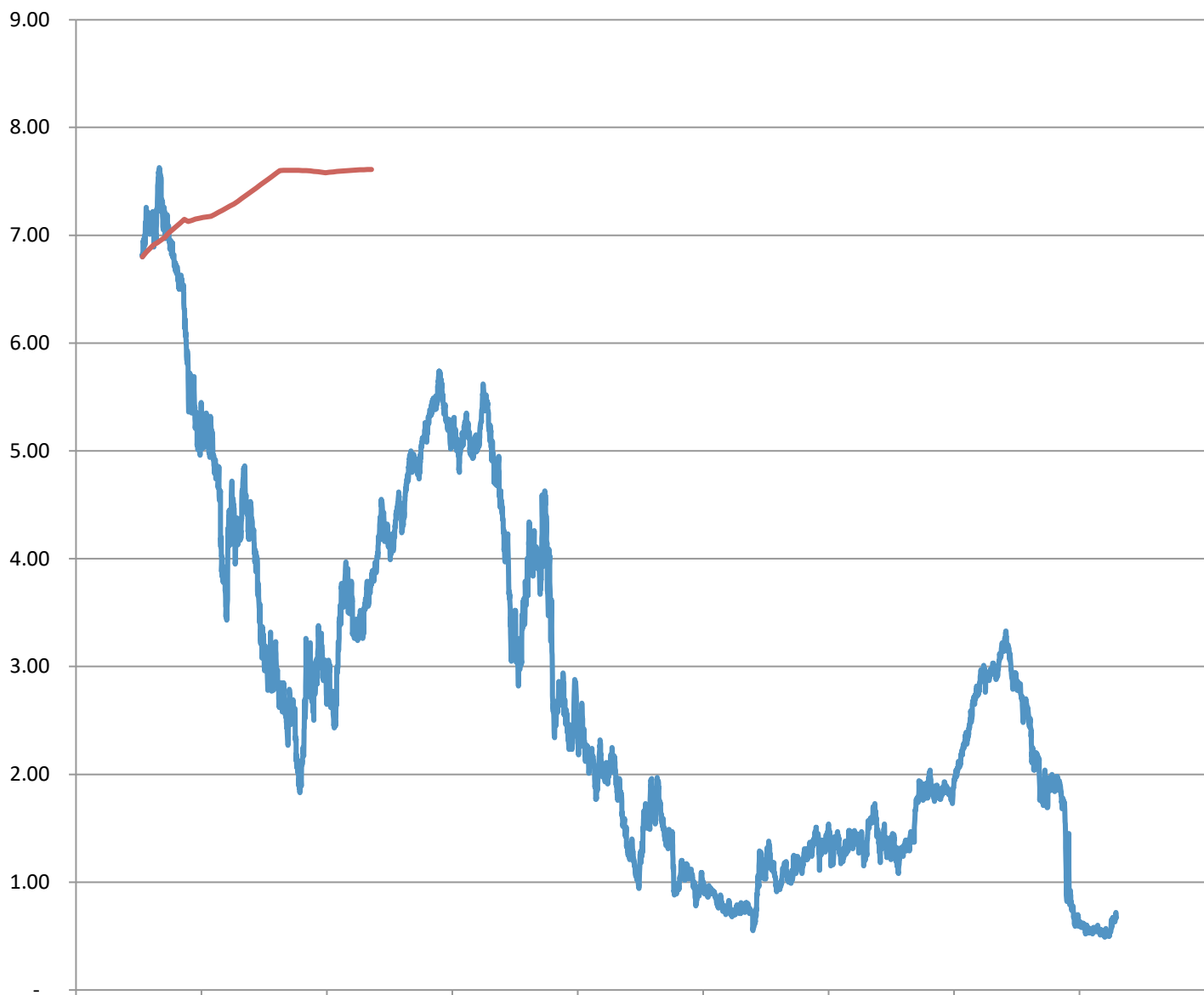


Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance

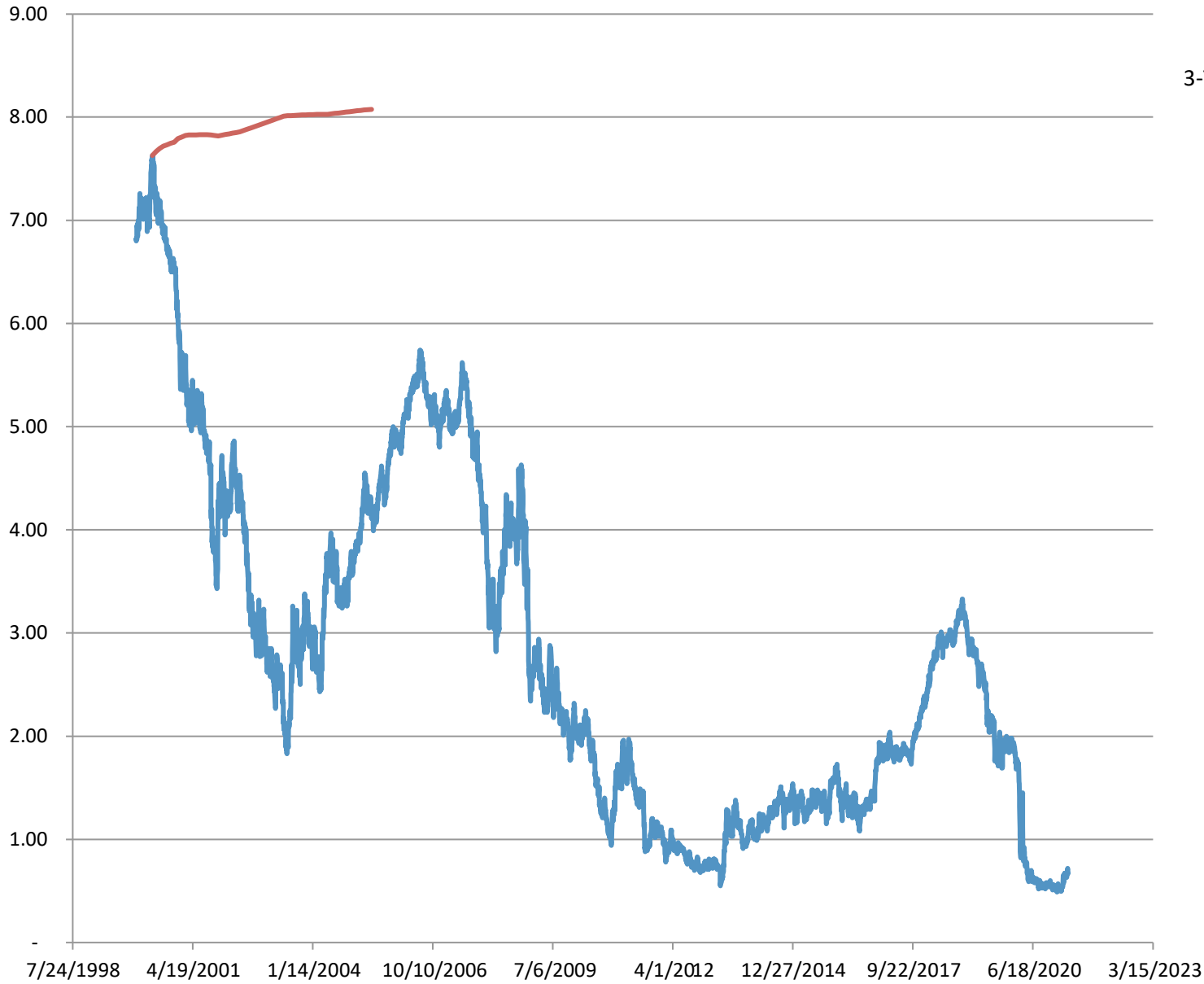


— 3 Year Historical
— Forward of 36 Mo
1/3/2000

7/24/1998 4/19/2001 1/14/2004 10/10/2006 7/6/2009 4/1/2012 12/27/2014 9/22/2017 6/18/2020 3/15/2023

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
5/17/2000

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance



Combined Historical and Forward Implied Yield

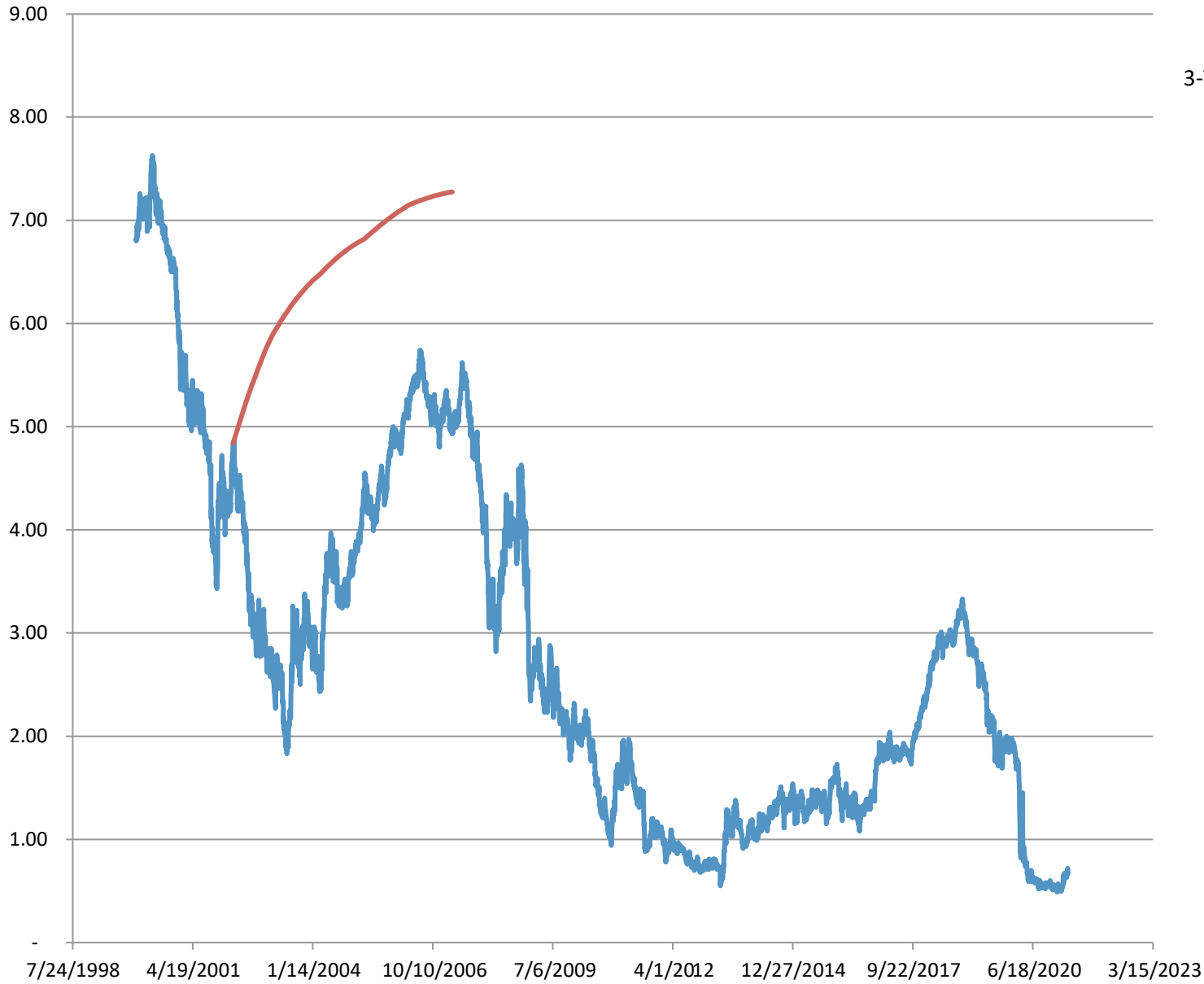
FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
11/7/2001

Combined Historical and Forward Implied Yield

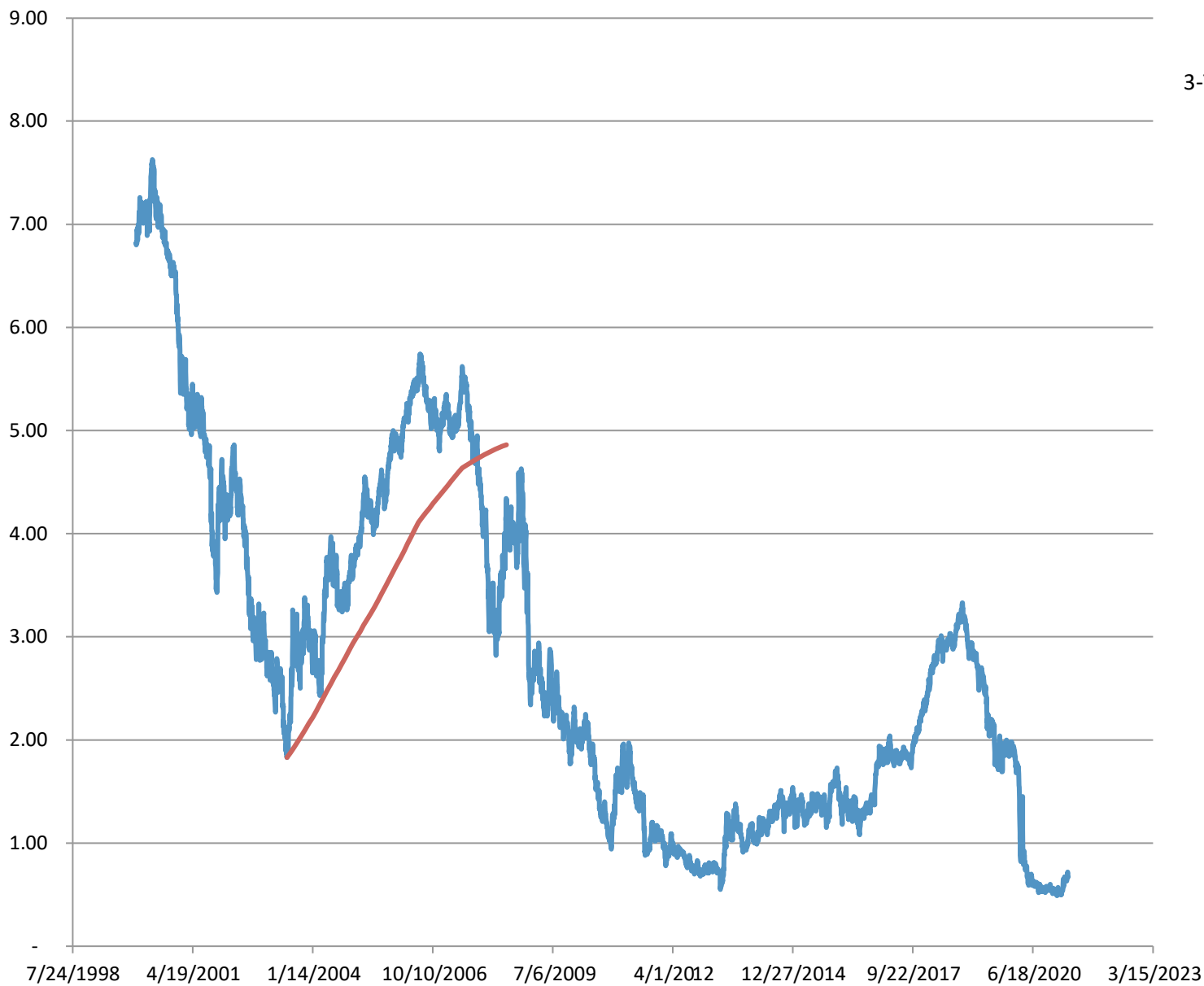
FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
3/21/2002

Combined Historical and Forward Implied Yield

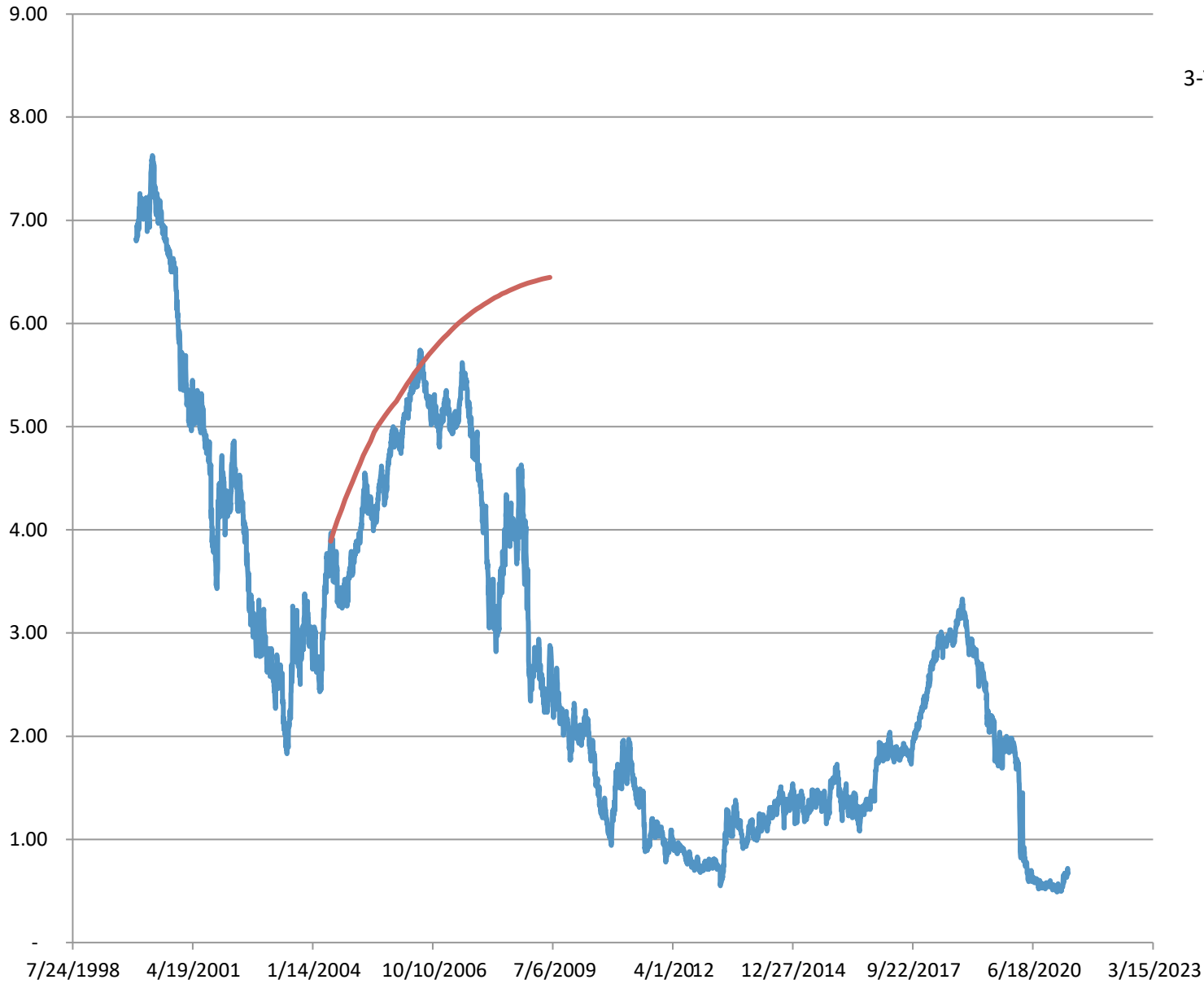
FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
6/13/2003

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
6/10/2004

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
6/28/2006

Combined Historical and Forward Implied Yield

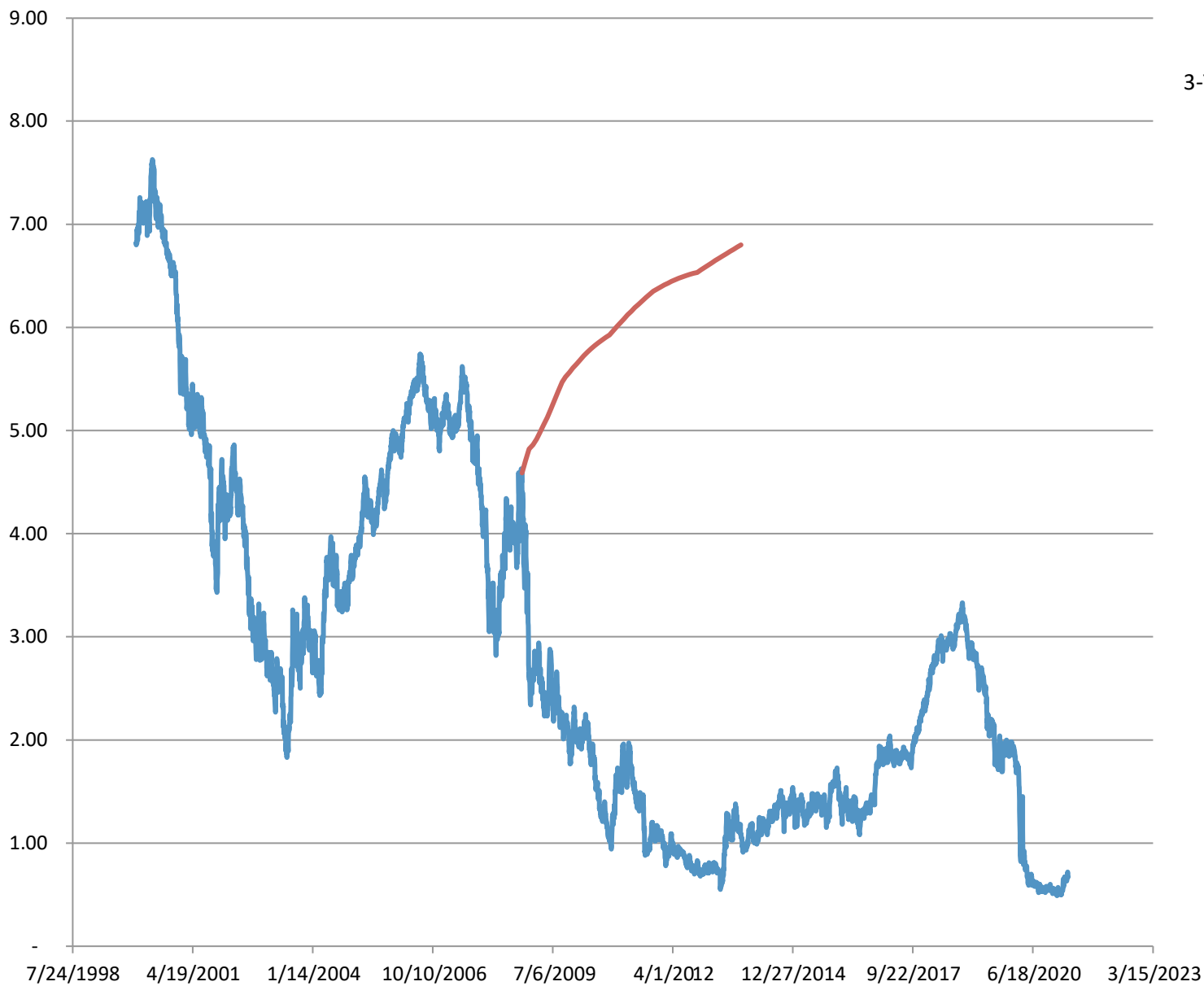
FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
3/19/2008

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
10/21/2008

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
11/4/2010

Combined Historical and Forward Implied Yield

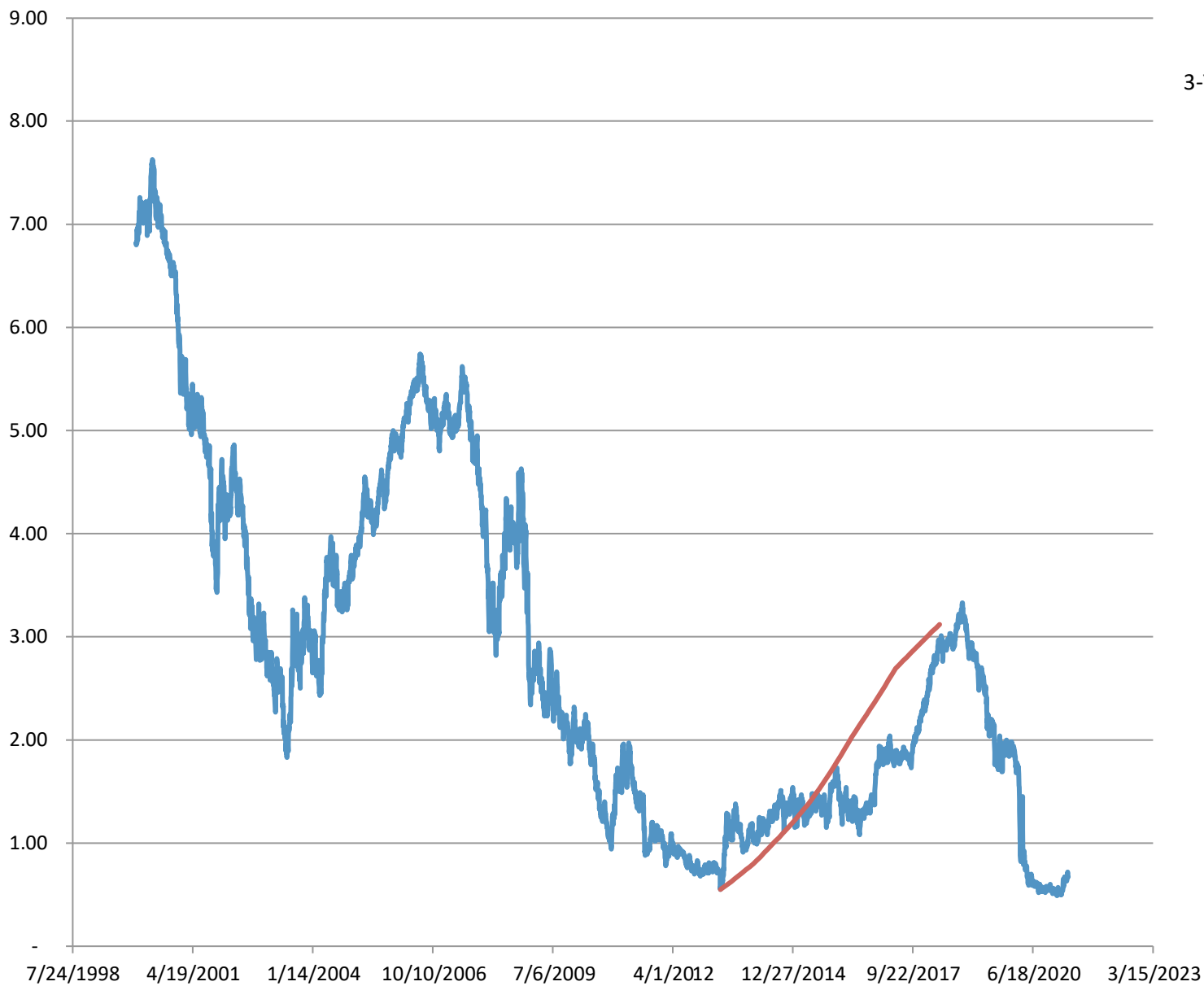
FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
2/9/2011

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
5/2/2013

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance

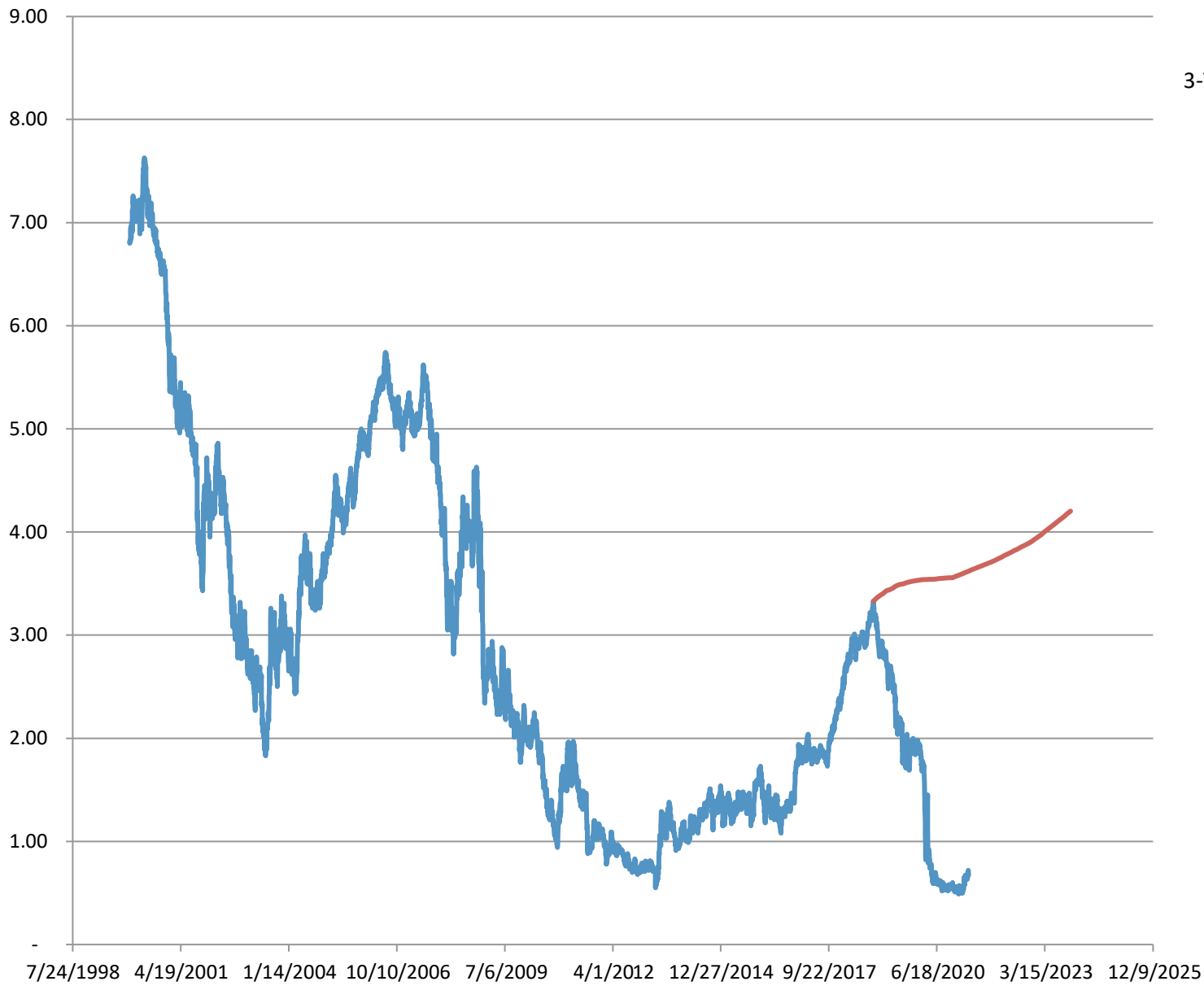
— 3 Year Historical
— Forward of 36 Mo
2/2/2015



Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance

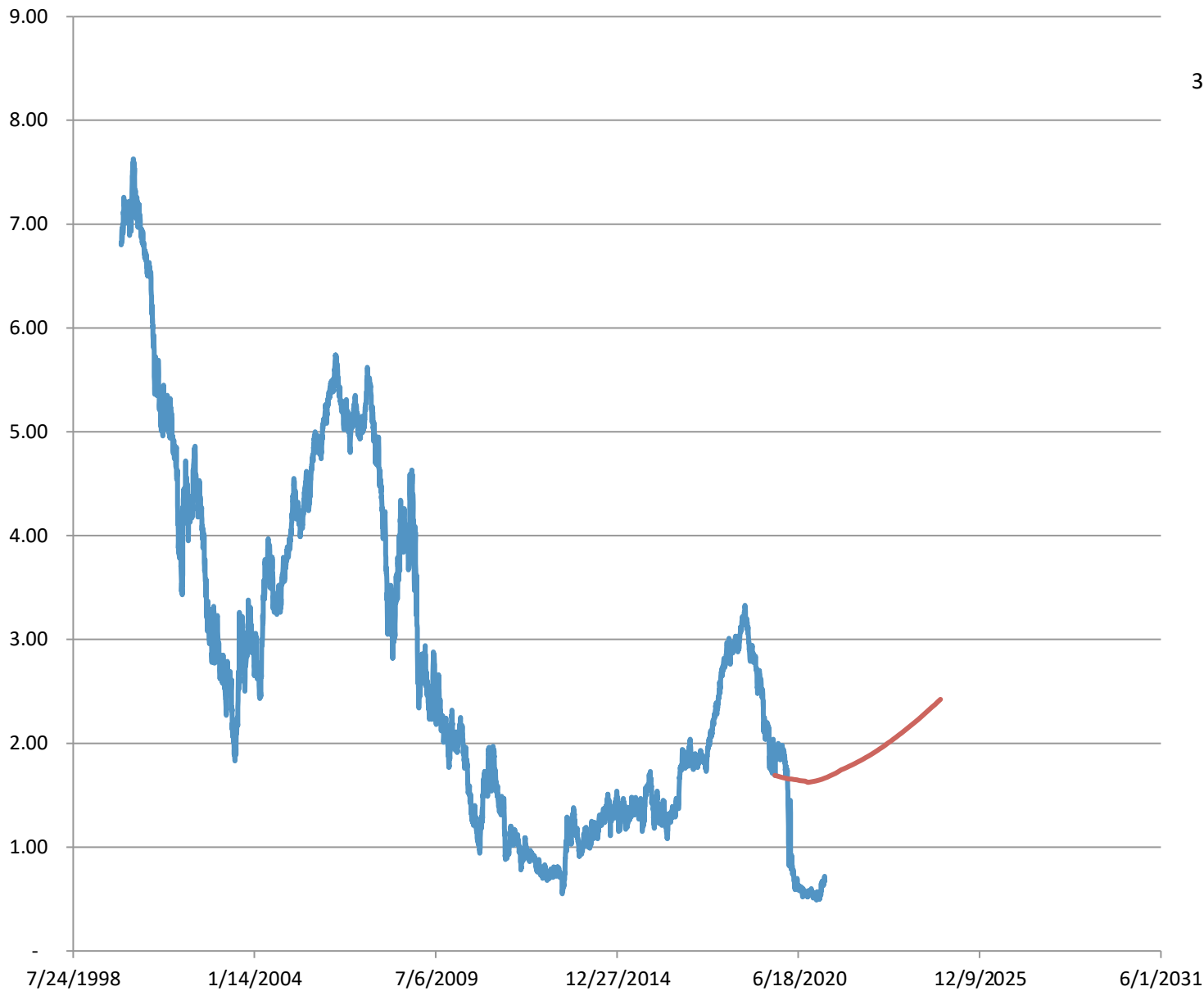
— 3 Year Historical
— Forward of 36 Mo
11/8/2018



Combined Historical and Forward Implied Yield

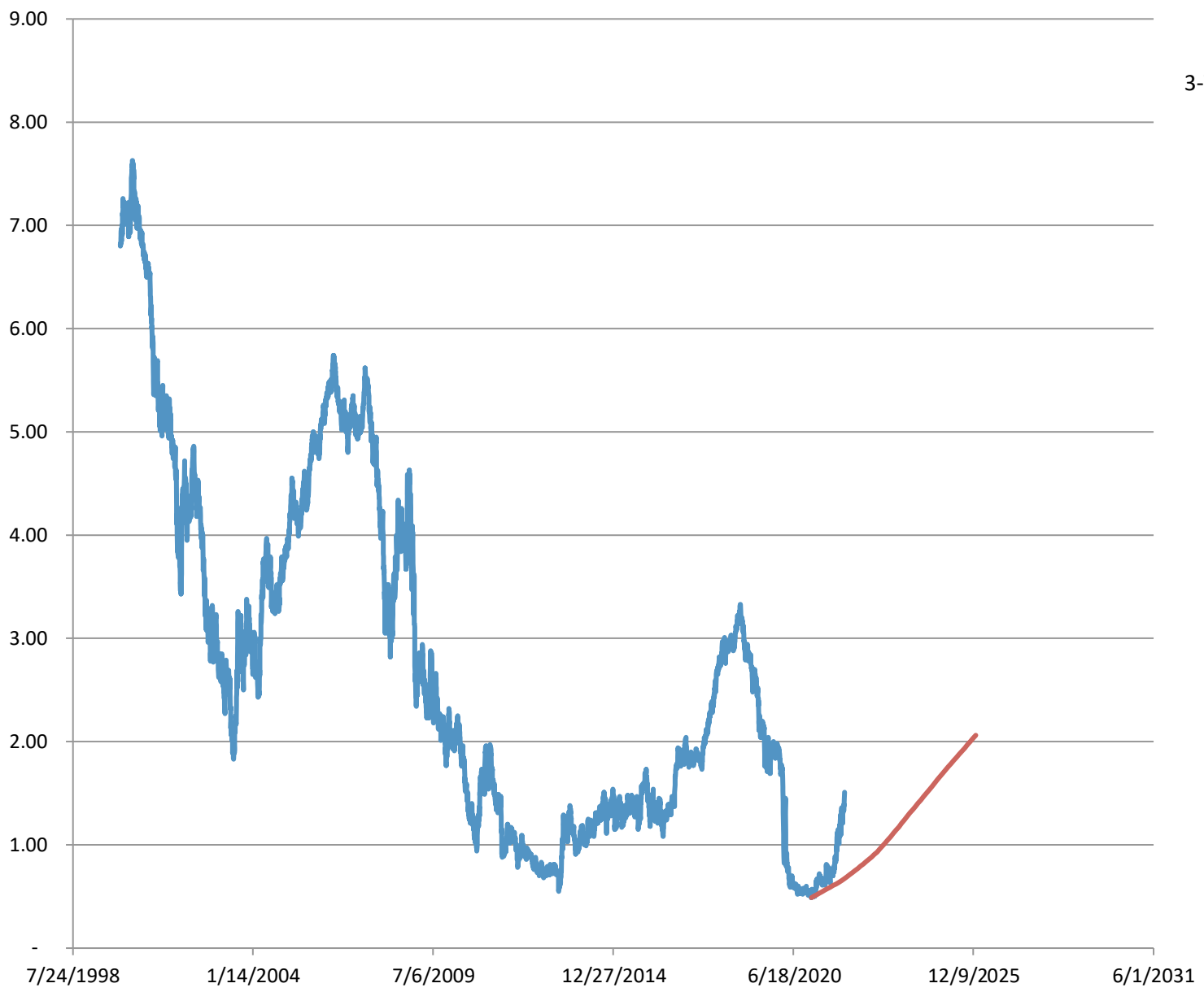
FHLB Des Moines
3-Year Fixed Rate Advance

— 3 Year Historical
— Forward of 36 Mo
10/4/2019



Combined Historical and Forward Implied Yield

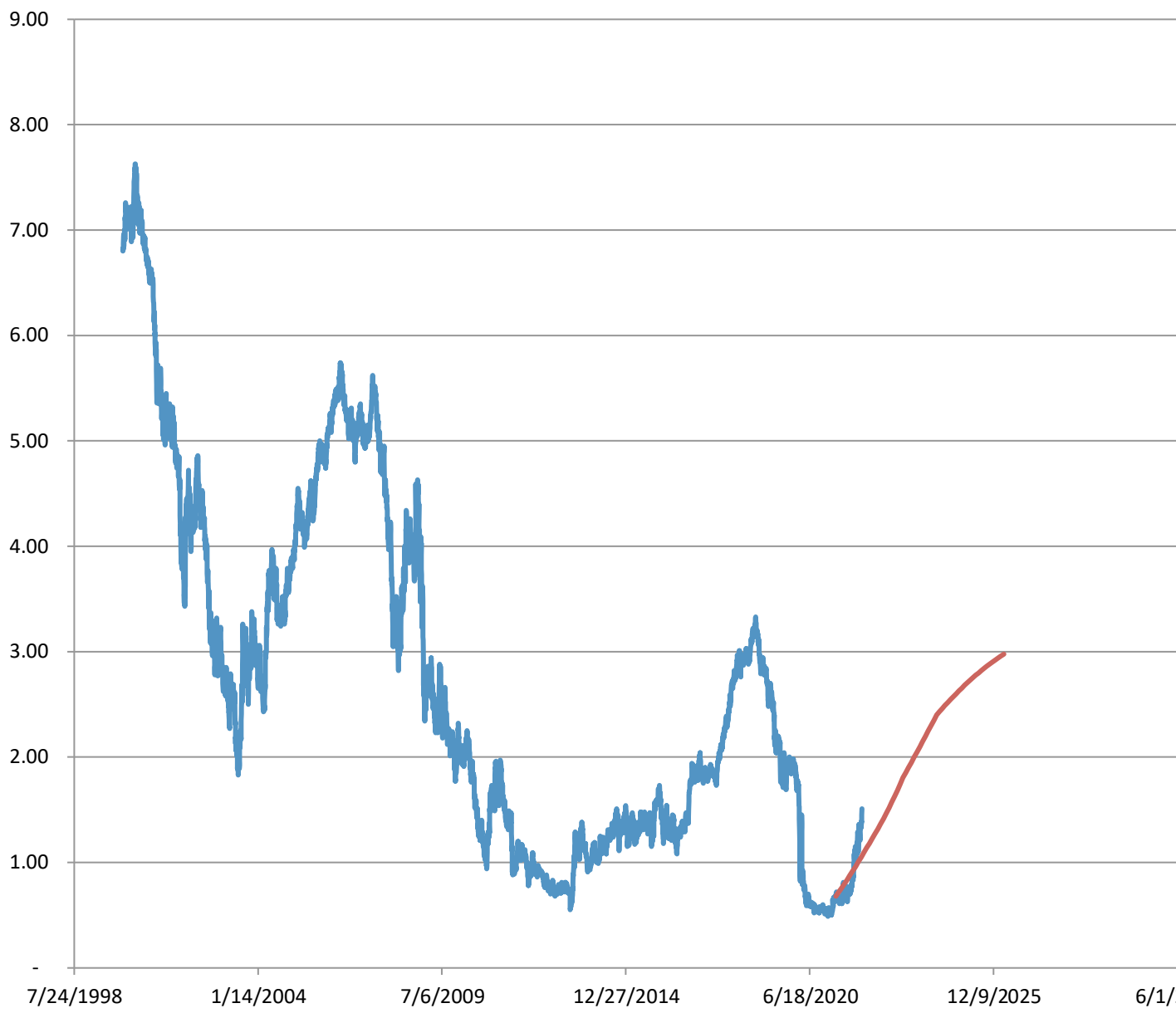
FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
1/5/2021

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance

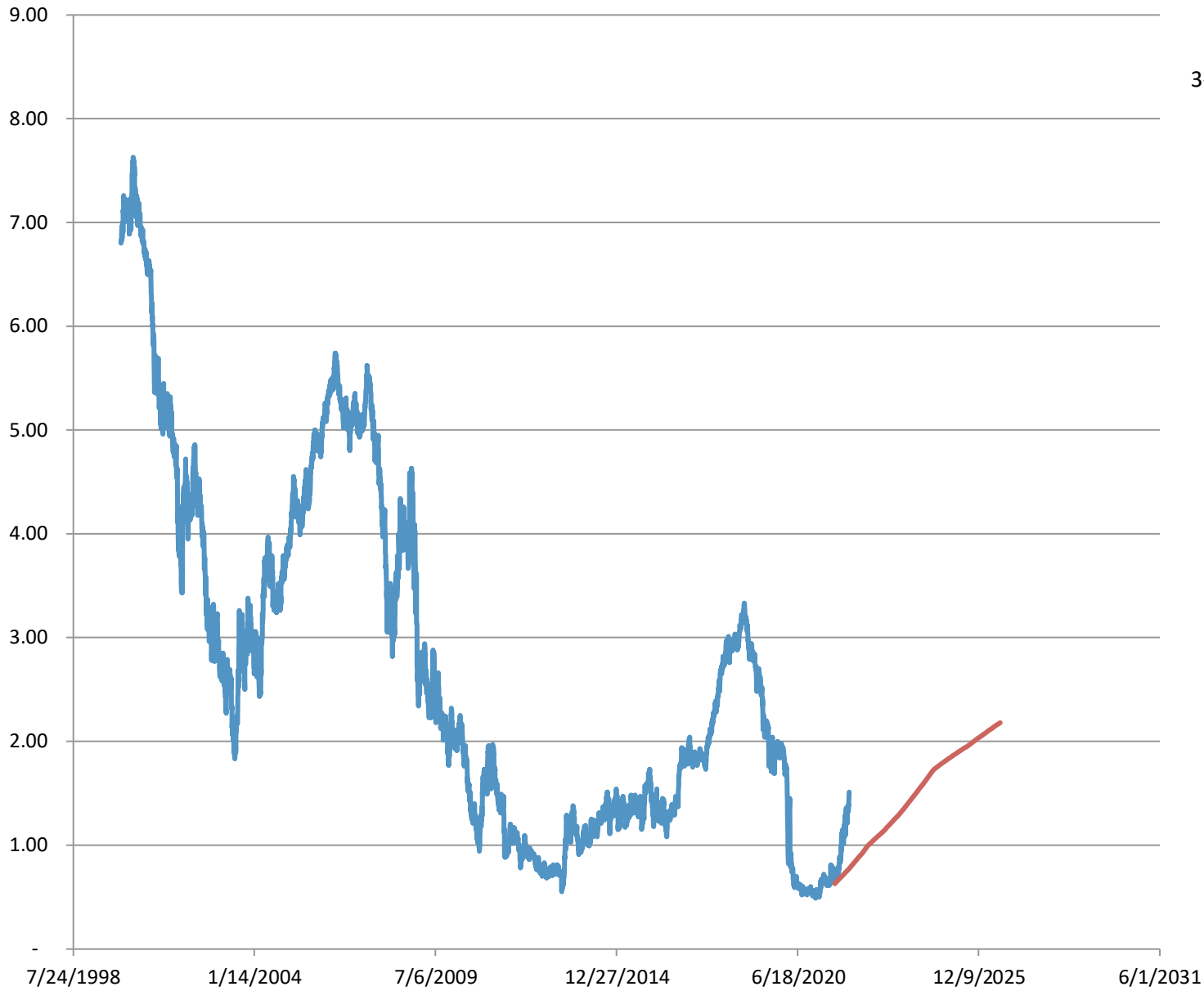


3 Year Historical
Forward of 36 Mo
3/30/2021

Combined Historical and Forward Implied Yield

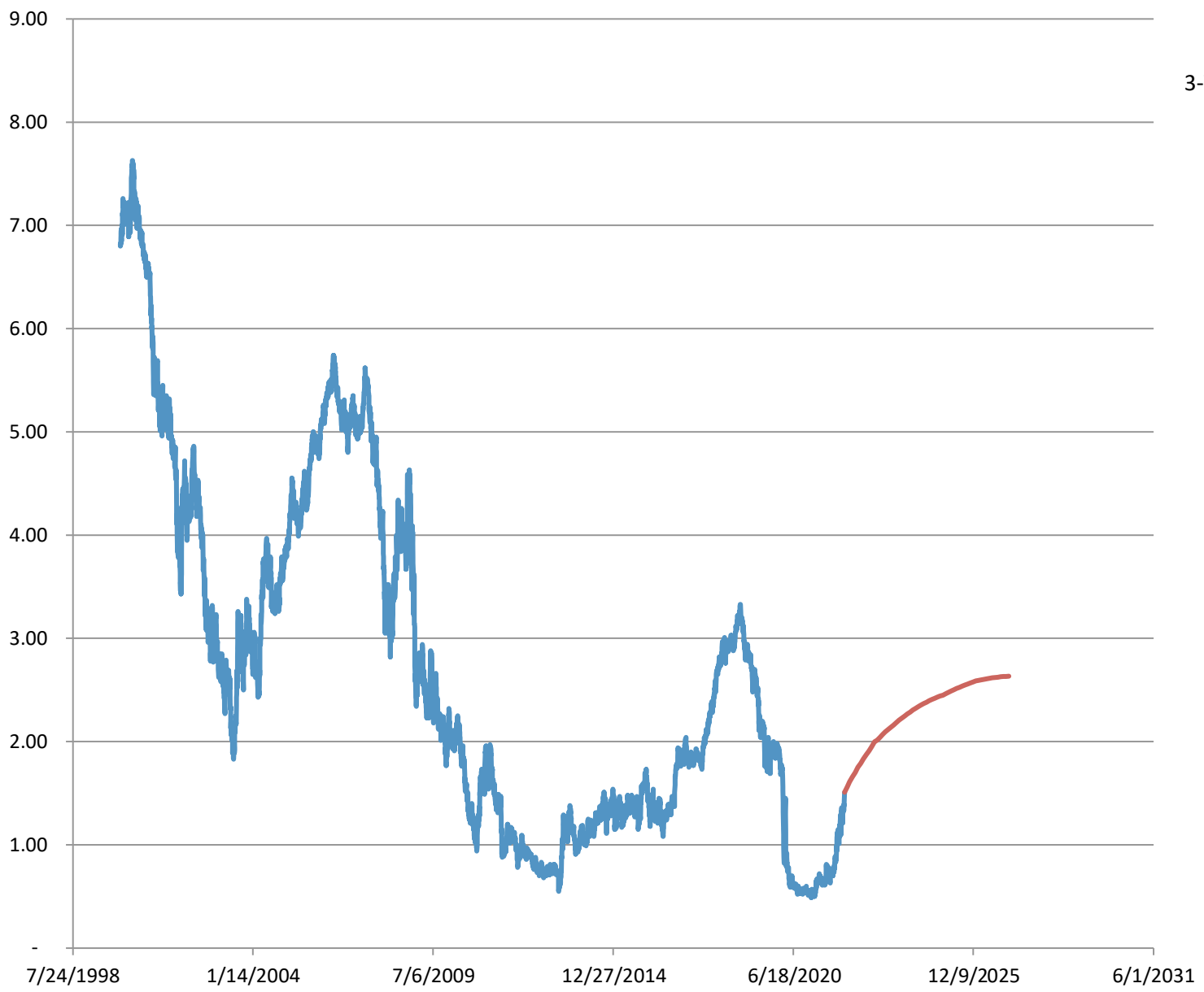
FHLB Des Moines
3-Year Fixed Rate Advance

— 3 Year Historical
— Forward of 36 Mo
8/3/2021



Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance

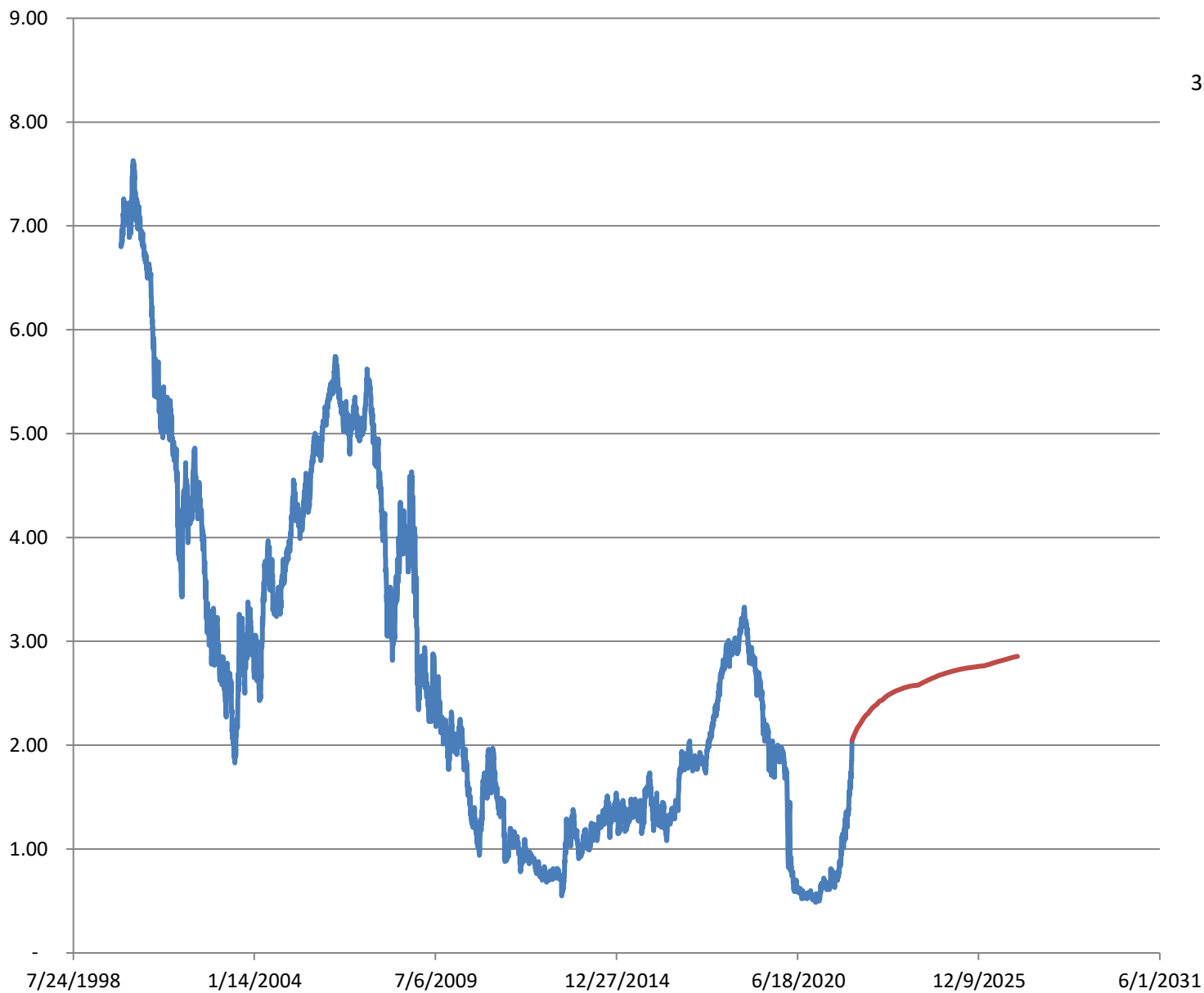


— 3 Year Historical
— Forward of 36 Mo
1/7/2022

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance

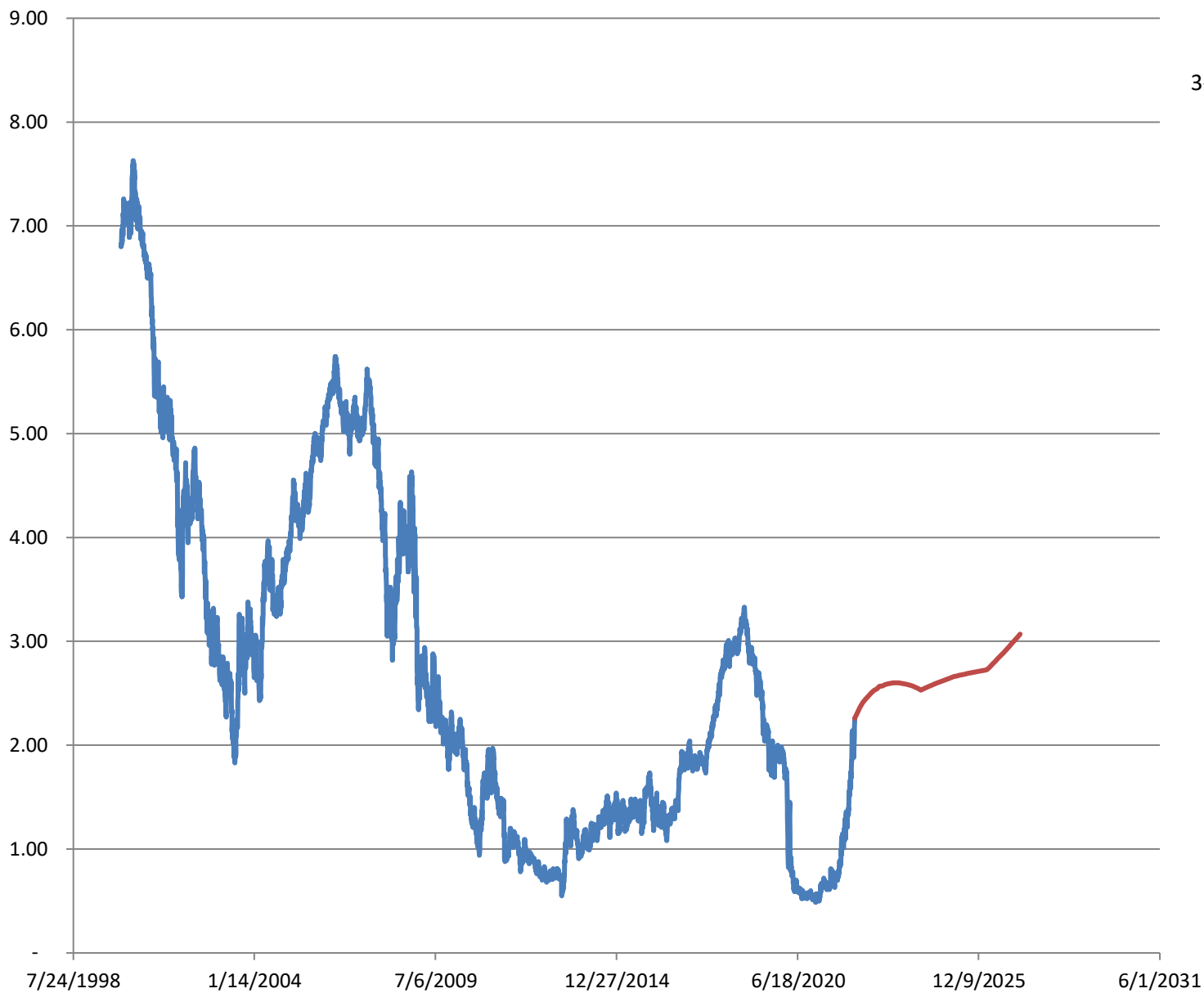
— 3 Year Historical
— Forward of 36 Mo
2/10/2022



Combined Historical and Forward Implied Yield

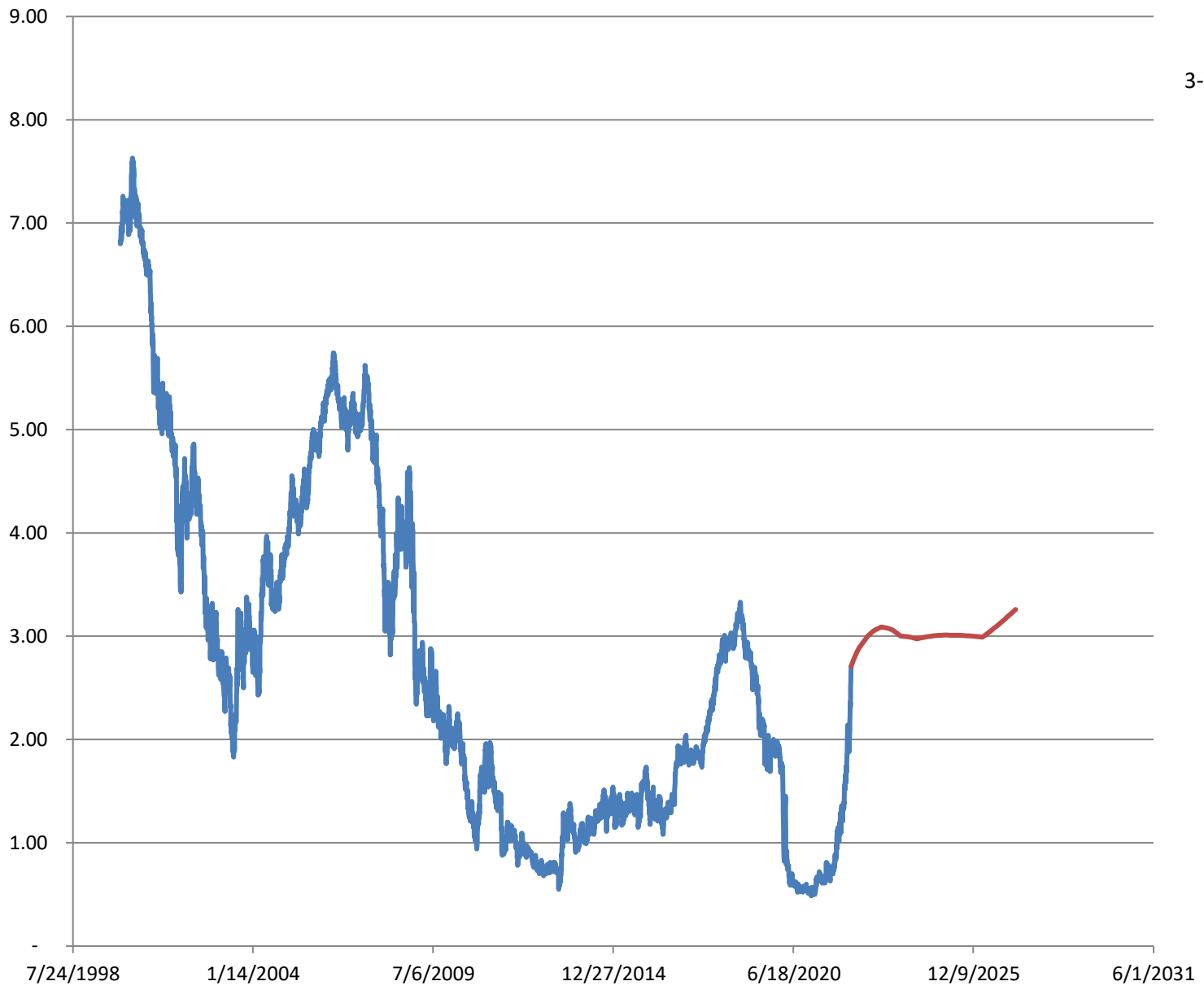
FHLB Des Moines
3-Year Fixed Rate Advance

— 3 Year Historical
— Forward of 36 Mo
3/11/2022



Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance

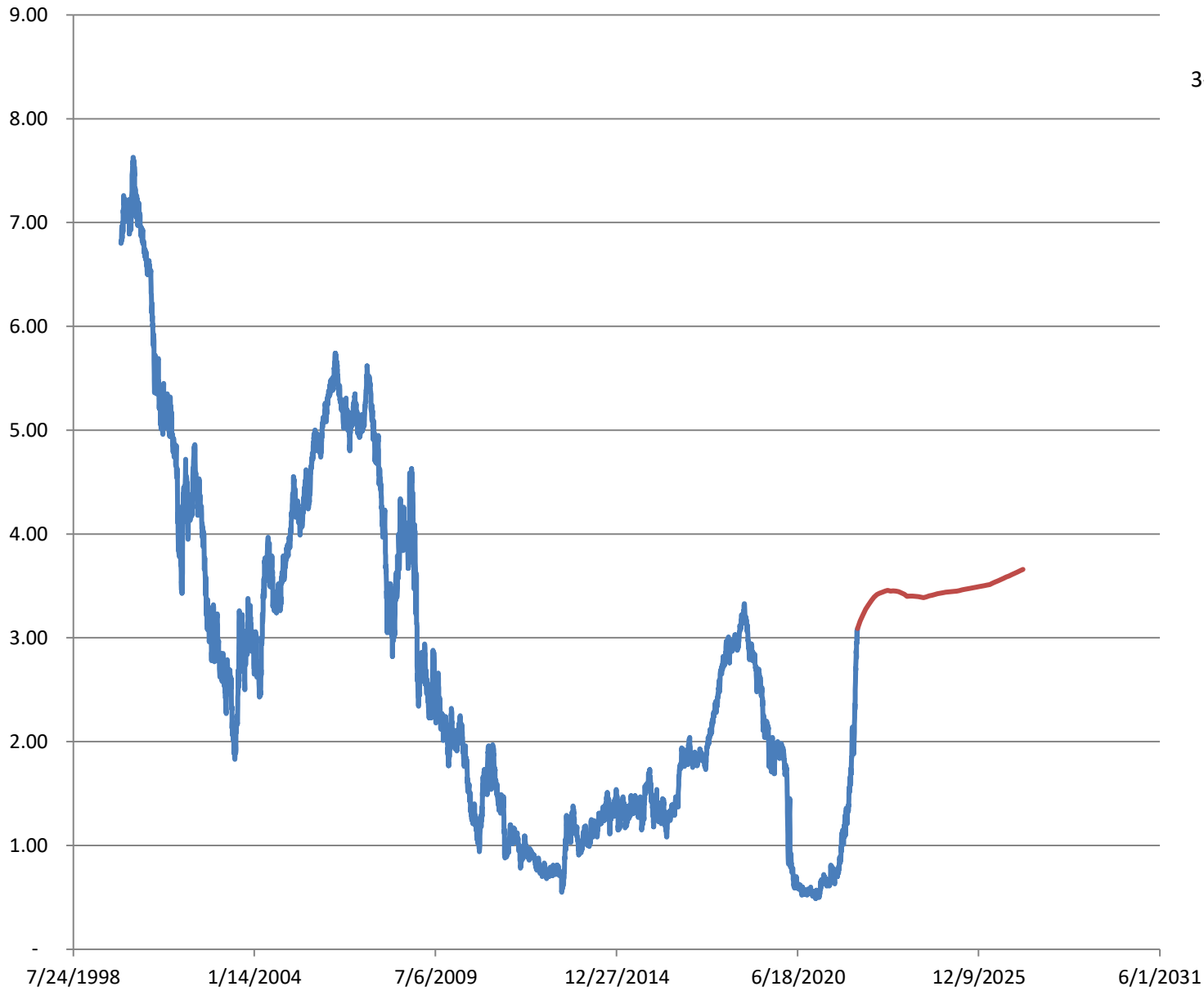


— 3 Year Historical
— Forward of 36 Mo
3/22/2022

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance

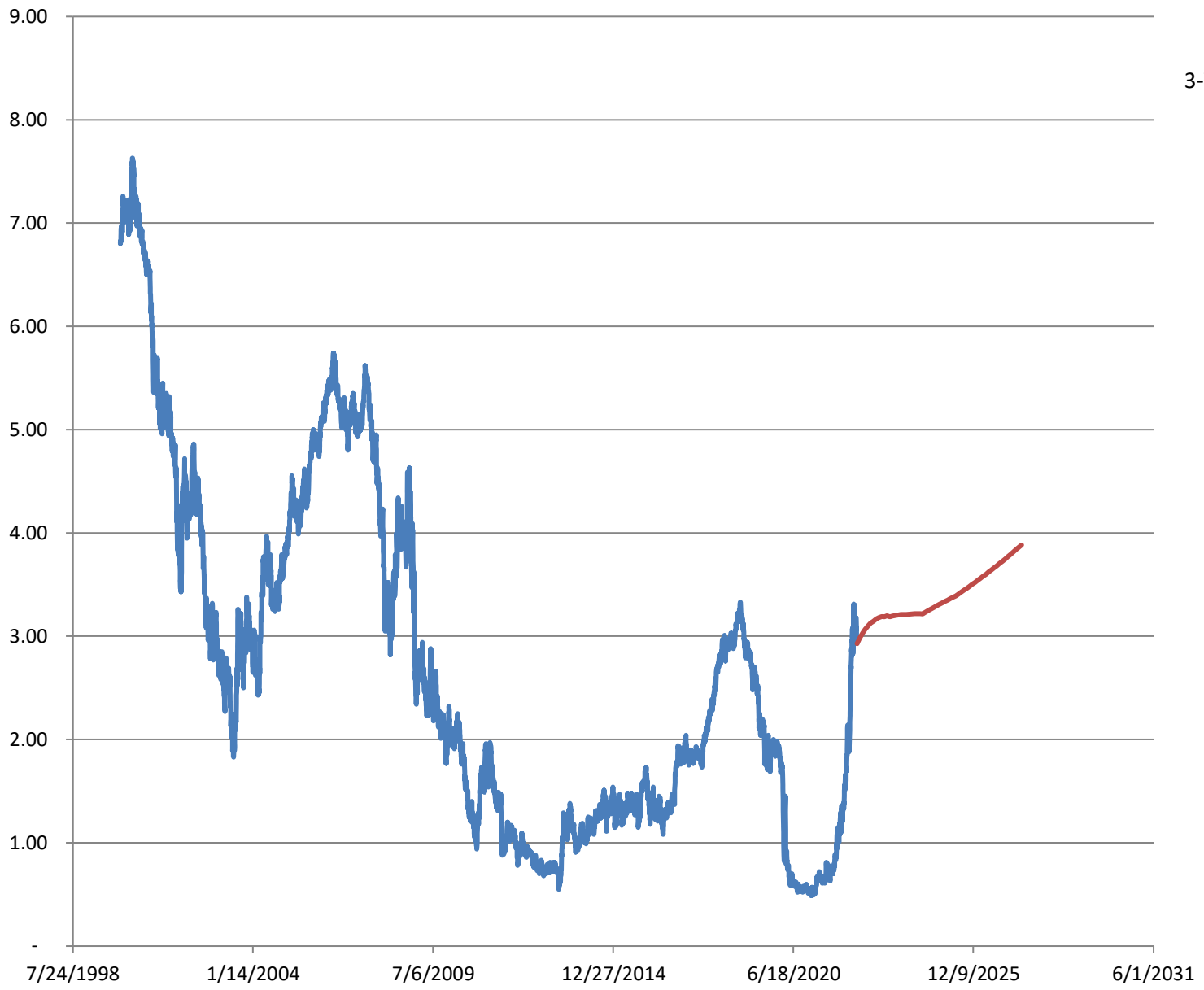
— 3 Year Historical
— Forward of 36 Mo
4/11/2022



Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance

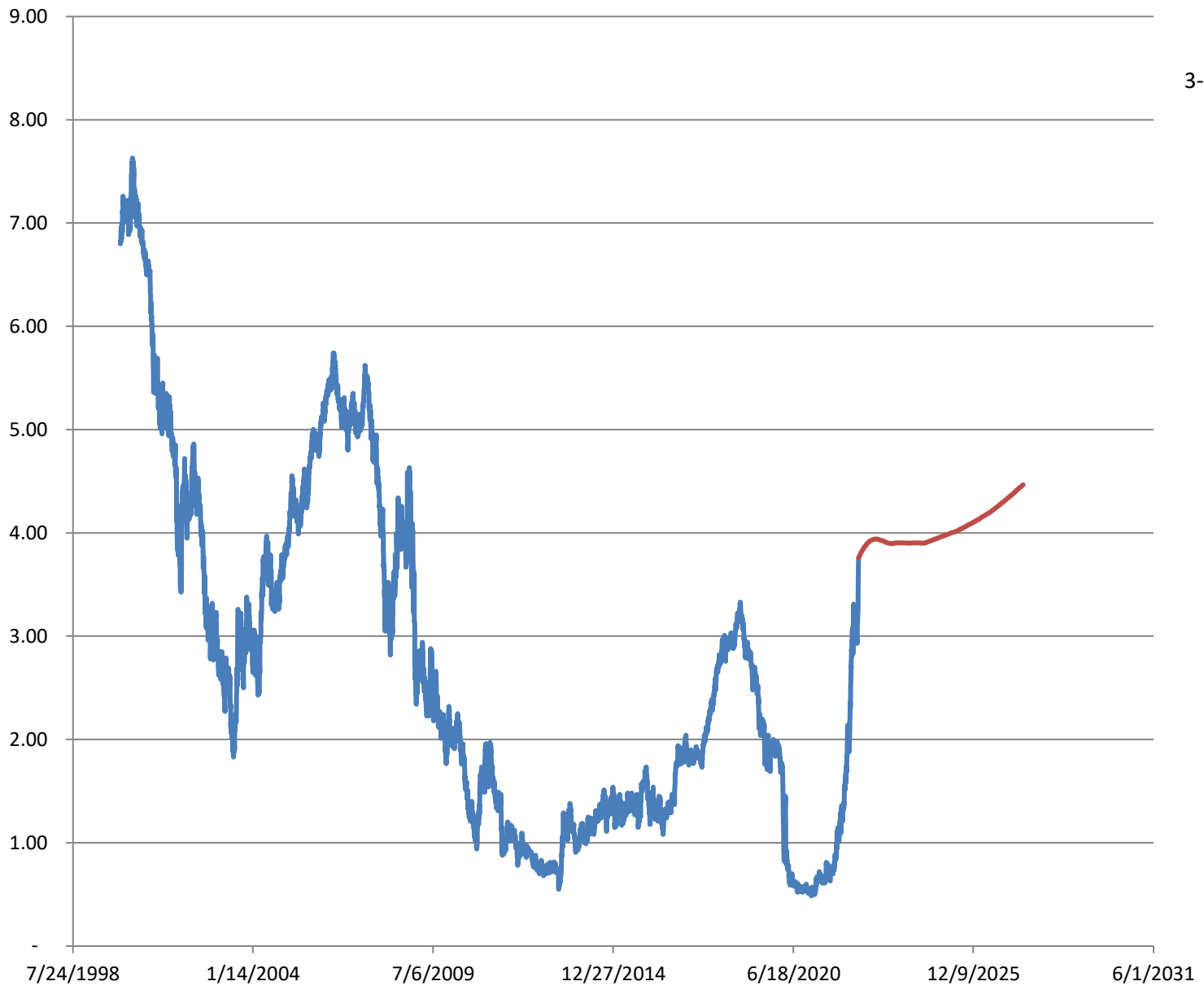
— 3 Year Historical
— Forward of 36 Mo
5/27/2022



Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance

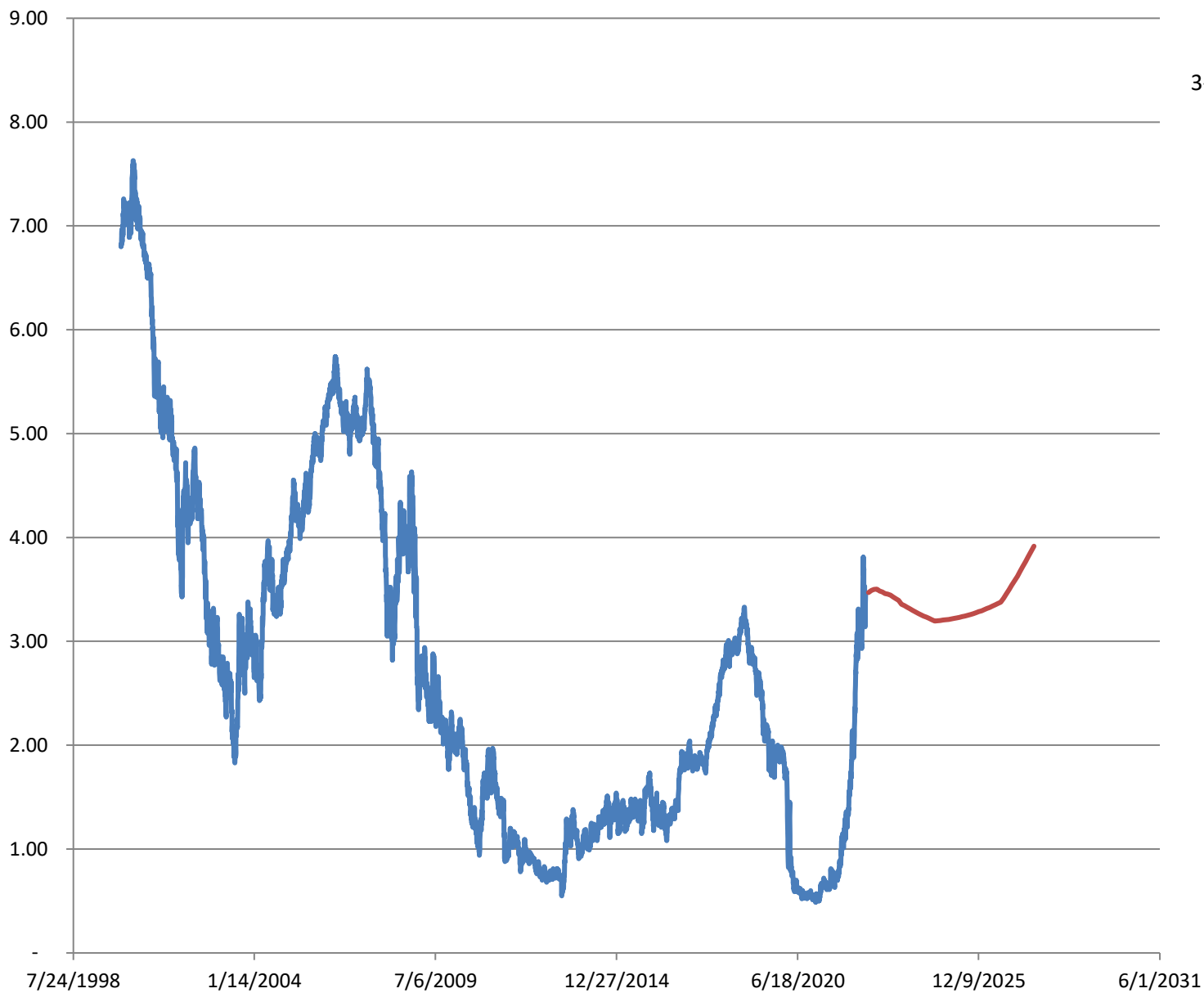
— 3 Year Historical
— Forward of 36 Mo
6/14/2022



Combined Historical and Forward Implied Yield

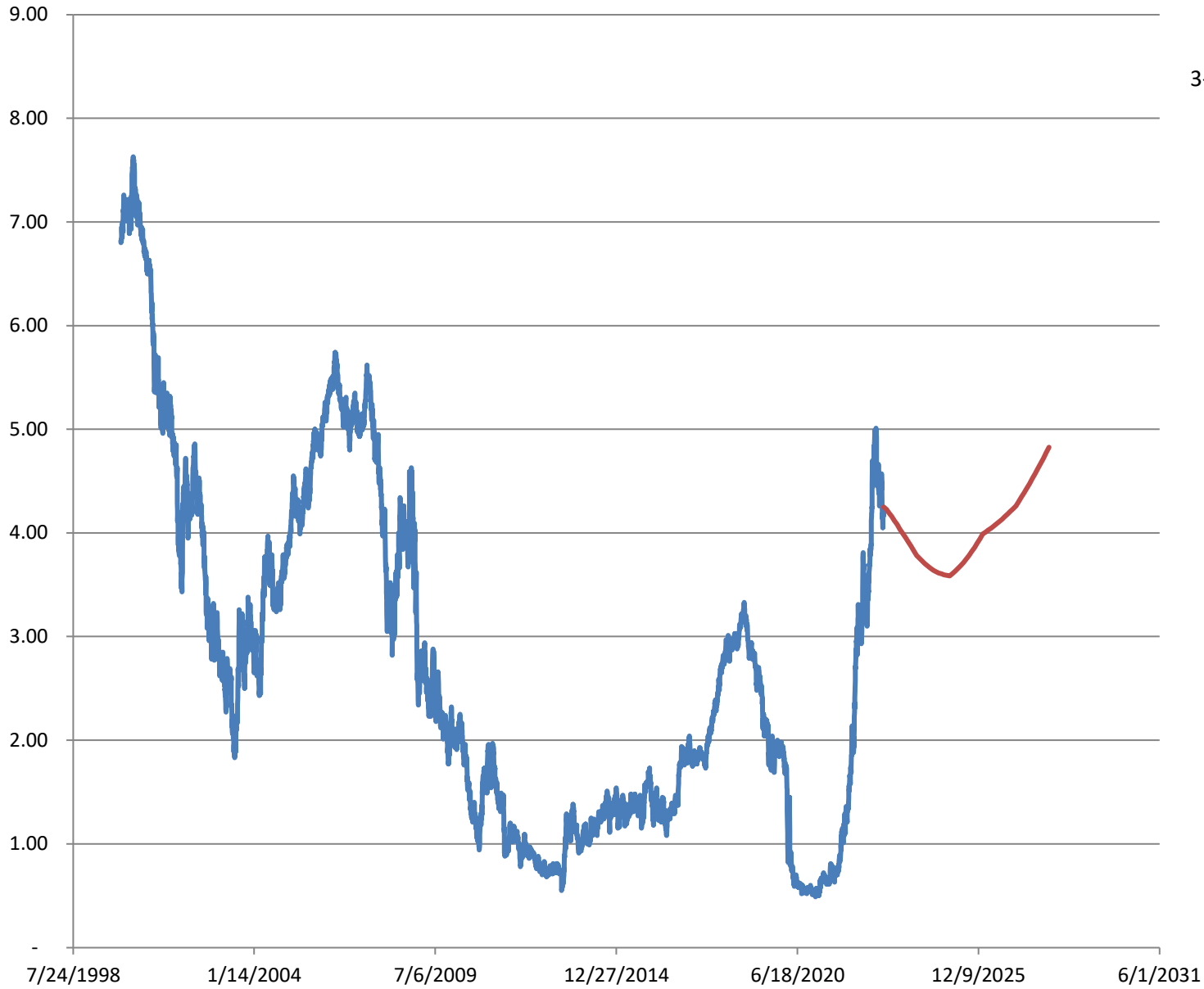
FHLB Des Moines
3-Year Fixed Rate Advance

— 3 Year Historical
— Forward of 36 Mo
8/11/2022



Combined Historical and Forward Implied Yield

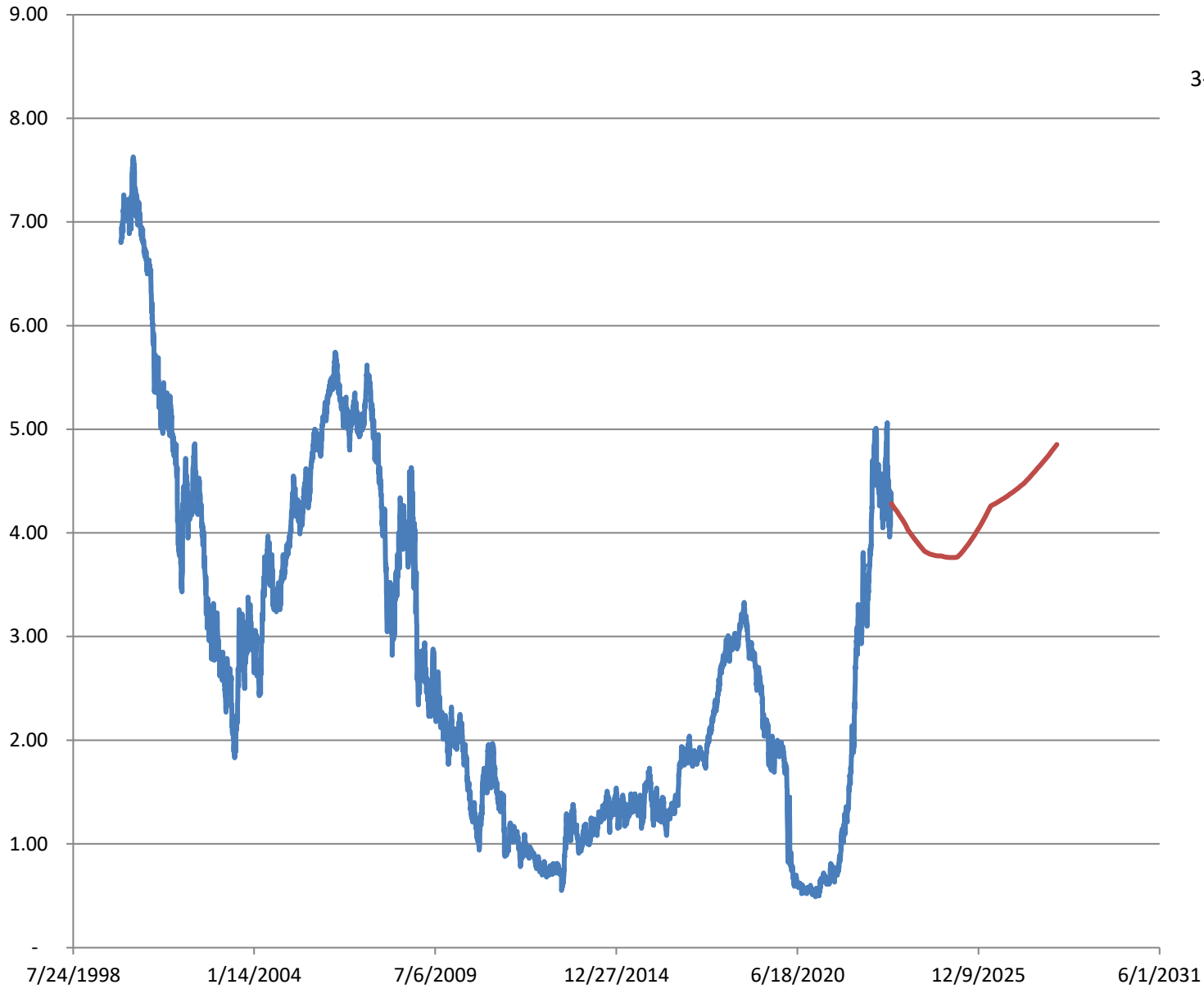
FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
1/27/2023

Combined Historical and Forward Implied Yield

FHLB Des Moines
3-Year Fixed Rate Advance



— 3 Year Historical
— Forward of 36 Mo
4/24/2023