

From: Hollan, Angela (Allianz Life Insurance Company)
Sent: Tuesday, March 12, 2019 8:56 AM
Subject: Annuity Disclosure Working Group - List of Indices

Hi Mike and Jennifer,

As a follow-up to the Annuity Disclosure (A) Working Group call on March 7, 2019, we have attached the index data we referenced on the call regarding indexes that are comprised of other indexes.

These indexes are the indexes we are aware of in the FIA marketplace and the data is based on information that is publically available on index provider websites. The list may not be comprehensive and given the number of data points and the manual collection of the data, it is possible that some of the starting dates are inaccurate, but we believe the overall picture is reliable.

As noted on the call, around 30% of these indexes have more than 20 years of history. Around 70% of these indexes have more than 15 years of history.

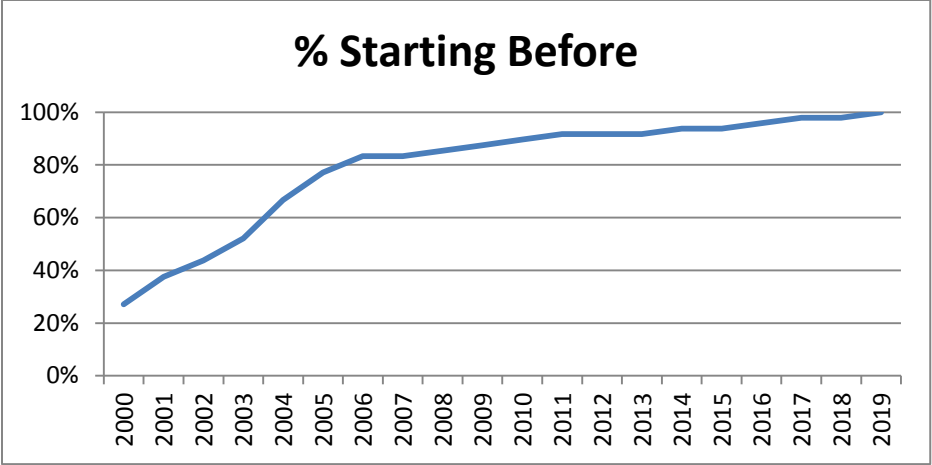
Many of these indexes start in the early 2000s because they use ETFs as index components. ETFs are generally preferred over other types of index components because they are traded frequently, which makes them cheaper and more efficient to hedge, which allows more value to go to the policyholder. The first bond ETFs were introduced in 2002 with other ETFs (bond and stock) introduced throughout the 2000s.

Please let us know if you have questions.

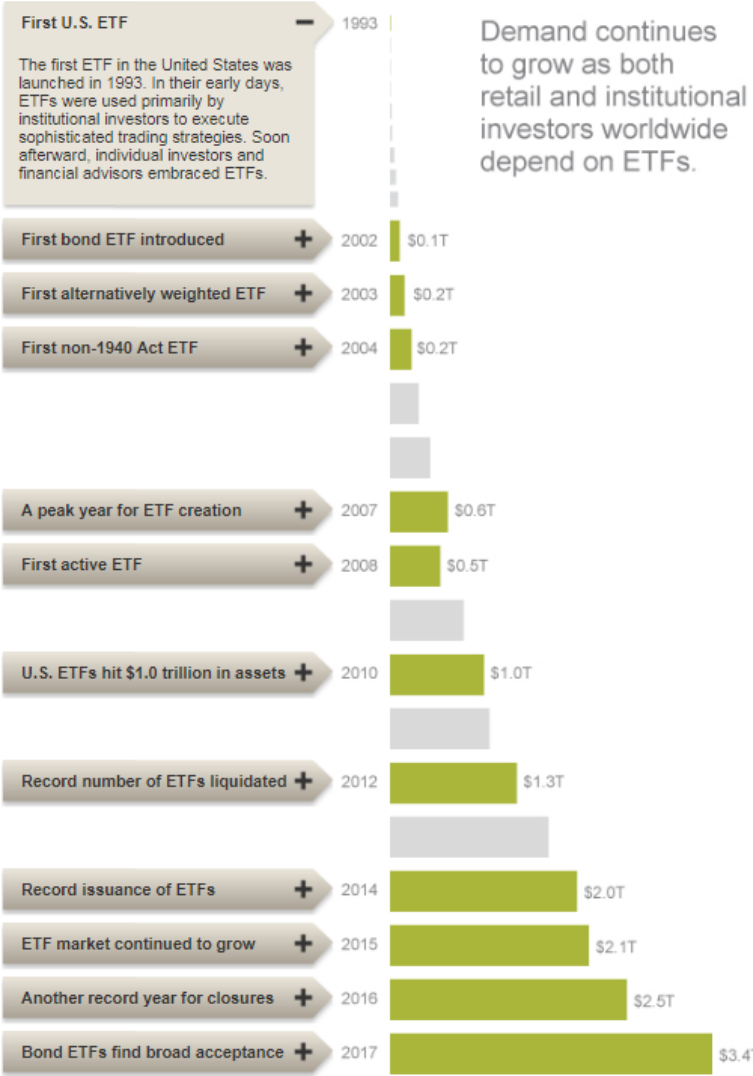
Thanks!

Angela.

Index	Start Date (earliest date index provider shows)
Merrill Lynch Strategic Balanced Index	1985
S&P 500 Average Daily Risk Control 10%	1985
Morgan Stanley 3D Index	1989
S&P MARC 5% Excess Return Index	1989
Annuity-Linked Trader Vic Index	1990
Dow Jones U.S. Real Estate DRC 10	1992
S&P U.S. Retiree Spending Index	1995
JP Morgan MOZAIC II Index	1996
CROCI Sectors II USD 5.5	1996
Citi Flexible Allocation 6 Excess Return Index	1997
S&P 500 Dividend Aristocrats Daily Risk Control 5% TR	1998
S&P 500 Dividend Aristocrats Daily Risk Control 5% ER	1998
S&P 500 Low Volatility Daily Risk Control 8%	1998
S&P 500 Daily Risk Control 2 8%	2000
NYSE Zebra Edge Index	2000
Morgan Stanley Dynamic Balance Index	2000
Morgan Stanley Dynamic Allocation Index	2000
Morgan Stanley Diversified Select Index	2000
PIMCO Global Optima Index	2001
Franklin US Index Total	2001
UBS Market Pioneers Index	2001
Shiller Barclays CAPE US Sector Risk Control 10%	2002
Deutsche Bank Momentum Asset Allocator 5.5	2002
Barclays Low Volatility 5 Index	2002
GS Momentum Builder Multi-Asset Class Index	2002
Janus SG Market Consensus II Index	2003
Janus SG Market Consensus Index	2003
BNP Paribas Multi Asset Diversified 5 Index Excess	2003
PIMCO Balanced Index	2003
Barclays Trailblazer Sectors 5 Index	2003
BNP Paribas High Dividend Plus Index	2003
Morgan Stanley Target Equity Balanced Index	2003
PIMCO Tactical Balanced ER Index	2004
Bloomberg US Dynamic Balance II	2004
Bloomberg US Dynamic Balance II ER	2004
Goldman Sachs Dynamo Strategy Index	2004
NYSE Expanded Opportunities Index	2004
Morningstar Dividend Yield Focus Target Vol 5	2005
CROCI Sectors III USD 5.5	2005
JP Morgan Strategic Balanced Index	2005
JP Morgan U.S. Sector Rotator 5	2007
Balanced Capital Strength 6	2008
S&P 500 Daily Risk Control 5	2009
JP Morgan ETF Efficiente 5 Index	2010
Guggenheim RBP Blended Index	2013
BlackRock Diversa Vol Control 7	2015
BlackRock Endura VC 5.5 Index	2016
BlackRock iBLD Claria Index Price	2018



U.S. ETF growth



Source: Vanguard, https://advisors.vanguard.com/VGApp/iip/site/advisor/etfcenter/article/ETF_HistoryOfETFs