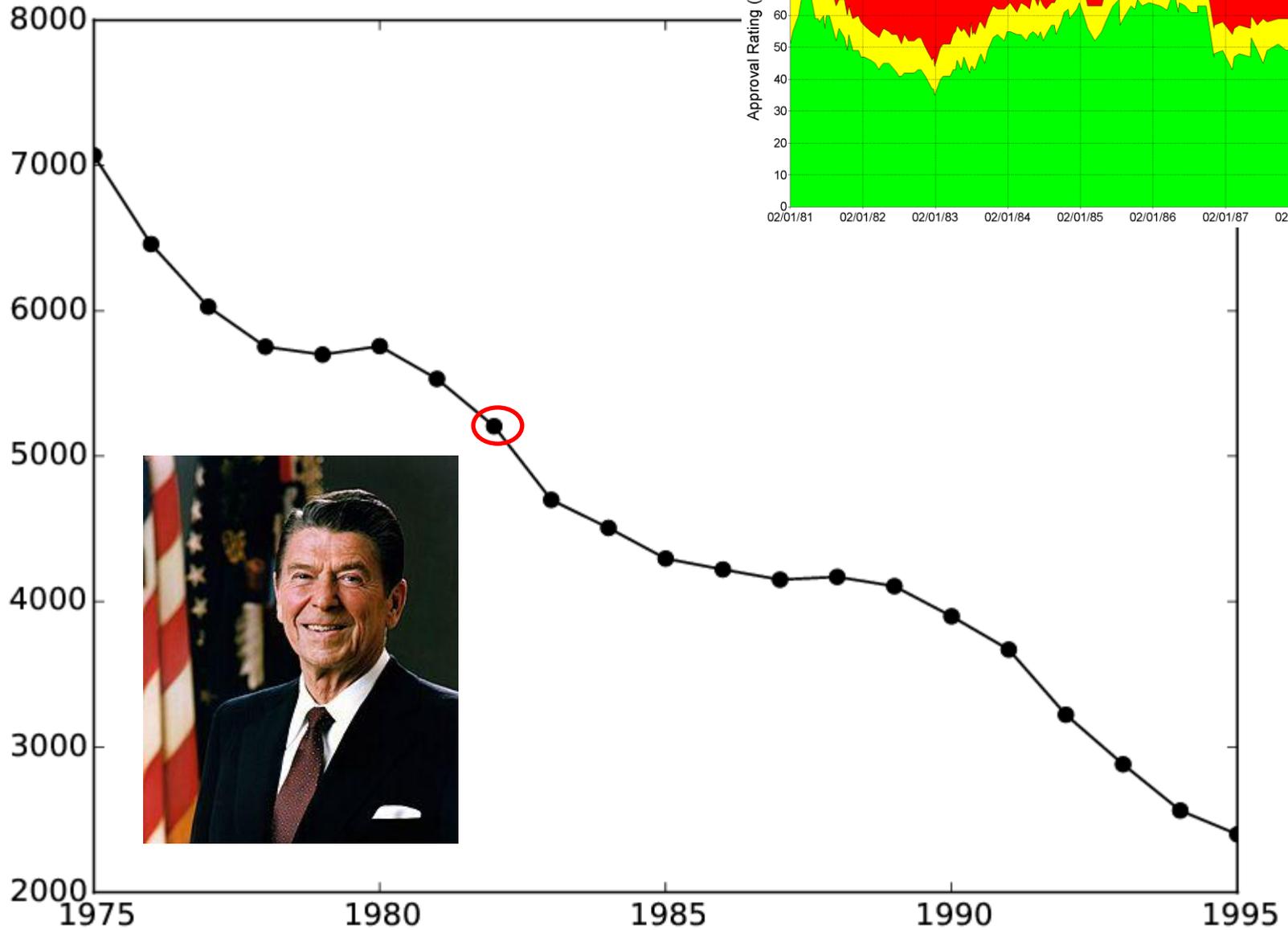
Jimmy Carter, 1977-81

Number of namesakes



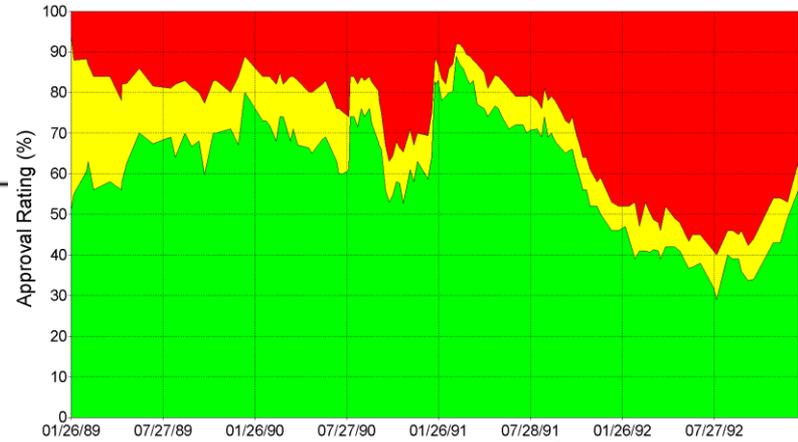
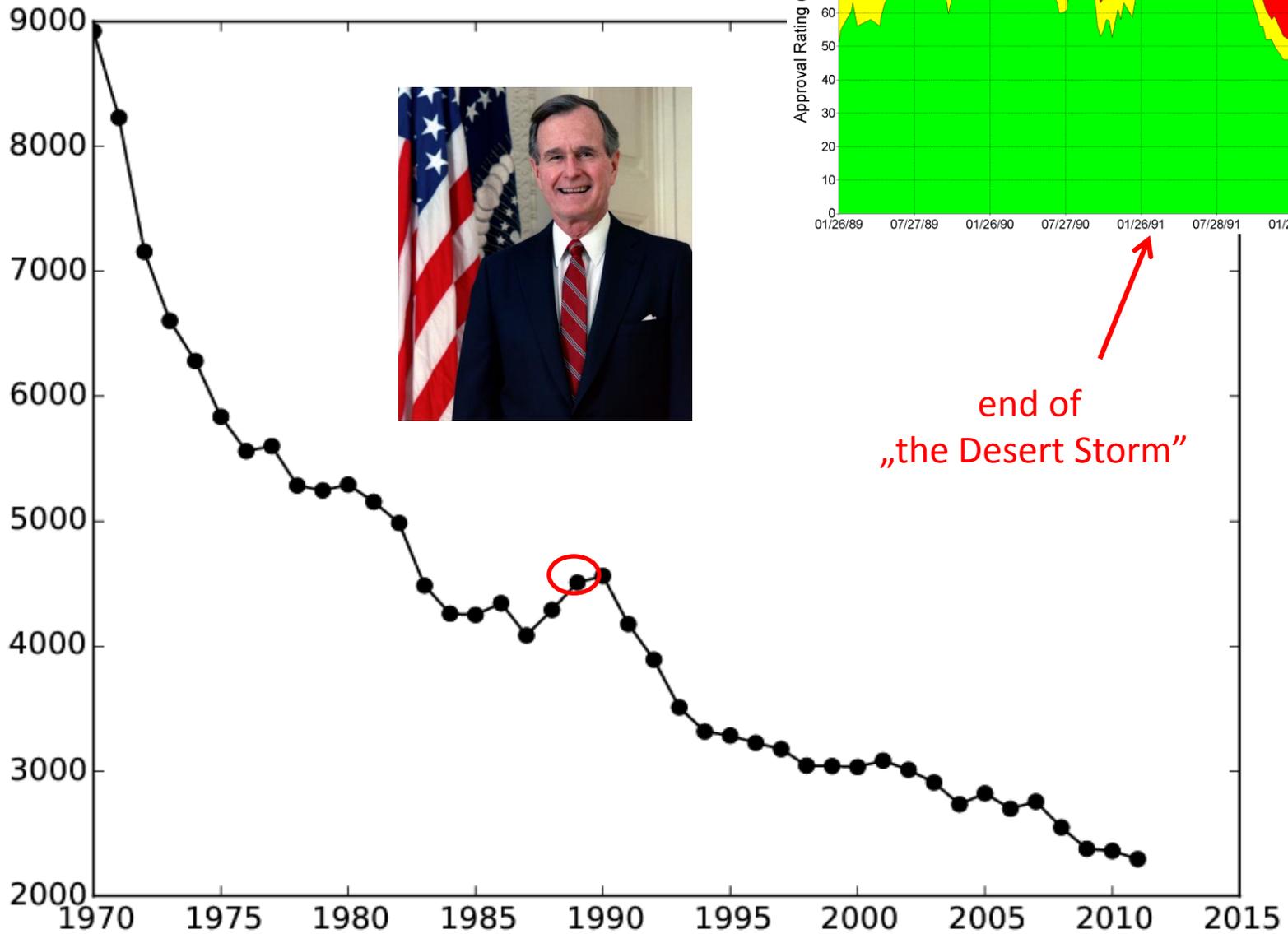
Ronald Reagan, 1981-89

Number of namesakes



George H. W. Bush, 1989-93

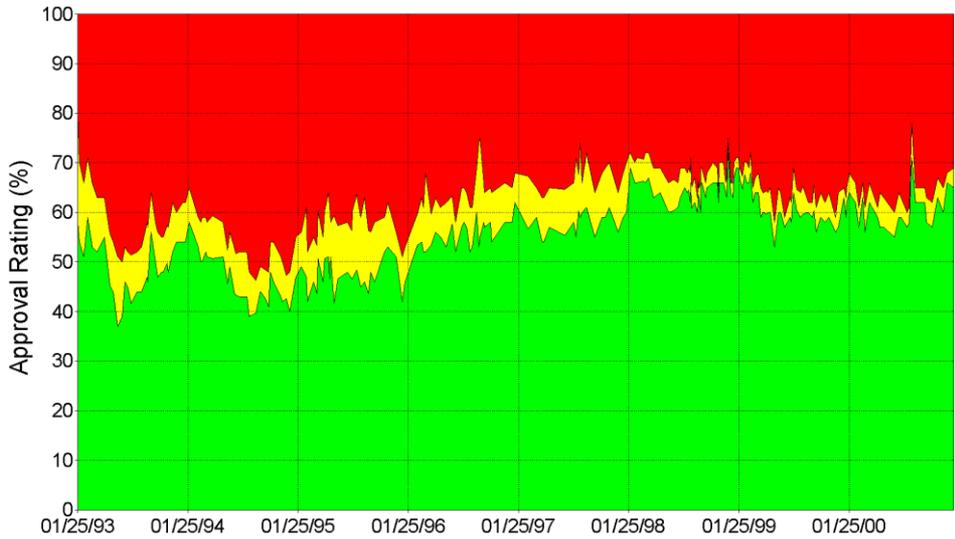
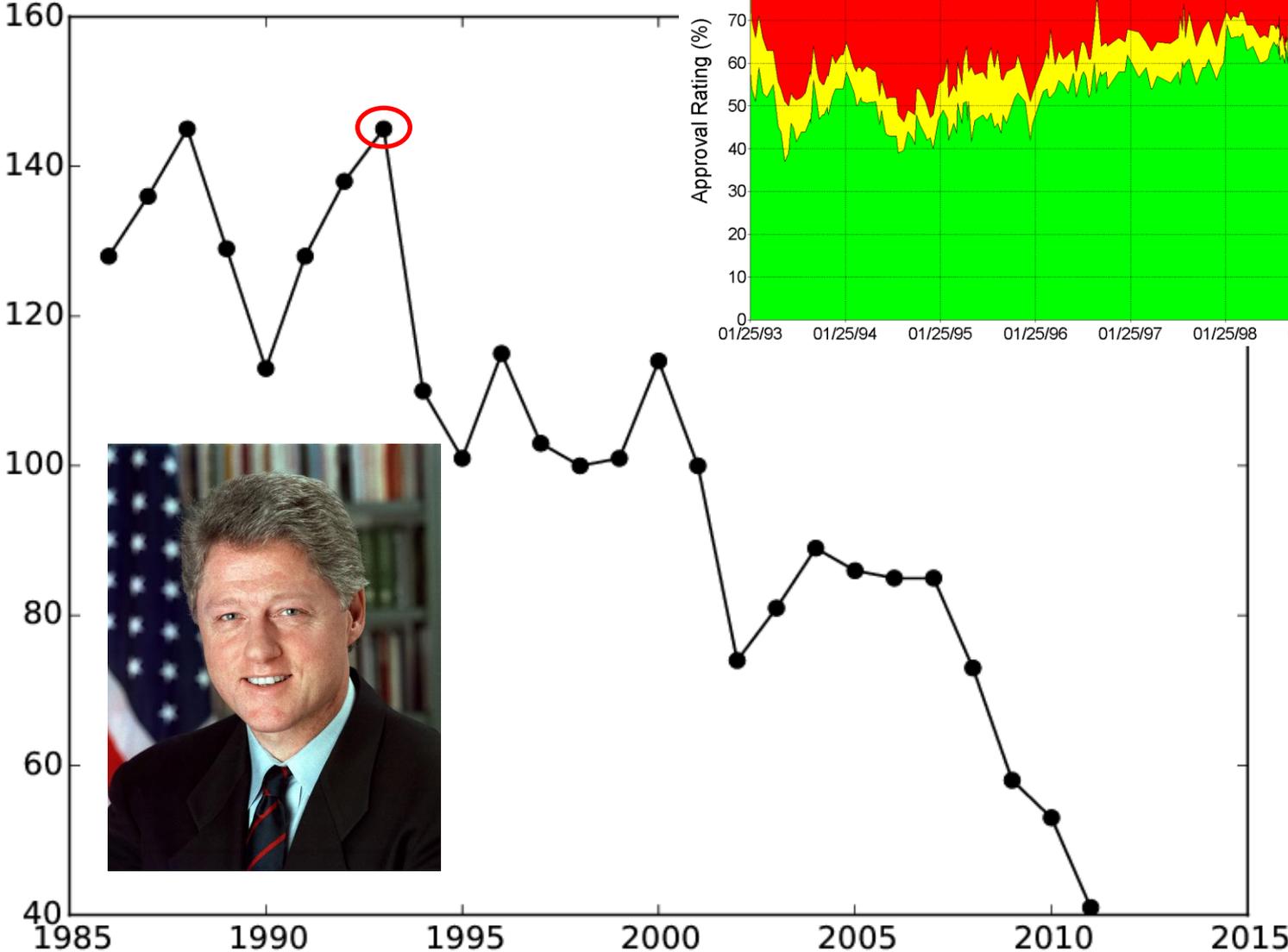
Number of namesakes



end of „the Desert Storm“

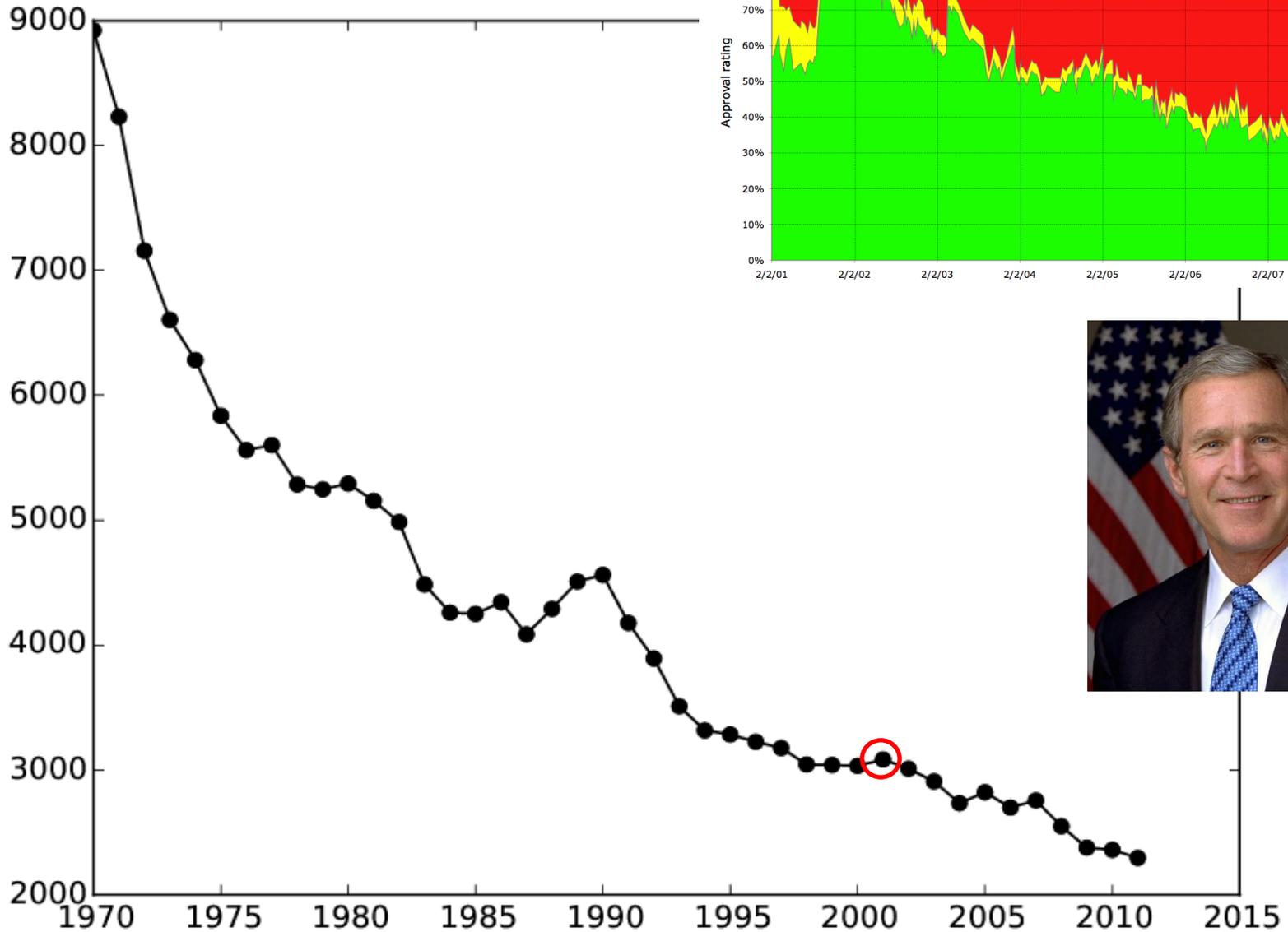
Bill Clinton, 1993-2001

Number of namesakes



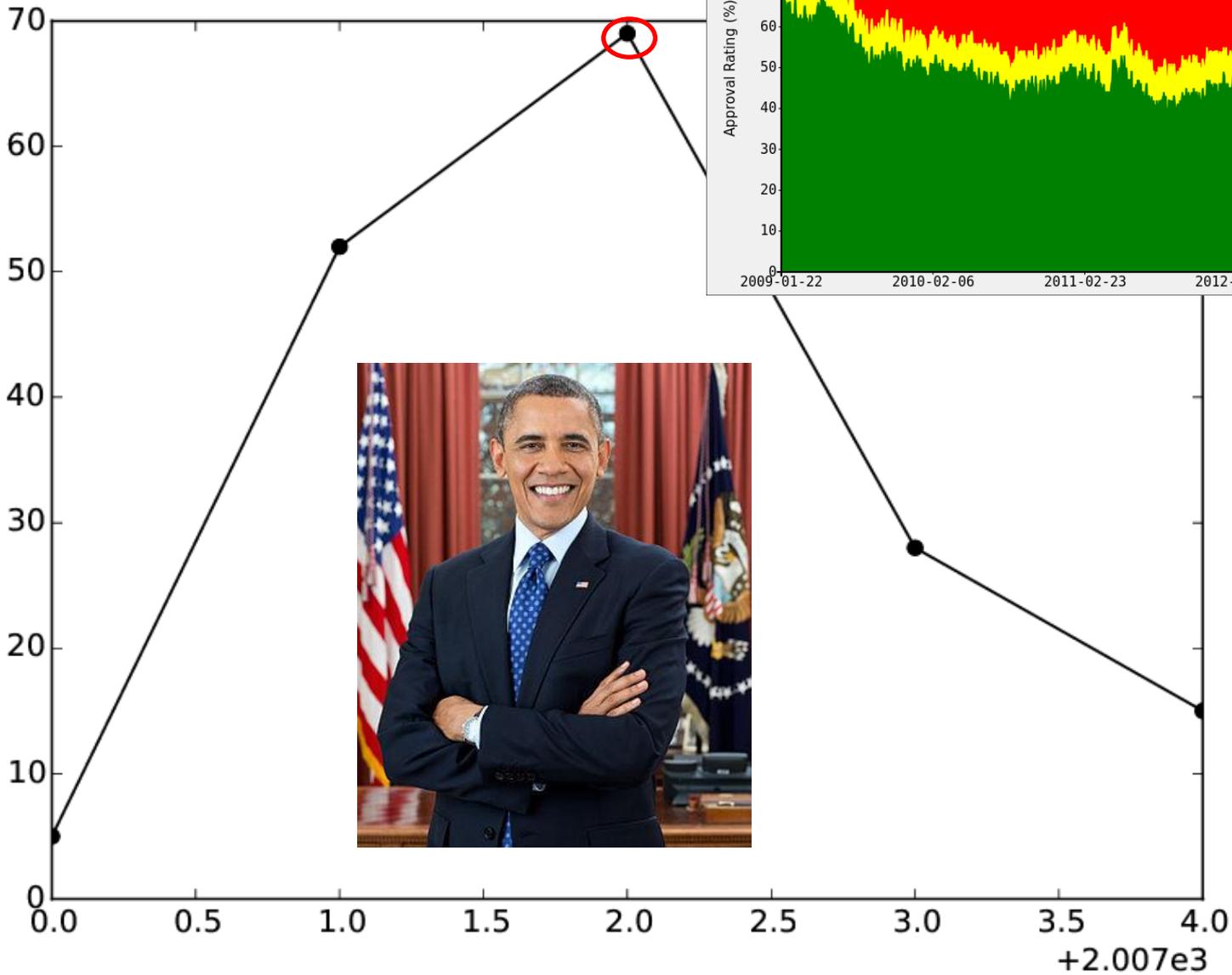
George W. Bush, 2001-09

Number of namesakes

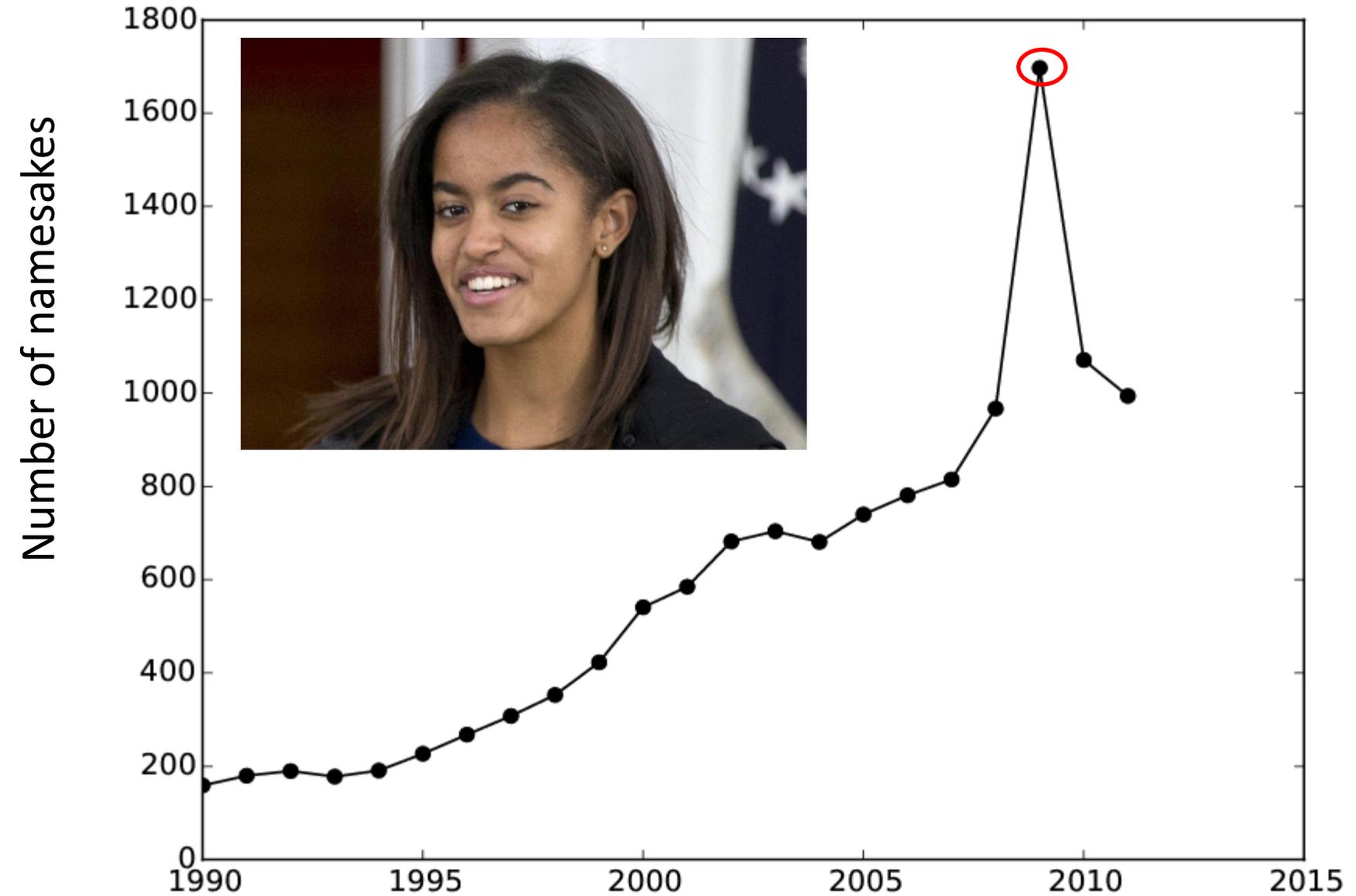


Barack Obama, 2009-

Number of namesakes



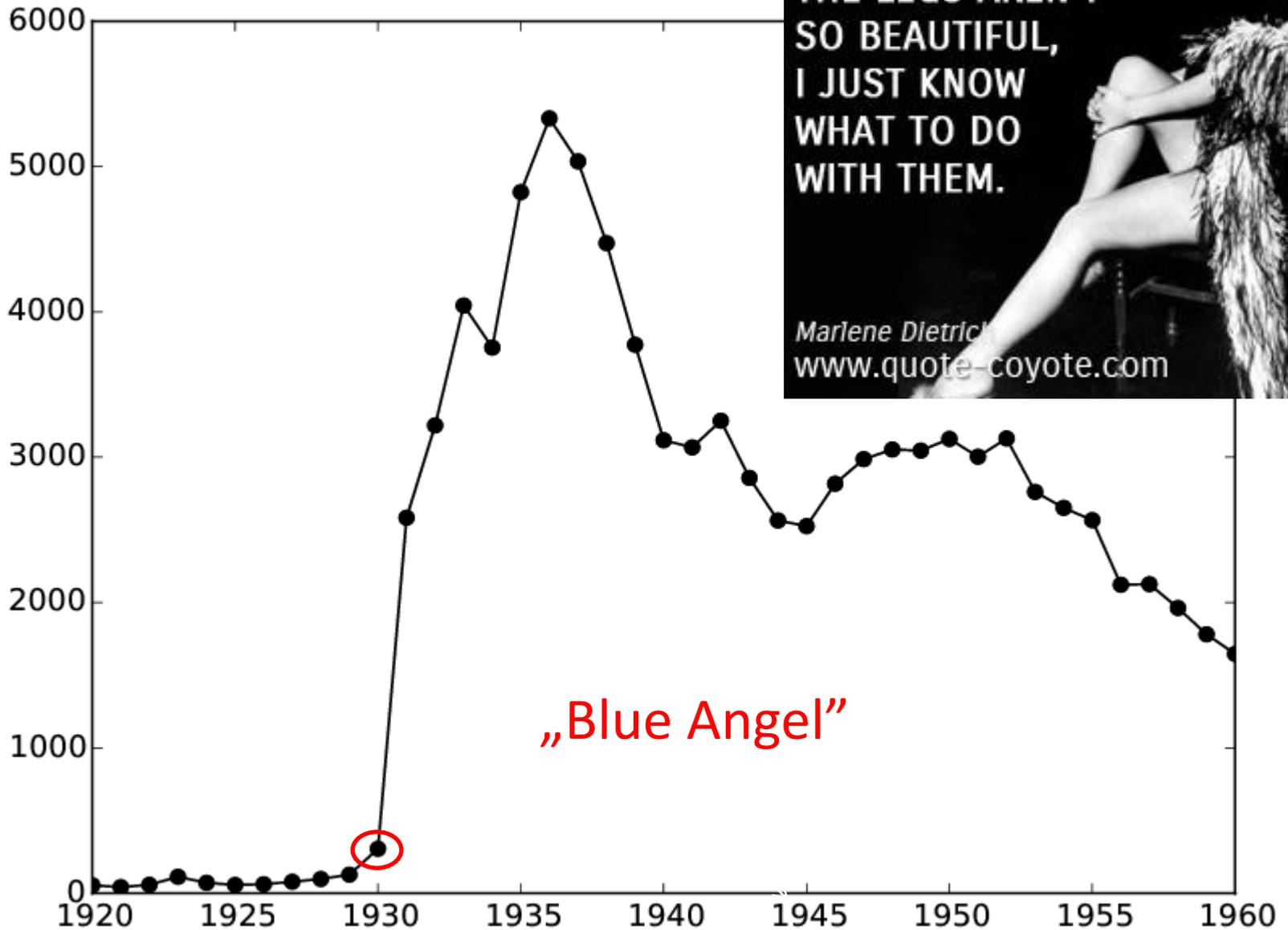
Malia Obama



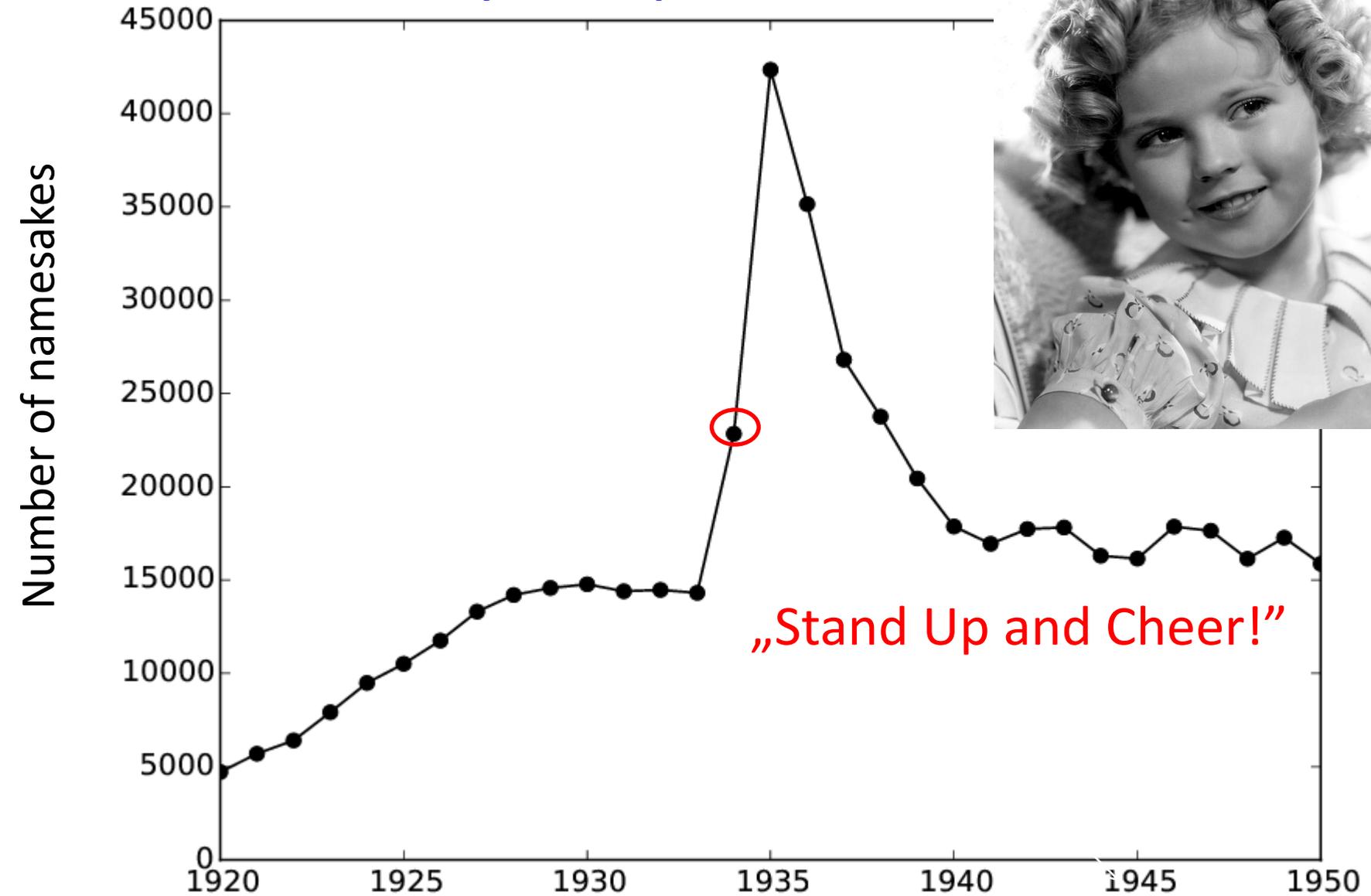
Marlene Dietrich



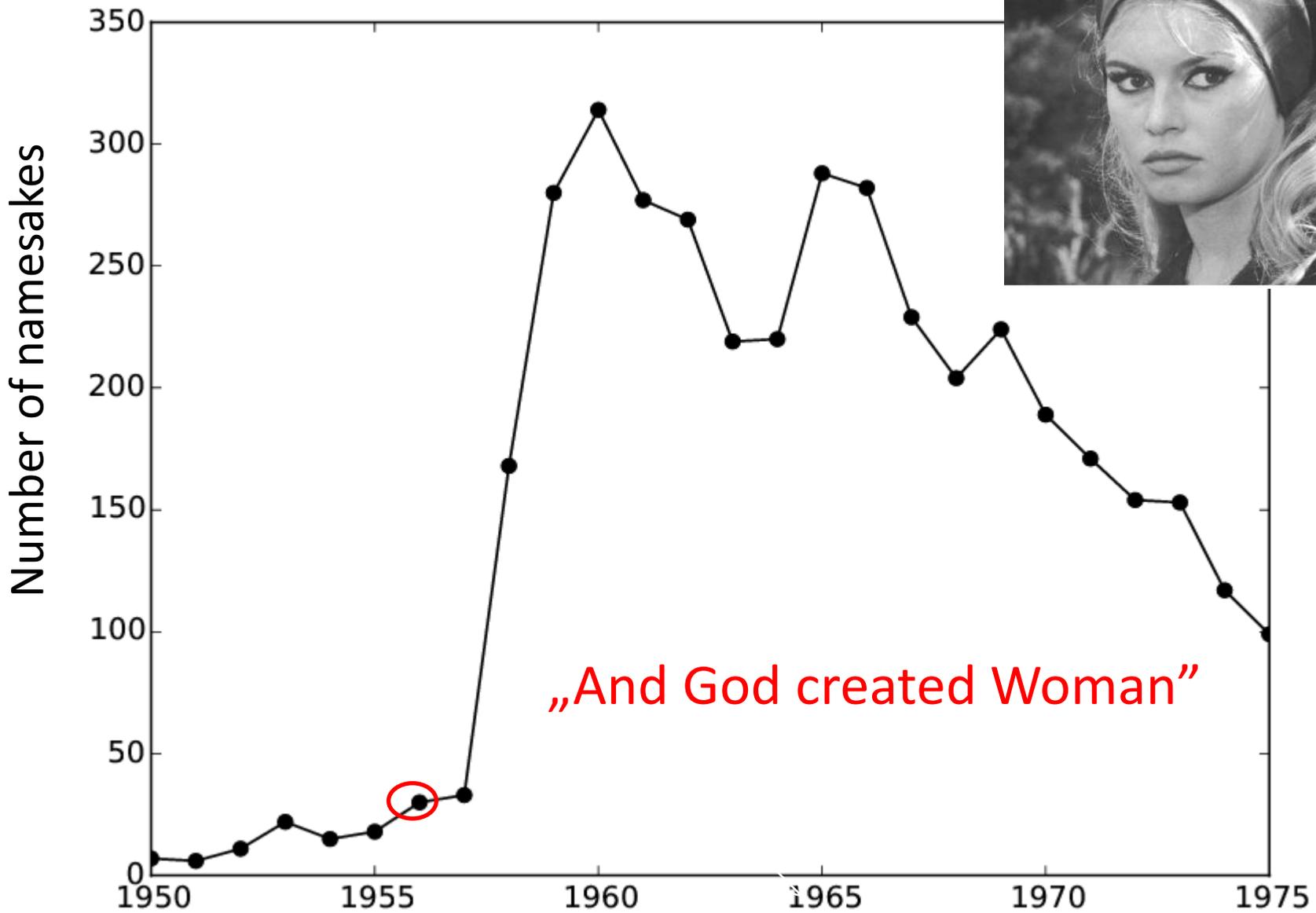
Number of namesakes



Shirley Temple



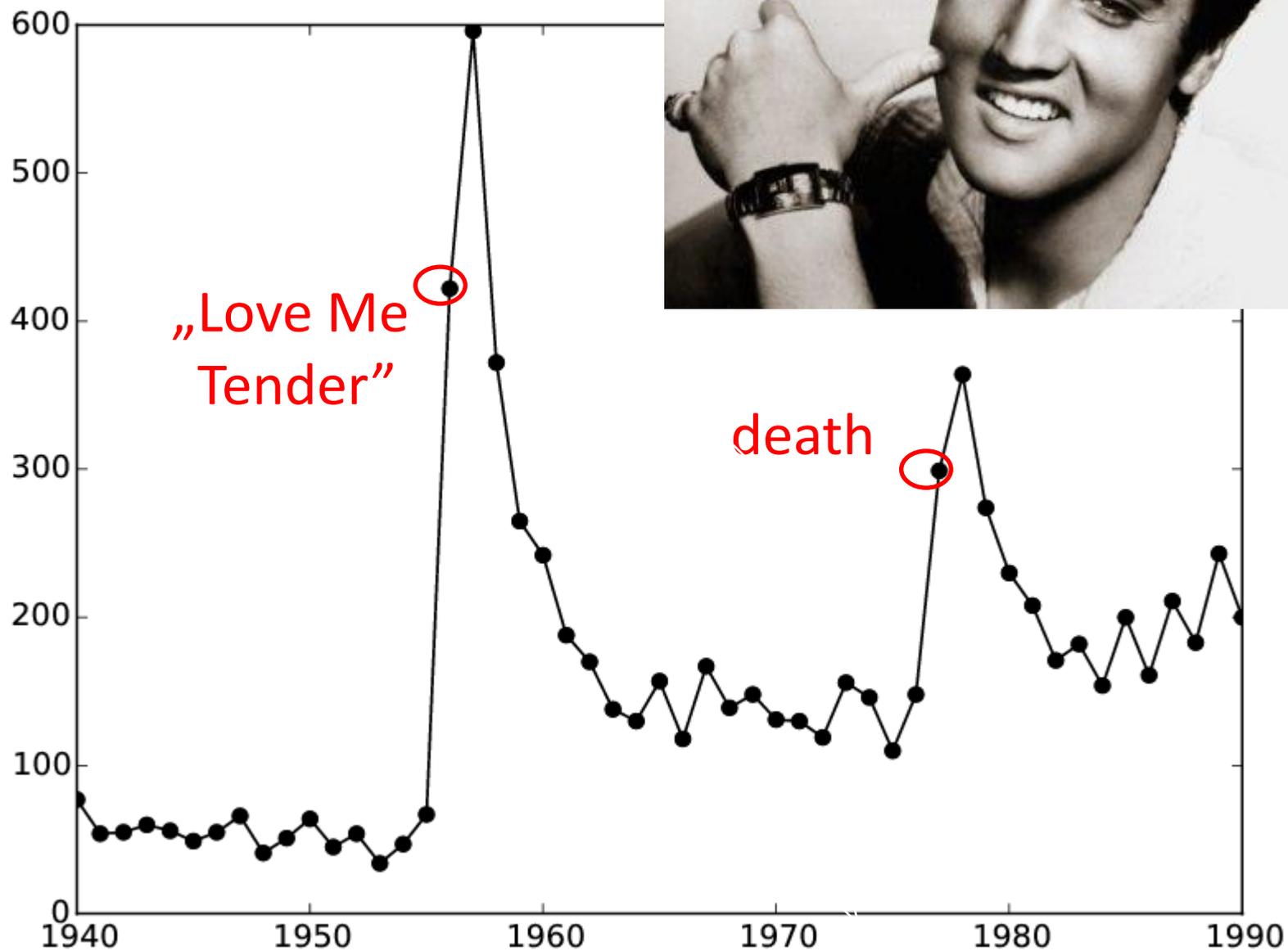
Brigitte Bardot



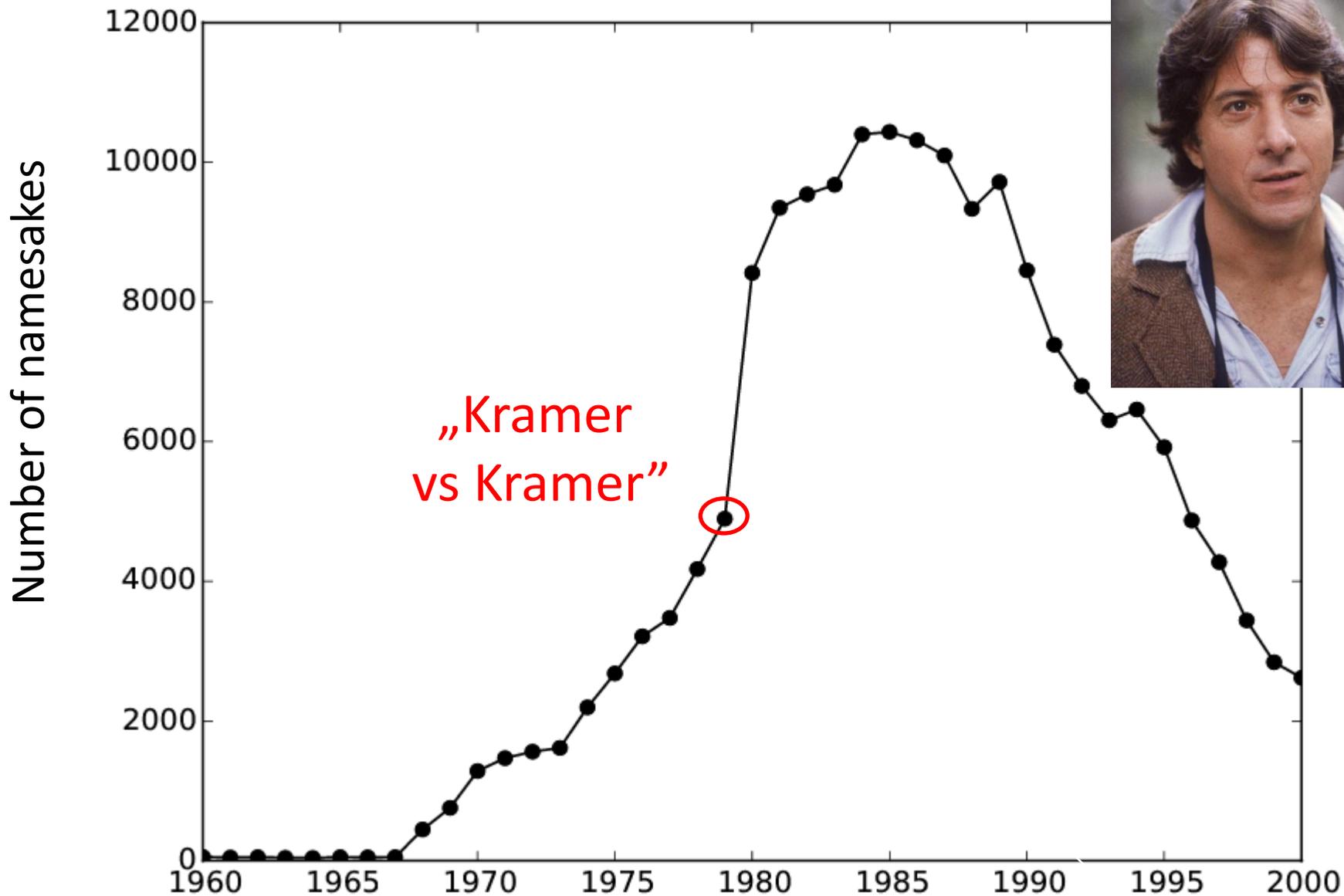
Elvis Presley



Number of namesakes



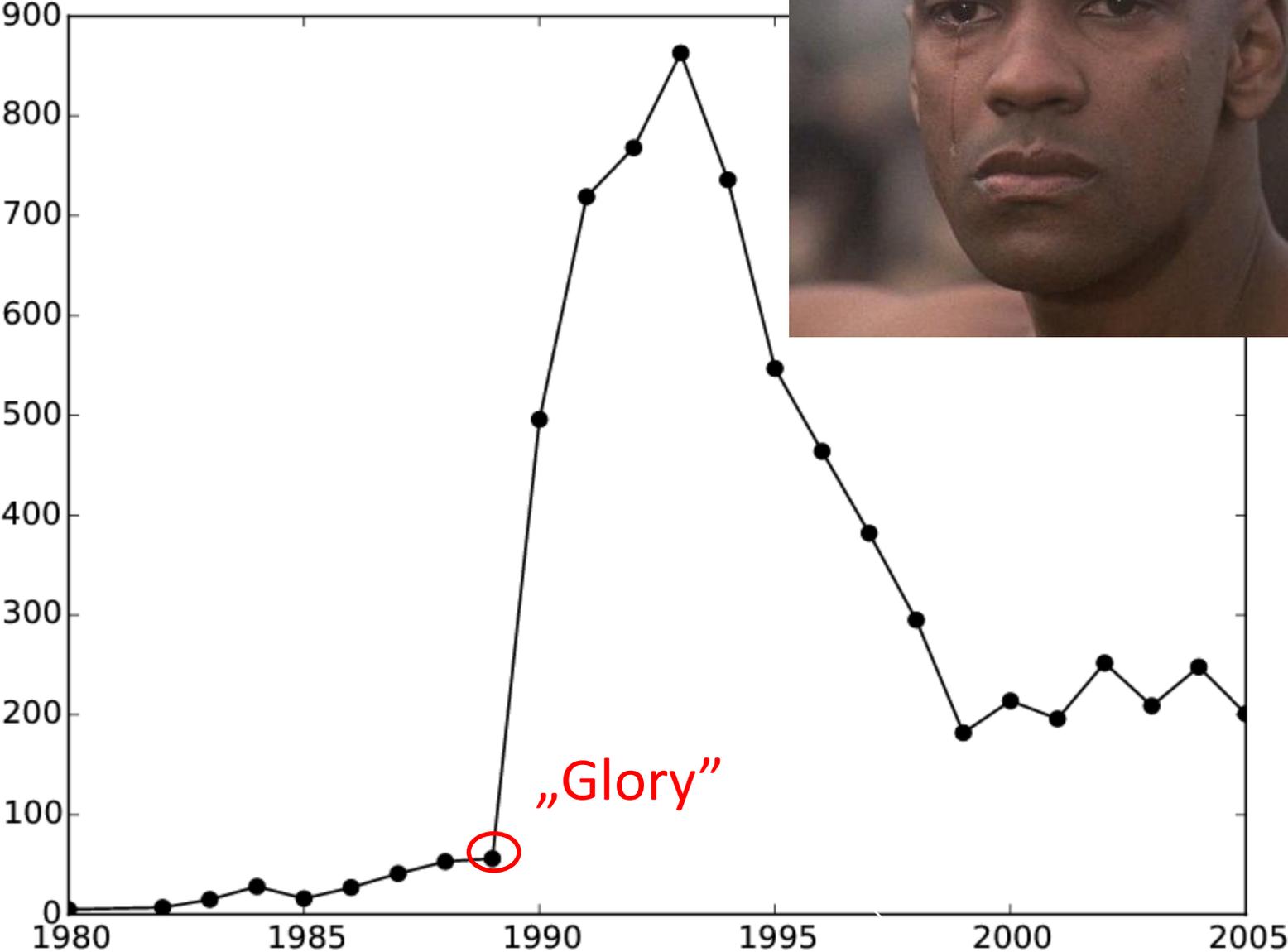
Dustin Hoffman



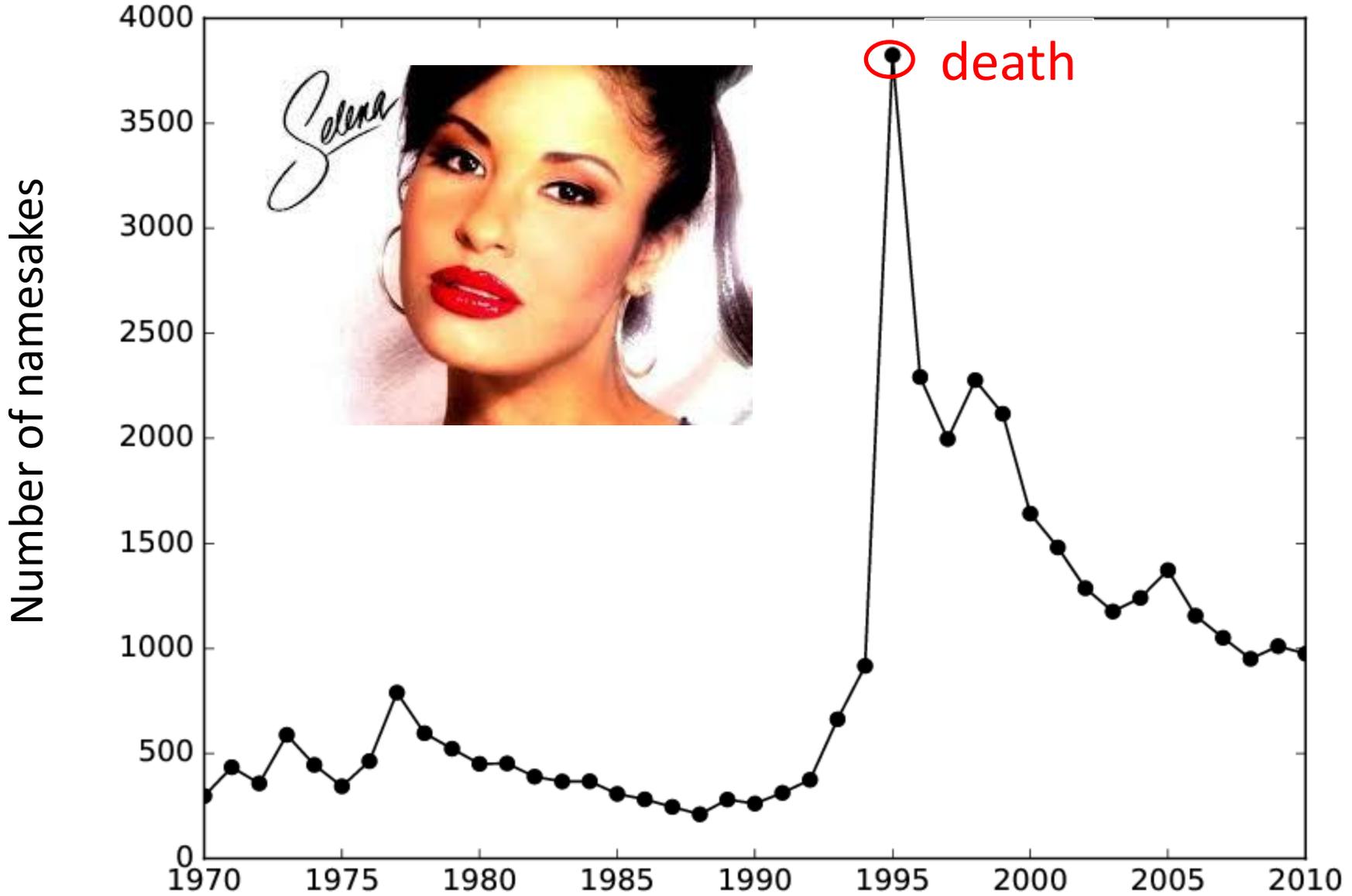
Denzel Washington



Number of namesakes



Selena Quintanilla Pérez



preliminary conclusions

- To name a boy with a president's name was more popular before Nixon, but in 60's this fashion faded out
- Current popularity of a president was not correlated with the number of his namesakes
- The fashion of naming a child after a celebrity persists

problems

- For presidents: popular names overshadow the effect
- For celebrities: whom to select? where to start?
- For both: a quantitative measure is desired.

How to measure this?

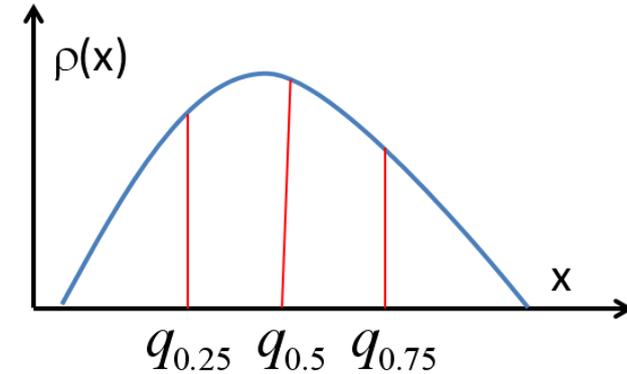
y_0 - the year when the office was assumed

$$y = \max\{y_{-1}, y_0, y_{+1}\}$$

For the series

$$\{y_{-5}, y_{-4}, y_{-3}, y_{-2}, y_{-1}, y_0, y_{+1}\}$$

the quartiles q_r are calculated



The index c is defined as

$$c = \frac{y - q_{0.5}}{q_{0.75} - q_{0.25}}$$

Quartiles here

For $r \in (0,1)$, $m =$ sample size, $i = [mr+0.5]$

If $mr \leq 0,5$ then $q_r = z_1$

If $0.5 \leq mr \leq m - 0.5$ then

$$q_r = (0.5 + i - mr)z_i + (0.5 - i + mr)z_{i+1}$$

If $mr \geq m - 0,5$ then $q_r = z_m$

The condition of statistical significance: $q_{0.5}$ not too small.

[P. Kulczycki, Wykrywanie uszkodzeń w systemach zautomatyzowanych metodami statystycznymi (in Polish), Alfa, Warszawa 1998]

An example: Lyndon B. Johnson

The data $\{y_i\}$:

1958; 162

1959; 192

1960; 246

1961; 207

1962; 148

1963; 177

1964; 512

The ordered data $\{z_i\}$:

148

162

177

192

207

246

512

$$y = \max\{148, 177, 512\} = 512$$

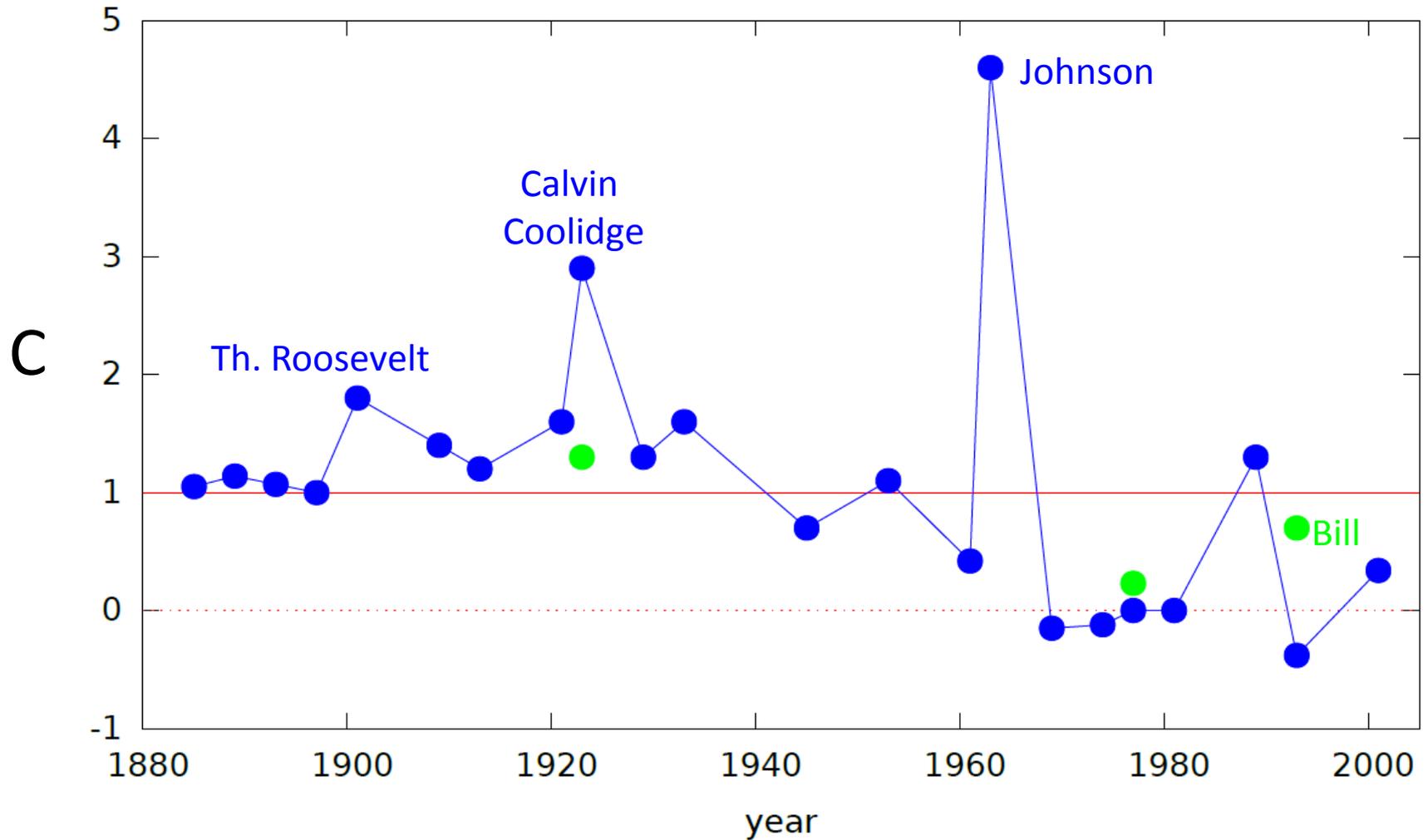
$$q_{0.5} = z_4 = 192$$

$$q_{0.25} = (3z_2 + z_3) / 4 = 166$$

$$q_{0.75} = (z_5 + 3z_6) / 4 = 236$$

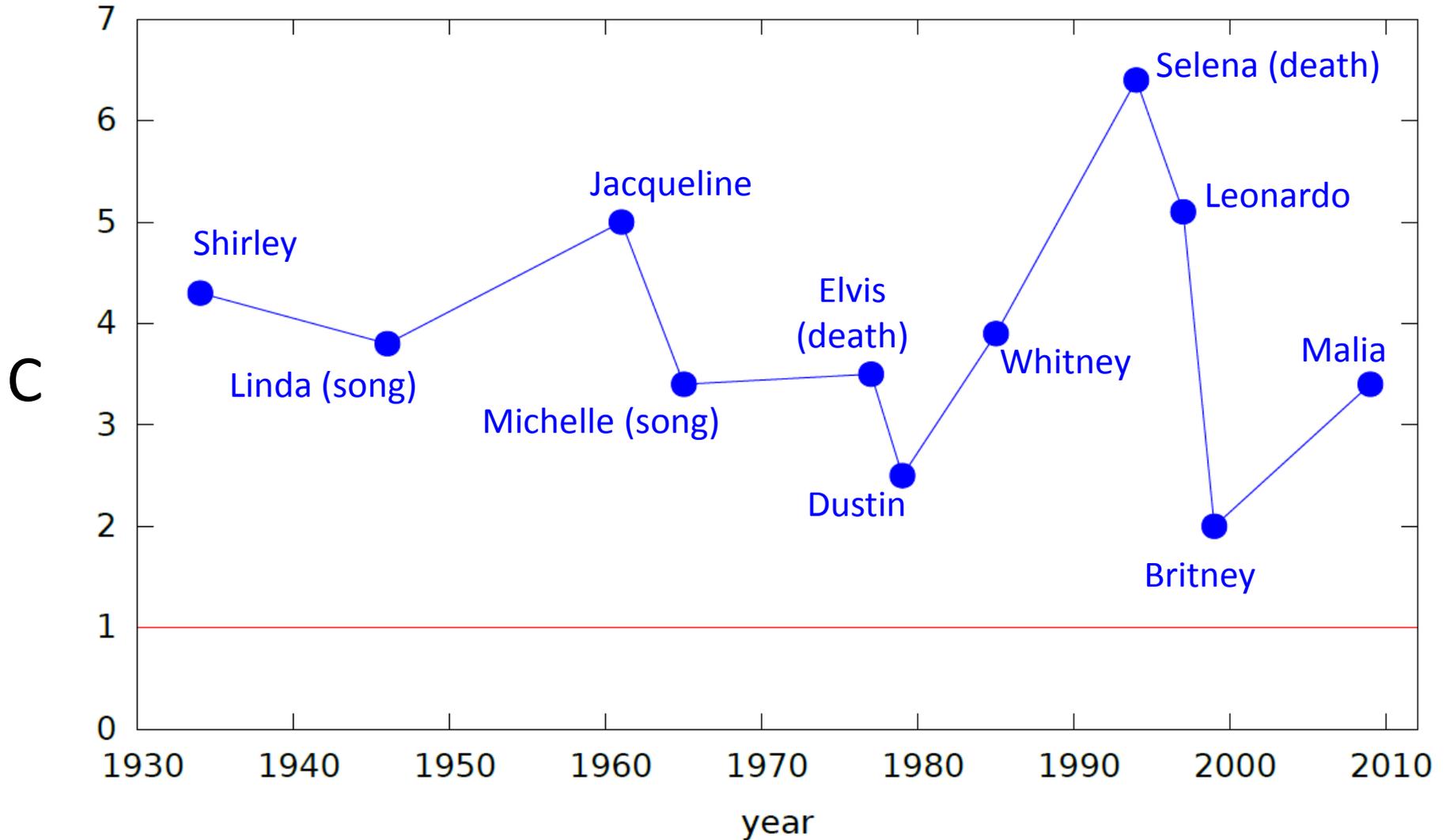
$$c = \frac{512 - 192}{236 - 166} = 4.6$$

The results - presidents

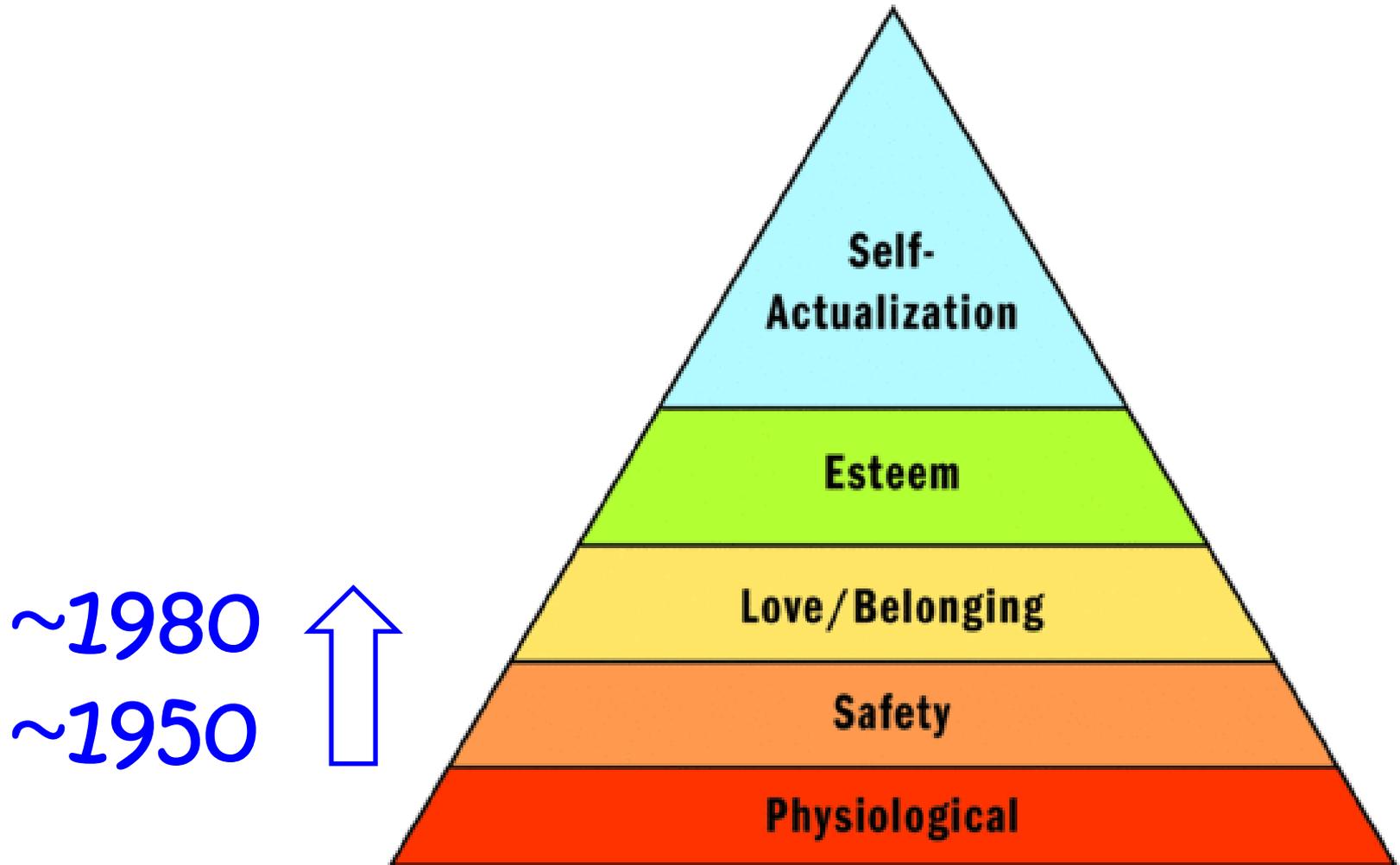


● the names after www.whitehouse.gov/1600/Presidents

The results – selected celebrities



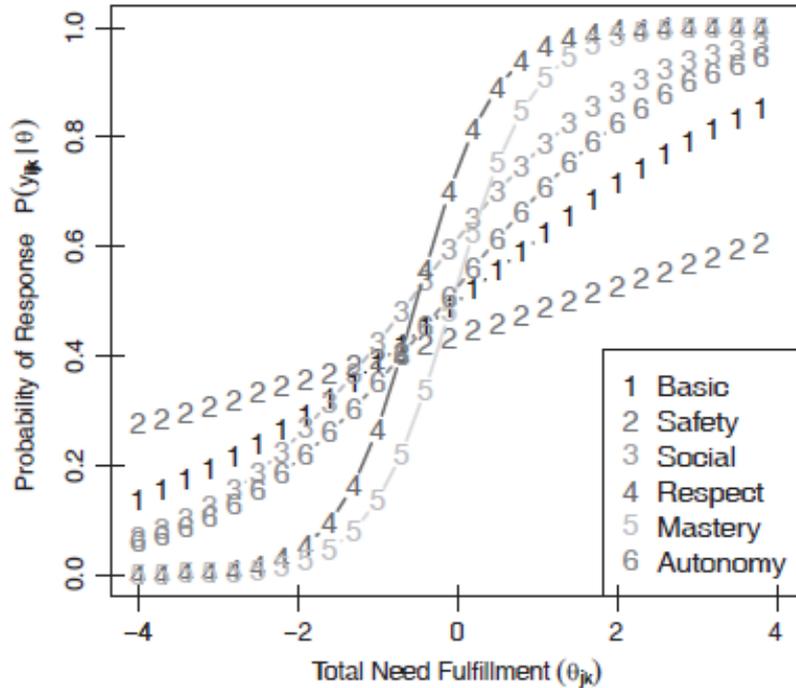
A proposition:



[A. H. Maslow, *A theory of human motivation*, *Psychol. Review* 50 (1943) 370]

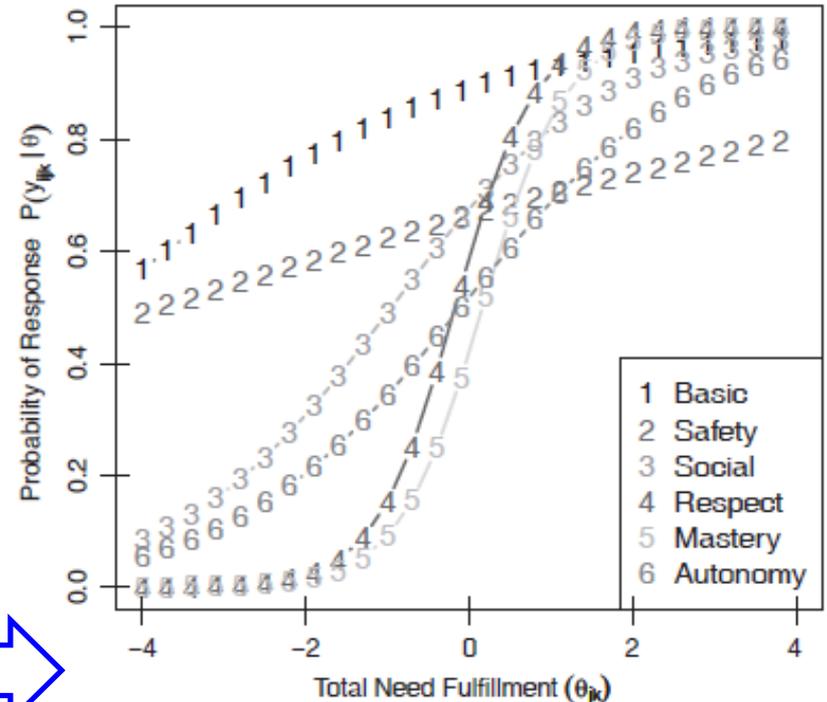
Suppose that it goes better:

Countries with lower fulfilment of needs

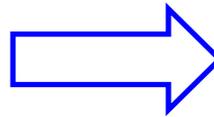


individual

Countries with higher fulfilment of needs

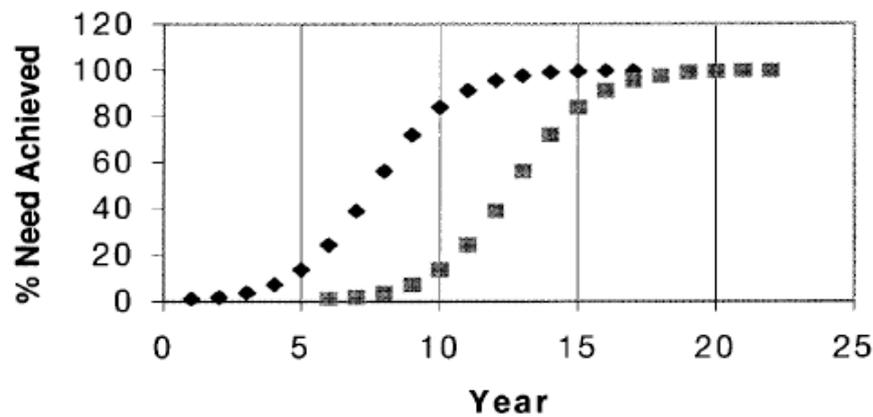


individual



[L. Tay, E. Diener, *Needs and Subjective Well-Being around the world*, *J. of Personality and Social Psychology* 101 (2011) 354.]

Is it
like
that?



No.

Figure 1. Hypothetical S-shaped curves predicting time path of fulfillment for two needs.

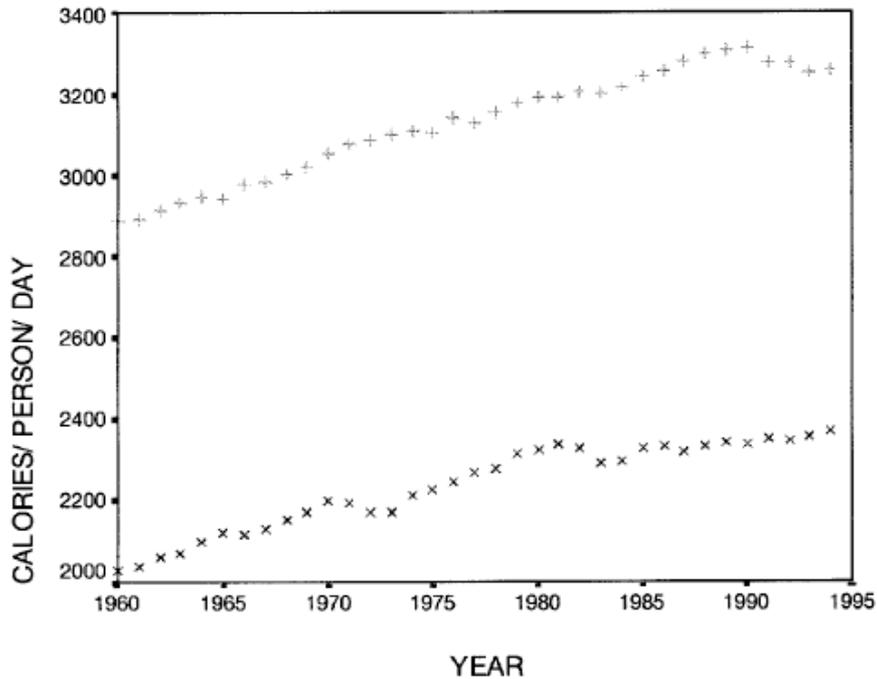


Figure 2. Calories per person per day since 1960, by top 50% (plotted as "+") and bottom 50% (plotted as "x") of nations.

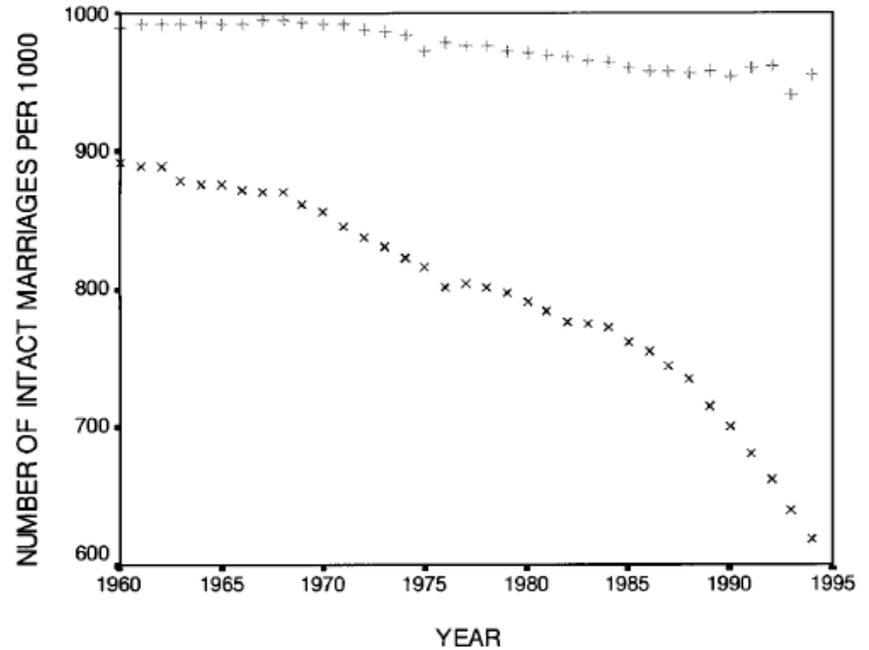


Figure 7. Number of intact marriages per 1000 population (1-Divorce Rate) since 1960, by top 50% (plotted as "+") and bottom 50% (plotted as "x") of nations.

[M. R. Hagerty, *Testing Maslow's hierarchy of needs, Social Indicators Research* 46 (1999) 249]

Summary

A new index is proposed to measure an influence of an appearance of a famous person on the number of her/his newborn namesakes.

The data indicate that the fashion of presidential names in USA faded out in 60's. This conclusion does not apply to **at least some of** names of American celebrities.



Thank you

