Appendix
Treasury Yield Implied Volatility and Real Activity *

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Abstract

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A1 Additional summary statistics

Table A1 reports the contemporaneous correlation of the 5-year YIV with various macroeconomic variables. Tables A2 and A3 report the contemporaneous correlation of YIV with various bond and stock market variables.

A2 Additional results

This section tabulates additional results and robustness tests. Figure A1 and Tables A4 – A6 show the results for predicting the year-on-year growth rates of industrial production, personal consumption expenditures, and non-farm payrolls with the YIV and standard forecasting variables added as controls.

The predictive R^2 for industrial production growth is highest for the 6-month horizon, at nearly 40%. R^2 values for consumption and employment peak at 9 months with values of nearly 36% and 47%, respectively.

Figure A4 and Tables A7 – A9 show the results for predicting the volatility of industrial production, personal consumption expenditures, and non-farm payrolls with the YIV and standard forecasting variables added as controls.

Figures A5 and A6 plot the predictive R^2s and the coefficients for the industrial production, consumption, and employment growth.

Tables A10 – A12 show the results for predicting the year-on-year growth rates of industrial production, personal consumption expenditures, and non-farm payrolls with the YIV and various term spreads added as controls.

Tables A13 – A15 show the results for predicting the volatility of industrial production, personal consumption expenditures, and non-farm payrolls with the YIV and various term spreads added as controls.

Tables A16 – A18 show the results for predicting the year-on-year growth rates of industrial production, personal consumption expenditures, and non-farm payrolls with the YIV and various credit spreads added as controls.

Tables A19 – A21 show the results for predicting the volatility of industrial production, personal consumption expenditures, and non-farm payrolls with the YIV and various credit spreads added as controls.

Tables A22 – A24 show the results for predicting the year-on-year growth rates of industrial production, personal consumption expenditures, and non-farm payrolls with the YIV and various Treasury implied

volatilities added as controls.

Tables A25 – A27 show the results for predicting the volatility of industrial production, personal consumption expenditures, and non-farm payrolls with the YIV and various Treasury implied volatilities added as controls.

Tables A28, A29, A30, and A31 present the results for additional robustness tests. In Table A28 and A29, we use YIV to predict growth rates of macroeconomic measures with non-overlapping observations. In Tables A30 and A31, we exclude the data from the financial crisis.

Tables A32 and A33 present the results for shorter horizons. In these Tables, we use YIV to predict growth rate and volatility of macroeconomic variables over horizons of 3, 6, 9, 12, and 15 months.

In Table A34 we follow Schwert (1989) and compute the volatility of macroeconomic variables using the residuals from an AR(3) model fitted to the growth rate. Our results are robust to how macroeconomic volatility of growth rates is computed.

Tables A35 - A42 show results for out of sample tests for predicting the growth rates and volatility of industrial production, personal consumption expenditures, and non-farm payrolls.

References

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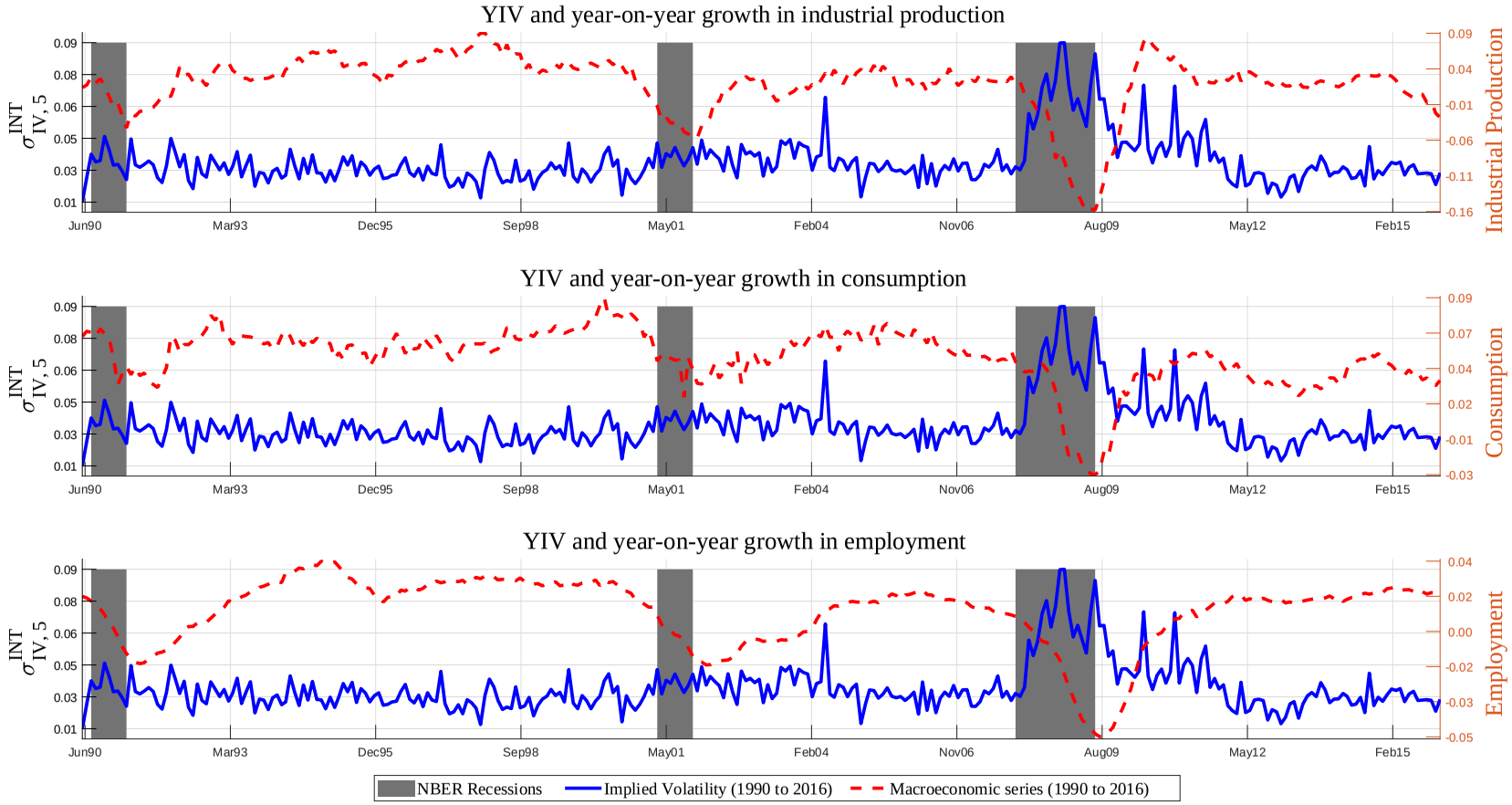

Figure A1: YIV and the growth rate of macroeconomic variables.

Notes: This figure plots the YIV and the growth rate of various macroeconomic variables. Each panel corresponds to a distinct macroeconomic variable: IND is the year-on-year growth rate of industrial production; CON is the year-on-year growth rate of personal consumption expenditures; and EMP is the year-on-year growth rate of total non-farm payrolls. In each panel, the blue solid line plots the implied volatility and the red dashed line plots the year-on-year growth rate of the macroeconomic variable. The months are indicated on the x-axis. The grey shaded regions represent National Bureau of Economic Research (NBER) recessions. The NBER recession dates are published by the NBER Business Cycle Dating Committee. Monthly data, 1990 – 2016.

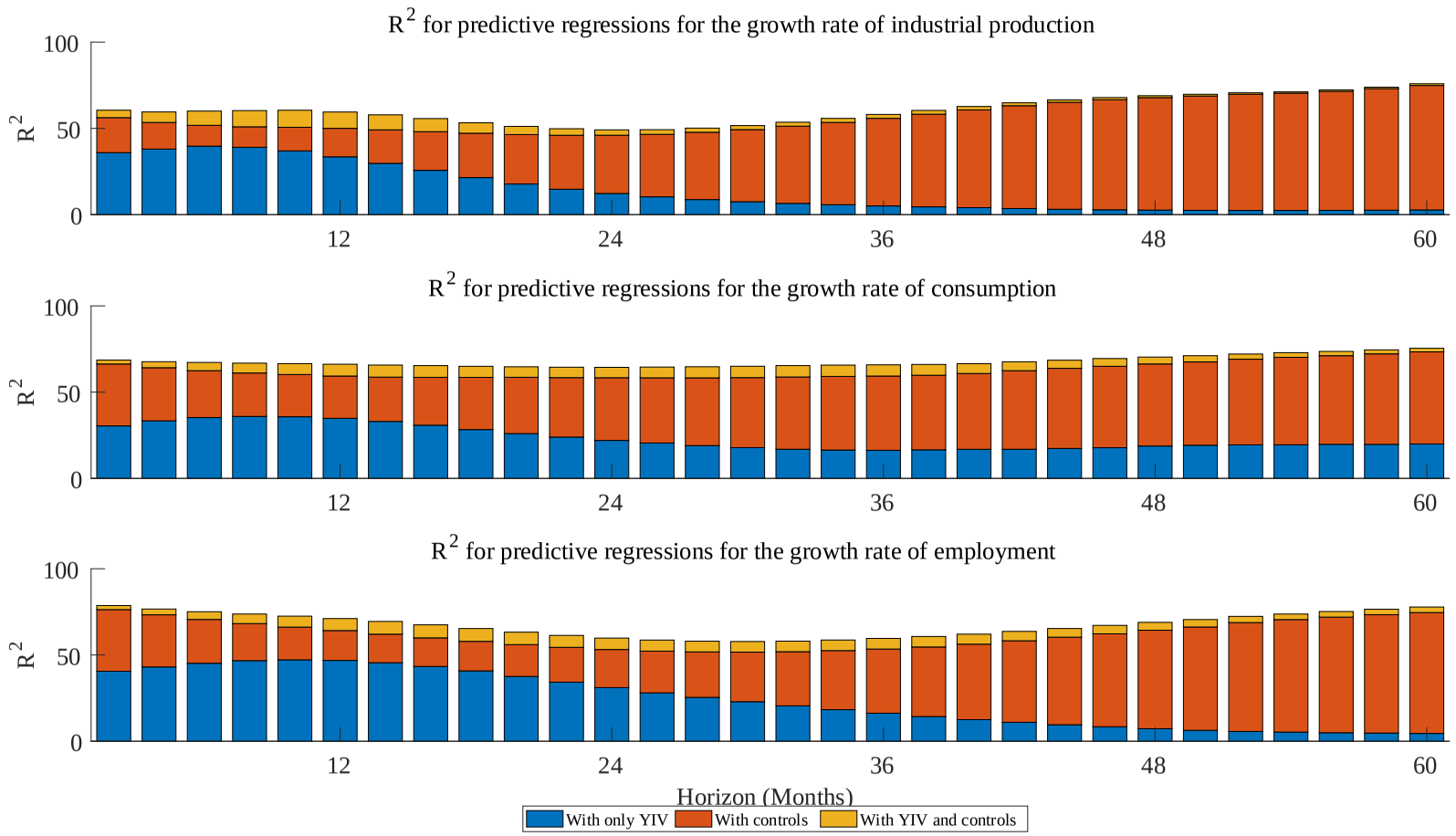

Figure A2: R-squared for predictive regressions for the growth rates of macroeconomic variables.

Notes: This figure plots the value of the R^2 for the predictive regressions of various macroeconomic variables. Each panel corresponds to a distinct macroeconomic variable: IND is the year-on-year growth rate of industrial production; CON is the year-on-year growth rate of personal consumption expenditures; and EMP is the year-on-year growth rate of total non-farm payrolls. Each panel, for each month, shows the R-squared achieved in a predictive regression with only the YIV (blue bar), with only the control variables (red bar), and the YIV and control variables (yellow bar). The months are indicated on the x-axis. Monthly data, 1990 – 2016.

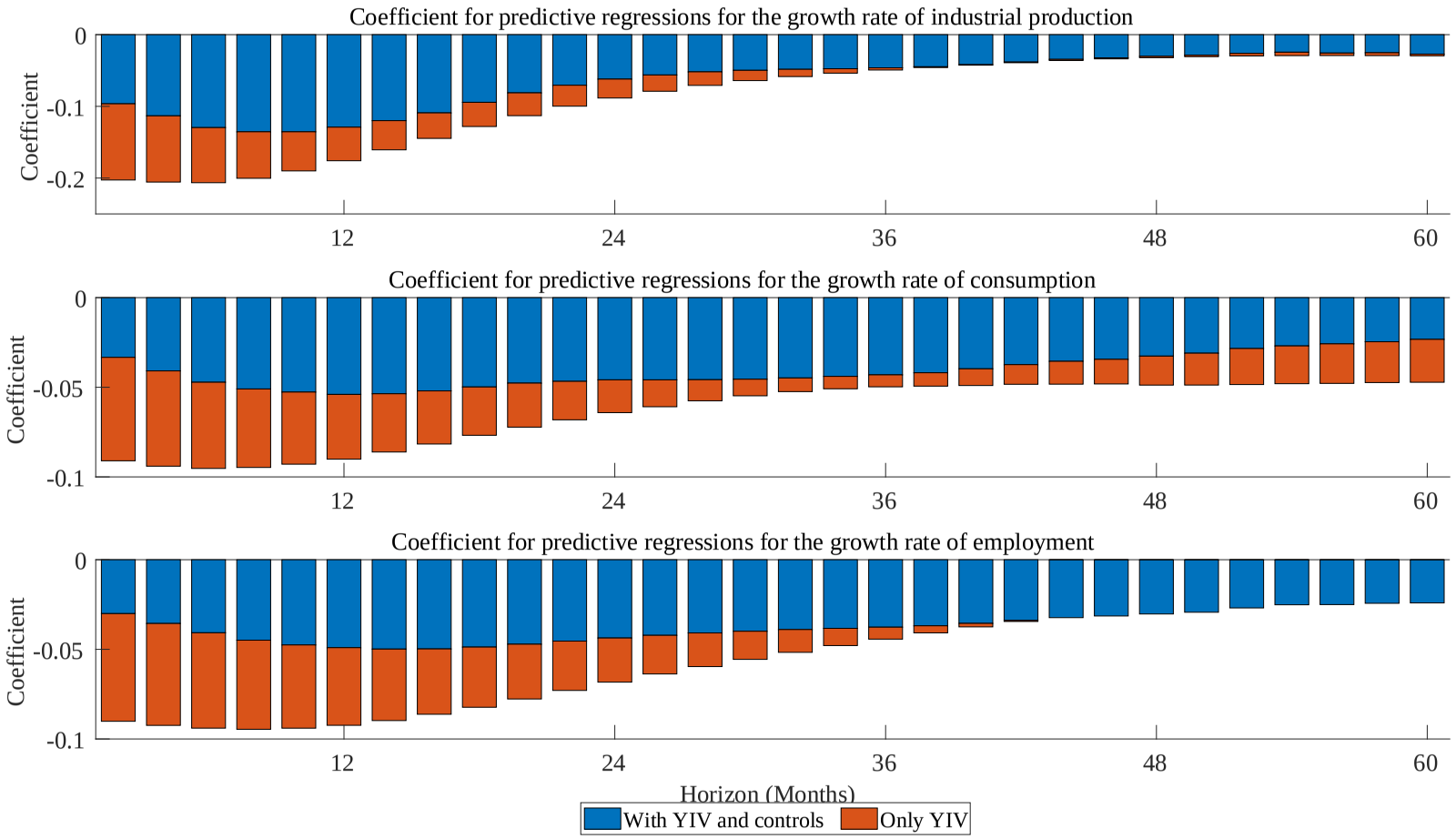

Figure A3: Coefficients for predictive regressions for the growth rates of macroeconomic variables.

Notes: This figure plots the value of the coefficients on YIV for the predictive regressions of various macroeconomic variables. Each panel corresponds to a distinct macroeconomic variable: IND is the year-on-year growth rate of industrial production; CON is the year-on-year growth rate of personal consumption expenditures; and EMP is the year-on-year growth rate of total non-farm payrolls. Each panel, for each month, shows the coefficient on the YIV with (blue bar) and without the control variables (red bar). The months are indicated on the x-axis. Monthly data, 1990 – 2016.

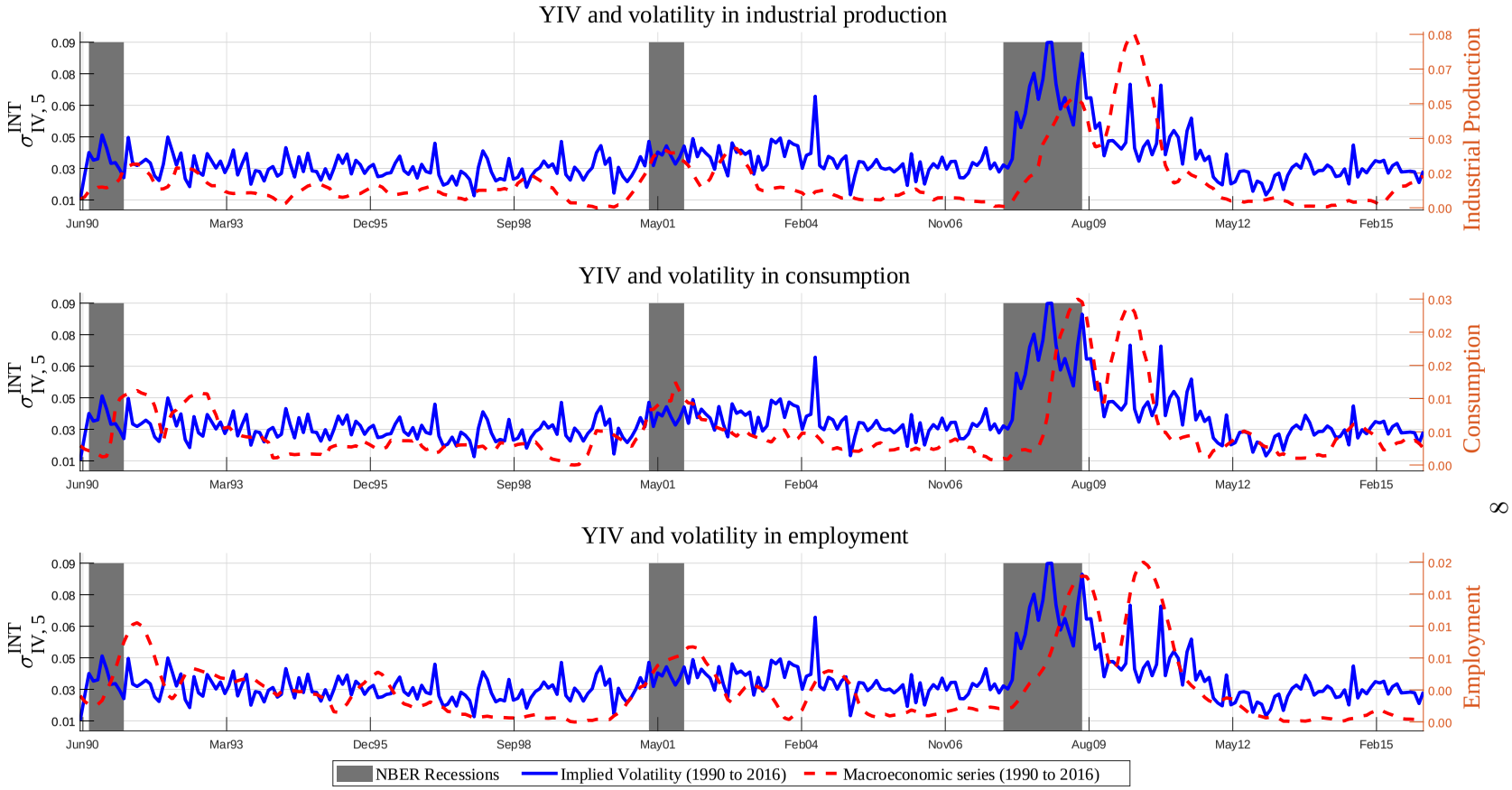

Figure A4: YIV and volatility in macroeconomic variables.

Notes: This figure plots the YIV and volatility of various macroeconomic variables. Each panel corresponds to a distinct macroeconomic variable: IND is the year-on-year growth rate of industrial production; CON is the year-on-year growth rate of personal consumption expenditures; and EMP is the year-on-year growth rate of total non-farm payrolls. In each panel, the blue solid line plots the implied volatility and the red dashed line plots the volatility of the macroeconomic variable. The months are indicated on the x-axis. The grey shaded regions represent National Bureau of Economic Research (NBER) recessions. The NBER recession dates are published by the NBER Business Cycle Dating Committee. Monthly data, 1990 – 2016.

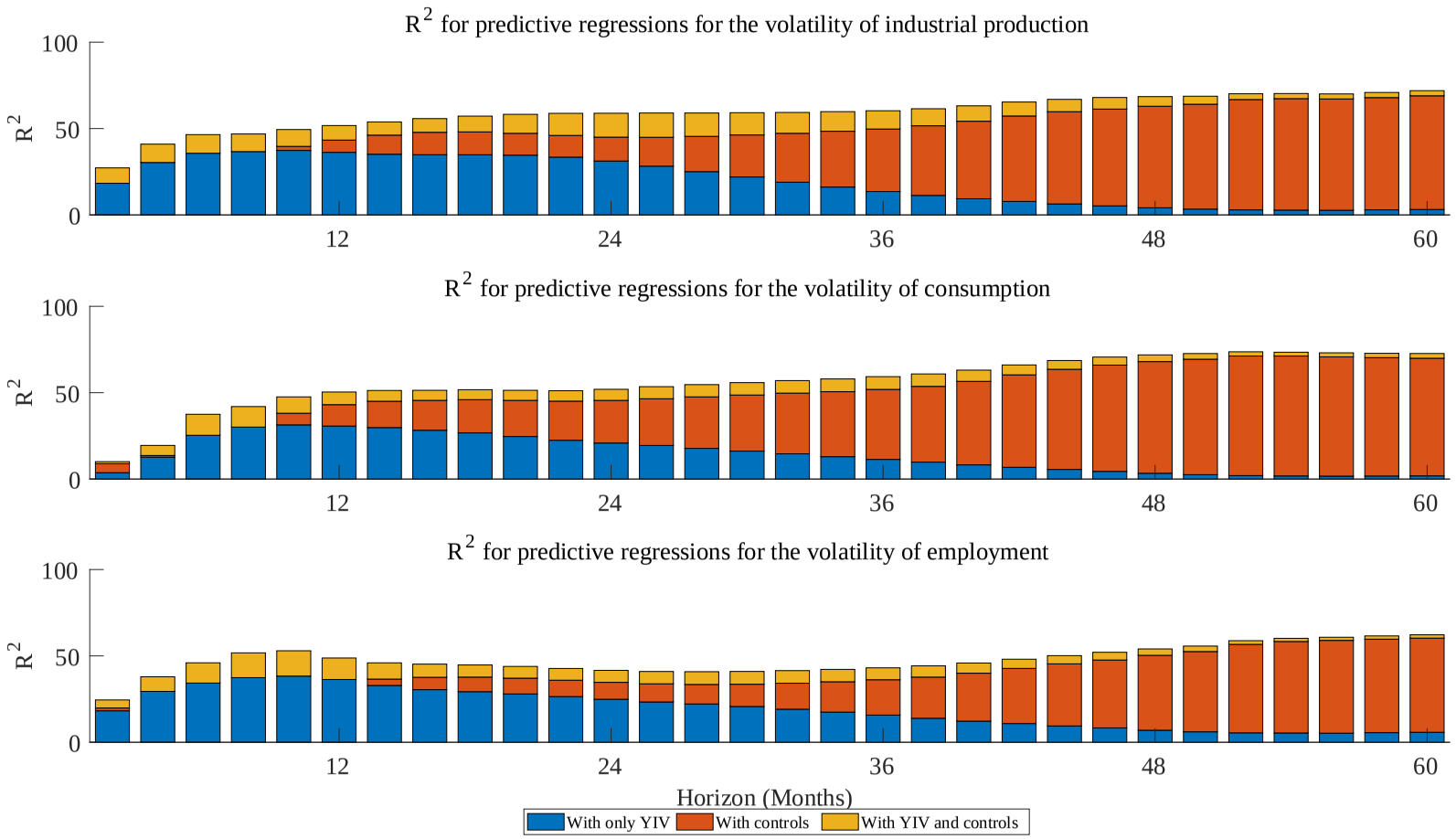

Figure A5: R-squared for predictive regressions for the volatility of macroeconomic variables.

Notes: This figure plots the value of the R^2 for the predictive regressions of various macroeconomic variables. Each panel corresponds to a distinct macroeconomic variable: IND is the volatility of the year-on-year growth rate of industrial production; CON is the volatility of the year-on-year growth rate of personal consumption expenditures; and EMP is the volatility of the year-on-year growth rate of total non-farm payrolls. Each panel, for each month, shows the R-squared achieved in a predictive regression with only the YIV (blue bar), with only the control variables (red bar), and the YIV and control variables (yellow bar). The months are indicated on the x-axis. Monthly data, 1990—2016.

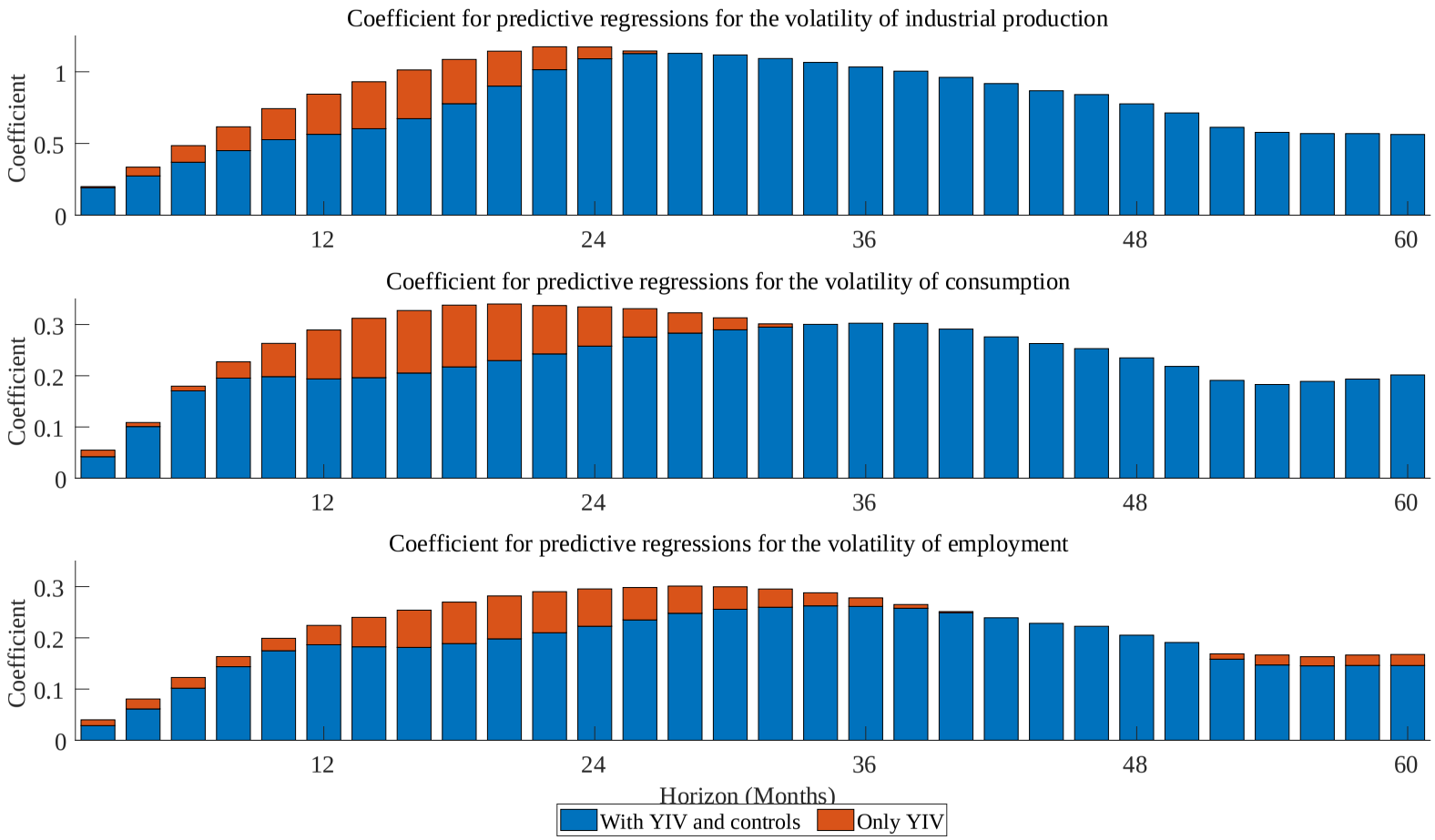

Figure A6: Coefficients for predictive regressions for the volatility of macroeconomic variables.

Notes: This figure plots the value of the coefficients on YIV for the predictive regressions of various macroeconomic variables. Each panel corresponds to a distinct macroeconomic variable: IND is the volatility of the year-on-year growth rate of industrial production; CON is the volatility of the year-on-year growth rate of personal consumption expenditures; and EMP is the volatility of the year-on-year growth rate of total non-farm payrolls. Each panel, for each month, shows the coefficient on the YIV with (blue bar) and without the control variables (red bar). The months are indicated on the x-axis. Monthly data, 1990 – 2016.

Table A1: Contemporaneous correlation with macroeconomic variables.

Notes: This table shows the correlation between the implied volatility from options on 2-year, 5-year, 10-year, and long-term (Ultra) Treasury note and bond futures ($\sigma^{INT}_{IV,2}$, $\sigma^{INT}_{IV,5}$, $\sigma^{INT}_{IV,10}$, and $\sigma^{INT}_{IV,TB}$, respectively) and macroeconomic variables. In the table, GDP is the year-on-year growth rate of real gross domestic product; IND is the year-on-year growth rate of industrial production; CON is the year-on-year growth rate of personal consumption expenditures; and EMP is the year-on-year growth rate of total non-farm payrolls. The numbers in parentheses are the p-values. All data is monthly data except for gross domestic product which is quarterly. Correlations are computed over the longest available sample for each pair of variables.

Variable	$\sigma^{INT}_{IV,2}$	$\sigma^{INT}_{IV,5}$	$\sigma^{INT}_{IV,10}$	$\sigma^{INT}_{IV,TB}$	GDP	IND	CON	EMP
$\sigma^{INT}_{IV,5}$	0.07	1.00						
	(0.26)							
$\sigma^{INT}_{IV,10}$	0.23***	0.69***	1.00					
	(0.01)	(0.01)						
$\sigma^{INT}_{IV,TB}$	-0.19***	-0.24***	-0.20***	1.00				
	(0.01)	(0.01)	(0.01)					
GDP	0.30***	-0.45***	-0.16*	-0.15*	1.00			
	(0.01)	(0.01)	(0.08)	(0.10)				
IND	0.13**	-0.45***	-0.21***	-0.21***	0.89***	1.00		
	(0.03)	(0.01)	(0.01)	(0.01)	(0.01)			
CON	0.32***	-0.41***	0.02	-0.13**	0.46***	0.38***	1.00	
	(0.01)	(0.01)	(0.64)	(0.01)	(0.01)	(0.01)		
EMP	0.10*	-0.57***	-0.28***	-0.05	0.85***	0.81***	0.53***	1.00
	(0.10)	(0.01)	(0.01)	(0.35)	(0.01)	(0.01)	(0.01)	

Table A2: Contemporaneous correlation with bond market variables.

Notes: This table shows the correlation between the implied volatility from options on 2-year, 5-year, 10-year, and long-term (Ultra) Treasury note and bond futures ($\sigma^{INT}_{IV,2}$, $\sigma^{INT}_{IV,5}$, $\sigma^{INT}_{IV,10}$, and $\sigma^{INT}_{IV,TB}$, respectively) and bond market variables. In the table, SRT03M, SRT06M, SRT01Y, SRT05Y, and SRT10Y are the changes in the yields-to-maturity of Treasury bills, notes, and bonds with maturities of 3-months, 6-months, 01-year, 05-years, and 10-years, respectively. ITBOND is the return on an index of all U.S. Treasury bonds. ICBOND is the return on an index of all U.S. investment-grade corporate bonds. CRSAAA and CRSBAA are the changes in the yields-to-maturity of corporate bonds rated AAA and BAA, respectively. The numbers in parentheses are the p-values. All data is monthly. Correlations are computed over the longest available sample for each pair of variables.

Variable	$\sigma^{INT}_{IV,2}$	$\sigma^{INT}_{IV,5}$	$\sigma^{INT}_{IV,10}$	$\sigma^{INT}_{IV,TB}$	SRT03M	SRT06M	SRT01Y	SRT05Y	SRT10Y	ITBOND	ICBOND	CRSAAA	CRSBAA
$\sigma^{INT}_{IV,2}$	0.07	1.00											
	(0.26)												
$\sigma^{INT}_{IV,2}$	0.23***	0.69***	1.00										
	(0.01)	(0.01)											
$\sigma^{INT}_{IV,2}$	-0.19***	-0.24***	-0.20***	1.00									
	(0.01)	(0.01)	(0.01)										
SRT03M	0.15***	-0.19***	-0.15***	-0.01	1.00								
	(0.01)	(0.01)	(0.01)	(0.96)									
SRT06M	0.21***	-0.17***	-0.15***	-0.01	0.93***	1.00							
	(0.01)	(0.01)	(0.01)	(0.95)	(0.01)								
SRT01Y	0.24***	-0.13**	-0.12**	0.01	0.85***	0.95***	1.00						
	(0.01)	(0.02)	(0.03)	(0.87)	(0.01)	(0.01)							
SRT05Y	0.25***	-0.01	-0.04	0.03	0.51***	0.64***	0.77***	1.00					
	(0.01)	(0.95)	(0.48)	(0.62)	(0.01)	(0.01)	(0.01)						
SRT10Y	0.24***	0.01	-0.02	0.03	0.37***	0.50***	0.63***	0.95***	1.00				
	(0.01)	(0.84)	(0.76)	(0.66)	(0.01)	(0.01)	(0.01)	(0.01)					
ITBOND	-0.15**	0.04	0.03	-0.02	-0.12**	-0.21***	-0.28***	-0.55***	-0.64***	1.00			
	(0.01)	(0.47)	(0.52)	(0.76)	(0.03)	(0.01)	(0.01)	(0.01)	(0.01)				
ICBOND	-0.11*	0.01	0.04	0.07	-0.12**	-0.25***	-0.32***	-0.45***	-0.49***	0.62***	1.00		
	(0.06)	(0.97)	(0.38)	(0.17)	(0.04)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)			
CRSAAA	0.21***	0.03	0.01	-0.03	0.18***	0.32***	0.42***	0.73***	0.84***	-0.62***	-0.62***	1.00	
	(0.01)	(0.57)	(0.82)	(0.62)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)		
CRSBAA	0.22***	0.08	0.06	-0.07	0.05	0.19***	0.29***	0.54***	0.65***	-0.48***	-0.62***	0.84***	1.00
	(0.01)	(0.14)	(0.28)	(0.22)	(0.39)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	

Table A3: Contemporaneous correlation with stock market variables.

Notes: This table shows the correlation between the implied volatility from options on 2-year, 5-year, 10-year, and long-term (Ultra) Treasury note and bond futures ($\sigma^{INT}_{IV,2}$, $\sigma^{INT}_{IV,5}$, $\sigma^{INT}_{IV,10}$, and $\sigma^{INT}_{IV,TB}$, respectively) and stock market variables. In the table, VWRETS is the value-weighted return on an index of all stocks in the CRSP database. EWRETS is the equal-weighted return on an index of all stocks in the CRSP database. σ^{VIX}_{IV} is the CBOE volatility index. HOUSNG is the measure of new-home construction reported by the Wall Street Journal. The numbers in parentheses are the p-values. All data is monthly. Correlations are computed over the longest available sample for each pair of variables.

Variable	$\sigma^{INT}_{IV,2}$	$\sigma^{INT}_{IV,5}$	$\sigma^{INT}_{IV,10}$	$\sigma^{INT}_{IV,TB}$	VWRETS	EWRETS	σ^{VIX}_{IV}	HOUSNG
$\sigma^{INT}_{IV,5}$	0.07	1.00						
	(0.26)							
$\sigma^{INT}_{IV,5}$	0.23***	0.69***	1.00					
	(0.01)	(0.01)						
$\sigma^{INT}_{IV,5}$	-0.19***	-0.24***	-0.20***	1.00				
	(0.01)	(0.01)	(0.01)					
VWRETS	-0.01	-0.16***	-0.15***	-0.06	1.00			
	(0.82)	(0.01)	(0.01)	(0.23)				
EWRETS	0.01	-0.08	-0.09*	-0.04	0.86***	1.00		
	(1.00)	(0.18)	(0.09)	(0.46)	(0.01)			
σ^{VIX}_{IV}	0.02	0.49***	0.50***	0.05	-0.27***	-0.24***	1.00	
	(0.74)	(0.01)	(0.01)	(0.42)	(0.01)	(0.01)		
HOUSNG	0.35***	-0.28***	0.01	-0.18***	-0.01	-0.01	-0.21***	1.00
	(0.01)	(0.01)	(0.81)	(0.01)	(0.83)	(0.95)	(0.01)	

Table A4: Predicting the growth rate of industrial production.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + IND_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $IND_{i,t+j}$ is the year-on-year growth rate of industrial production measured at time $t+j$. Controls include the term spread measured by the yield spread between the 5-year Treasuries and the 3-month T-bills (TRM05-03), the level of the short-term interest rate measured by the yield-to-maturity on the 3-month T-bills (SRT03M), the change in the short-term interest rate (ΔSRT03M), the return on an index of treasury bonds (ITBOND), the returns on an index of investment-grade corporate bonds (ICBOND), the value-weighted return on an index of all stocks in CRSP (VWRETS), the CBOE Volatility Index (σ_{IV}^{VIX}), the credit spread on corporate bonds (CRSAAA), the option-based credit spread from Culp, Nozawa, and Veronesi (2018) (SPXSPRD), and the measure of new-home construction reported by the Wall Street Journal (HOUSNG). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: YIV					Panel B: YIV and Lags				
$\sigma_{IV,5}^{INT}$	-0.18***	-0.13***	-0.09***	-0.06***	-0.05**	-0.17***	-0.13**	-0.09**	-0.06**	-0.05**
	(-2.91)	(-2.64)	(-2.71)	(-2.51)	(-2.01)	(-2.55)	(-2.27)	(-2.26)	(-2.22)	(-2.03)
Lag						0.01	-0.01	0.01	0.01	0.01
						(0.16)	(-0.04)	(0.10)	(0.17)	(0.08)
$R^2 - ord$	33.52	21.46	12.25	7.50	5.04	33.58	21.46	12.28	7.57	5.05
	Panel C: Controls only					Panel D: YIV and Controls				
$\sigma_{IV,5}^{INT}$						-0.13***	-0.09***	-0.06***	-0.05***	-0.05**
						(-2.85)	(-2.61)	(-2.54)	(-2.34)	(-2.22)
Lag	0.08	0.07	0.08*	0.09*	0.09*	0.05	0.05	0.07	0.08*	0.08*
	(1.61)	(1.58)	(1.71)	(1.75)	(1.86)	(1.06)	(1.23)	(1.56)	(1.64)	(1.73)
TRM05-03	0.16*	0.15	0.11	0.09	0.09	0.23***	0.20**	0.15	0.12	0.11
	(1.71)	(1.41)	(1.08)	(0.94)	(1.14)	(2.74)	(2.12)	(1.50)	(1.29)	(1.53)
SRT03M	0.21	0.14	0.03	-0.04	-0.06	0.28**	0.20	0.07	-0.01	-0.04
	(1.47)	(0.89)	(0.18)	(-0.24)	(-0.39)	(2.21)	(1.37)	(0.41)	(-0.09)	(-0.27)
ΔSRT03M	0.04***	0.05**	0.05	0.04	0.03	0.03**	0.04*	0.04	0.04	0.02
	(2.72)	(2.08)	(1.55)	(1.45)	(1.35)	(2.11)	(1.74)	(1.37)	(1.29)	(1.19)
ITBOND	0.01	-0.01	-0.01	-0.01	-0.01	0.01	-0.01	-0.01	-0.01	-0.01
	(0.26)	(-0.23)	(-0.26)	(-0.21)	(-0.01)	(0.05)	(-0.49)	(-0.43)	(-0.37)	(-0.19)
ICBOND	-0.01	0.01	0.01	0.01	0.01	-0.01	0.01	0.01	0.01	0.01
	(-0.37)	(0.28)	(0.52)	(0.65)	(0.70)	(-0.56)	(0.29)	(0.55)	(0.68)	(0.71)
VWRETS	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01
	(1.06)	(1.02)	(0.76)	(0.33)	(0.11)	(1.46)	(1.31)	(0.94)	(0.38)	(0.11)
σ_{IV}^{VIX}	0.13**	0.16***	0.15***	0.13***	0.11***	0.15***	0.17***	0.16***	0.13***	0.11***
	(2.18)	(2.35)	(2.85)	(3.38)	(3.45)	(2.78)	(2.54)	(2.99)	(3.55)	(3.66)
CRSBAA	-0.18	-0.13	-0.03	0.04	0.07	-0.24**	-0.18	-0.06	0.02	0.05
	(-1.43)	(-0.89)	(-0.18)	(0.27)	(0.54)	(-2.14)	(-1.37)	(-0.42)	(0.11)	(0.40)
SPXSPRD	-0.24***	-0.24**	-0.22***	-0.19***	-0.17***	-0.19***	-0.20**	-0.19***	-0.17***	-0.15***
	(-2.36)	(-2.12)	(-2.62)	(-3.63)	(-4.26)	(-2.42)	(-2.08)	(-2.55)	(-3.44)	(-3.77)
HOUSNG	-0.02	-0.02	-0.02	-0.03	-0.04**	-0.04	-0.03	-0.03	-0.04	-0.05***
	(-0.63)	(-0.84)	(-1.00)	(-1.30)	(-2.27)	(-1.27)	(-1.45)	(-1.38)	(-1.59)	(-2.62)
$R^2 - ord$	50.02	47.20	46.04	49.29	55.82	59.49	53.23	49.15	51.62	58.10

Table A5: Predicting the growth rate of consumption.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + CON_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $CON_{i,t+j}$ is the year-on-year growth rate of personal consumption expenditures measured at time $t+j$. Controls include the term spread measured by the yield spread between the 5-year Treasuries and the 3-month T-bills (TRM05-03), the level of the short-term interest rate measured by the yield-to-maturity on the 3-month T-bills (SRT03M), the change in the short-term interest rate (ΔSRT03M), the return on an index of treasury bonds (ITBOND), the returns on an index of investment-grade corporate bonds (ICBOND), the value-weighted return on an index of all stocks in CRSP (VWRETS), the CBOE Volatility Index (σ_{IV}^{VIX}), the credit spread on corporate bonds (CRSAAA), the option-based credit spread from Culp, Nozawa, and Veronesi (2018) (SPXSPRD), and the measure of new-home construction reported by the Wall Street Journal (HOUSNG). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H =$	12	18	24	30	36	12	18	24	30	36
	Panel A: YIV					Panel B: YIV and Lags				
$\sigma_{IV,5}^{INT}$	-0.09***	-0.08***	-0.06***	-0.05***	-0.05***	-0.07**	-0.06**	-0.05**	-0.04**	-0.04***
	(-3.31)	(-3.22)	(-3.42)	(-3.59)	(-3.80)	(-2.10)	(-2.08)	(-2.14)	(-2.26)	(-2.68)
Lag						0.05**	0.04*	0.03	0.02	0.02
						(2.24)	(1.67)	(1.43)	(1.42)	(1.48)
$R^2 - ord$	34.82	28.28	22.00	17.82	16.29	43.62	33.62	25.51	20.29	17.86
	Panel C: Controls only					Panel D: YIV and Controls				
$\sigma_{IV,5}^{INT}$						-0.05***	-0.05***	-0.05***	-0.05***	-0.04***
						(-2.61)	(-2.80)	(-3.19)	(-3.57)	(-3.90)
Lag	0.01	-0.01	-0.01	-0.01	-0.01	0.01	-0.01	-0.02*	-0.01	-0.01
	(0.56)	(-0.48)	(-1.02)	(-0.80)	(-0.07)	(0.01)	(-1.08)	(-1.68)	(-1.51)	(-0.78)
TRM05-03	-0.02	-0.02	-0.02	-0.02	-0.02	0.01	0.01	0.01	0.01	0.01
	(-0.76)	(-0.65)	(-0.58)	(-0.52)	(-0.46)	(0.27)	(0.35)	(0.22)	(0.15)	(0.07)
SRT03M	-0.04	-0.05	-0.07	-0.08	-0.09	-0.02	-0.02	-0.04	-0.06	-0.07
	(-0.82)	(-0.83)	(-0.83)	(-0.85)	(-0.88)	(-0.37)	(-0.43)	(-0.58)	(-0.69)	(-0.83)
ΔSRT03M	0.02*	0.02***	0.03**	0.02*	0.02*	0.01	0.02**	0.02*	0.02	0.01
	(1.86)	(2.48)	(2.22)	(1.92)	(1.70)	(1.48)	(2.01)	(1.81)	(1.54)	(1.30)
ITBOND	0.01*	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	(1.69)	(1.48)	(1.16)	(1.10)	(1.42)	(1.44)	(1.12)	(0.80)	(0.59)	(0.88)
ICBOND	-0.01	-0.01	-0.01	-0.01	0.01	-0.01	-0.01	-0.01	0.01	0.01
	(-0.85)	(-0.72)	(-0.29)	(-0.03)	(0.01)	(-0.92)	(-0.67)	(-0.12)	(0.17)	(0.04)
VWRETS	0.02*	0.01	0.01*	0.01**	0.01**	0.02*	0.01	0.01*	0.01**	0.01**
	(1.68)	(1.49)	(1.75)	(2.01)	(2.20)	(1.84)	(1.59)	(1.87)	(2.16)	(2.27)
σ_{IV}^{VIX}	-0.01	0.02	0.03	0.04*	0.04**	0.01	0.03	0.03	0.04**	0.05***
	(-0.12)	(0.64)	(1.06)	(1.68)	(2.16)	(0.15)	(0.87)	(1.33)	(2.02)	(2.58)
CRSBAA	0.07	0.08	0.10	0.11	0.12	0.05	0.06	0.07	0.09	0.10
	(1.56)	(1.59)	(1.46)	(1.38)	(1.44)	(1.36)	(1.37)	(1.28)	(1.28)	(1.44)
SPXSPRD	-0.05	-0.06	-0.06	-0.05	-0.06**	-0.03	-0.04	-0.04	-0.04	-0.04*
	(-1.04)	(-1.05)	(-1.14)	(-1.46)	(-2.00)	(-0.69)	(-0.79)	(-0.85)	(-1.13)	(-1.67)
HOUSNG	0.07***	0.07***	0.07***	0.07***	0.06***	0.06***	0.07***	0.07***	0.06***	0.05***
	(3.52)	(3.92)	(4.24)	(4.47)	(4.44)	(3.41)	(3.94)	(4.52)	(4.89)	(5.18)
$R^2 - ord$	59.35	58.57	58.36	58.43	59.33	66.19	64.99	64.38	65.01	65.83

Table A6: Predicting the growth rate of employment.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + EMP_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $EMP_{i,t+j}$ is the year-on-year growth rate of total non-farm payrolls measured at time $t+j$. Controls include the term spread measured by the yield spread between the 5-year Treasuries and the 3-month T-bills (TRM05-03), the level of the short-term interest rate measured by the yield-to-maturity on the 3-month T-bills (SRT03M), the change in the short-term interest rate (ΔSRT03M), the return on an index of treasury bonds (ITBOND), the returns on an index of investment-grade corporate bonds (ICBOND), the value-weighted return on an index of all stocks in CRSP (VWRETS), the CBOE Volatility Index (σ_{IV}^{VIX}), the credit spread on corporate bonds (CRSAAA), the option-based credit spread from Culp, Nozawa, and Veronesi (2018) (SPXSPRD), and the measure of new-home construction reported by the Wall Street Journal (HOUSNG). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: YIV					Panel B: YIV and Lags				
$\sigma_{IV,5}^{INT}$	-0.09***	-0.08***	-0.07***	-0.06***	-0.04***	-0.07***	-0.07***	-0.06***	-0.05***	-0.05***
	(-6.28)	(-5.46)	(-5.10)	(-4.86)	(-4.15)	(-3.65)	(-3.55)	(-3.78)	(-4.24)	(-4.59)
Lag						0.05***	0.03*	0.02	0.01	-0.01
						(3.25)	(1.91)	(1.01)	(0.33)	(-0.10)
$R^2 - ord$	46.85	40.79	31.10	22.92	16.24	55.77	44.35	32.30	23.08	16.26
	Panel C: Controls only					Panel D: YIV and Controls				
$\sigma_{IV,5}^{INT}$						-0.05***	-0.05***	-0.04***	-0.04***	-0.04***
						(-3.75)	(-3.49)	(-3.51)	(-3.54)	(-3.89)
Lag	0.08***	0.07***	0.07***	0.07***	0.07***	0.07***	0.06***	0.06***	0.06***	0.06***
	(3.97)	(3.60)	(3.44)	(3.37)	(3.54)	(3.85)	(3.68)	(3.61)	(3.51)	(3.67)
TRM05-03	0.02	0.03	0.03	0.02	0.02	0.05*	0.05	0.05	0.05	0.05
	(0.59)	(0.63)	(0.58)	(0.53)	(0.53)	(1.70)	(1.62)	(1.38)	(1.21)	(1.20)
SRT03M	-0.01	-0.01	-0.04	-0.06	-0.08	0.03	0.02	-0.01	-0.03	-0.05
	(-0.06)	(-0.18)	(-0.47)	(-0.72)	(-0.91)	(0.63)	(0.39)	(-0.08)	(-0.45)	(-0.73)
ΔSRT03M	0.02***	0.02***	0.02***	0.02**	0.02*	0.02**	0.02***	0.02**	0.02*	0.01
	(2.77)	(3.22)	(2.55)	(2.03)	(1.65)	(2.19)	(2.45)	(2.03)	(1.64)	(1.30)
ITBOND	0.01**	0.01	0.01	0.01	0.01	0.01**	0.01	0.01	0.01	0.01
	(1.98)	(1.51)	(1.40)	(1.35)	(1.46)	(2.05)	(1.37)	(1.24)	(1.17)	(1.26)
ICBOND	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01**	-0.01	-0.01	-0.01	-0.01
	(-1.51)	(-1.02)	(-0.61)	(-0.32)	(-0.17)	(-2.04)	(-1.27)	(-0.69)	(-0.33)	(-0.18)
VWRETS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	(0.65)	(0.75)	(0.65)	(0.53)	(0.42)	(0.75)	(0.81)	(0.69)	(0.55)	(0.40)
σ_{IV}^{VIX}	0.01	0.03	0.03	0.04*	0.04**	0.01	0.03	0.04	0.04*	0.04**
	(0.42)	(0.98)	(1.36)	(1.76)	(2.09)	(0.75)	(1.19)	(1.53)	(1.93)	(2.30)
CRSBAA	-0.01	-0.01	0.01	0.03	0.04	-0.04	-0.04	-0.02	0.01	0.02
	(-0.33)	(-0.16)	(0.14)	(0.42)	(0.64)	(-1.11)	(-0.81)	(-0.30)	(0.10)	(0.39)
SPXSPRD	-0.07**	-0.08*	-0.09**	-0.09***	-0.09***	-0.05*	-0.06*	-0.07**	-0.07***	-0.07***
	(-2.05)	(-1.94)	(-2.15)	(-2.68)	(-3.38)	(-1.82)	(-1.75)	(-1.98)	(-2.51)	(-3.24)
HOUSNG	0.01	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	-0.02	-0.02**
	(0.07)	(-0.14)	(-0.40)	(-0.78)	(-1.42)	(-0.44)	(-0.70)	(-0.94)	(-1.29)	(-2.01)
$R^2 - ord$	64.18	57.89	53.18	51.65	53.45	71.13	65.34	59.81	57.82	59.60

Table A7: Predicting the volatility of industrial production growth.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(IND_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $IND_{i,t+j}$ is the year-on-year growth rate of industrial production measured at time $t+j$. Controls include the term spread measured by the yield spread between the 5-year Treasuries and the 3-month T-bills (TRM05-03), the level of the short-term interest rate measured by the yield-to-maturity on the 3-month T-bills (SRT03M), the change in the short-term interest rate (ΔSRT03M), the return on an index of treasury bonds (ITBOND), the returns on an index of investment-grade corporate bonds (ICBOND), the value-weighted return on an index of all stocks in CRSP (VWRETS), the CBOE Volatility Index (σ_{IV}^{VIX}), the credit spread on corporate bonds (CRSAAA), the option-based credit spread from Culp, Nozawa, and Veronesi (2018) (SPXSPRD), and the measure of new-home construction reported by the Wall Street Journal (HOUSNG). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: YIV					Panel B: YIV and Lags				
$\sigma_{IV,5}^{INT}$	0.84***	1.09***	1.17***	1.05***	0.84***	0.74***	1.06***	1.29***	1.25***	1.08***
	(3.73)	(3.38)	(3.11)	(2.89)	(2.54)	(3.99)	(3.70)	(3.13)	(2.77)	(2.47)
Lag						0.20	0.06	-0.22	-0.39	-0.46
						(0.82)	(0.23)	(-0.90)	(-1.24)	(-1.34)
R^2-ord	36.24	34.83	31.20	21.97	13.55	37.69	34.90	32.00	24.22	16.52
	Panel C: Controls only					Panel D: YIV and Controls				
$\sigma_{IV,5}^{INT}$						0.56***	0.78***	1.09***	1.12***	1.03***
						(3.46)	(4.33)	(4.65)	(4.43)	(4.70)
Lag	0.19	0.06	0.02	0.07	0.17	0.05	-0.12	-0.22	-0.18	-0.05
	(0.78)	(0.27)	(0.10)	(0.27)	(0.59)	(0.25)	(-0.76)	(-1.49)	(-1.04)	(-0.23)
TRM05-03	0.65	1.02*	1.19	1.30	1.59*	0.31	0.50	0.45	0.53	0.93
	(1.43)	(1.64)	(1.49)	(1.54)	(1.84)	(0.80)	(1.00)	(0.81)	(0.95)	(1.61)
SRT03M	1.11*	2.00*	2.72*	3.32*	4.10**	0.77	1.49	2.00	2.59*	3.52***
	(1.67)	(1.79)	(1.70)	(1.87)	(2.30)	(1.35)	(1.58)	(1.59)	(1.92)	(2.62)
ΔSRT03M	-0.10	-0.23	-0.29	-0.37*	-0.44***	-0.04	-0.15	-0.17	-0.25	-0.33*
	(-0.75)	(-1.19)	(-1.45)	(-1.81)	(-2.36)	(-0.31)	(-0.72)	(-0.86)	(-1.28)	(-1.92)
ITBOND	-0.26**	-0.27*	-0.26*	-0.27*	-0.29**	-0.23**	-0.22*	-0.21*	-0.21**	-0.23**
	(-2.15)	(-1.86)	(-1.78)	(-1.91)	(-2.11)	(-2.31)	(-1.86)	(-1.80)	(-2.02)	(-2.31)
ICBOND	0.27*	0.28*	0.17	0.16	0.16	0.27**	0.27**	0.16	0.15	0.16
	(1.85)	(1.67)	(1.03)	(0.94)	(0.91)	(2.28)	(2.01)	(1.31)	(1.14)	(1.17)
VWRETS	0.10	0.06	0.06	0.07	0.05	0.10	0.07	0.08	0.09	0.07
	(0.76)	(0.49)	(0.55)	(0.75)	(0.58)	(0.78)	(0.58)	(0.75)	(0.95)	(0.71)
σ_{IV}^{VIX}	-0.06	0.09	-0.15	-0.48	-0.52	-0.10	0.03	-0.24	-0.57*	-0.59*
	(-0.15)	(0.32)	(-0.52)	(-1.28)	(-1.32)	(-0.29)	(0.15)	(-1.22)	(-1.78)	(-1.69)
CRSAAA	-0.73	-1.38	-1.91	-2.44*	-3.17**	-0.40	-0.88	-1.20	-1.72	-2.57***
	(-1.19)	(-1.43)	(-1.40)	(-1.65)	(-2.19)	(-0.77)	(-1.07)	(-1.12)	(-1.53)	(-2.34)
SPXSPRD	0.89*	1.23**	1.60***	1.93***	1.94***	0.66	0.91**	1.17***	1.49***	1.54***
	(1.72)	(2.23)	(2.73)	(2.83)	(2.86)	(1.47)	(1.98)	(2.89)	(3.13)	(3.19)
HOUSNG	-0.33*	-0.50*	-0.57*	-0.49	-0.33	-0.28**	-0.43**	-0.46*	-0.38	-0.22
	(-1.95)	(-1.87)	(-1.66)	(-1.35)	(-0.95)	(-2.03)	(-2.00)	(-1.76)	(-1.33)	(-0.80)
R^2-ord	43.32	48.06	45.03	46.30	49.72	51.75	57.20	58.85	59.18	60.31

Table A8: Predicting the volatility of consumption growth.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(CON_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $CON_{i,t+j}$ is the year-on-year growth rate of personal consumption expenditures measured at time $t+j$. Controls include the term spread measured by the yield spread between the 5-year Treasuries and the 3-month T-bills (TRM05-03), the level of the short-term interest rate measured by the yield-to-maturity on the 3-month T-bills (SRT03M), the change in the short-term interest rate (ΔSRT03M), the return on an index of treasury bonds (ITBOND), the returns on an index of investment-grade corporate bonds (ICBOND), the value-weighted return on an index of all stocks in CRSP (VWRETS), the CBOE Volatility Index (σ_{IV}^{VIX}), the credit spread on corporate bonds (CRSAAA), the option-based credit spread from Culp, Nozawa, and Veronesi (2018) (SPXSPRD), and the measure of new-home construction reported by the Wall Street Journal (HOUSNG). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: YIV					Panel B: YIV and Lags				
$\sigma_{IV,5}^{INT}$	0.29***	0.34***	0.33***	0.31***	0.27***	0.25***	0.33***	0.35***	0.35***	0.33***
	(4.26)	(3.49)	(3.14)	(2.96)	(2.58)	(3.05)	(3.07)	(2.87)	(2.81)	(2.69)
Lag						0.09	0.02	-0.04	-0.08	-0.13
						(0.86)	(0.20)	(-0.37)	(-0.79)	(-1.13)
R^2-ord	30.69	26.73	20.85	16.19	11.38	32.95	26.80	21.04	17.07	13.44
	Panel C: Controls only					Panel D: YIV and Controls				
$\sigma_{IV,5}^{INT}$						0.19***	0.22***	0.26***	0.29***	0.30***
						(3.43)	(3.78)	(3.95)	(3.62)	(3.58)
Lag	0.11	0.03	0.05	0.09	0.13	0.07	-0.01	-0.01	0.03	0.07
	(1.07)	(0.34)	(0.63)	(1.19)	(1.44)	(0.74)	(-0.16)	(-0.09)	(0.51)	(0.95)
TRM05-03	-0.01	0.21	0.40	0.50*	0.55**	-0.12	0.07	0.23	0.31	0.36*
	(-0.09)	(0.90)	(1.46)	(1.76)	(2.05)	(-0.85)	(0.32)	(0.97)	(1.34)	(1.82)
SRT03M	0.02	0.50	1.00*	1.30**	1.46***	-0.09	0.37	0.84*	1.12**	1.30***
	(0.08)	(1.26)	(1.76)	(2.05)	(2.47)	(-0.41)	(1.01)	(1.67)	(2.10)	(2.76)
ΔSRT03M	-0.02	-0.09	-0.11	-0.12	-0.12*	-0.01	-0.07	-0.08	-0.09	-0.09
	(-0.40)	(-1.01)	(-1.16)	(-1.33)	(-1.75)	(-0.04)	(-0.74)	(-0.89)	(-1.02)	(-1.39)
ITBOND	-0.07***	-0.08*	-0.08*	-0.08*	-0.08*	-0.06***	-0.07*	-0.07*	-0.07*	-0.06**
	(-2.46)	(-1.81)	(-1.75)	(-1.78)	(-1.90)	(-2.40)	(-1.79)	(-1.80)	(-1.88)	(-2.03)
ICBOND	0.07	0.06	0.04	0.04	0.02	0.07*	0.06	0.05	0.04	0.03
	(1.52)	(1.02)	(0.69)	(0.64)	(0.35)	(1.69)	(1.20)	(0.87)	(0.85)	(0.57)
VWRETS	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03
	(0.67)	(0.77)	(0.91)	(1.24)	(1.20)	(0.64)	(0.80)	(0.92)	(1.14)	(1.04)
σ_{IV}^{VIX}	-0.22	-0.12	-0.15	-0.18	-0.18	-0.24	-0.14	-0.18	-0.21*	-0.21*
	(-1.23)	(-0.91)	(-1.13)	(-1.33)	(-1.38)	(-1.36)	(-1.14)	(-1.42)	(-1.64)	(-1.65)
CRSAAA	0.11	-0.30	-0.76	-1.05*	-1.22***	0.22	-0.17	-0.59	-0.86*	-1.04***
	(0.57)	(-0.90)	(-1.55)	(-1.93)	(-2.44)	(1.13)	(-0.54)	(-1.35)	(-1.86)	(-2.58)
SPXSPRD	0.45*	0.52**	0.61***	0.66***	0.66***	0.37*	0.44**	0.51***	0.55***	0.55***
	(1.79)	(2.16)	(3.00)	(3.52)	(3.66)	(1.71)	(2.03)	(3.08)	(3.78)	(4.09)
HOUSNG	-0.09*	-0.18**	-0.21**	-0.17	-0.08	-0.07*	-0.16**	-0.18**	-0.14	-0.05
	(-1.90)	(-2.13)	(-1.99)	(-1.62)	(-0.88)	(-1.84)	(-2.17)	(-1.99)	(-1.53)	(-0.63)
R^2-ord	43.09	45.99	45.55	48.65	51.92	50.40	51.73	51.96	55.83	59.28

Table A9: Predicting the volatility of employment growth.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(EMP_{i,t+j}) = \alpha_H + \beta_H \sigma^{INT}_{IV,t} + Controls + \epsilon_{t+H}$$

Here, $\sigma^{INT}_{IV,t}$ is the YIV measured at time t and $EMP_{i,t+j}$ is the year-on-year growth rate of total non-farm payrolls measured at time $t+j$. Controls include the term spread measured by the yield spread between the 5-year Treasuries and the 3-month T-bills (TRM05-03), the level of the short-term interest rate measured by the yield-to-maturity on the 3-month T-bills (SRT03M), the change in the short-term interest rate (ΔSRT03M), the return on an index of treasury bonds (ITBOND), the returns on an index of investment-grade corporate bonds (ICBOND), the value-weighted return on an index of all stocks in CRSP (VWRETS), the CBOE Volatility Index (σ^{VIX}_{IV}), the credit spread on corporate bonds (CRSAAA), the option-based credit spread from Culp, Nozawa, and Veronesi (2018) (SPXSPRD), and the measure of new-home construction reported by the Wall Street Journal (HOUSNG). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: YIV					Panel B: YIV and Lags				
$\sigma^{INT}_{IV,5}$	0.22***	0.27***	0.30***	0.30***	0.28***	0.18***	0.23***	0.28***	0.32***	0.32***
	(5.32)	(4.45)	(3.90)	(3.61)	(3.18)	(4.28)	(4.97)	(4.33)	(3.82)	(3.42)
Lag						0.08	0.08	0.04	-0.03	-0.09
						(1.26)	(1.07)	(0.42)	(-0.31)	(-0.85)
R^2-ord	36.34	29.29	24.91	20.71	15.74	39.40	31.36	25.17	20.86	16.90
	Panel C: Controls only					Panel D: YIV and Controls				
$\sigma^{INT}_{IV,5}$						0.19***	0.19***	0.22***	0.26***	0.26***
						(5.12)	(4.45)	(4.68)	(4.33)	(3.76)
Lag	0.12*	0.13	0.12	0.14	0.17*	0.06	0.07	0.06	0.06	0.09
	(1.63)	(1.56)	(1.52)	(1.55)	(1.83)	(1.02)	(1.07)	(0.90)	(0.90)	(1.33)
TRM05-03	0.09	0.16	0.33	0.47	0.56*	-0.02	0.04	0.18	0.30	0.40
	(0.57)	(0.73)	(1.20)	(1.52)	(1.79)	(-0.11)	(0.20)	(0.73)	(1.15)	(1.58)
SRT03M	0.14	0.33	0.68	1.00	1.24*	0.02	0.19	0.53	0.82	1.06*
	(0.62)	(0.91)	(1.27)	(1.54)	(1.89)	(0.11)	(0.59)	(1.07)	(1.45)	(1.95)
ΔSRT03M	-0.05*	-0.06	-0.08	-0.10	-0.11	-0.03	-0.04	-0.06	-0.07	-0.09
	(-1.62)	(-0.89)	(-0.91)	(-1.10)	(-1.48)	(-1.07)	(-0.60)	(-0.65)	(-0.82)	(-1.20)
ITBOND	-0.03	-0.07**	-0.09**	-0.10**	-0.11***	-0.02	-0.07**	-0.08**	-0.09***	-0.10***
	(-1.16)	(-2.28)	(-2.15)	(-2.30)	(-2.64)	(-1.15)	(-2.31)	(-2.18)	(-2.45)	(-2.92)
ICBOND	0.02	0.07**	0.07	0.07	0.08	0.03	0.08**	0.07*	0.08*	0.08*
	(0.79)	(1.98)	(1.56)	(1.43)	(1.45)	(1.09)	(2.24)	(1.79)	(1.67)	(1.70)
VWRETS	0.01	0.01	0.01	0.02	0.03	0.01	0.02	0.01	0.03	0.03
	(0.31)	(0.40)	(0.35)	(0.74)	(1.05)	(0.34)	(0.46)	(0.43)	(0.78)	(0.96)
σ^{VIX}_{IV}	-0.10	-0.10	-0.04	-0.07	-0.09	-0.12	-0.12	-0.07	-0.10	-0.13
	(-0.78)	(-0.70)	(-0.30)	(-0.39)	(-0.49)	(-1.04)	(-0.95)	(-0.55)	(-0.61)	(-0.70)
CRSAAA	-0.05	-0.16	-0.45	-0.72	-0.92*	0.07	-0.03	-0.29	-0.54	-0.74*
	(-0.24)	(-0.52)	(-0.97)	(-1.31)	(-1.72)	(0.37)	(-0.09)	(-0.67)	(-1.11)	(-1.66)
SPXSPRD	0.20	0.32*	0.36**	0.45***	0.54***	0.13	0.24	0.27**	0.36***	0.45***
	(1.27)	(1.67)	(2.22)	(2.75)	(3.04)	(1.03)	(1.43)	(1.97)	(2.58)	(2.90)
HOUSNG	-0.06	-0.09	-0.11	-0.09	-0.03	-0.05	-0.08	-0.10	-0.08	-0.01
	(-1.33)	(-1.33)	(-1.23)	(-0.88)	(-0.25)	(-1.51)	(-1.45)	(-1.29)	(-0.88)	(-0.14)
R^2-ord	34.50	37.72	34.69	33.59	36.19	46.95	44.76	41.64	41.00	43.09

Table A10: Predicting the growth rate of industrial production: Controlling for term spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + IND_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $IND_{i,t+j}$ is the year-on-year growth rate of industrial production measured at time $t+j$. Controls include the term spread measured by yield spread between the 5-year Treasuries and the 6-month T-bills (TRM05-06), the 10-year Treasuries and the 3-month T-bills (TRM10-03), the 10-year Treasuries and the 6-month T-bills (TRM10-06), and the 10-year Treasuries and the 12-month T-bills (TRM10-12). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: TRM05-06					Panel B: YIV and TRM05-06				
$\sigma_{IV,5}^{INT}$						-0.18***	-0.19***	-0.20***	-0.20***	-0.19***
						(-3.27)	(-3.40)	(-3.57)	(-3.54)	(-3.30)
TRM05-06	-0.04	-0.03	-0.01	0.01	0.01	0.02	0.03	0.05*	0.06**	0.07**
	(-1.45)	(-0.91)	(-0.40)	(0.05)	(0.43)	(0.75)	(1.41)	(1.92)	(2.16)	(2.21)
$R^2 - ord$	1.48	0.65	0.13	0.01	0.18	28.39	32.75	36.31	37.60	35.98
	Panel C: TRM10-03					Panel D: YIV and TRM10-03				
$\sigma_{IV,5}^{INT}$						-0.18***	-0.19***	-0.20***	-0.20***	-0.19***
						(-3.22)	(-3.34)	(-3.51)	(-3.46)	(-3.22)
TRM10-03	-0.06*	-0.05	-0.03	-0.02	-0.01	0.01	0.03	0.04	0.05*	0.06*
	(-1.73)	(-1.25)	(-0.86)	(-0.54)	(-0.26)	(0.31)	(0.93)	(1.44)	(1.71)	(1.80)
$R^2 - ord$	3.16	2.05	1.11	0.48	0.11	28.21	32.24	35.40	36.31	34.33
	Panel E: TRM10-06					Panel F: YIV and TRM10-06				
$\sigma_{IV,5}^{INT}$						-0.18***	-0.19***	-0.20***	-0.20***	-0.19***
						(-3.19)	(-3.31)	(-3.48)	(-3.44)	(-3.20)
TRM10-06	-0.06*	-0.05	-0.03	-0.02	-0.01	0.01	0.02	0.04	0.05	0.06*
	(-1.90)	(-1.40)	(-0.98)	(-0.63)	(-0.30)	(0.11)	(0.76)	(1.29)	(1.58)	(1.68)
$R^2 - ord$	3.40	2.18	1.20	0.52	0.13	28.17	32.07	35.11	35.93	33.89
	Panel G: TRM10-12					Panel H: YIV and TRM10-12				
$\sigma_{IV,5}^{INT}$						-0.17***	-0.19***	-0.20***	-0.19***	-0.18***
						(-3.13)	(-3.24)	(-3.38)	(-3.33)	(-3.10)
TRM10-12	-0.07**	-0.06*	-0.04	-0.03	-0.02	-0.01	0.01	0.03	0.04	0.05
	(-2.13)	(-1.64)	(-1.25)	(-0.91)	(-0.59)	(-0.24)	(0.40)	(0.90)	(1.19)	(1.31)
$R^2 - ord$	4.32	3.02	1.91	1.08	0.49	28.19	31.83	34.54	35.04	32.74

Table A11: Predicting the growth rate of consumption: Controlling for term spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + CON_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $CON_{i,t+j}$ is the year-on-year growth rate of personal consumption expenditures measured at time $t+j$. Controls include the term spread measured by yield spread between the 5-year Treasuries and the 6-month T-bills (TRM05-06), the 10-year Treasuries and the 3-month T-bills (TRM10-03), the 10-year Treasuries and the 6-month T-bills (TRM10-06), and the 10-year Treasuries and the 12-month T-bills (TRM10-12). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H =$	12	18	24	30	36	12	18	24	30	36
	Panel A: TRM05-06					Panel B: YIV and TRM05-06				
$\sigma_{IV,5}^{INT}$						-0.08***	-0.09***	-0.09***	-0.09***	-0.09***
						(-3.16)	(-3.27)	(-3.46)	(-3.51)	(-3.46)
TRM05-06	-0.03*	-0.02	-0.02	-0.01	-0.01	-0.01	0.01	0.01	0.02	0.02
	(-1.73)	(-1.30)	(-0.98)	(-0.71)	(-0.47)	(-0.22)	(0.27)	(0.68)	(0.98)	(1.17)
$R^2 - ord$	3.15	2.16	1.39	0.81	0.39	26.16	29.39	32.51	34.12	34.08
	Panel C: TRM10-03					Panel D: YIV and TRM10-03				
$\sigma_{IV,5}^{INT}$						-0.07***	-0.08***	-0.09***	-0.09***	-0.09***
						(-2.86)	(-2.93)	(-3.07)	(-3.08)	(-3.01)
TRM10-03	-0.05***	-0.04**	-0.04*	-0.03	-0.03	-0.02	-0.01	-0.01	-0.01	0.01
	(-2.66)	(-2.17)	(-1.82)	(-1.56)	(-1.34)	(-1.40)	(-0.82)	(-0.37)	(-0.06)	(0.16)
$R^2 - ord$	8.76	7.33	6.06	4.95	3.93	27.42	29.89	32.24	33.19	32.57
	Panel E: TRM10-06					Panel F: YIV and TRM10-06				
$\sigma_{IV,5}^{INT}$						-0.07***	-0.08***	-0.09***	-0.09***	-0.09***
						(-2.80)	(-2.86)	(-2.99)	(-3.00)	(-2.93)
TRM10-06	-0.05***	-0.04***	-0.04**	-0.04*	-0.03	-0.02	-0.02	-0.01	-0.01	0.01
	(-2.85)	(-2.34)	(-1.98)	(-1.70)	(-1.45)	(-1.58)	(-0.98)	(-0.53)	(-0.21)	(0.02)
$R^2 - ord$	9.48	7.91	6.52	5.31	4.24	27.89	30.19	32.39	33.24	32.54
	Panel G: TRM10-12					Panel H: YIV and TRM10-12				
$\sigma_{IV,5}^{INT}$						-0.07***	-0.08***	-0.08***	-0.09***	-0.08***
						(-2.72)	(-2.78)	(-2.88)	(-2.89)	(-2.82)
TRM10-12	-0.05***	-0.05***	-0.04**	-0.04*	-0.04*	-0.03*	-0.02	-0.01	-0.01	-0.01
	(-3.04)	(-2.52)	(-2.16)	(-1.88)	(-1.64)	(-1.77)	(-1.17)	(-0.73)	(-0.42)	(-0.21)
$R^2 - ord$	10.75	9.14	7.72	6.47	5.36	28.48	30.64	32.70	33.42	32.60

Table A12: Predicting the growth rate of employment: Controlling for term spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + EMP_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $EMP_{i,t+j}$ is the year-on-year growth rate of total non-farm payrolls measured at time $t+j$. Controls include the term spread measured by yield spread between the 5-year Treasuries and the 6-month T-bills (TRM05-06), the 10-year Treasuries and the 3-month T-bills (TRM10-03), the 10-year Treasuries and the 6-month T-bills (TRM10-06), and the 10-year Treasuries and the 12-month T-bills (TRM10-12). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: TRM05-06					Panel B: YIV and TRM05-06				
$\sigma_{IV,5}^{INT}$						-0.08***	-0.09***	-0.09***	-0.09***	-0.09***
						(-5.35)	(-5.56)	(-5.98)	(-6.15)	(-6.00)
TRM05-06	-0.05***	-0.04***	-0.04**	-0.03*	-0.03	-0.03**	-0.02	-0.01	-0.01	0.01
	(-3.57)	(-2.81)	(-2.27)	(-1.82)	(-1.43)	(-2.32)	(-1.48)	(-0.78)	(-0.21)	(0.24)
$R^2 - ord$	13.32	10.41	7.81	5.54	3.69	43.26	44.74	46.37	47.06	46.63
	Panel C: TRM10-03					Panel D: YIV and TRM10-03				
$\sigma_{IV,5}^{INT}$						-0.08***	-0.08***	-0.09***	-0.09***	-0.09***
						(-5.26)	(-5.52)	(-5.99)	(-6.17)	(-6.01)
TRM10-03	-0.06***	-0.05***	-0.04***	-0.04**	-0.03*	-0.03***	-0.02*	-0.01	-0.01	0.01
	(-3.84)	(-3.04)	(-2.48)	(-2.04)	(-1.66)	(-2.65)	(-1.74)	(-0.97)	(-0.36)	(0.12)
$R^2 - ord$	16.71	13.63	10.82	8.28	6.08	43.70	45.04	46.54	47.12	46.58
	Panel E: TRM10-06					Panel F: YIV and TRM10-06				
$\sigma_{IV,5}^{INT}$						-0.08***	-0.08***	-0.09***	-0.09***	-0.09***
						(-5.26)	(-5.49)	(-5.93)	(-6.10)	(-5.95)
TRM10-06	-0.06***	-0.05***	-0.05***	-0.04**	-0.03*	-0.03***	-0.02**	-0.02	-0.01	-0.01
	(-4.18)	(-3.34)	(-2.74)	(-2.26)	(-1.85)	(-3.16)	(-2.15)	(-1.32)	(-0.64)	(-0.10)
$R^2 - ord$	18.23	14.86	11.79	9.02	6.61	44.78	45.79	46.99	47.32	46.58
	Panel G: TRM10-12					Panel H: YIV and TRM10-12				
$\sigma_{IV,5}^{INT}$						-0.08***	-0.08***	-0.09***	-0.09***	-0.09***
						(-5.19)	(-5.40)	(-5.81)	(-5.95)	(-5.80)
TRM10-12	-0.06***	-0.06***	-0.05***	-0.04***	-0.04**	-0.04***	-0.03***	-0.02*	-0.01	-0.01
	(-4.54)	(-3.66)	(-3.04)	(-2.54)	(-2.12)	(-3.69)	(-2.63)	(-1.75)	(-1.02)	(-0.44)
$R^2 - ord$	20.60	17.01	13.72	10.73	8.11	46.03	46.75	47.67	47.72	46.72

Table A13: Predicting the volatility of industrial production growth: Controlling for term spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(IND_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $IND_{i,t+j}$ is the year-on-year growth rate of industrial production measured at time $t+j$. Controls include the term spread measured by yield spread between the 5-year Treasuries and the 6-month T-bills (TRM05-06), the 10-year Treasuries and the 3-month T-bills (TRM10-03), the 10-year Treasuries and the 6-month T-bills (TRM10-06), and the 10-year Treasuries and the 12-month T-bills (TRM10-12). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: TRM05-06					Panel B: YIV and TRM05-06				
$\sigma_{IV,5}^{INT}$						0.33***	0.48***	0.62***	0.76***	0.88***
						(4.65)	(4.42)	(4.09)	(4.13)	(4.13)
TRM05-06	0.11*	0.15	0.16	0.15	0.12	0.01	-0.01	-0.03	-0.08	-0.15
	(1.64)	(1.44)	(1.18)	(0.93)	(0.65)	(0.14)	(-0.01)	(-0.39)	(-0.83)	(-1.25)
R^2-ord	3.35	3.48	2.61	1.68	0.82	30.05	35.47	36.82	37.96	37.57
	Panel C: TRM10-03					Panel D: YIV and TRM10-03				
$\sigma_{IV,5}^{INT}$						0.33***	0.48***	0.63***	0.77***	0.90***
						(4.69)	(4.52)	(4.23)	(4.30)	(4.30)
TRM10-03	0.12*	0.17	0.18	0.18	0.16	0.01	-0.01	-0.05	-0.11	-0.18
	(1.73)	(1.52)	(1.23)	(1.00)	(0.76)	(0.01)	(-0.14)	(-0.62)	(-1.08)	(-1.47)
R^2-ord	4.18	4.43	3.31	2.31	1.39	30.04	35.49	36.96	38.24	37.88
	Panel E: TRM10-06					Panel F: YIV and TRM10-06				
$\sigma_{IV,5}^{INT}$						0.33***	0.48***	0.62***	0.77***	0.90***
						(4.72)	(4.55)	(4.25)	(4.32)	(4.35)
TRM10-06	0.12*	0.16	0.18	0.17	0.15	0.01	-0.01	-0.05	-0.11	-0.18
	(1.68)	(1.46)	(1.19)	(0.96)	(0.71)	(0.01)	(-0.16)	(-0.58)	(-1.04)	(-1.45)
R^2-ord	3.91	4.07	3.11	2.09	1.17	30.04	35.49	36.94	38.22	37.90
	Panel G: TRM10-12					Panel H: YIV and TRM10-12				
$\sigma_{IV,5}^{INT}$						0.33***	0.48***	0.62***	0.77***	0.89***
						(4.71)	(4.56)	(4.27)	(4.34)	(4.36)
TRM10-12	0.12*	0.17	0.18	0.18	0.16	0.01	-0.01	-0.04	-0.10	-0.16
	(1.71)	(1.49)	(1.23)	(1.00)	(0.77)	(0.06)	(-0.09)	(-0.49)	(-0.98)	(-1.40)
R^2-ord	4.13	4.31	3.36	2.30	1.35	30.04	35.48	36.88	38.10	37.70

Table A14: Predicting the volatility of consumption growth: Controlling for term spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(CON_{i,t+j}) = \alpha_H + \beta_H \sigma^{INT}_{IV,t} + Controls + \epsilon_{t+H}$$

Here, $\sigma^{INT}_{IV,t}$ is the YIV measured at time t and $CON_{i,t+j}$ is the year-on-year growth rate of personal consumption expenditures measured at time $t+j$. Controls include the term spread measured by yield spread between the 5-year Treasuries and the 6-month T-bills (TRM05-06), the 10-year Treasuries and the 3-month T-bills (TRM10-03), the 10-year Treasuries and the 6-month T-bills (TRM10-06), and the 10-year Treasuries and the 12-month T-bills (TRM10-12). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: TRM05-06					Panel B: YIV and TRM05-06				
$\sigma^{INT}_{IV,5}$						0.10***	0.17***	0.22***	0.27***	0.30***
						(2.55)	(3.05)	(3.54)	(4.17)	(4.48)
TRM05-06	0.06**	0.07**	0.08*	0.06	0.04	0.03	0.02	0.01	-0.02	-0.06
	(2.17)	(2.01)	(1.67)	(1.17)	(0.63)	(1.07)	(0.66)	(0.15)	(-0.45)	(-1.01)
R^2-ord	3.71	4.33	3.46	1.87	0.58	13.89	25.81	30.36	31.95	31.99
	Panel C: TRM10-03					Panel D: YIV and TRM10-03				
$\sigma^{INT}_{IV,5}$						0.10***	0.18***	0.23***	0.27***	0.31***
						(2.61)	(3.12)	(3.66)	(4.34)	(4.64)
TRM10-03	0.05*	0.07*	0.08	0.07	0.06	0.01	0.01	-0.01	-0.03	-0.06
	(1.93)	(1.78)	(1.52)	(1.18)	(0.82)	(0.55)	(0.09)	(-0.27)	(-0.70)	(-1.10)
R^2-ord	3.05	3.80	3.42	2.30	1.18	13.39	25.53	30.40	32.19	32.08
	Panel E: TRM10-06					Panel F: YIV and TRM10-06				
$\sigma^{INT}_{IV,5}$						0.10***	0.18***	0.23***	0.27***	0.31***
						(2.61)	(3.13)	(3.68)	(4.39)	(4.73)
TRM10-06	0.05*	0.07*	0.07	0.07	0.05	0.01	0.01	-0.01	-0.03	-0.06
	(1.89)	(1.76)	(1.52)	(1.18)	(0.79)	(0.54)	(0.09)	(-0.26)	(-0.69)	(-1.11)
R^2-ord	2.89	3.56	3.19	2.14	1.03	13.39	25.53	30.40	32.16	32.06
	Panel G: TRM10-12					Panel H: YIV and TRM10-12				
$\sigma^{INT}_{IV,5}$						0.10***	0.18***	0.23***	0.27***	0.31***
						(2.61)	(3.13)	(3.68)	(4.41)	(4.74)
TRM10-12	0.05*	0.07*	0.07	0.07	0.06	0.01	0.01	-0.01	-0.03	-0.05
	(1.84)	(1.75)	(1.57)	(1.28)	(0.91)	(0.46)	(0.05)	(-0.25)	(-0.63)	(-1.03)
R^2-ord	2.74	3.47	3.26	2.37	1.29	13.34	25.53	30.39	32.06	31.80

Table A15: Predicting the volatility of employment growth: Controlling for term spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(EMP_{i,t+j}) = \alpha_H + \beta_H \sigma^{INT}_{IV,t} + Controls + \epsilon_{t+H}$$

Here, $\sigma^{INT}_{IV,t}$ is the YIV measured at time t and $EMP_{i,t+j}$ is the year-on-year growth rate of total non-farm payrolls measured at time $t+j$. Controls include the term spread measured by yield spread between the 5-year Treasuries and the 6-month T-bills (TRM05-06), the 10-year Treasuries and the 3-month T-bills (TRM10-03), the 10-year Treasuries and the 6-month T-bills (TRM10-06), and the 10-year Treasuries and the 12-month T-bills (TRM10-12). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: TRM05-06					Panel B: YIV and TRM05-06				
$\sigma^{INT}_{IV,5}$						0.08***	0.12***	0.16***	0.19***	0.22***
						(4.25)	(4.89)	(5.28)	(5.52)	(5.48)
TRM05-06	0.03**	0.05*	0.06*	0.07	0.07	0.01	0.01	0.01	0.01	0.01
	(1.99)	(1.86)	(1.73)	(1.53)	(1.27)	(0.52)	(0.50)	(0.44)	(0.28)	(0.05)
R^2-ord	4.56	5.21	5.51	5.02	3.85	28.96	34.26	37.71	38.74	36.54
	Panel C: TRM10-03					Panel D: YIV and TRM10-03				
$\sigma^{INT}_{IV,5}$						0.08***	0.12***	0.16***	0.20***	0.22***
						(4.22)	(4.91)	(5.37)	(5.71)	(5.72)
TRM10-03	0.04**	0.05*	0.07*	0.08	0.08	0.01	0.01	0.01	0.01	-0.01
	(2.13)	(1.93)	(1.75)	(1.54)	(1.31)	(0.60)	(0.45)	(0.28)	(0.09)	(-0.11)
R^2-ord	6.40	6.72	6.62	5.93	4.69	29.07	34.24	37.60	38.66	36.56
	Panel E: TRM10-06					Panel F: YIV and TRM10-06				
$\sigma^{INT}_{IV,5}$						0.08***	0.12***	0.16***	0.20***	0.23***
						(4.18)	(4.89)	(5.41)	(5.80)	(5.84)
TRM10-06	0.04**	0.05*	0.06*	0.07	0.07	0.01	0.01	0.01	0.01	-0.01
	(2.13)	(1.90)	(1.70)	(1.49)	(1.25)	(0.58)	(0.40)	(0.23)	(0.05)	(-0.16)
R^2-ord	6.02	6.19	6.01	5.33	4.14	29.05	34.21	37.58	38.65	36.57
	Panel G: TRM10-12					Panel H: YIV and TRM10-12				
$\sigma^{INT}_{IV,5}$						0.07***	0.12***	0.16***	0.20***	0.22***
						(4.09)	(4.81)	(5.38)	(5.83)	(5.91)
TRM10-12	0.04**	0.05**	0.07*	0.08	0.08	0.01	0.01	0.01	0.01	-0.01
	(2.24)	(1.98)	(1.77)	(1.55)	(1.32)	(0.67)	(0.48)	(0.30)	(0.12)	(-0.07)
R^2-ord	6.56	6.64	6.37	5.68	4.53	29.18	34.29	37.62	38.67	36.55

Table A16: Predicting the growth rate of industrial production: Controlling for credit spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + IND_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $IND_{i,t+j}$ is the year-on-year growth rate of industrial production measured at time $t+j$. Controls include credit spreads measured using AA-rated corporate bonds (CRSAA), BAA-rated corporate bonds (CRSBAA), the difference between BAA-rated and AAA-rated corporate bonds (CRSBAA-AAA), and the credit spread index from Gilchrist and Zakrajsek (2012) (CRSGZI). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H =$	12	18	24	30	36	12	18	24	30	36
	Panel A: CRSAA					Panel B: YIV and CRSAA				
$\sigma_{IV,5}^{INT}$						-0.19***	-0.20***	-0.20***	-0.19***	-0.18***
						(-3.59)	(-3.43)	(-3.30)	(-3.10)	(-2.82)
CRSAA	0.07***	0.07**	0.06**	0.06*	0.06*	0.08***	0.07***	0.07**	0.06*	0.06*
	(2.71)	(2.25)	(1.97)	(1.80)	(1.67)	(2.97)	(2.43)	(2.07)	(1.82)	(1.68)
$R^2 - ord$	4.23	3.98	3.88	3.87	3.91	35.82	38.19	39.37	38.56	35.35
	Panel C: CRSBAA					Panel D: YIV and CRSBAA				
$\sigma_{IV,5}^{INT}$						-0.18***	-0.19***	-0.19***	-0.18***	-0.17***
						(-3.39)	(-3.32)	(-3.25)	(-3.05)	(-2.76)
CRSBAA	-0.01	-0.01	-0.01	-0.01	0.01	0.02	0.02	0.01	0.02	0.02
	(-0.31)	(-0.25)	(-0.16)	(-0.02)	(0.14)	(0.59)	(0.47)	(0.42)	(0.49)	(0.61)
$R^2 - ord$	0.11	0.09	0.04	0.01	0.03	28.46	31.95	34.12	33.99	31.21
	Panel E: CRSBAA-AAA					Panel F: YIV and CRSBAA-AAA				
$\sigma_{IV,5}^{INT}$						-0.04	-0.05*	-0.06*	-0.07	-0.06
						(-1.45)	(-1.74)	(-1.67)	(-1.44)	(-1.27)
CRSBAA-AAA	-0.26***	-0.26***	-0.24***	-0.23***	-0.21***	-0.24***	-0.23***	-0.21***	-0.19***	-0.17***
	(-14.16)	(-12.86)	(-10.16)	(-8.08)	(-6.63)	(-10.82)	(-10.52)	(-9.74)	(-8.31)	(-6.76)
$R^2 - ord$	62.42	61.85	58.74	53.40	46.95	63.54	63.72	61.26	56.22	49.67
	Panel G: CRSGZI					Panel H: YIV and CRSGZI				
$\sigma_{IV,5}^{INT}$						-0.10	-0.11**	-0.05**	-0.01	-0.02
						(-1.27)	(-2.01)	(-1.96)	(-0.18)	(-1.17)
CRSGZI	-0.24***	-0.20***	-0.17***	-0.13***	-0.10**	-0.17***	-0.13*	-0.15***	-0.13***	-0.11**
	(-5.04)	(-4.51)	(-3.11)	(-2.64)	(-2.29)	(-3.29)	(-1.84)	(-2.68)	(-2.45)	(-2.29)
$R^2 - ord$	49.88	39.47	37.48	26.75	20.84	54.62	45.60	39.69	26.76	21.55

Table A17: Predicting the growth rate of consumption: Controlling for credit spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + CON_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $CON_{i,t+j}$ is the year-on-year growth rate of personal consumption expenditures measured at time $t+j$. Controls include credit spreads measured using AA-rated corporate bonds (CRSAA), BAA-rated corporate bonds (CRSBAA), the difference between BAA-rated and AAA-rated corporate bonds (CRSBAA-AAA), and the credit spread index from Gilchrist and Zakrajsek (2012) (CRSGZI). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H =$	12	18	24	30	36	12	18	24	30	36
	Panel A: CRSAA					Panel B: YIV and CRSAA				
$\sigma_{IV,5}^{INT}$						-0.09***	-0.09***	-0.09***	-0.09***	-0.09***
						(-3.90)	(-3.68)	(-3.54)	(-3.40)	(-3.27)
CRSAA	0.07***	0.07***	0.07***	0.06***	0.06***	0.07***	0.07***	0.07***	0.06***	0.06***
	(6.90)	(6.10)	(5.61)	(5.34)	(5.22)	(6.29)	(5.34)	(4.66)	(4.22)	(4.07)
$R^2 - ord$	16.60	16.64	16.72	16.83	17.01	46.99	48.87	50.40	50.72	49.79
	Panel C: CRSBAA					Panel D: YIV and CRSBAA				
$\sigma_{IV,5}^{INT}$						-0.09***	-0.09***	-0.09***	-0.09***	-0.09***
						(-3.72)	(-3.58)	(-3.51)	(-3.39)	(-3.27)
CRSBAA	0.03*	0.03	0.03	0.03*	0.04*	0.05***	0.04***	0.04***	0.04***	0.04***
	(1.76)	(1.58)	(1.57)	(1.68)	(1.89)	(2.93)	(2.53)	(2.34)	(2.34)	(2.51)
$R^2 - ord$	3.61	3.78	4.17	4.81	5.69	33.80	36.65	39.31	40.82	41.15
	Panel E: CRSBAA-AAA					Panel F: YIV and CRSBAA-AAA				
$\sigma_{IV,5}^{INT}$						-0.02	-0.02	-0.02	-0.03	-0.03
						(-1.30)	(-1.58)	(-1.54)	(-1.35)	(-1.28)
CRSBAA-AAA	-0.13***	-0.13***	-0.12***	-0.12***	-0.11***	-0.12***	-0.12***	-0.11***	-0.10***	-0.10***
	(-15.00)	(-17.51)	(-15.29)	(-12.24)	(-10.22)	(-14.17)	(-13.76)	(-10.91)	(-8.06)	(-6.14)
$R^2 - ord$	63.47	64.41	62.90	59.57	54.83	64.08	65.39	64.32	61.26	56.84
	Panel G: CRSGZI					Panel H: YIV and CRSGZI				
$\sigma_{IV,5}^{INT}$						-0.09***	-0.08***	-0.06***	-0.02	-0.01
						(-3.08)	(-3.81)	(-4.08)	(-1.14)	(-0.33)
CRSGZI	-0.11***	-0.09***	-0.06*	-0.04	-0.02	-0.05***	-0.04**	-0.04*	-0.03	-0.02
	(-4.85)	(-4.23)	(-1.86)	(-1.52)	(-1.03)	(-3.16)	(-2.29)	(-1.76)	(-1.52)	(-1.16)
$R^2 - ord$	47.23	37.63	21.96	9.58	2.95	61.99	53.09	34.31	11.01	3.08

Table A18: Predicting the growth rate of employment: Controlling for credit spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + EMP_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $EMP_{i,t+j}$ is the year-on-year growth rate of total non-farm payrolls measured at time $t+j$. Controls include credit spreads measured using AA-rated corporate bonds (CRSAA), BAA-rated corporate bonds (CRSBAA), the difference between BAA-rated and AAA-rated corporate bonds (CRSBAA-AAA), and the credit spread index from Gilchrist and Zakrajsek (2012) (CRSGZI). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H =$	12	18	24	30	36	12	18	24	30	36
	Panel A: CRSAA					Panel B: YIV and CRSAA				
$\sigma_{IV,5}^{INT}$						-0.10***	-0.10***	-0.10***	-0.10***	-0.10***
						(-6.28)	(-6.40)	(-6.82)	(-6.93)	(-6.59)
CRSAA	0.02	0.02	0.01	0.01	0.01	0.02**	0.02*	0.01	0.01	0.01
	(1.31)	(1.06)	(0.89)	(0.76)	(0.66)	(2.26)	(1.72)	(1.28)	(0.95)	(0.78)
$R^2 - ord$	1.45	1.27	1.11	0.97	0.84	47.90	50.12	52.04	52.52	51.43
	Panel C: CRSBAA					Panel D: YIV and CRSBAA				
$\sigma_{IV,5}^{INT}$						-0.09***	-0.09***	-0.09***	-0.09***	-0.09***
						(-5.70)	(-5.95)	(-6.48)	(-6.64)	(-6.30)
CRSBAA	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01
	(-1.61)	(-1.47)	(-1.38)	(-1.32)	(-1.27)	(-0.67)	(-0.83)	(-0.96)	(-1.01)	(-0.97)
$R^2 - ord$	2.72	2.92	2.99	2.95	2.80	40.63	43.91	46.86	48.15	47.64
	Panel E: CRSBAA-AAA					Panel F: YIV and CRSBAA-AAA				
$\sigma_{IV,5}^{INT}$						-0.05***	-0.05***	-0.05***	-0.05***	-0.04***
						(-3.89)	(-4.19)	(-4.41)	(-4.34)	(-4.10)
CRSBAA-AAA	-0.10***	-0.10***	-0.10***	-0.10***	-0.10***	-0.08***	-0.08***	-0.08***	-0.08***	-0.08***
	(-9.11)	(-10.20)	(-11.62)	(-12.49)	(-12.24)	(-6.99)	(-7.27)	(-7.00)	(-6.50)	(-6.09)
$R^2 - ord$	53.85	56.95	58.92	59.93	59.87	61.09	64.47	66.53	67.07	66.55
	Panel G: CRSGZI					Panel H: YIV and CRSGZI				
$\sigma_{IV,5}^{INT}$						-0.05***	-0.04***	-0.03***	-0.01	-0.01
						(-3.14)	(-2.68)	(-3.54)	(-0.98)	(-0.55)
CRSGZI	-0.12***	-0.10***	-0.09***	-0.07***	-0.06***	-0.09***	-0.07***	-0.07***	-0.07***	-0.06***
	(-8.24)	(-6.65)	(-3.92)	(-3.60)	(-3.19)	(-4.29)	(-3.09)	(-3.72)	(-3.48)	(-3.22)
$R^2 - ord$	61.80	54.35	48.14	37.70	29.79	66.75	59.62	52.15	38.08	29.96

Table A19: Predicting the volatility of industrial production growth: Controlling for credit spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(IND_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $IND_{i,t+j}$ is the year-on-year growth rate of industrial production measured at time $t+j$. Controls include credit spreads measured using AA-rated corporate bonds (CRSAA), BAA-rated corporate bonds (CRSBAA), the difference between BAA-rated and AAA-rated corporate bonds (CRSBAA-AAA), and the credit spread index from Gilchrist and Zakrajsek (2012) (CRSGZI). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: CRSAA					Panel B: YIV and CRSAA				
$\sigma_{IV,5}^{INT}$						0.35***	0.50***	0.64***	0.77***	0.87***
						(4.55)	(4.23)	(3.90)	(3.92)	(3.86)
CRSAA	0.01	0.03	0.04	0.06	0.08	-0.01	0.01	0.04	0.07	0.10
	(0.22)	(0.43)	(0.47)	(0.52)	(0.60)	(-0.35)	(0.20)	(0.60)	(0.94)	(1.08)
R^2-ord	0.03	0.12	0.16	0.23	0.32	32.43	37.57	38.41	39.05	37.85
	Panel C: CRSBAA					Panel D: YIV and CRSBAA				
$\sigma_{IV,5}^{INT}$						0.33***	0.47***	0.60***	0.72***	0.81***
						(4.25)	(3.95)	(3.69)	(3.75)	(3.73)
CRSBAA	0.07*	0.12*	0.16**	0.21**	0.26*	0.01	0.05	0.10	0.14*	0.18**
	(1.63)	(1.95)	(2.02)	(1.99)	(1.89)	(0.38)	(1.07)	(1.58)	(1.94)	(1.97)
R^2-ord	1.29	2.20	2.60	3.07	3.47	30.10	35.94	37.62	38.87	38.16
	Panel E: CRSBAA-AAA					Panel F: YIV and CRSBAA-AAA				
$\sigma_{IV,5}^{INT}$						0.27***	0.38***	0.46***	0.50***	0.49***
						(3.72)	(3.53)	(3.21)	(3.13)	(3.07)
CRSBAA-AAA	0.26***	0.39***	0.52***	0.69***	0.85***	0.11*	0.17**	0.25***	0.38***	0.55***
	(3.63)	(3.80)	(4.05)	(4.44)	(4.73)	(1.88)	(2.08)	(2.59)	(3.15)	(3.57)
R^2-ord	18.30	23.59	27.47	33.11	38.49	32.15	38.56	40.91	43.91	46.30
	Panel G: CRSGZI					Panel H: YIV and CRSGZI				
$\sigma_{IV,5}^{INT}$						0.56***	0.69***	0.86***	0.09	0.39**
						(3.18)	(3.06)	(2.76)	(0.33)	(2.04)
CRSGZI	1.18***	1.37***	0.82	0.45	0.13	0.79***	0.91***	0.38	0.42	0.24
	(4.69)	(3.51)	(1.46)	(1.02)	(0.40)	(3.22)	(2.48)	(1.16)	(1.05)	(0.70)
R^2-ord	51.16	45.58	16.00	5.22	0.48	56.96	51.86	28.92	5.38	4.29

Table A20: Predicting the volatility of consumption growth: Controlling for credit spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(CON_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $CON_{i,t+j}$ is the year-on-year growth rate of personal consumption expenditures measured at time $t+j$. Controls include credit spreads measured using AA-rated corporate bonds (CRSAA), BAA-rated corporate bonds (CRSBAA), the difference between BAA-rated and AAA-rated corporate bonds (CRSBAA-AAA), and the credit spread index from Gilchrist and Zakrajsek (2012) (CRSGZI). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: CRSAA					Panel B: YIV and CRSAA				
$\sigma_{IV,5}^{INT}$						0.12***	0.19***	0.24***	0.28***	0.31***
						(2.90)	(3.28)	(3.76)	(4.30)	(4.49)
CRSAA	0.04**	0.04*	0.04	0.04	0.03	0.03*	0.04*	0.04*	0.04	0.04
	(2.15)	(1.92)	(1.50)	(1.02)	(0.67)	(1.75)	(1.77)	(1.77)	(1.42)	(0.99)
R^2-ord	2.04	1.66	1.11	0.64	0.34	17.84	31.44	35.54	35.41	34.02
	Panel C: CRSBAA					Panel D: YIV and CRSBAA				
$\sigma_{IV,5}^{INT}$						0.10***	0.17***	0.22***	0.25***	0.28***
						(2.48)	(2.95)	(3.45)	(4.07)	(4.29)
CRSBAA	0.07***	0.09***	0.11***	0.12***	0.13***	0.05**	0.07***	0.08***	0.09***	0.10***
	(3.48)	(4.01)	(4.05)	(3.43)	(2.85)	(2.30)	(2.60)	(2.97)	(2.75)	(2.44)
R^2-ord	5.14	6.44	6.95	6.60	6.29	16.09	29.02	34.50	35.90	34.87
	Panel E: CRSBAA-AAA					Panel F: YIV and CRSBAA-AAA				
$\sigma_{IV,5}^{INT}$						0.11***	0.18***	0.20***	0.19***	0.17***
						(2.56)	(2.87)	(3.01)	(3.11)	(3.06)
CRSBAA-AAA	0.06**	0.10***	0.16***	0.23***	0.30***	-0.01	0.01	0.05	0.11**	0.19***
	(2.09)	(2.57)	(3.23)	(4.31)	(5.57)	(-0.19)	(0.07)	(1.01)	(2.18)	(3.79)
R^2-ord	3.74	8.68	16.06	24.42	32.93	13.23	25.53	31.19	35.30	39.43
	Panel G: CRSGZI					Panel H: YIV and CRSGZI				
$\sigma_{IV,5}^{INT}$						0.21***	0.25***	0.22*	0.04	0.18***
						(2.41)	(2.35)	(1.92)	(0.43)	(2.38)
CRSGZI	0.47***	0.51***	0.31	0.17	0.07	0.32***	0.34***	0.20	0.18	0.12
	(4.81)	(3.72)	(1.44)	(0.92)	(0.45)	(2.85)	(2.50)	(1.15)	(0.99)	(0.72)
R^2-ord	40.98	35.04	12.62	3.78	0.76	45.32	39.72	17.37	4.00	4.85

Table A21: Predicting the volatility of employment growth: Controlling for credit spreads.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(EMP_{i,t+j}) = \alpha_H + \beta_H \sigma^{INT}_{IV,t} + Controls + \epsilon_{t+H}$$

Here, $\sigma^{INT}_{IV,t}$ is the YIV measured at time t and $EMP_{i,t+j}$ is the year-on-year growth rate of total non-farm payrolls measured at time $t+j$. Controls include credit spreads measured using AA-rated corporate bonds (CRSAA), BAA-rated corporate bonds (CRSBAA), the difference between BAA-rated and AAA-rated corporate bonds (CRSBAA-AAA), and the credit spread index from Gilchrist and Zakrajsek (2012) (CRSGZI). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: CRSAA					Panel B: YIV and CRSAA				
$\sigma^{INT}_{IV,5}$						0.08***	0.13***	0.17***	0.21***	0.24***
						(4.45)	(5.17)	(5.61)	(5.79)	(5.66)
CRSAA	0.01	0.02	0.03	0.04	0.05	0.01	0.02	0.03*	0.05*	0.06*
	(1.29)	(1.24)	(1.23)	(1.24)	(1.22)	(0.86)	(1.22)	(1.64)	(1.93)	(1.96)
R^2-ord	0.81	1.10	1.36	1.60	1.78	30.32	36.82	41.25	42.85	40.72
	Panel C: CRSBAA					Panel D: YIV and CRSBAA				
$\sigma^{INT}_{IV,5}$						0.08***	0.12***	0.16***	0.19***	0.22***
						(4.28)	(4.76)	(5.03)	(5.18)	(5.11)
CRSBAA	0.03***	0.04***	0.06***	0.08***	0.10***	0.02**	0.03**	0.04***	0.06***	0.08***
	(2.74)	(2.78)	(2.94)	(3.19)	(3.36)	(2.01)	(2.13)	(2.41)	(2.69)	(2.92)
R^2-ord	4.24	4.66	5.26	5.98	6.79	30.18	35.93	40.16	42.08	40.73
	Panel E: CRSBAA-AAA					Panel F: YIV and CRSBAA-AAA				
$\sigma^{INT}_{IV,5}$						0.07***	0.12***	0.16***	0.19***	0.20***
						(4.25)	(4.26)	(4.13)	(4.00)	(3.90)
CRSBAA-AAA	0.06***	0.08***	0.10***	0.13***	0.16***	0.02	0.01	0.01	0.01	0.03
	(3.12)	(3.18)	(3.54)	(3.97)	(4.47)	(1.50)	(0.56)	(0.11)	(0.18)	(0.86)
R^2-ord	14.48	13.44	13.74	15.52	18.74	29.67	34.18	37.52	38.68	37.09
	Panel G: CRSGZI					Panel H: YIV and CRSGZI				
$\sigma^{INT}_{IV,5}$						0.26***	0.11**	0.09	0.04	0.13***
						(4.68)	(2.00)	(1.61)	(0.73)	(2.38)
CRSGZI	0.22***	0.29***	0.20*	0.14	0.09	0.04	0.22***	0.16	0.15	0.13
	(3.77)	(4.13)	(1.77)	(1.22)	(0.79)	(0.49)	(2.82)	(1.59)	(1.35)	(1.08)
R^2-ord	26.14	34.24	13.76	5.33	2.13	44.89	36.66	15.84	5.76	6.05

Table A22: Predicting the growth rate of industrial production: Controlling for 2-year 10-year, and long-term YIVs.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + IND_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $IND_{i,t+j}$ is the year-on-year growth rate of industrial production measured at time $t+j$. Controls include implied volatility from options on 2-year ($\sigma_{IV,2}^{INT}$), 10-year ($\sigma_{IV,10}^{INT}$), and long-term (Ultra) ($\sigma_{IV,TB}^{INT}$) Treasury note and bond futures. The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H =$	12	18	24	30	36	12	18	24	30	36
	Panel A: 2-year YIV					Panel B: 2- and 5-year YIV				
$\sigma_{IV,5}^{INT}$						-0.18***	-0.19***	-0.19***	-0.18***	-0.17***
						(-3.37)	(-3.27)	(-3.18)	(-2.98)	(-2.73)
$\sigma_{IV,2}^{INT}$	0.04*	0.04*	0.04	0.03	0.03	0.05*	0.04	0.03	0.03	0.03
	(1.94)	(1.66)	(1.46)	(1.37)	(1.31)	(1.81)	(1.57)	(1.36)	(1.24)	(1.20)
$R^2 - ord$	1.47	1.28	1.15	1.15	1.19	31.17	33.65	35.16	34.63	31.52
	Panel C: 10-year YIV					Panel D: 5- and 10-year YIV				
$\sigma_{IV,5}^{INT}$						-0.18***	-0.18***	-0.18***	-0.17***	-0.16***
						(-3.80)	(-3.55)	(-3.18)	(-2.83)	(-2.51)
$\sigma_{IV,10}^{INT}$	-0.11**	-0.12*	-0.12*	-0.12*	-0.11*	0.01	-0.01	-0.01	-0.01	-0.01
	(-1.99)	(-1.91)	(-1.91)	(-1.87)	(-1.79)	(0.15)	(-0.04)	(-0.32)	(-0.42)	(-0.33)
$R^2 - ord$	11.72	13.28	14.31	13.94	12.37	28.02	31.37	33.31	32.82	29.76
	Panel E: 'Ultra' YIV					Panel F: 5-year and 'Ultra' YIV				
$\sigma_{IV,5}^{INT}$						-0.19***	-0.17***	-0.16***	-0.14**	-0.14*
						(-4.24)	(-3.49)	(-2.86)	(-2.03)	(-1.94)
$\sigma_{IV,TB}^{INT}$	-0.08*	-0.08	-0.09	-0.13***	-0.11**	-0.10***	-0.08***	-0.06***	-0.03	-0.01
	(-1.85)	(-1.43)	(-1.27)	(-2.39)	(-2.27)	(-5.03)	(-3.90)	(-2.98)	(-0.99)	(-0.45)
$R^2 - ord$	5.83	6.39	7.48	16.85	12.48	36.01	34.75	32.42	29.60	25.64

Table A23: Predicting the growth rate of consumption: Controlling for 2-year 10-year, and long-term YIVs.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + CON_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $CON_{i,t+j}$ is the year-on-year growth rate of personal consumption expenditures measured at time $t+j$. Controls include implied volatility from options on 2-year ($\sigma_{IV,2}^{INT}$), 10-year ($\sigma_{IV,10}^{INT}$), and long-term (Ultra) ($\sigma_{IV,TB}^{INT}$) Treasury note and bond futures. The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H =$	12	18	24	30	36	12	18	24	30	36
	Panel A: 2-year YIV					Panel B: 2- and 5-year YIV				
$\sigma_{IV,5}^{INT}$						-0.09***	-0.09***	-0.09***	-0.09***	-0.09***
						(-3.73)	(-3.71)	(-3.75)	(-3.67)	(-3.53)
$\sigma_{IV,2}^{INT}$	0.05***	0.05***	0.05***	0.05***	0.05***	0.05***	0.05***	0.05***	0.05***	0.04***
	(4.21)	(4.14)	(4.22)	(4.05)	(3.85)	(3.34)	(3.29)	(3.36)	(3.22)	(3.09)
$R^2 - ord$	9.36	9.35	9.84	9.52	9.09	37.84	40.58	43.70	44.37	43.05
	Panel C: 10-year YIV					Panel D: 5- and 10-year YIV				
$\sigma_{IV,5}^{INT}$						-0.10***	-0.10***	-0.10***	-0.10***	-0.10***
						(-4.83)	(-4.76)	(-4.51)	(-4.24)	(-4.03)
$\sigma_{IV,10}^{INT}$	-0.04	-0.04	-0.04	-0.04	-0.04	0.03*	0.03*	0.02	0.02	0.02
	(-1.36)	(-1.27)	(-1.22)	(-1.16)	(-1.11)	(1.87)	(1.65)	(1.46)	(1.43)	(1.51)
$R^2 - ord$	5.64	6.48	7.10	7.06	6.59	27.99	31.09	33.40	34.31	33.74
	Panel E: 'Ultra' YIV					Panel F: 5-year and 'Ultra' YIV				
$\sigma_{IV,5}^{INT}$						-0.09***	-0.08***	-0.08***	-0.06**	-0.06**
						(-4.26)	(-3.86)	(-3.43)	(-2.18)	(-2.06)
$\sigma_{IV,TB}^{INT}$	-0.04*	-0.04	-0.05	-0.08***	-0.07***	-0.05***	-0.04***	-0.03***	-0.04**	-0.03*
	(-1.69)	(-1.34)	(-1.24)	(-3.09)	(-3.07)	(-4.49)	(-3.47)	(-2.55)	(-2.09)	(-1.72)
$R^2 - ord$	5.65	6.77	9.17	26.16	22.99	34.92	35.67	35.52	36.35	33.89

Table A24: Predicting the growth rate of employment: Controlling for 2-year 10-year, and long-term YIVs.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + EMP_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $EMP_{i,t+j}$ is the year-on-year growth rate of total non-farm payrolls measured at time $t+j$. Controls include implied volatility from options on 2-year ($\sigma_{IV,2}^{INT}$), 10-year ($\sigma_{IV,10}^{INT}$), and long-term (Ultra) ($\sigma_{IV,TB}^{INT}$) Treasury note and bond futures. The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: 2-year YIV					Panel B: 2- and 5-year YIV				
$\sigma_{IV,5}^{INT}$						-0.09***	-0.09***	-0.10***	-0.10***	-0.09***
						(-6.06)	(-6.39)	(-6.99)	(-7.12)	(-6.74)
$\sigma_{IV,2}^{INT}$	0.01*	0.01	0.01	0.01	0.01	0.02**	0.01*	0.01*	0.01	0.01
	(1.65)	(1.48)	(1.35)	(1.25)	(1.15)	(2.09)	(1.91)	(1.69)	(1.50)	(1.37)
R^2-ord	0.97	0.94	0.91	0.90	0.84	47.01	49.62	51.81	52.50	51.47
	Panel C: 10-year YIV					Panel D: 5- and 10-year YIV				
$\sigma_{IV,5}^{INT}$						-0.07***	-0.07***	-0.07***	-0.07***	-0.07***
						(-4.43)	(-4.68)	(-5.04)	(-5.11)	(-4.77)
$\sigma_{IV,10}^{INT}$	-0.07***	-0.07***	-0.07***	-0.07***	-0.07***	-0.03**	-0.03**	-0.03***	-0.03***	-0.03**
	(-4.53)	(-4.08)	(-3.80)	(-3.52)	(-3.31)	(-2.06)	(-2.20)	(-2.45)	(-2.47)	(-2.33)
R^2-ord	27.50	29.01	30.27	30.44	29.45	41.93	45.00	47.72	48.61	47.60
	Panel E: 'Ultra' YIV					Panel F: 5-year and 'Ultra' YIV				
$\sigma_{IV,5}^{INT}$						-0.09***	-0.09***	-0.08***	-0.07***	-0.07***
						(-7.25)	(-7.85)	(-7.87)	(-5.68)	(-4.86)
$\sigma_{IV,TB}^{INT}$	-0.02	-0.02	-0.04	-0.07***	-0.07***	-0.03***	-0.03***	-0.02**	-0.03***	-0.02**
	(-0.89)	(-0.91)	(-1.07)	(-3.95)	(-3.74)	(-4.39)	(-3.26)	(-2.23)	(-2.33)	(-1.96)
R^2-ord	1.76	3.49	7.67	30.64	27.17	44.84	45.33	45.47	46.27	43.80

Table A25: Predicting the volatility of industrial production growth: Controlling for 2-year 10-year, and long-term YIVs.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(IND_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $IND_{i,t+j}$ is the year-on-year growth rate of industrial production measured at time $t+j$. Controls include implied volatility from options on 2-year ($\sigma_{IV,2}^{INT}$), 10-year ($\sigma_{IV,10}^{INT}$), and long-term (Ultra) ($\sigma_{IV,TB}^{INT}$) Treasury note and bond futures. The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: 2-year YIV					Panel B: 2- and 5-year YIV				
$\sigma_{IV,5}^{INT}$						0.38***	0.55***	0.69***	0.82***	0.93***
						(4.04)	(3.70)	(3.61)	(3.77)	(3.84)
$\sigma_{IV,2}^{INT}$	-0.06*	-0.06	-0.06	-0.07	-0.08	-0.08*	-0.07	-0.06	-0.06	-0.07
	(-1.74)	(-1.11)	(-0.85)	(-0.77)	(-0.72)	(-1.86)	(-1.33)	(-1.05)	(-0.85)	(-0.77)
R^2-ord	0.97	0.50	0.33	0.30	0.31	34.63	40.35	39.51	39.64	38.62
	Panel C: 10-year YIV					Panel D: 5- and 10-year YIV				
$\sigma_{IV,5}^{INT}$						0.34***	0.49***	0.58***	0.67***	0.75***
						(3.88)	(3.57)	(3.22)	(3.26)	(3.35)
$\sigma_{IV,10}^{INT}$	0.20***	0.29***	0.39***	0.47**	0.55*	-0.03	-0.03	0.02	0.06	0.09
	(3.09)	(2.78)	(2.48)	(2.19)	(1.95)	(-0.50)	(-0.41)	(0.29)	(0.56)	(0.67)
R^2-ord	11.42	12.93	15.09	15.86	16.34	29.85	34.73	35.44	35.86	35.28
	Panel E: 'Ultra' YIV					Panel F: 5-year and 'Ultra' YIV				
$\sigma_{IV,5}^{INT}$						0.43***	0.62***	0.73***	0.64***	0.72***
						(3.05)	(2.90)	(3.15)	(4.46)	(6.05)
$\sigma_{IV,TB}^{INT}$	0.01	0.09	0.26	0.78**	0.91**	0.07	0.10*	0.12	0.36	0.45
	(0.18)	(0.58)	(0.87)	(2.29)	(2.16)	(1.60)	(1.66)	(1.45)	(1.44)	(1.36)
R^2-ord	0.03	0.80	4.31	27.61	30.58	31.19	36.55	35.74	38.71	41.83

Table A26: Predicting the volatility of consumption growth: Controlling for 2-year 10-year, and long-term YIVs.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(CON_{i,t+j}) = \alpha_H + \beta_H \sigma^{INT}_{IV,t} + Controls + \epsilon_{t+H}$$

Here, $\sigma^{INT}_{IV,t}$ is the YIV measured at time t and $CON_{i,t+j}$ is the year-on-year growth rate of personal consumption expenditures measured at time $t+j$. Controls include implied volatility from options on 2-year ($\sigma^{INT}_{IV,2}$), 10-year ($\sigma^{INT}_{IV,10}$), and long-term (Ultra) ($\sigma^{INT}_{IV,TB}$) Treasury note and bond futures. The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H =$	12	18	24	30	36	12	18	24	30	36
	Panel A: 2-year YIV					Panel B: 2- and 5-year YIV				
$\sigma^{INT}_{IV,5}$						0.12***	0.20***	0.25***	0.28***	0.32***
						(2.82)	(3.15)	(3.60)	(4.11)	(4.29)
$\sigma^{INT}_{IV,2}$	0.02	0.03	0.01	-0.01	-0.01	0.02	0.02	0.01	0.01	-0.01
	(0.90)	(1.17)	(0.49)	(-0.03)	(-0.31)	(0.88)	(1.32)	(0.57)	(0.16)	(-0.17)
$R^2 - ord$	0.42	0.54	0.09	0.01	0.05	16.25	30.51	33.57	33.61	33.96
	Panel C: 10-year YIV					Panel D: 5- and 10-year YIV				
$\sigma^{INT}_{IV,5}$						0.11**	0.18***	0.21***	0.23***	0.25***
						(2.10)	(2.62)	(2.82)	(3.30)	(3.61)
$\sigma^{INT}_{IV,10}$	0.08***	0.11***	0.14***	0.18***	0.20**	0.01	-0.01	0.01	0.03	0.04
	(3.23)	(3.04)	(2.71)	(2.46)	(2.14)	(0.13)	(-0.07)	(0.27)	(0.85)	(0.90)
$R^2 - ord$	6.14	9.96	11.71	14.23	14.61	13.08	24.43	27.26	29.46	29.27
	Panel E: 'Ultra' YIV					Panel F: 5-year and 'Ultra' YIV				
$\sigma^{INT}_{IV,5}$						0.15***	0.23***	0.26***	0.24***	0.27***
						(2.59)	(3.04)	(3.62)	(3.84)	(4.32)
$\sigma^{INT}_{IV,TB}$	-0.01	0.03	0.08	0.26***	0.30***	0.02	0.03	0.03	0.10	0.13
	(-0.10)	(0.49)	(0.87)	(2.68)	(2.57)	(0.93)	(1.19)	(1.31)	(1.32)	(1.57)
$R^2 - ord$	0.01	0.33	2.90	22.59	26.38	17.04	27.49	29.87	34.04	38.24

Table A27: Predicting the volatility of employment growth: Controlling for 2-year 10-year, and long-term YIVs.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(EMP_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $EMP_{i,t+j}$ is the year-on-year growth rate of total non-farm payrolls measured at time $t+j$. Controls include implied volatility from options on 2-year ($\sigma_{IV,2}^{INT}$), 10-year ($\sigma_{IV,10}^{INT}$), and long-term (Ultra) ($\sigma_{IV,TB}^{INT}$) Treasury note and bond futures. The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: 2-year YIV					Panel B: 2- and 5-year YIV				
$\sigma_{IV,5}^{INT}$						0.09***	0.14***	0.18***	0.22***	0.25***
						(4.81)	(5.47)	(5.49)	(5.51)	(5.40)
$\sigma_{IV,2}^{INT}$	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
	(-1.04)	(-0.49)	(-0.37)	(-0.41)	(-0.39)	(-1.43)	(-0.77)	(-0.45)	(-0.39)	(-0.36)
R^2-ord	0.42	0.12	0.08	0.12	0.12	32.39	40.03	43.64	44.24	41.00
	Panel C: 10-year YIV					Panel D: 5- and 10-year YIV				
$\sigma_{IV,5}^{INT}$						0.08***	0.12***	0.15***	0.18***	0.20***
						(3.59)	(3.73)	(3.77)	(3.76)	(3.64)
$\sigma_{IV,10}^{INT}$	0.05***	0.08***	0.10***	0.13***	0.15***	0.01	0.01	0.01	0.01	0.02
	(3.43)	(3.50)	(3.52)	(3.27)	(2.97)	(0.35)	(0.18)	(0.26)	(0.47)	(0.72)
R^2-ord	13.10	13.73	14.43	15.18	15.47	27.19	31.20	33.91	34.71	33.18
	Panel E: 'Ultra' YIV					Panel F: 5-year and 'Ultra' YIV				
$\sigma_{IV,5}^{INT}$						0.11***	0.16***	0.20***	0.22***	0.23***
						(4.39)	(4.24)	(4.54)	(4.71)	(5.14)
$\sigma_{IV,TB}^{INT}$	0.01	0.02	0.06	0.17***	0.20***	0.02***	0.02***	0.02*	0.02	0.05
	(0.45)	(0.65)	(0.92)	(2.69)	(2.54)	(3.39)	(2.69)	(1.68)	(0.63)	(0.96)
R^2-ord	0.17	0.86	3.42	20.67	22.24	30.40	40.45	43.17	42.13	40.69

Table A28: Predicting growth rates of macroeconomic variables with non-overlapping observations.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + MACRO_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is YIV measured at time t and $MACRO_{i,t+j}$ is either the year-on-year growth rate of real gross domestic product, industrial production, personal consumption expenditures, or total non-farm payrolls measured at time $t+j$. Controls include the lagged growth rates. The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity and autocorrelation using Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H =$	12	18	24	30	36	12	18	24	30	36
	Panel A: Predict GDP with YIV					Panel B: Predict GDP with YIV and lags				
$\sigma_{IV,5}^{INT}$	-0.06***	-0.02**	-0.02	-0.02	-0.01	-0.06***	-0.02	-0.01	-0.02	-0.02*
	(-2.98)	(-2.04)	(-0.98)	(-0.92)	(-0.88)	(-2.60)	(-1.43)	(-0.72)	(-1.42)	(-1.96)
Lag						0.01	0.02	0.01	-0.01	-0.02
						(0.32)	(0.81)	(0.31)	(-0.56)	(-0.71)
$R^2 - ord$	17.09	2.76	1.29	1.10	0.64	17.26	3.83	1.46	1.50	1.53
	Panel C: Predict IND with YIV					Panel D: Predict IND with YIV and lags				
$\sigma_{IV,5}^{INT}$	-0.08	0.02	0.05	0.03	0.04	-0.11	0.03	0.06*	0.04	0.03
	(-1.22)	(0.86)	(1.30)	(1.15)	(1.16)	(-1.47)	(1.40)	(1.72)	(1.11)	(0.89)
Lag						-0.05	0.01	0.03	0.01	-0.02
						(-0.79)	(0.28)	(0.82)	(0.06)	(-0.51)
$R^2 - ord$	6.24	0.50	1.79	1.00	1.29	7.71	0.58	2.40	1.00	1.58
	Panel E: Predict CON with YIV					Panel F: Predict CON with YIV and lags				
$\sigma_{IV,5}^{INT}$	-0.07***	-0.03**	-0.01	-0.01	-0.01	-0.06**	-0.02	-0.01	0.01	0.01
	(-2.68)	(-2.30)	(-0.76)	(-0.48)	(-0.53)	(-2.08)	(-1.57)	(-0.11)	(0.08)	(0.09)
Lag						0.01	0.02	0.02	0.02	0.03
						(0.64)	(0.99)	(1.38)	(1.12)	(0.97)
$R^2 - ord$	17.18	2.73	0.36	0.26	0.39	17.74	3.59	1.62	1.71	2.31
	Panel G: Predict EMP with YIV					Panel H: Predict EMP with YIV and lags				
$\sigma_{IV,5}^{INT}$	-1.07***	-1.43***	-1.58***	-1.61***	-1.55***	-0.08***	-0.05***	-0.03***	-0.01	-0.01
	(-6.26)	(-5.36)	(-5.04)	(-4.83)	(-4.33)	(-3.20)	(-3.39)	(-3.09)	(-1.38)	(-0.36)
Lag						0.01	-0.01	-0.03	-0.03	-0.03
						(0.18)	(-0.89)	(-1.27)	(-1.34)	(-1.30)
$R^2 - ord$	44.87	38.54	29.75	22.13	16.07	30.91	10.28	3.72	4.53	5.48

Table A29: Predicting volatility of macroeconomic variables growth with non-overlapping observations.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(MACRO_{i,t+j}) = \alpha_H + \beta_H \sigma^{INT}_{IV,t} + Controls + \epsilon_{t+H}$$

Here, $\sigma^{INT}_{IV,t}$ is YIV measured at time t and $MACRO_{i,t+j}$ is either the year-on-year growth rate of real gross domestic product, industrial production, personal consumption expenditures, or total non-farm payrolls measured at time $t+j$. Controls include the lagged growth rates. The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity and autocorrelation using Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: Predict GDP with YIV					Panel B: Predict GDP with YIV and lags				
$\sigma^{INT}_{IV,5}$	0.42***	0.38***	0.31***	0.27***	0.20**	0.33***	0.34***	0.32***	0.33***	0.30***
	(7.89)	(8.71)	(3.69)	(2.65)	(2.03)	(5.92)	(6.90)	(4.43)	(4.05)	(3.50)
Lag						0.27***	0.10	-0.04	-0.18*	-0.29***
						(3.09)	(0.89)	(-0.41)	(-1.96)	(-2.80)
R^2-ord	43.18	34.91	22.66	17.06	9.51	58.52	37.13	23.09	24.08	27.53
	Panel C: Predict IND with YIV					Panel D: Predict IND with YIV and lags				
$\sigma^{INT}_{IV,5}$	0.79***	0.76***	0.49*	0.02	-0.22**	0.67***	0.80***	0.74**	0.24	-0.03
	(3.56)	(2.83)	(1.94)	(0.21)	(-2.21)	(3.77)	(3.09)	(2.15)	(1.57)	(-0.29)
Lag						0.23	-0.09	-0.48*	-0.42*	-0.37*
						(1.02)	(-0.62)	(-1.84)	(-1.65)	(-1.92)
R^2-ord	34.17	30.49	12.49	0.02	2.53	36.18	30.81	21.27	6.63	7.67
	Panel E: Predict CON with YIV					Panel F: Predict CON with YIV and lags				
$\sigma^{INT}_{IV,5}$	0.30***	0.22***	0.11*	-0.04	-0.08*	0.26***	0.26***	0.19**	0.02	-0.03
	(4.21)	(2.51)	(1.64)	(-1.35)	(-1.71)	(3.10)	(2.62)	(1.96)	(0.48)	(-0.82)
Lag						0.08	-0.08	-0.17*	-0.12	-0.11**
						(0.83)	(-1.11)	(-1.66)	(-1.55)	(-2.00)
R^2-ord	31.32	16.26	3.87	0.59	2.16	33.11	17.93	11.72	4.18	5.37
	Panel G: Predict EMP with YIV					Panel H: Predict EMP with YIV and lags				
$\sigma^{INT}_{IV,5}$	0.22***	0.18***	0.15**	0.05	-0.03	0.17***	0.21***	0.26***	0.30***	0.31***
	(5.45)	(3.40)	(2.33)	(1.11)	(-1.03)	(4.09)	(4.45)	(4.01)	(3.58)	(3.31)
Lag						0.08	0.09	0.05	-0.01	-0.06
						(1.31)	(1.22)	(0.62)	(-0.05)	(-0.59)
R^2-ord	33.50	22.71	16.16	1.45	0.67	36.05	30.27	25.09	20.59	16.73

Table A30: Predicting growth rates of macroeconomic variables excluding the recent global financial crisis.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + MACRO_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is YIV measured at time t and $MACRO_{i,t+j}$ is either the year-on-year growth rate of real gross domestic product, industrial production, personal consumption expenditures, or total non-farm payrolls measured at time $t+j$. Controls include the term spread measured by the yield spread between the 5-year Treasuries and the 3-month T-bills (TRM05-03), the level of the short-term interest rate measured by the yield-to-maturity on the 3-month T-bills (SRT03M), the change in the short-term interest rate (ΔSRT03M), the return on an index of treasury bonds (ITBOND), the returns on an index of investment-grade corporate bonds (ICBOND), the value-weighted return on an index of all stocks in CRSP (VWRETS), the CBOE Volatility Index (σ_{IV}^{VIX}), the credit spread on corporate bonds (CRSAAA), the option-based credit spread from Culp, Nozawa, and Veronesi (2018) (SPXSPRD), and the measure of new-home construction reported by the Wall Street Journal (HOUSNG). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity and autocorrelation using Newey-West correction with 36 lags. Monthly data, 1990 – 2007.

$H =$	12	18	24	30	36	12	18	24	30	36
	Panel A: Predict GDP with controls					Panel B: Predict GDP with controls and YIV				
$\sigma_{IV,5}^{INT}$						-0.02*	-0.01*	-0.01**	-0.01***	-0.01***
						(-1.70)	(-1.86)	(-2.29)	(-2.40)	(-2.35)
Lag	0.03**	0.02*	0.01	0.01	-0.01	0.03*	0.01	0.01	-0.01	-0.01
	(2.07)	(1.67)	(0.64)	(0.07)	(-0.17)	(1.89)	(1.38)	(0.16)	(-0.46)	(-0.63)
$R^2 - ord$	47.30	51.05	64.98	65.11	66.75	49.42	52.92	67.31	67.34	68.25
	Panel C: Predict IND with controls					Panel D: Predict IND with controls and YIV				
$\sigma_{IV,5}^{INT}$						-0.02***	-0.01**	-0.01***	-0.01***	-0.01***
						(-2.78)	(-2.14)	(-2.48)	(-2.39)	(-2.53)
Lag	0.14***	0.12***	0.11***	0.10***	0.08***	0.14***	0.12***	0.10***	0.09***	0.07***
	(5.94)	(5.69)	(5.87)	(5.52)	(4.77)	(5.98)	(5.63)	(5.70)	(5.35)	(4.61)
$R^2 - ord$	69.62	67.03	68.75	69.80	70.34	70.17	67.32	69.12	70.13	70.69
	Panel E: Predict CON with controls					Panel F: Predict CON with controls and YIV				
$\sigma_{IV,5}^{INT}$						-0.01	-0.01	-0.01	-0.01	-0.01***
						(-1.53)	(-1.39)	(-1.36)	(-1.36)	(-2.71)
Lag	0.01	-0.01	-0.01**	-0.02***	-0.02***	0.01	-0.01	-0.01**	-0.02***	-0.02***
	(0.60)	(-0.66)	(-2.19)	(-4.16)	(-5.13)	(0.57)	(-0.69)	(-2.23)	(-4.22)	(-5.40)
$R^2 - ord$	31.11	39.18	50.38	62.04	70.46	31.89	39.62	50.72	62.30	71.04
	Panel G: Predict EMP with controls					Panel H: Predict EMP with controls and YIV				
$\sigma_{IV,5}^{INT}$						-0.01***	-0.01***	-0.01***	-0.01***	-0.01***
						(-2.56)	(-2.50)	(-2.50)	(-2.34)	(-3.47)
Lag	0.10***	0.08***	0.07***	0.05***	0.04***	0.10***	0.08***	0.06***	0.05***	0.04***
	(5.40)	(5.51)	(5.74)	(5.24)	(5.62)	(5.55)	(5.57)	(5.80)	(5.31)	(5.48)
$R^2 - ord$	71.01	68.25	66.40	66.80	69.42	72.09	69.34	67.52	67.74	70.58

Table A31: Predicting volatility of macroeconomic variables growth excluding the recent global financial crisis.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(MACRO_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is YIV measured at time t and $MACRO_{i,t+j}$ is either the year-on-year growth rate of real gross domestic product, industrial production, personal consumption expenditures, or total non-farm payrolls measured at time $t+j$. Controls include the term spread measured by the yield spread between the 5-year Treasuries and the 3-month T-bills (TRM05-03), the level of the short-term interest rate measured by the yield-to-maturity on the 3-month T-bills (SRT03M), the change in the short-term interest rate (ΔSRT03M), the return on an index of treasury bonds (ITBOND), the returns on an index of investment-grade corporate bonds (ICBOND), the value-weighted return on an index of all stocks in CRSP (VWRETS), the CBOE Volatility Index (σ_{IV}^{VIX}), the credit spread on corporate bonds (CRSAAA), the option-based credit spread from Culp, Nozawa, and Veronesi (2018) (SPXSPRD), and the measure of new-home construction reported by the Wall Street Journal (HOUSNG). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity and autocorrelation using Newey-West correction with 36 lags. Monthly data, 1990 – 2007.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: GDP and YIV					Panel B: GDP and YIV and Controls				
$\sigma_{IV,5}^{INT}$						0.22***	0.18*	0.16*	0.16*	0.06
						(2.75)	(1.64)	(1.79)	(1.71)	(0.97)
Lag	-0.04	-0.17*	-0.25***	-0.09	0.07	-0.06	-0.15*	-0.23***	-0.06	0.08
	(-0.37)	(-1.92)	(-2.49)	(-0.77)	(1.45)	(-0.62)	(-1.70)	(-2.43)	(-0.64)	(1.47)
R^2-ord	40.47	51.82	51.59	56.32	65.67	48.86	55.19	54.01	58.67	65.95
	Panel C: IND and YIV					Panel D: IND and YIV and Controls				
$\sigma_{IV,5}^{INT}$						0.04	0.06	0.09*	0.05	0.04*
						(1.23)	(1.32)	(1.95)	(1.43)	(1.95)
Lag	0.08	-0.10	-0.21	-0.15**	-0.05	0.07	-0.11	-0.22	-0.16**	-0.05
	(0.60)	(-0.59)	(-1.44)	(-2.03)	(-0.92)	(0.60)	(-0.62)	(-1.52)	(-2.11)	(-1.01)
R^2-ord	29.79	40.67	55.16	65.90	76.12	30.22	41.15	55.95	66.17	76.30
	Panel E: CON and YIV					Panel F: CON and YIV and Controls				
$\sigma_{IV,5}^{INT}$						0.03**	0.02	0.03	0.04	0.03**
						(2.00)	(1.26)	(1.54)	(1.61)	(2.03)
Lag	0.15***	0.16***	0.09*	0.06	0.07*	0.15***	0.16***	0.09*	0.05	0.07*
	(3.61)	(2.90)	(1.72)	(1.15)	(1.86)	(3.62)	(2.92)	(1.67)	(1.03)	(1.70)
R^2-ord	56.35	53.14	50.42	57.64	67.86	57.21	53.37	51.03	58.27	68.19
	Panel G: EMP and YIV					Panel H: EMP and YIV and Controls				
$\sigma_{IV,5}^{INT}$						0.02**	0.01	0.02	0.02	0.04
						(2.02)	(1.15)	(1.16)	(0.80)	(1.59)
Lag	0.03	0.01	-0.01	-0.01	0.03	0.03	0.01	-0.01	-0.01	0.02
	(0.81)	(0.28)	(-0.18)	(-0.05)	(0.49)	(0.83)	(0.27)	(-0.19)	(-0.05)	(0.44)
R^2-ord	46.12	49.01	44.59	44.50	52.52	46.92	49.19	44.86	44.66	53.04

Table A32: Predicting growth rates of macroeconomic variables at short horizons.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sum_{j=1}^{j=H} \log(1 + MACRO_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is YIV measured at time t and $MACRO_{i,t+j}$ is either the year-on-year growth rate of real gross domestic product, industrial production, personal consumption expenditures, or total non-farm payrolls measured at time $t+j$. Controls include the term spread measured by the yield spread between 5-year Treasuries and the 3-month T-bills (TRM05-03), the level of the short-term interest rate measured by the yield-to-maturity on the 3-month T-bills (SRT03M), the change in the short-term interest rate (ΔSRT03M), the return on an index of treasury bonds (ITBOND), the returns on an index of investment-grade corporate bonds (ICBOND), the value-weighted return on an index of all stocks in CRSP (VWRETS), the CBOE Volatility Index (σ_{IV}^{VIX}), the credit spread on corporate bonds (CRSAAA), the option-based credit spread from Culp, Nozawa, and Veronesi (2018) (SPXSPRD), and the measure of new-home construction reported by the Wall Street Journal (HOUSNG). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity and autocorrelation using Newey-West correction with 36 lags. Monthly data, 1990 – 2007.

$H=$	3	6	9	12	15	3	6	9	12	15
	Panel A: Predict GDP with controls					Panel B: Predict GDP with controls and YIV				
$\sigma_{IV,5}^{INT}$						-0.06***	-0.06***	-0.06***	-0.06***	-0.05***
						(-3.84)	(-4.17)	(-4.30)	(-4.20)	(-3.90)
Lag	0.08***	0.06***	0.05***	0.04**	0.04**	0.07***	0.05***	0.04***	0.04**	0.03**
	(3.62)	(3.08)	(2.62)	(2.27)	(2.12)	(3.51)	(2.85)	(2.36)	(2.08)	(2.06)
R^2-ord	56.26	54.16	54.52	54.50	55.72	64.84	65.07	66.61	65.63	64.44
	Panel C: Predict IND with controls					Panel D: Predict IND with controls and YIV				
$\sigma_{IV,5}^{INT}$						-0.10***	-0.13***	-0.14***	-0.13***	-0.11***
						(-4.02)	(-3.90)	(-3.30)	(-2.85)	(-2.71)
Lag	0.17***	0.12**	0.09*	0.08	0.07	0.14***	0.09*	0.06	0.05	0.05
	(3.36)	(2.24)	(1.81)	(1.61)	(1.54)	(3.04)	(1.80)	(1.25)	(1.06)	(1.07)
R^2-ord	54.84	51.78	50.74	50.02	48.67	59.91	60.02	60.62	59.49	56.81
	Panel E: Predict CON with controls					Panel F: Predict CON with controls and YIV				
$\sigma_{IV,5}^{INT}$						-0.04***	-0.05***	-0.05***	-0.05***	-0.05***
						(-3.26)	(-3.08)	(-2.69)	(-2.61)	(-2.67)
Lag	0.06***	0.04*	0.02	0.01	0.01	0.05***	0.03	0.01	0.01	-0.01
	(2.81)	(1.82)	(1.18)	(0.56)	(0.04)	(2.67)	(1.46)	(0.67)	(0.01)	(-0.52)
R^2-ord	65.25	62.47	60.68	59.35	58.62	68.21	67.23	66.74	66.19	65.57
	Panel G: Predict EMP with controls					Panel H: Predict EMP with controls and YIV				
$\sigma_{IV,5}^{INT}$						-0.03***	-0.04***	-0.05***	-0.05***	-0.05***
						(-4.00)	(-4.35)	(-4.06)	(-3.75)	(-3.55)
Lag	0.10***	0.09***	0.08***	0.08***	0.07***	0.09***	0.08***	0.07***	0.07***	0.06***
	(6.89)	(5.07)	(4.33)	(3.97)	(3.74)	(6.81)	(5.00)	(4.20)	(3.85)	(3.73)
R^2-ord	74.77	70.61	67.17	64.18	60.99	77.62	75.08	73.15	71.13	68.48

Table A33: Predicting volatility of macroeconomic variables growth at short horizons.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(MACRO_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is YIV measured at time t and $MACRO_{i,t+j}$ is either the year-on-year growth rate of real gross domestic product, industrial production, personal consumption expenditures, or total non-farm payrolls measured at time $t+j$. Controls include the term spread measured by the yield spread between the 5-year Treasuries and the 3-month T-bills (TRM05-03), the level of the short-term interest rate measured by the yield-to-maturity on the 3-month T-bills (SRT03M), the change in the short-term interest rate (ΔSRT03M), the return on an index of treasury bonds (ITBOND), the returns on an index of investment-grade corporate bonds (ICBOND), the value-weighted return on an index of all stocks in CRSP (VWRETS), the CBOE Volatility Index (σ_{IV}^{VIX}), the credit spread on corporate bonds (CRSAAA), the option-based credit spread from Culp, Nozawa, and Veronesi (2018) (SPXSPRD), and the measure of new-home construction reported by the Wall Street Journal (HOUSNG). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity and autocorrelation using Newey-West correction with 36 lags. Monthly data, 1990 – 2007.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: GDP and YIV					Panel B: GDP and YIV and Controls				
$\sigma_{IV,5}^{INT}$						0.17***	0.18***	0.17***	0.19***	0.19***
						(2.34)	(2.87)	(2.46)	(2.57)	(2.74)
Lag	-0.04	-0.04	-0.07	-0.12*	-0.17*	-0.05	-0.06	-0.09	-0.13*	-0.17**
	(-0.87)	(-0.90)	(-1.27)	(-1.64)	(-1.95)	(-1.21)	(-1.15)	(-1.50)	(-1.91)	(-2.19)
R^2-ord	13.80	27.90	40.12	46.50	46.26	26.60	39.19	47.67	53.69	52.51
	Panel C: IND and YIV					Panel D: IND and YIV and Controls				
$\sigma_{IV,5}^{INT}$						0.22***	0.37***	0.49***	0.56***	0.63***
						(3.22)	(3.54)	(3.48)	(3.46)	(3.57)
Lag	0.11	0.17	0.20	0.19	0.12	0.05	0.07	0.08	0.05	-0.03
	(1.43)	(1.13)	(0.96)	(0.78)	(0.52)	(0.77)	(0.63)	(0.48)	(0.25)	(-0.16)
R^2-ord	19.53	30.61	37.47	43.32	47.31	29.28	41.47	47.52	51.75	54.92
	Panel E: CON and YIV					Panel F: CON and YIV and Controls				
$\sigma_{IV,5}^{INT}$						0.06	0.17**	0.20***	0.19***	0.20***
						(1.60)	(2.29)	(2.92)	(3.43)	(3.53)
Lag	0.06*	0.10	0.12	0.11	0.07	0.05	0.06	0.08	0.07	0.03
	(1.78)	(1.60)	(1.39)	(1.07)	(0.66)	(1.39)	(1.13)	(1.01)	(0.74)	(0.29)
R^2-ord	12.85	20.82	34.12	43.09	45.55	15.58	32.98	45.34	50.40	51.46
	Panel G: EMP and YIV					Panel H: EMP and YIV and Controls				
$\sigma_{IV,5}^{INT}$						0.05***	0.10***	0.16***	0.19***	0.18***
						(4.01)	(3.85)	(4.34)	(5.12)	(5.02)
Lag	0.02**	0.05**	0.09*	0.12*	0.13	0.01	0.02	0.04	0.06	0.07
	(2.14)	(2.06)	(1.76)	(1.63)	(1.60)	(0.59)	(0.92)	(0.91)	(1.02)	(1.12)
R^2-ord	26.55	30.35	31.18	34.50	37.23	34.24	42.08	46.13	46.95	45.63

Table A34: Predicting volatility of industrial production growth computed using residuals of an AR model.

Notes: This Table shows the estimated coefficients for the forecasting regression:

$$\sigma(IND_{i,t+j}) = \alpha_H + \beta_H \sigma_{IV,t}^{INT} + Controls + \epsilon_{t+H}$$

Here, $\sigma_{IV,t}^{INT}$ is the YIV measured at time t and $IND_{i,t+j}$ is the year-on-year growth rate in the index of industrial production measured at time $t+j$. Controls include the term spread (TRM), the changes in the short rate (ΔSY), the return on an index of treasury bonds (ITB), the returns on an index of corporate bonds (ICB), the value-weighted return on an index of all stocks in CRSP (VWR), and the CBOE Volatility Index (VIX). The numbers in parenthesis are the t-statistics. Statistical significance is indicated by *, **, and *** at the 10%, 5% and 1% levels, respectively. The standard errors are adjusted for heteroscedasticity, autocorrelation, and overlapping data using the Newey-West correction with 36 lags. Monthly data, 1990 – 2016.

$H=$	12	18	24	30	36	12	18	24	30	36
	Panel A: Controls only					Panel B: YIV and controls				
$\sigma_{IV,5}^{INT}$						0.60***	0.77***	1.08***	1.14***	1.10***
						(4.27)	(5.43)	(4.40)	(4.07)	(4.37)
Lag IND	-0.15*	-0.24*	-0.29*	-0.29*	-0.28*	-0.11*	-0.19**	-0.22**	-0.22**	-0.20*
	(-1.86)	(-1.93)	(-1.79)	(-1.71)	(-1.72)	(-1.81)	(-2.11)	(-2.06)	(-1.97)	(-1.92)
TRM	0.15	-0.01	-0.25	-0.51*	-0.76**	-0.08	-0.30*	-0.68***	-0.96***	-1.21***
	(1.00)	(-0.04)	(-0.95)	(-1.66)	(-2.14)	(-0.77)	(-1.89)	(-2.59)	(-2.90)	(-3.04)
ΔSY	-0.18	-0.36*	-0.41**	-0.48**	-0.50**	-0.13	-0.31	-0.32	-0.39	-0.40
	(-1.49)	(-1.85)	(-2.14)	(-2.04)	(-1.97)	(-1.00)	(-1.45)	(-1.61)	(-1.57)	(-1.51)
ITB	-0.23**	-0.20	-0.18	-0.19	-0.20	-0.21**	-0.18	-0.15	-0.16	-0.17
	(-2.08)	(-1.50)	(-1.24)	(-1.39)	(-1.48)	(-2.17)	(-1.52)	(-1.39)	(-1.51)	(-1.54)
ICB	0.22	0.15	0.01	-0.04	-0.08	0.23**	0.17	0.03	-0.02	-0.04
	(1.42)	(0.97)	(0.05)	(-0.27)	(-0.54)	(1.97)	(1.42)	(0.29)	(-0.14)	(-0.41)
VWR	-0.05	-0.14	-0.20*	-0.23*	-0.24*	-0.01	-0.07	-0.10	-0.12	-0.14
	(-0.58)	(-1.41)	(-1.80)	(-1.79)	(-1.69)	(-0.02)	(-0.76)	(-1.20)	(-1.36)	(-1.30)
σ_{IV}^{VIX}	0.84***	1.22***	1.25***	1.15***	1.01***	0.48***	0.77***	0.63***	0.50**	0.40*
	(3.26)	(3.19)	(3.01)	(2.97)	(2.78)	(2.79)	(2.89)	(2.64)	(2.13)	(1.84)
R^2-ord	35.18	43.21	36.84	33.87	34.55	45.62	52.97	51.42	48.25	47.19

Table A35: Out of sample forecasts for growth rate of other macroeconomic variables.

Notes: This Table reports the out of sample root-mean-squared errors (RMSE) for predicting year-on-year growth rate of industrial production, personal consumption expenditures, and non-farm payrolls. Each panel reports the RMSE for a separate macroeconomic variable. The row headers indicate the model estimated: *YIV only* is a model with only the YIV; *Naive* is a model with only the lagged growth rates; *TRM* is a model with the term spreads; *CRS* is a model with credit spreads; *SRT* is a model with the level and changes of short rates; *Ex. YIV* is a model with all control variables excluding YIV; and *Full* is a model with all variables. Each model is estimated over five-year rolling windows, and then used to predict the year-on-year growth rates of each macroeconomic variable 3-36 months ahead. The predicted values are compared to the realized values to compute the RMSE. The RMSE are multiplied by 100 and expressed in percentages.

$H =$	3	6	9	12	15	18	21	24	27	30	33	36
Panel A: Industrial production												
YIV only	4.0695	4.4813	5.0583	5.3318	5.4006	5.4483	5.4810	5.4573	5.4134	5.3811	5.3725	5.3875
Naive	4.9192	5.8942	6.0838	5.8896	5.6897	5.5709	5.5182	5.5013	5.5033	5.5111	5.5148	5.5409
TRM	5.0753	5.2437	5.2950	5.2697	5.2458	5.2230	5.2472	5.2865	5.3132	5.3343	5.3296	5.2927
CRS	5.1316	5.3068	5.3660	5.3699	5.3928	5.4322	5.4923	5.5544	5.5852	5.5709	5.5100	5.4008
SRT	4.8026	5.0749	5.1866	5.2378	5.2857	5.3398	5.3706	5.4084	5.4416	5.4600	5.4643	5.4635
Ex. YIV	4.6978	5.9458	6.5994	7.0647	7.2673	7.1817	7.0671	7.0242	6.8770	6.5302	6.1306	5.8565
Full	4.4088	5.5240	6.2125	6.7953	7.0688	7.0638	7.0439	7.0364	6.9046	6.5776	6.1746	5.8908
Panel B: Personal consumption expenditures												
YIV only	1.8890	2.1437	2.3507	2.4279	2.4922	2.4850	2.4830	2.4737	2.4754	2.4954	2.5233	2.5459
Naive	2.0015	2.4274	2.5830	2.6053	2.5527	2.4783	2.4352	2.4404	2.4980	2.5935	2.6946	2.7726
TRM	2.3132	2.4153	2.4810	2.5191	2.5424	2.5442	2.5463	2.5464	2.5507	2.5567	2.5583	2.5502
CRS	2.2327	2.3129	2.3642	2.3999	2.4284	2.4577	2.4940	2.5284	2.5541	2.5733	2.5796	2.5727
SRT	2.0872	2.2405	2.3018	2.3496	2.3586	2.3678	2.4004	2.4407	2.4889	2.5346	2.5679	2.5794
Ex. YIV	1.9022	2.4364	2.7911	3.0369	3.2216	3.3481	3.3842	3.4004	3.4166	3.4182	3.4096	3.3885
Full	1.7841	2.2690	2.6300	2.8701	3.0597	3.1887	3.2352	3.2508	3.2655	3.2663	3.2664	3.2748
Panel C: Non-farm payrolls												
YIV only	1.4042	1.4446	1.5778	1.7476	1.9127	2.0404	2.1409	2.1913	2.2146	2.2289	2.2360	2.2385
Naive	1.3995	1.7624	1.9948	2.1314	2.2069	2.2422	2.2549	2.2566	2.2525	2.2461	2.2417	2.2422
TRM	1.8162	1.9496	2.0483	2.1130	2.1497	2.1630	2.1604	2.1506	2.1373	2.1248	2.1115	2.0876
CRS	2.0115	2.1230	2.2044	2.2616	2.3011	2.3287	2.3498	2.3686	2.3832	2.3918	2.3939	2.3907
SRT	1.6602	1.8430	1.9770	2.0804	2.1585	2.2091	2.2427	2.2687	2.2926	2.3083	2.3226	2.3328
Ex. YIV	1.4171	1.8945	2.2702	2.5938	2.8697	3.0694	3.1756	3.2032	3.1749	3.0855	2.9323	2.7516
Full	1.3117	1.7140	2.0479	2.3644	2.6450	2.8628	3.0059	3.0529	3.0378	2.9594	2.8099	2.6377

Table A36: Out of sample forecasts for volatility of other macroeconomic variables growth.

Notes: This Table reports the out of sample root-mean-squared errors (RMSE) for predicting volatility of industrial production, personal consumption expenditures, and non-farm payrolls. Each panel reports the RMSE for a separate macroeconomic variable. The row headers indicate the model estimated: *YIV only* is a model with only the YIV; *Naive* is a model with only the lagged growth rates; *TRM* is a model with the term spreads; *CRS* is a model with credit spreads; *SRT* is a model with the level and changes of short rates; *Ex. YIV* is a model with all control variables excluding YIV; and *Full* is a model with all variables. Each model is estimated over five-year rolling windows, and then used to predict the volatility of each macroeconomic variable 3-36 months ahead. The predicted values are compared to the realized values to compute the RMSE. The RMSE are multiplied by 100 and expressed in percentages.

$H=$	3	6	9	12	15	18	21	24	27	30	33	36
Panel A: Industrial production												
YIV only	0.6588	0.9911	1.4968	1.8795	2.1958	2.4246	2.5865	2.6607	2.6636	2.6255	2.6038	2.6114
Naive	0.7222	1.2130	1.8227	2.2515	2.4577	2.5043	2.5187	2.5583	2.6230	2.6563	2.6887	2.6998
TRM	0.7336	1.1183	1.5071	1.8284	2.0638	2.2175	2.2967	2.3479	2.4188	2.5049	2.5936	2.6864
CRS	0.7332	1.1618	1.6074	2.0051	2.3406	2.5952	2.7660	2.8636	2.8987	2.8668	2.7990	2.7340
SRT	0.7145	1.1273	1.5754	1.9570	2.2257	2.3955	2.4924	2.5633	2.6311	2.7098	2.8168	2.9058
Ex. YIV	0.7557	1.3087	2.0963	2.7457	3.1659	3.5502	3.8506	4.0846	4.1881	4.2041	4.1333	3.9773
Full	0.7407	1.2123	1.9645	2.5984	3.0323	3.3813	3.6426	3.8694	4.0065	4.0629	4.0087	3.8673
Panel B: Personal consumption expenditures												
YIV only	0.3332	0.4179	0.5819	0.7009	0.7908	0.8509	0.8957	0.9321	0.9616	0.9769	0.9833	0.9928
Naive	0.3313	0.4520	0.6357	0.7513	0.8256	0.8817	0.9160	0.9510	0.9891	1.0062	1.0106	1.0171
TRM	0.3409	0.4556	0.5764	0.6692	0.7349	0.7834	0.8307	0.8746	0.9134	0.9496	0.9856	1.0190
CRS	0.3508	0.4679	0.6046	0.7400	0.8577	0.9521	1.0300	1.0841	1.1176	1.1267	1.1170	1.1053
SRT	0.3449	0.4478	0.5836	0.6958	0.7779	0.8300	0.8799	0.9324	0.9843	1.0396	1.0888	1.1207
Ex. YIV	0.3876	0.5068	0.8201	1.0205	1.1763	1.2788	1.3712	1.4873	1.5821	1.6295	1.6010	1.5140
Full	0.3956	0.4839	0.7933	0.9947	1.1558	1.2590	1.3532	1.4747	1.5770	1.6237	1.5830	1.4834
Panel C: Non-farm payrolls												
YIV only	0.1599	0.2514	0.3718	0.4834	0.5760	0.6501	0.7108	0.7542	0.7860	0.8061	0.8108	0.8171
Naive	0.1707	0.2781	0.4143	0.5419	0.6408	0.7065	0.7518	0.7907	0.8281	0.8587	0.8783	0.8931
TRM	0.1811	0.2951	0.4075	0.5093	0.5986	0.6762	0.7451	0.7976	0.8291	0.8374	0.8402	0.8551
CRS	0.1857	0.3084	0.4286	0.5475	0.6616	0.7606	0.8417	0.9086	0.9619	0.9962	1.0149	1.0249
SRT	0.1771	0.2932	0.4115	0.5247	0.6099	0.6692	0.7091	0.7442	0.7795	0.8078	0.8274	0.8433
Ex. YIV	0.1871	0.3439	0.5425	0.7626	0.9598	1.1422	1.2958	1.4207	1.5076	1.5723	1.6137	1.5975
Full	0.1783	0.3201	0.4925	0.7076	0.9199	1.1151	1.2803	1.4152	1.5100	1.5805	1.6231	1.6082

Table A37: Regressing actual values on forecasted values of the growth rate of industrial production.

Notes: This Table reports the estimates for regressing the actual future year-on-year growth rates of industrial production on their predicted values. The row headers indicate the model estimated: *YIV only* is a model with only the YIV; *Naive* is a model with only the lagged growth rates; *TRM* is a model with the term spreads; *CRS* is a model with credit spreads; *SRT* is a model with the level and changes of short rates; *Ex. YIV* is a model with all control variables excluding YIV; and *Full* is a model with all variables. Each model is estimated over five-year rolling windows, and then used to predict the year-on-year growth rates of industrial production 3-36 months ahead. The predicted values are regressed on the realized values.

	$H=$	3	6	9	12	15	18	21	24	27	30	33	36
	Coeff	0.94***	0.73***	0.37***	0.08	-0.14	-0.39**	-0.54***	-0.62***	-0.61***	-0.57**	-0.54**	-0.47*
YIV only	t-stat	(9.28)	(6.59)	(2.93)	(0.54)	(-0.86)	(-2.10)	(-2.79)	(-2.92)	(-2.68)	(-2.32)	(-2.04)	(-1.65)
	R^2	31.31	18.68	4.33	0.15	0.39	2.28	3.95	4.32	3.67	2.77	2.15	1.42
	Coeff	0.48***	0.15*	-0.06	-0.16	-0.21	-0.23	-0.24	-0.24	-0.26	-0.29	-0.31	-0.31
Naive	t-stat	(6.65)	(1.67)	(-0.65)	(-1.41)	(-1.55)	(-1.54)	(-1.47)	(-1.41)	(-1.48)	(-1.56)	(-1.53)	(-1.43)
	R^2	18.95	1.46	0.22	1.05	1.25	1.24	1.13	1.05	1.15	1.26	1.22	1.07
	Coeff	0.81***	0.18	-0.05	0.07	0.27	0.42	0.40	0.32	0.24	0.20	0.24	0.46*
TRM	t-stat	(2.64)	(0.55)	(-0.16)	(0.21)	(0.91)	(1.46)	(1.43)	(1.14)	(0.88)	(0.76)	(0.94)	(1.81)
	R^2	3.56	0.16	0.01	0.02	0.44	1.12	1.07	0.69	0.41	0.30	0.47	1.70
	Coeff	0.34*	0.10	0.03	0.04	0.06	0.04	-0.01	-0.09	-0.15	-0.16	-0.13	-0.03
CRS	t-stat	(1.79)	(0.55)	(0.15)	(0.23)	(0.37)	(0.27)	(-0.09)	(-0.59)	(-1.00)	(-1.10)	(-0.88)	(-0.19)
	R^2	1.67	0.16	0.01	0.03	0.07	0.04	0.01	0.18	0.53	0.64	0.41	0.02
	Coeff	0.54***	0.30**	0.17	0.09	0.03	-0.05	-0.10	-0.19	-0.34	-0.43*	-0.47*	-0.35
SRT	t-stat	(3.93)	(2.00)	(1.10)	(0.55)	(0.17)	(-0.27)	(-0.48)	(-0.88)	(-1.40)	(-1.69)	(-1.73)	(-1.24)
	R^2	7.54	2.08	0.64	0.16	0.01	0.04	0.12	0.41	1.03	1.50	1.56	0.81
	Coeff	0.53***	0.22***	-0.01	-0.15**	-0.19***	-0.16**	-0.16**	-0.21***	-0.28***	-0.31***	-0.30***	-0.34***
Ex. YIV	t-stat	(8.65)	(3.01)	(-0.06)	(-2.09)	(-2.73)	(-2.28)	(-2.20)	(-2.74)	(-3.38)	(-3.28)	(-2.76)	(-2.56)
	R^2	28.36	4.56	0.01	2.26	3.80	2.69	2.51	3.83	5.71	5.40	3.87	3.36
	Coeff	0.59***	0.33***	0.11	-0.10	-0.19***	-0.17**	-0.17**	-0.21***	-0.28***	-0.31***	-0.32***	-0.38***
Full	t-stat	(10.04)	(4.66)	(1.36)	(-1.33)	(-2.50)	(-2.26)	(-2.25)	(-2.78)	(-3.39)	(-3.35)	(-2.93)	(-2.95)
	R^2	34.77	10.30	0.97	0.92	3.19	2.63	2.60	3.92	5.72	5.59	4.35	4.41

Table A38: Regressing actual values on forecasted values of the growth rate of consumption.

Notes: This Table reports the estimates for regressing the actual future year-on-year growth rates of personal consumption expenditures on their predicted values. The row headers indicate the model estimated: *YIV only* is a model with only the YIV; *Naive* is a model with only the lagged growth rates; *TRM* is a model with the term spreads; *CRS* is a model with credit spreads; *SRT* is a model with the level and changes of short rates; *Ex. YIV* is a model with all control variables excluding YIV; and *Full* is a model with all variables. Each model is estimated over five-year rolling windows, and then used to predict the year-on-year growth rates of personal consumption expenditures 3-36 months ahead. The predicted values are regressed on the realized values.

	$H=$	3	6	9	12	15	18	21	24	27	30	33	36
	Coeff	1.20***	0.85***	0.53***	0.40**	0.25	0.31	0.37	0.53*	0.72*	0.71*	0.58	0.52
YIV only	t-stat	(9.97)	(6.06)	(3.27)	(2.23)	(1.15)	(1.27)	(1.35)	(1.66)	(1.96)	(1.63)	(1.09)	(0.81)
	R^2	34.48	16.29	5.35	2.56	0.70	0.84	0.95	1.44	1.99	1.39	0.62	0.35
	Coeff	0.62***	0.40***	0.25***	0.14	0.13	0.26	0.59***	0.97***	0.89***	0.45*	0.12	-0.03
Naive	t-stat	(9.58)	(4.95)	(2.60)	(1.22)	(0.87)	(1.32)	(2.33)	(3.18)	(2.87)	(1.62)	(0.49)	(-0.13)
	R^2	32.70	11.46	3.46	0.78	0.40	0.92	2.80	5.08	4.17	1.38	0.13	0.01
	Coeff	1.41***	0.48	-0.20	-0.44	-0.49	-0.41	-0.35	-0.39	-0.41	-0.34	-0.12	0.48
TRM	t-stat	(3.75)	(1.09)	(-0.41)	(-0.86)	(-0.93)	(-0.76)	(-0.66)	(-0.74)	(-0.79)	(-0.67)	(-0.24)	(0.95)
	R^2	6.92	0.63	0.09	0.39	0.45	0.31	0.23	0.29	0.33	0.24	0.03	0.47
	Coeff	0.95***	0.80***	0.73***	0.70***	0.66***	0.57***	0.46***	0.36*	0.30*	0.27	0.27	0.30*
CRS	t-stat	(5.07)	(4.20)	(3.83)	(3.65)	(3.48)	(3.02)	(2.47)	(1.94)	(1.66)	(1.52)	(1.52)	(1.69)
	R^2	11.96	8.54	7.20	6.58	6.02	4.60	3.13	1.95	1.43	1.21	1.21	1.48
	Coeff	0.90***	0.62***	0.57***	0.55***	0.70***	0.84***	0.93***	0.97***	0.93***	0.78**	0.56	0.56
SRT	t-stat	(5.68)	(3.63)	(3.17)	(2.94)	(3.50)	(3.95)	(3.95)	(3.67)	(3.06)	(2.19)	(1.34)	(1.13)
	R^2	14.60	6.51	5.04	4.38	6.09	7.62	7.63	6.64	4.71	2.47	0.94	0.67
	Coeff	0.63***	0.42***	0.25***	0.14**	0.07	0.03	0.04	0.06	0.06	0.07	0.06	0.05
Ex. YIV	t-stat	(11.81)	(6.59)	(3.71)	(2.04)	(1.00)	(0.50)	(0.70)	(0.92)	(0.99)	(1.04)	(0.94)	(0.69)
	R^2	42.47	18.69	6.77	2.15	0.53	0.13	0.26	0.44	0.52	0.56	0.46	0.25
	Coeff	0.69***	0.50***	0.32***	0.19***	0.07	0.02	0.04	0.06	0.07	0.08	0.08	0.06
Full	t-stat	(13.08)	(7.81)	(4.50)	(2.50)	(0.98)	(0.31)	(0.52)	(0.86)	(1.07)	(1.23)	(1.19)	(0.82)
	R^2	47.50	24.41	9.69	3.20	0.51	0.05	0.14	0.39	0.60	0.80	0.74	0.35

Table A39: Regressing actual values on forecasted values of the growth rate of employment.

Notes: This Table reports the estimates for regressing the actual future year-on-year growth rates of non-farm payrolls on their predicted values. The row headers indicate the model estimated: *YIV only* is a model with only the YIV; *Naive* is a model with only the lagged growth rates; *TRM* is a model with the term spreads; *CRS* is a model with credit spreads; *SRT* is a model with the level and changes of short rates; *Ex. YIV* is a model with all control variables excluding YIV; and *Full* is a model with all variables. Each model is estimated over five-year rolling windows, and then used to predict the year-on-year growth rates of non-farm payrolls 3-36 months ahead. The predicted values are regressed on the realized values.

	$H=$	3	6	9	12	15	18	21	24	27	30	33	36
	Coeff	1.03***	0.97***	0.83***	0.66***	0.45***	0.23*	0.01	-0.16	-0.28*	-0.38***	-0.47***	-0.55***
YIV only	t-stat	(12.43)	(11.64)	(9.29)	(6.58)	(3.99)	(1.83)	(0.04)	(-1.11)	(-1.85)	(-2.35)	(-2.70)	(-2.97)
	R^2	44.98	41.78	31.35	18.63	7.76	1.74	0.01	0.65	1.78	2.84	3.72	4.47
	Coeff	0.72***	0.54***	0.37***	0.20**	0.03	-0.14	-0.31**	-0.47***	-0.58***	-0.64***	-0.65***	-0.65***
Naive	t-stat	(13.46)	(7.94)	(4.59)	(2.18)	(0.29)	(-1.20)	(-2.33)	(-3.06)	(-3.39)	(-3.36)	(-3.12)	(-2.90)
	R^2	48.93	25.03	10.04	2.46	0.04	0.76	2.79	4.71	5.75	5.64	4.89	4.26
	Coeff	1.47***	1.03***	0.49**	-0.04	-0.42	-0.57*	-0.49*	-0.31	-0.12	0.02	0.13	0.30
TRM	t-stat	(8.48)	(4.80)	(1.97)	(-0.15)	(-1.45)	(-1.91)	(-1.64)	(-1.04)	(-0.44)	(0.07)	(0.53)	(1.23)
	R^2	27.56	10.85	2.01	0.01	1.10	1.90	1.41	0.57	0.10	0.01	0.15	0.79
	Coeff	0.40***	0.21	0.10	0.05	0.04	0.03	0.01	-0.03	-0.08	-0.13	-0.19	-0.24**
CRS	t-stat	(2.92)	(1.58)	(0.79)	(0.42)	(0.31)	(0.23)	(0.06)	(-0.26)	(-0.69)	(-1.15)	(-1.62)	(-2.04)
	R^2	4.32	1.30	0.33	0.09	0.05	0.03	0.01	0.03	0.25	0.70	1.36	2.16
	Coeff	0.68***	0.47***	0.30***	0.15	0.04	-0.01	-0.02	-0.02	-0.03	-0.04	-0.08	-0.15
SRT	t-stat	(7.41)	(4.63)	(2.74)	(1.33)	(0.38)	(-0.07)	(-0.16)	(-0.13)	(-0.20)	(-0.28)	(-0.55)	(-0.97)
	R^2	22.49	10.18	3.82	0.92	0.08	0.01	0.01	0.01	0.02	0.04	0.16	0.49
	Coeff	0.67***	0.47***	0.27***	0.06	-0.14**	-0.29***	-0.38***	-0.42***	-0.44***	-0.41***	-0.33***	-0.21**
Ex. YIV	t-stat	(14.76)	(8.31)	(4.31)	(0.93)	(-2.11)	(-4.40)	(-5.92)	(-6.53)	(-6.53)	(-5.64)	(-3.97)	(-2.15)
	R^2	53.53	26.78	8.95	0.46	2.31	9.31	15.65	18.42	18.41	14.40	7.71	2.40
	Coeff	0.70***	0.55***	0.40***	0.22***	0.01	-0.18***	-0.32***	-0.41***	-0.46***	-0.45***	-0.38***	-0.26***
Full	t-stat	(16.88)	(10.78)	(6.89)	(3.42)	(0.16)	(-2.56)	(-4.61)	(-5.76)	(-6.17)	(-5.58)	(-4.08)	(-2.37)
	R^2	60.12	38.08	20.08	5.84	0.01	3.35	10.12	14.94	16.76	14.15	8.11	2.88

Table A40: Regressing actual values on forecasted values of the volatility of industrial production growth.

Notes: This Table reports the estimates for regressing the actual future volatility of industrial production on their predicted values. The row headers indicate the model estimated: *YIV only* is a model with only the YIV; *Naive* is a model with only the lagged growth rates; *TRM* is a model with the term spreads; *CRS* is a model with credit spreads; *SRT* is a model with the level and changes of short rates; *Ex. YIV* is a model with all control variables excluding YIV; and *Full* is a model with all variables. Each model is estimated over five-year rolling windows, and then used to predict the volatility of industrial production 3-36 months ahead. The predicted values are regressed on the realized values.

	$H=$	3	6	9	12	15	18	21	24	27	30	33	36
	Coeff	1.22***	1.15***	0.10	-0.29	-0.70***	-0.82***	-0.85***	-0.71***	-0.18	0.51	1.27***	1.75***
YIV only	t-stat	(6.36)	(6.23)	(0.48)	(-1.32)	(-2.88)	(-3.33)	(-3.50)	(-2.71)	(-0.63)	(1.53)	(3.45)	(4.62)
	R^2	17.61	17.02	0.12	0.92	4.21	5.56	6.10	3.75	0.21	1.23	5.93	10.15
	Coeff	0.41***	0.17*	-0.12	-0.26***	-0.35***	-0.35**	0.06	0.65***	0.74***	0.75***	0.68***	0.65***
Naive	t-stat	(2.87)	(1.66)	(-1.22)	(-2.50)	(-2.74)	(-1.98)	(0.27)	(3.03)	(3.94)	(3.84)	(3.00)	(2.48)
	R^2	4.18	1.44	0.78	3.20	3.82	2.03	0.04	4.64	7.60	7.22	4.56	3.15
	Coeff	0.43	-0.85	-2.24***	-2.07***	-0.68	0.84	2.02***	2.34***	1.94***	1.23***	0.58*	0.04
TRM	t-stat	(0.59)	(-1.30)	(-3.62)	(-3.40)	(-1.16)	(1.60)	(4.52)	(6.19)	(5.71)	(3.84)	(1.93)	(0.12)
	R^2	0.19	0.89	6.50	5.77	0.71	1.34	9.74	16.84	14.71	7.23	1.93	0.01
	Coeff	-0.10	-0.55**	-0.89***	-1.03***	-1.10***	-1.04***	-0.92***	-0.76***	-0.54***	-0.29*	-0.05	0.13
CRS	t-stat	(-0.29)	(-2.00)	(-3.66)	(-4.67)	(-5.37)	(-5.44)	(-5.07)	(-4.42)	(-3.29)	(-1.82)	(-0.31)	(0.95)
	R^2	0.04	2.07	6.63	10.36	13.24	13.54	11.96	9.37	5.40	1.73	0.05	0.47
	Coeff	0.44*	0.05	-0.34*	-0.47***	-0.36*	-0.14	0.17	0.44*	0.61***	0.50*	0.01	-0.54*
SRT	t-stat	(1.89)	(0.24)	(-1.75)	(-2.44)	(-1.83)	(-0.67)	(0.78)	(1.92)	(2.47)	(1.84)	(0.01)	(-1.69)
	R^2	1.85	0.03	1.59	3.06	1.74	0.24	0.32	1.91	3.13	1.75	0.01	1.48
	Coeff	0.20	0.14*	-0.13*	-0.32***	-0.40***	-0.40***	-0.34***	-0.29***	-0.27***	-0.27***	-0.27***	-0.25***
Ex. YIV	t-stat	(1.62)	(1.64)	(-1.82)	(-4.62)	(-5.69)	(-5.87)	(-5.29)	(-4.82)	(-4.58)	(-4.50)	(-4.19)	(-3.71)
	R^2	1.37	1.40	1.71	10.14	14.61	15.43	12.89	10.93	10.01	9.67	8.51	6.79
	Coeff	0.26**	0.25***	-0.06	-0.28***	-0.41***	-0.45***	-0.42***	-0.37***	-0.35***	-0.33***	-0.31***	-0.27***
Full	t-stat	(2.05)	(2.87)	(-0.82)	(-3.68)	(-5.29)	(-5.93)	(-5.76)	(-5.55)	(-5.28)	(-5.08)	(-4.51)	(-3.73)
	R^2	2.17	4.18	0.36	6.69	12.89	15.71	14.95	14.01	12.87	12.02	9.73	6.85

Table A41: Regressing actual values on forecasted values of the volatility of consumption growth.

Notes: This Table reports the estimates for regressing the actual volatility of personal consumption expenditures on their predicted values. The row headers indicate the model estimated: *YIV only* is a model with only the YIV; *Naive* is a model with only the lagged growth rates; *TRM* is a model with the term spreads; *CRS* is a model with credit spreads; *SRT* is a model with the level and changes of short rates; *Ex. YIV* is a model with all control variables excluding YIV; and *Full* is a model with all variables. Each model is estimated over five-year rolling windows, and then used to predict the volatility of personal consumption expenditures 3-36 months ahead. The predicted values are regressed on the realized values.

	$H=$	3	6	9	12	15	18	21	24	27	30	33	36
	Coeff	0.81***	0.85***	0.04	-0.32*	-0.72***	-0.72***	-0.54**	-0.41	-0.25	-0.01	0.35	0.57
YIV only	t-stat	(2.56)	(4.26)	(0.24)	(-1.66)	(-3.10)	(-2.90)	(-2.07)	(-1.45)	(-0.83)	(-0.04)	(0.95)	(1.48)
	R^2	3.36	8.75	0.03	1.44	4.84	4.25	2.21	1.09	0.36	0.01	0.47	1.15
	Coeff	0.74***	0.36***	-0.24*	-0.44***	-0.76***	-1.36***	-0.98***	-0.47	-0.41	-0.17	0.07	0.19
Naive	t-stat	(3.30)	(2.39)	(-1.67)	(-2.84)	(-3.84)	(-5.14)	(-3.06)	(-1.44)	(-1.26)	(-0.53)	(0.24)	(0.68)
	R^2	5.45	2.94	1.46	4.09	7.25	12.27	4.72	1.09	0.84	0.15	0.03	0.24
	Coeff	0.68	-1.61***	-2.09***	-1.16**	0.42	1.31***	1.41***	1.18***	0.90***	0.47	-0.02	-0.39
TRM	t-stat	(0.97)	(-2.80)	(-4.00)	(-2.15)	(0.84)	(2.94)	(3.54)	(3.33)	(2.84)	(1.60)	(-0.08)	(-1.52)
	R^2	0.50	3.99	7.79	2.40	0.37	4.38	6.20	5.54	4.09	1.33	0.01	1.21
	Coeff	-1.11	-0.62	-0.30	-0.30	-0.46***	-0.55***	-0.62***	-0.62***	-0.56***	-0.45***	-0.31***	-0.18
CRS	t-stat	(-1.51)	(-1.38)	(-1.02)	(-1.36)	(-2.41)	(-3.17)	(-3.90)	(-4.29)	(-4.12)	(-3.48)	(-2.49)	(-1.49)
	R^2	1.20	0.99	0.55	0.97	2.97	5.05	7.46	8.88	8.25	6.03	3.18	1.17
	Coeff	-0.11	0.10	-0.23	-0.08	0.11	0.39**	0.57***	0.60***	0.50***	0.03	-0.72***	-1.41***
SRT	t-stat	(-0.29)	(0.35)	(-1.00)	(-0.41)	(0.61)	(2.18)	(3.17)	(3.16)	(2.38)	(0.14)	(-2.82)	(-5.35)
	R^2	0.05	0.07	0.53	0.09	0.20	2.45	5.05	5.01	2.92	0.01	4.05	13.15
	Coeff	-0.10	0.24***	-0.25***	-0.36***	-0.32***	-0.26***	-0.22***	-0.23***	-0.25***	-0.31***	-0.37***	-0.43***
Ex. YIV	t-stat	(-0.72)	(2.76)	(-3.28)	(-5.00)	(-4.88)	(-4.09)	(-3.75)	(-4.22)	(-4.71)	(-5.99)	(-6.70)	(-6.81)
	R^2	0.27	3.87	5.38	11.70	11.21	8.11	6.91	8.61	10.51	15.94	19.19	19.73
	Coeff	-0.07	0.37***	-0.14*	-0.31***	-0.33***	-0.26***	-0.23***	-0.24***	-0.25***	-0.32***	-0.38***	-0.45***
Full	t-stat	(-0.49)	(4.29)	(-1.79)	(-4.15)	(-4.73)	(-4.04)	(-3.71)	(-4.30)	(-4.83)	(-6.07)	(-6.69)	(-6.80)
	R^2	0.13	8.88	1.67	8.34	10.60	7.93	6.79	8.92	11.00	16.31	19.15	19.66

Table A42: Regressing actual values on forecasted values of the volatility of employment growth.

Notes: This Table reports the estimates for regressing the actual future volatility of non-farm payrolls on their predicted values. The row headers indicate the model estimated: *YIV only* is a model with only the YIV; *Naive* is a model with only the lagged growth rates; *TRM* is a model with the term spreads; *CRS* is a model with credit spreads; *SRT* is a model with the level and changes of short rates; *Ex. YIV* is a model with all control variables excluding YIV; and *Full* is a model with all variables. Each model is estimated over five-year rolling windows, and then used to predict the volatility of non-farm payrolls 3-36 months ahead. The predicted values are regressed on the realized values.

	$H=$	3	6	9	12	15	18	21	24	27	30	33	36
	Coeff	1.46***	1.32***	0.59***	0.09	-0.55**	-1.05***	-1.31***	-1.51***	-1.52***	-1.33***	-0.85**	-0.36
YIV only	t-stat	(7.23)	(7.45)	(3.26)	(0.42)	(-2.22)	(-3.90)	(-4.79)	(-5.07)	(-4.51)	(-3.52)	(-1.97)	(-0.75)
	R^2	21.64	22.69	5.33	0.10	2.54	7.45	10.83	11.95	9.72	6.17	2.02	0.29
	Coeff	0.99***	0.63***	0.04	-0.35**	-0.66***	-0.93***	-1.12***	-1.09***	-0.88***	-0.65***	-0.46*	-0.26
Naive	t-stat	(4.34)	(3.63)	(0.26)	(-2.29)	(-4.13)	(-5.09)	(-5.17)	(-4.44)	(-3.44)	(-2.58)	(-1.89)	(-1.14)
	R^2	9.08	6.53	0.04	2.71	8.28	12.07	12.37	9.46	5.88	3.39	1.86	0.69
	Coeff	1.54**	-0.18	-0.88**	-1.01***	-1.07***	-1.04***	-1.09***	-1.01***	-0.70***	-0.26	-0.01	0.01
TRM	t-stat	(2.12)	(-0.35)	(-2.24)	(-3.08)	(-3.67)	(-3.90)	(-4.35)	(-4.18)	(-2.90)	(-1.07)	(-0.02)	(0.04)
	R^2	2.33	0.06	2.58	4.79	6.64	7.45	9.11	8.46	4.27	0.61	0.01	0.01
	Coeff	0.19	-0.35	-0.48**	-0.62***	-0.73***	-0.77***	-0.77***	-0.81***	-0.86***	-0.87***	-0.86***	-0.78***
CRS	t-stat	(0.50)	(-1.19)	(-1.96)	(-2.96)	(-4.02)	(-4.69)	(-5.01)	(-5.45)	(-5.94)	(-6.11)	(-6.09)	(-5.55)
	R^2	0.13	0.75	2.00	4.43	7.88	10.42	11.73	13.59	15.73	16.51	16.42	14.00
	Coeff	0.53*	0.10	-0.39*	-0.82***	-0.88***	-0.77***	-0.59***	-0.45*	-0.43	-0.42	-0.43	-0.37
SRT	t-stat	(1.95)	(0.41)	(-1.76)	(-3.92)	(-4.25)	(-3.56)	(-2.49)	(-1.80)	(-1.61)	(-1.52)	(-1.51)	(-1.31)
	R^2	1.97	0.09	1.62	7.51	8.74	6.27	3.17	1.68	1.34	1.20	1.19	0.90
	Coeff	0.32***	0.08	-0.12	-0.29***	-0.43***	-0.50***	-0.52***	-0.52***	-0.51***	-0.53***	-0.56***	-0.57***
Ex. YIV	t-stat	(2.59)	(0.83)	(-1.59)	(-4.35)	(-7.43)	(-10.03)	(-11.60)	(-12.32)	(-12.48)	(-13.13)	(-14.11)	(-13.12)
	R^2	3.44	0.37	1.32	9.11	22.59	34.73	41.59	44.53	45.18	47.71	51.32	47.66
	Coeff	0.48***	0.22**	0.03	-0.20***	-0.41***	-0.51***	-0.54***	-0.53***	-0.53***	-0.54***	-0.56***	-0.56***
Full	t-stat	(3.72)	(2.15)	(0.31)	(-2.69)	(-6.48)	(-9.62)	(-11.69)	(-12.82)	(-13.03)	(-13.62)	(-14.43)	(-13.14)
	R^2	6.82	2.39	0.05	3.68	18.19	32.87	41.96	46.50	47.33	49.54	52.40	47.74