EconWorkBench Chartbook

Mike Aguilar

April 11, 2017
MacroJournal Opinion Poll

Weekly poll taken by students in Prof. Aguilar’s Intermediate Macroeconomic Theory course.
RGDP: Actual vs Potential

Real GDP: Actual vs Potential

Growth in Real GDP: Actual vs Potential
Contributions to RGDP Growth

Dashed bars = Real GDP
RGDP by State

2006
Y/Y Percent RGDP Growth by State
National Y/Y Percent RGDP Growth: 2.6666%
RGDP by State

2007
Y/Y Percent RGDP Growth by State
National Y/Y Percent RGDP Growth: 1.7899%
RGDP by State

2008
Y/Y Percent RGDP Growth by State
National Y/Y Percent RGDP Growth: -0.29039%
RGDP by State

2009
Y/Y Percent RGDP Growth by State
National Y/Y Percent RGDP Growth: -2.8024%
RGDP by State

2010
Y/Y Percent RGDP Growth by State
National Y/Y Percent RGDP Growth: 2.5073%
RGDP by State

2011
Y/Y Percent RGDP Growth by State
National Y/Y Percent RGDP Growth: 1.8472%
RGDP by State

2012
Y/Y Percent RGDP Growth by State
National Y/Y Percent RGDP Growth: 2.2236%
RGDP by State

2013
Y/Y Percent RGDP Growth by State
National Y/Y Percent RGDP Growth: 1.4895%
Outlays

Federal Outlays

Federal Outlays as % NGDP
Outlays

Federal Outlays by Major Category % NGDP

- Blue = Discretionary [9.2987]
- Red = Net Interest [1.3569]
- Green = Mandatory [14.4265]
Debt/Deficit

Federal Outlays and Receipts

Federal Outlays and Receipts as a % of GDP
Debt/Deficit

Federal Debt Held By Public

Federal Debt Held By Public% GDP
Unemployment Rates by State

2007
Average National Unemployment Rate: 4.6167%
Unemployment Rates by State

2008
Average National Unemployment Rate: 5.8%
Unemployment Rates by State

2009
Average National Unemployment Rate: 9.2833%

[Map of the United States showing different colors representing unemployment rates by state]
Unemployment Rates by State

2010
Average National Unemployment Rate: 9.625%

[Map of the United States with states colored to represent unemployment rates, scale bar from 0% to >15% on the right side]
Unemployment Rates by State

2011
Average National Unemployment Rate: 8.9333%
Unemployment Rates by State

2012
Average National Unemployment Rate: 8.075%

[Map of the United States with state color coding for unemployment rates]
Unemployment Rates by State

2013
Average National Unemployment Rate: 7.35%
Unemployment Rates by State

Unemployment Rate by State Updated: 4/1/2016
National Unemployment Rate: 4.7%
Labor Market Nowcasts/Forecasts

Forecasting Mthly Payrolls with Weekly Jobless Claims

Last Updated: 30-Jun-2015
MIDAS Weighting Scheme = Beta
Claims Last Actual (m/m % Δ): 20-Jun-15=-1.2
Payrolls Last Actual (solid): May-15=0.2
Payrolls Fitted (dashed): Jun-15=0.2
Mortgage Rates

Interest Rate %

2009  2012  2015

30yr Mortgage Rate - 10yr Treas. Cnst Mat.

Last Obs: 02-Jun-2016
Blue=30yr Mortgage (3.85)
Red=10yr Treasury (1.85)
Inflation

Last Obs: Apr 2016
Blue = Headline (1.1)
Red Dashed = Core (2.1)
Inflation
Inflation

PCE Deflator

Last Obs: 30-Jul-2014
Blue=Headline [1.7683]
Red Dashed=Core [1.4695]
Inflation

GDP Deflator

Last Obs: 28-Feb-2014
Deflator [5.0702]
Real Interest Rates
Risk Spreads
Risk Spreads

TED Spread

3-month LIBOR - 3-month US T-bill (Basis Points)


East CME: 27-May-2016 (35.305)
Yield Curve

Latest Observation: 02-Jun-2016
Blue Stars=Latest
Red Dashed=3yr Ago

Nominal Interest Rate %

1mth 3mth 6mth 1yr 2yr 3yr 5yr 7yr 10yr 30yr
Fed Funds Rate
Equity Market Volatility

SP500

CBOE Volatility VIX

Last Obs: 02-Jun-2016 (2105.26)

Last Obs: 02-Jun-2016 (16.37)
Power of Diversification
10 Sectors - Price
10 Sectors - Return
IYJ - Industrials
IYF - Financials
IYH - Health Care

Daily Returns

Weekly Returns

Mthly Returns

Daily Autocorr-Returns

Wkly Autocorr-Returns

Mthly Autocorr-Returns

Daily Autocorr-Abs Returns

Wkly Autocorr-Abs Returns

Mthly Autocorr-Abs Returns
Correlations with IVV
Correlations with IDU

May12

May12

May12

May12

May12

May12

May12

May12
Correlations with IYZ
Correlations with IYW
Correlations with IYH
Correlations with IYF

![Graphs showing correlations with IYF](image-url)
Correlations with IYE

![Graphs showing correlations between different series labeled IVV, IYM, IYK, IYC, IYF, IYH, IYJ, IYW, IYZ, IDU over the period May 12.]
Correlations with IYC
Correlations with IYK
Correlations with IYM
10 Sectors - MVO Backtest
10 Sectors - MVO Backtest Weights A

Wgts for Max SR; Historical Input=252days; Rebalance=20days

[Charts showing weight changes for different sectors over time]
10 Sectors - MVO Backtest Weights B

Wgts for Max SR; Historical Input=252days; Rebalance=252days

Graphs showing weight changes from May 2012 to February 2015 for different sectors.
10 Sectors - MVO Backtest Weights C

Wgts for Max SR; Historical Input=20days; Rebalance=252days
Wgts for Max SR; Perfect Foresight Return; 20day Sym.Cov.Window; Rebalance=20days
References & Notes

References:
- All data is obtained via FRED or finance.yahoo.com. Original data manufacturers may vary.

Notes:
- This Chartbook is updateley (approximately) once a week.
- I cannot guarantee the accuracy of the data.
- All errors regarding data transformations and presentations are my responsibility.
- Special thanks to Sean Myers and Ryan Delgado for providing some of the code used to construct this ChartBook.
- Please contact Mike Aguilar at maguilar@email.unc.edu for questions or comments.