Appendix Tables – Idiosyncrasy as a Leading Indicator

Table A1. Testing for Mean Reversion in Economic Growth

This table reports the results for tests of mean revision in economic growth. Panel A reports contemporaneous correlation between economic growth and stock return idiosyncrasy. Panel B regresses economic growth on contemporaneous stock returns idiosyncrasy. Panel C predicts the cumulative growth from quarter *t-1* to quarter *t+1* with idiosyncrasy in quarter *t*. Cumulative growth is defined as $\Delta \ln Y_{t-1,\,t+1} = \ln Y_{t+1} - \ln Y_{t-1}$, where Y = GDP or IP. Economic growth is measured by GDP growth, Δln GDP, or industrial production growth, Δln IP. Stock returns idiosyncrasy is defined with the baseline decomposition (equations (1)-(3)), Carhart's (1997) 4-factor model (equation (6)), or Campbell et al. (2001) decomposition (equation (7)). Control variables are: change in credit spread (ΔS), term spread (TERM), change in the ten-year T-bond yields(ΔTB), dividend yield (DIV), inflation (INF), market premium (RET), stock market liquidity (ILLIQ). Newey-West p-values are in parentheses. Boldface denotes significance at 10% or better.

Panel A. Contemporaneous Correlations between Stock Return Idiosyncrasy and Economic Growth

	Δln GDP_t	Δln IP_t	ln AIV_t	ln ASV_t	ln ψ_t	ln 4F-AIV_t	ln 4F-ASV_t	ln 4F-ψ_t	ln C-AIV_t	ln C-ASV_t	ln C-APV_t
Δln IP_t	**0.837**										
	(0.00)										
ln AIV_t	**-0.170**	**-0.195**									
	(0.00)	**(0.00)**									
ln ASV_t	**-0.284**	**-0.267**	**0.705**								
	(0.00)	**(0.00)**	**(0.00)**								
ln ψ_t	**0.244**	**0.197**	-0.068	**-0.756**							
	(0.00)	**(0.00)**	(0.25)	**(0.00)**							
ln 4F-AIV_t	**-0.165**	**-0.191**	**0.990**	**0.684**	-0.048						
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	(0.41)						
ln 4F-ASV_t	**-0.275**	**-0.264**	**0.780**	**0.984**	**-0.663**	**0.756**					
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**					
ln 4F-ψ_t	**0.244**	**0.200**	**-0.142**	**-0.774**	**0.957**	-0.094	**-0.723**				
	(0.00)	**(0.00)**	**(0.01)**	**(0.00)**	**(0.00)**	(0.11)	**(0.00)**				
ln C-AIV_t	**-0.158**	**-0.182**	**0.992**	**0.697**	-0.065	**0.996**	**0.769**	**-0.118**			
	(0.01)	**(0.00)**	**(0.00)**	**(0.00)**	(0.26)	**(0.00)**	**(0.00)**	**(0.04)**			
ln C-ASV_t	**-0.279**	**-0.260**	**0.646**	**0.989**	**-0.794**	**0.628**	**0.968**	**-0.808**	**0.640**		
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**		
ln C-APV_t	**-0.234**	**-0.260**	**0.860**	**0.820**	**-0.359**	**0.821**	**0.886**	**-0.481**	**0.818**	**0.788**	
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	
ln C-ψ_t	**0.235**	**0.200**	-0.030	**-0.672**	**0.918**	0.017	**-0.616**	**0.954**	0.009	**-0.730**	**-0.445**
	(0.00)	**(0.00)**	(0.61)	**(0.00)**	**(0.00)**	(0.77)	**(0.00)**	**(0.00)**	(0.87)	**(0.00)**	**(0.00)**

Panel B. Contemporaneous Stock Return Idiosyncrasy and Economic Growth

$\Delta \ln Y_t$ =	Δln GDP$_t$		Δln IP$_t$		Δln GDP$_t$		Δln IP$_t$		Δln GDP$_t$		Δln IP$_t$	
Decomposition	Baseline definition				Carhart (1997) 4-factor				Campbell et al (2001)			
Regression	A1.B.1	A1.B.2	A1.B.3	A1.B.4	A1.B.5	A1.B.6	A1.B.7	A1.B.8	A1.B.9	A1.B.10	A1.B.11	A1.B.12
ln AIV$_t$	-0.087		0.099		0.072		0.201		0.406		0.263	
	(0.74)		(0.50)		(0.79)		(0.26)		(0.29)		(0.26)	
ln ψ_t		0.273		**0.304**		0.369		**0.372**		0.360		**0.355**
		(0.18)		**(0.04)**		(0.13)		**(0.04)**		(0.15)		**(0.06)**
ΔS$_t$	**-0.021**	**-0.023**	**-0.011**	**-0.012**	**-0.021**	**-0.023**	**-0.011**	**-0.012**	**-0.021**	**-0.023**	**-0.011**	**-0.012**
	(0.01)	**(0.00)**	**(0.02)**	**(0.01)**	**(0.00)**	**(0.00)**	**(0.02)**	**(0.02)**	**(0.01)**	**(0.00)**	**(0.02)**	**(0.02)**
TERM$_t$	-0.000	-0.000	0.000	0.000	-0.000	-0.000	0.000	-0.000	-0.001	-0.000	-0.000	-0.000
	(0.97)	(0.60)	(0.70)	(0.94)	(0.90)	(0.54)	(0.82)	(0.94)	(0.44)	(0.46)	(0.94)	(0.79)
ΔTB$_t$	**0.005**	**0.005**	0.002	0.002	**0.005**	**0.005**	0.002	0.002	**0.005**	**0.005**	**0.002**	**0.002**
	(0.08)	**(0.07)**	(0.17)	(0.15)	**(0.09)**	**(0.07)**	(0.15)	(0.12)	**(0.06)**	**(0.05)**	**(0.09)**	**(0.06)**
DIV$_t$	-0.212	0.031	-0.032	0.105	-0.195	-0.028	-0.051	0.044	-0.438	-0.016	-0.105	0.056
	(0.47)	(0.88)	(0.84)	(0.47)	(0.63)	(0.89)	(0.74)	(0.76)	(0.26)	(0.94)	(0.63)	(0.70)
RET$_t$	-0.032	-0.027	-0.013	-0.011	-0.031	-0.027	-0.013	-0.010	-0.023	-0.025	-0.009	-0.008
	(0.21)	(0.28)	(0.46)	(0.53)	(0.19)	(0.27)	(0.46)	(0.53)	(0.38)	(0.30)	(0.60)	(0.60)
INF$_t$	-0.187	-0.228	-0.066	-0.089	**-0.200**	-0.238	-0.078	-0.099	**-0.253**	-0.254	-0.099	-0.115
	(0.16)	(0.13)	(0.39)	(0.28)	**(0.08)**	(0.13)	(0.34)	(0.25)	**(0.09)**	(0.13)	(0.29)	(0.23)
ILLIQ$_t$	**-0.010**	**-0.010**	-0.004	-0.004	**-0.010**	**-0.009**	-0.004	-0.004	**-0.011**	**-0.010**	-0.005	-0.004
	(0.03)	**(0.04)**	(0.21)	(0.23)	**(0.03)**	**(0.04)**	(0.20)	(0.22)	**(0.01)**	**(0.04)**	(0.14)	(0.19)
ln ASV$_t$	-0.282		**-0.307**		-0.381		**-0.377**		0.044		-0.155	
	(0.16)		**(0.04)**		(0.15)		**(0.03)**		(0.85)		(0.30)	
ln APV$_t$									**-0.825**		-0.312	
									(0.10)		(0.23)	
ΔlnY$_{t-1}$	**0.340**	**0.353**	0.078	0.086	**0.340**	**0.351**	0.078	0.085	**0.330**	**0.351**	0.072	0.083
	(0.02)	**(0.02)**	(0.63)	(0.60)	**(0.02)**	**(0.02)**	(0.63)	(0.60)	**(0.02)**	**(0.02)**	(0.66)	(0.61)
Adj. R^2	0.274	0.271	0.165	0.162	0.274	0.273	0.165	0.163	0.278	0.272	0.163	0.161

Panel C. Predicting Cumulative Economic Growth from Quarter t-1 to t+1

$\Delta \ln Y_{t-1,t+1}$ =	Δln GDP$_{t-1,t+1}$		Δln IP$_{t-1,t+1}$		Δln GDP$_{t-1,t+1}$		Δln IP$_{t-1,t+1}$		Δln GDP$_{t-1,t+1}$		Δln IP$_{t-1,t+1}$	
Decomposition	Baseline definition				Carhart (1997) 4-factor				Campbell et al (2001)			
Regression	A1.C.1	A1.C.2	A1.C.3	A1.C.4	A1.C.5	A1.C.6	A1.C.7	A1.C.8	A1.C.9	A1.C.10	A1.C.11	A1.C.12
ln AIV$_t$	**0.655**		0.749		**0.925**		**1.495**		**0.986**		**2.231**	
	(0.08)		(0.32)		**(0.02)**		**(0.07)**		**(0.07)**		**(0.03)**	
ln ψ_t		**0.879**		**1.681**		**1.083**		**2.236**		**1.034**		**2.121**
		(0.00)		**(0.00)**		**(0.00)**		**(0.00)**		**(0.00)**		**(0.00)**
ΔS$_t$	**-0.021**	**-0.022**	**-0.053**	**-0.058**	**-0.021**	**-0.022**	**-0.053**	**-0.057**	**-0.021**	**-0.022**	**-0.052**	**-0.056**
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
TERM$_t$	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001
	(0.11)	(0.13)	(0.28)	(0.44)	(0.12)	(0.15)	(0.29)	(0.44)	(0.26)	(0.23)	(0.73)	(0.64)
ΔTB$_t$	-0.002	-0.002	-0.001	-0.000	-0.002	-0.001	-0.000	-0.000	-0.001	-0.001	0.002	0.001
	(0.46)	(0.55)	(0.91)	(0.95)	(0.58)	(0.59)	(0.95)	(0.98)	(0.79)	(0.76)	(0.75)	(0.84)
DIV$_t$	0.687	0.835	0.484	1.101	0.575	0.663	0.351	0.758	0.456	0.692	-0.333	0.820
	(0.17)	(0.16)	(0.71)	(0.21)	(0.36)	(0.28)	(0.70)	(0.29)	(0.43)	(0.19)	(0.82)	(0.33)
RET$_t$	0.027	**0.031**	**0.069**	**0.082**	0.029	**0.031**	**0.072**	**0.083**	**0.037**	**0.037**	**0.101**	**0.094**
	(0.20)	**(0.10)**	**(0.06)**	**(0.04)**	(0.13)	**(0.09)**	**(0.10)**	**(0.03)**	**(0.09)**	**(0.07)**	**(0.01)**	**(0.02)**
INF$_t$	-0.172	-0.196	-0.400	**-0.503**	-0.205	-0.224	**-0.470**	**-0.560**	-0.252	**-0.270**	**-0.644**	**-0.655**
	(0.21)	(0.21)	(0.20)	**(0.09)**	(0.17)	(0.15)	**(0.08)**	**(0.06)**	(0.15)	**(0.09)**	**(0.05)**	**(0.04)**
ILLIQ$_t$	-0.003	-0.002	0.006	0.007	-0.003	-0.002	0.007	0.008	-0.004	-0.003	0.001	0.006
	(0.50)	(0.59)	(0.50)	(0.38)	(0.50)	(0.54)	(0.29)	(0.25)	(0.24)	(0.36)	(0.87)	(0.44)
ln ASV$_t$	**-0.879**		**-1.684**		**-1.086**		**-2.249**		**-0.475**		-0.469	
	(0.00)		**(0.00)**		**(0.00)**		**(0.00)**		**(0.02)**		(0.33)	
ln APV$_t$									-0.764		-2.772	
									(0.22)		(0.04)	
Adj. R^2	0.233	0.233	0.257	0.252	0.235	0.237	0.265	0.262	0.233	0.233	0.271	0.257

Table A2. Predicting GDP Growth Excluding Government Expenditures

This table predicts next quarter's GDP growth, excluding government expenditures, with current quarter stock returns idiosyncrasy for the period of 1947Q1-2020Q4. Economic growth is the quarterly growth rate of GDP minus government expenditures, $\Delta \ln (GDP - G)_{t+1}$. Stock returns idiosyncrasy is defined with the baseline decomposition (equations (1)-(3)), Carhart's (1997) 4-factor model (equation (6)), or Campbell et al. (2001) decomposition (equation (7)). Control variables, defined in Appendix A, are: change in credit spread (ΔS), term spread (TERM), change in the ten-year T-bond yields(ΔTB), dividend yield (DIV), inflation (INF), market premium (RET), stock market liquidity (ILLIQ), and, in regressions involving ln AIV, systematic return variation (ln ASV). Newey-West p-values are in parentheses. Boldface denotes significance at 10% or better.

$\Delta \ln Y_{t+1}$ =	$\Delta \ln (GDP - G)_{t+1}$					
Decomposition	Baseline definition		Carhart (1997) 4-factor		Campbell et al (2001)	
Regression	A2.1	A2.2	A2.3	A2.4	A2.5	A2.6
ln AIV_t	**0.509**		**0.626**		**0.674**	
	(0.02)		**(0.00)**		**(0.02)**	
ln ψ_t		**0.535**		**0.657**		**0.692**
		(0.00)		**(0.00)**		**(0.00)**
ΔS_t	**-0.007**	**-0.007**	**-0.007**	**-0.007**	**-0.007**	**-0.007**
	(0.05)	**(0.04)**	**(0.06)**	**(0.04)**	**(0.08)**	**(0.06)**
$TERM_t$	**0.001**	**0.001**	**0.001**	**0.001**	0.001	**0.001**
	(0.05)	**(0.06)**	**(0.06)**	**(0.06)**	(0.12)	**(0.10)**
ΔTB_t	0.000	0.000	0.001	0.001	0.001	0.001
	(0.87)	(0.87)	(0.83)	(0.82)	(0.68)	(0.71)
DIV_t	-0.050	-0.033	-0.161	-0.143	-0.209	-0.126
	(0.81)	(0.87)	(0.45)	(0.49)	(0.38)	(0.52)
RET_t	0.034	**0.034**	0.035	0.035	**0.039**	**0.038**
	(0.11)	**(0.10)**	(0.12)	(0.11)	**(0.09)**	**(0.08)**
INF_t	-0.089	-0.091	-0.106	-0.109	-0.134	**-0.142**
	(0.31)	(0.26)	(0.22)	(0.16)	(0.13)	**(0.07)**
$ILLIQ_t$	-0.003	-0.003	-0.003	-0.003	-0.004	-0.004
	(0.29)	(0.31)	(0.26)	(0.28)	(0.16)	(0.21)
ln ASV_t	**-0.535**		**-0.658**		**-0.324**	
	(0.00)		**(0.00)**		**(0.01)**	
ln APV_t					-0.426	
					(0.13)	
$\Delta \ln Y_t$	0.077	0.078	0.075	0.075	0.071	0.073
	(0.66)	(0.65)	(0.67)	(0.67)	(0.69)	(0.68)
Adj. R^2	0.163	0.166	0.166	0.169	0.165	0.173

Table A3. Stock Return Idiosyncrasy and Investment Dispersion

This table reports the regressions of next quarter (Panel A) or current quarter (Panel B) economic growth on current quarter stock returns idiosyncrasy and/or investment dispersion. Economic growth is measured by GDP growth, $\Delta \ln GDP_t$, or industrial production growth, $\Delta \ln IP_t$. Stock returns idiosyncrasy is defined using the baseline decomposition (equations (1)-(3)), Carhart's (1997) 4-factor model (equation (6)), or Campbell et al. (2001) decomposition (equation (7)). Investment dispersion ($\ln \sigma^2_{I,t}$) is the log variance of quarterly capital expenditure over quarter-beginning net property, plant, and equipment for CRSP/Compustat Merged firms from 1984Q1 to 2020Q4. The first-order difference is used in the regressions for variables that failed the DF-GLS unit root test for the period of 1984Q1-2020Q4. These variables are: stock return idiosyncrasy ratio based on Campbell et al. (2001) decomposition ($\Delta \ln$ C-AIV/(C-ASV+C-APV)), investment dispersion ($\Delta \ln \sigma^2_{I,t}$), dividend yield ($\Delta$DIV), inflation ($\Delta$INF), and stock market liquidity (ΔILLIQ). Other control variables are: change in credit spread (ΔS), term spread (TERM), change in the ten-year T-bond yields(ΔTB), and market premium (RET). Newey-West p-values are in parentheses. Boldface denotes significance at 10% or better.

Panel A. Predicting Economic Growth with Stock Return Idiosyncrasy and Investment Dispersion

$\Delta \ln Y_{t+1}$ =	Δln GDP$_{t+1}$		Δln IP$_{t+1}$		Δln GDP$_{t+1}$		Δln IP$_{t+1}$		Δln GDP$_{t+1}$		Δln IP$_{t+1}$		Δln GDP$_{t+1}$	Δln IP$_{t+1}$
Decomposition	Baseline definition				Carhart (1997) 4-factor				Campbell et al (2001)				Excluding AIV	
Regression	A3.A.1	A3.A.2	A3.A.3	A3.A.4	A3.A.5	A3.A.6	A3.A.7	A3.A.8	A3.A.9	A3.A.10	A3.A.11	A3.A.12	A3.A.13	A3.A.14
ln AIV$_t$	**0.407**		0.491		**0.492**		**0.720**		**0.617**		**1.149**			
	(0.04)		(0.16)		**(0.01)**		**(0.06)**		**(0.00)**		**(0.00)**			
ln ψ_t		**0.324**		**0.410**		**0.402**		**0.608**		0.008		0.008		
		(0.03)		**(0.10)**		**(0.04)**		**(0.02)**		(0.23)		(0.28)		
$\Delta \ln \sigma^2_{I,t}$	**0.017**	0.017	**0.031**	**0.031**	0.017	0.017	**0.032**	**0.032**	**0.017**	**0.018**	**0.032**	**0.032**	0.017	**0.031**
	(0.10)	(0.11)	**(0.05)**	**(0.03)**	(0.11)	(0.12)	**(0.03)**	**(0.03)**	**(0.09)**	**(0.07)**	**(0.02)**	**(0.02)**	(0.11)	**(0.03)**
ΔS$_t$	-0.002	-0.001	-0.005	-0.005	-0.002	-0.001	-0.005	-0.005	-0.001	-0.001	-0.005	-0.004	-0.001	-0.004
	(0.62)	(0.68)	(0.25)	(0.39)	(0.62)	(0.70)	(0.23)	(0.28)	(0.68)	(0.70)	(0.23)	(0.38)	(0.83)	(0.43)
TERM$_t$	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.001
	(0.42)	(0.44)	(0.45)	(0.45)	(0.45)	(0.51)	(0.43)	(0.45)	(0.66)	(0.60)	(0.88)	(0.56)	(0.58)	(0.52)
ΔTB$_t$	-0.000	-0.000	0.002	0.002	-0.000	-0.000	0.002	0.002	0.000	-0.000	0.003	0.002	-0.000	0.002
	(0.82)	(0.82)	(0.60)	(0.57)	(0.82)	(0.82)	(0.68)	(0.68)	(0.95)	(0.82)	(0.47)	(0.62)	(0.93)	(0.60)
ΔDIV$_t$	0.669	0.704	0.228	0.258	0.627	0.671	0.153	0.204	0.655	-0.271	0.157	-0.746	0.738	0.307
	(0.46)	(0.43)	(0.83)	(0.87)	(0.45)	(0.46)	(0.84)	(0.80)	(0.34)	(0.63)	(0.83)	(0.37)	(0.33)	(0.72)
RET$_t$	**0.025**	**0.024**	**0.055**	**0.053**	**0.026**	**0.024**	**0.056**	**0.053**	**0.029**	0.008	**0.063**	**0.037**	0.022	**0.050**
	(0.08)	**(0.08)**	**(0.01)**	**(0.01)**	**(0.08)**	**(0.08)**	**(0.01)**	**(0.02)**	**(0.03)**	(0.36)	**(0.01)**	**(0.02)**	(0.11)	**(0.02)**
ΔINF$_t$	0.090	0.090	**0.164**	0.164	0.091	0.090	**0.165**	**0.164**	**0.090**	0.039	**0.163**	0.110	**0.089**	**0.164**
	(0.20)	(0.19)	**(0.04)**	(0.18)	(0.19)	(0.21)	**(0.01)**	**(0.01)**	**(0.08)**	(0.46)	**(0.01)**	(0.15)	**(0.08)**	**(0.01)**
ΔILLIQ$_t$	-0.006	-0.006	-0.010	-0.010	-0.006	-0.006	-0.009	-0.009	-0.006	-0.006	-0.010	-0.010	-0.007	-0.012
	(0.48)	(0.49)	(0.34)	(0.43)	(0.51)	(0.52)	(0.41)	(0.41)	(0.47)	(0.41)	(0.31)	(0.28)	(0.45)	(0.33)
ln ASV$_t$	**-0.313**		**-0.399**		**-0.386**		**-0.585**		-0.178		-0.058			
	(0.04)		**(0.10)**		**(0.03)**		**(0.02)**		(0.28)		(0.81)			
ln APV$_t$									-0.325		**-0.916**			
									(0.15)		**(0.04)**			
ΔlnY$_t$	-0.271	-0.274	-0.058	-0.061	-0.278	-0.280	-0.072	-0.075	-0.284	-0.248	-0.098	-0.022	-0.255	-0.051
	(0.06)	(0.07)	(0.83)	(0.82)	(0.04)	(0.07)	(0.78)	(0.77)	(0.02)	(0.09)	(0.67)	(0.93)	(0.06)	(0.84)
Adj. R^2	0.158	0.162	0.242	0.247	0.163	0.167	0.255	0.259	0.173	0.177	0.277	0.249	0.143	0.235

Panel B. Contemporaneous Economic Growth, Stock Return Idiosyncrasy, and Investment Dispersion

$\Delta \ln Y_t$ =	Δln GDP$_t$		Δln IP$_t$		Δln GDP$_t$		Δln IP$_t$		Δln GDP$_t$		Δln IP$_t$		Δln GDP$_t$	Δln IP$_t$
Decomposition	Baseline definition				Carhart (1997) 4-factor				Campbell et al (2001)				Excluding AIV	
Regression	A3.B.1	A3.B.2	A3.B.3	A3.B.4	A3.B.5	A3.B.6	A3.B.7	A3.B.8	A3.B.9	A3.B.10	A3.B.11	A3.B.12	A3.B.13	A3.B.14
ln AIV$_t$	0.273		0.191		**0.420**		0.403		**0.418**		**0.627**			
	(0.17)		(0.61)		**(0.04)**		(0.33)		**(0.10)**		**(0.09)**			
ln ψ_t		**0.423**		0.426		**0.523**		0.568		0.002		-0.002		
		(0.04)		(0.19)		**(0.02)**		(0.13)		(0.20)		(0.39)		
$\Delta \ln \sigma^2_{I,t}$	**0.016**	**0.016**	**0.032**	**0.033**	**0.016**	**0.017**	**0.033**	**0.034**	**0.015**	**0.018**	**0.032**	**0.035**	**0.016**	**0.032**
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.01)**	**(0.01)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
ΔS$_t$	-0.009	-0.009	**-0.016**	**-0.016**	-0.009	-0.009	**-0.016**	**-0.016**	-0.008	-0.010	**-0.015**	**-0.017**	-0.008	**-0.015**
	(0.14)	(0.14)	**(0.04)**	**(0.04)**	(0.14)	(0.14)	**(0.05)**	**(0.05)**	(0.16)	(0.15)	**(0.06)**	**(0.05)**	(0.15)	**(0.04)**
TERM$_t$	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.001	-0.000	-0.000	-0.000
	(0.83)	(0.87)	(0.74)	(0.74)	(0.72)	(0.73)	(0.64)	(0.65)	(0.62)	(0.73)	(0.51)	(0.68)	(0.78)	(0.72)
ΔTB$_t$	0.000	0.000	-0.000	-0.000	0.000	0.000	-0.000	-0.000	0.001	0.001	0.001	0.000	0.001	0.000
	(0.72)	(0.73)	(0.98)	(0.96)	(0.74)	(0.75)	(0.96)	(0.96)	(0.36)	(0.59)	(0.66)	(0.81)	(0.62)	(0.98)
ΔDIV$_t$	-0.872	-0.947	**-2.337**	**-2.465**	-0.922	-0.978	**-2.384**	**-2.482**	-0.877	**-1.268**	**-2.275**	-2.349	-0.840	**-2.313**
	(0.20)	(0.14)	**(0.09)**	**(0.09)**	(0.18)	(0.16)	**(0.08)**	**(0.09)**	(0.17)	**(0.05)**	**(0.07)**	(0.14)	(0.14)	**(0.08)**
RET$_t$	-0.030	-0.026	-0.044	-0.038	-0.028	-0.025	-0.041	-0.037	-0.026	-0.028	-0.036	-0.031	-0.032	-0.045
	(0.32)	(0.34)	(0.30)	(0.32)	(0.34)	(0.34)	(0.30)	(0.31)	(0.40)	(0.34)	(0.38)	(0.43)	(0.29)	(0.29)
ΔINF$_t$	0.030	0.030	0.014	0.014	0.029	0.030	0.013	0.014	0.026	0.026	0.010	0.029	0.030	0.014
	(0.54)	(0.52)	(0.85)	(0.83)	(0.57)	(0.59)	(0.85)	(0.84)	(0.55)	(0.59)	(0.90)	(0.67)	(0.44)	(0.86)
ΔILLIQ$_t$	-0.002	-0.002	-0.003	-0.003	-0.002	-0.002	-0.002	-0.002	-0.002	-0.005	-0.003	-0.008	-0.003	-0.004
	(0.62)	(0.60)	(0.50)	(0.49)	(0.71)	(0.70)	(0.62)	(0.60)	(0.55)	(0.37)	(0.44)	(0.28)	(0.50)	(0.46)
ln ASV$_t$	**-0.444**		-0.463		**-0.544**		-0.606		-0.274		-0.153			
	(0.04)		(0.18)		**(0.02)**		(0.12)		(0.22)		(0.63)			
ln APV$_t$									-0.287		**-0.695**			
									(0.26)		**(0.10)**			
$\Delta \ln Y_{t-1}$	-0.166	-0.158	0.111	0.124	-0.171	-0.166	0.104	0.112	**-0.185**	-0.107	0.076	0.152	-0.160	0.112
	(0.17)	(0.18)	(0.64)	(0.61)	(0.15)	(0.17)	(0.66)	(0.64)	**(0.07)**	(0.36)	(0.73)	(0.51)	(0.16)	(0.63)
Adj. R^2	0.212	0.212	0.233	0.233	0.216	0.219	0.237	0.240	0.212	0.165	0.243	0.215	0.208	0.237

Table A4. Testing for Mean Reversion in Consumption Growth

This table reports the results for tests of mean revision in consumption growth. Panel A reports contemporaneous correlation between consumption growth and stock return idiosyncrasy. Panel B regresses consumption growth on contemporaneous stock returns idiosyncrasy. Panel C predicts the cumulative growth from quarter t-1 to quarter t+1 with idiosyncrasy in quarter t. Cumulative consumption growth is defined as $\Delta \ln C_{t-1,\,t+1} = \ln C_{t+1} - \ln C_{t-1}$. Stock returns idiosyncrasy is defined with the baseline decomposition (equations (1)-(3)), Carhart's (1997) 4-factor model (equation (6)), or Campbell et al. (2001) decomposition (equation (7)). Control variables are: change in credit spread (ΔS), term spread (TERM), change in the ten-year T-bond yields(ΔTB), dividend yield (DIV), inflation (INF), market premium (RET), stock market liquidity (ILLIQ). Newey-West p-values are in parentheses. Boldface denotes significance at 10% or better.

Panel A. Contemporaneous Correlations between Return Idiosyncrasy and Consumption Growth

	$\Delta \ln C_t$	$\ln AIV_t$	$\ln ASV_t$	$\ln \psi_t$	$\ln$ 4F-AIV_t	$\ln$ 4F-ASV_t	$\ln$ 4F-ψ_t	$\ln$ C-AIV_t	$\ln$ C-ASV_t	$\ln$ C-APV_t
$\ln AIV_t$	**-0.103** **(0.08)**									
$\ln ASV_t$	**-0.261** **(0.00)**	**0.705** **(0.00)**								
$\ln \psi_t$	**0.272** **(0.00)**	-0.068 (0.25)	**-0.756** **(0.00)**							
$\ln$ 4F-AIV_t	**-0.103** **(0.08)**	**0.990** **(0.00)**	**0.684** **(0.00)**	-0.048 (0.41)						
$\ln$ 4F-ASV_t	**-0.244** **(0.00)**	**0.780** **(0.00)**	**0.984** **(0.00)**	**-0.663** **(0.00)**	**0.756** **(0.00)**					
$\ln$ 4F-ψ_t	**0.262** **(0.00)**	**-0.142** **(0.01)**	**-0.774** **(0.00)**	**0.957** **(0.00)**	-0.094 (0.11)	**-0.723** **(0.00)**				
$\ln$ C-AIV_t	**-0.100** **(0.09)**	**0.992** **(0.00)**	**0.697** **(0.00)**	-0.065 (0.26)	**0.996** **(0.00)**	**0.769** **(0.00)**	**-0.118** **(0.04)**			
$\ln$ C-ASV_t	**-0.266** **(0.00)**	**0.646** **(0.00)**	**0.989** **(0.00)**	**-0.794** **(0.00)**	**0.628** **(0.00)**	**0.968** **(0.00)**	**-0.808** **(0.00)**	**0.640** **(0.00)**		
$\ln$ C-APV_t	**-0.178** **(0.00)**	**0.860** **(0.00)**	**0.820** **(0.00)**	**-0.359** **(0.00)**	**0.821** **(0.00)**	**0.886** **(0.00)**	**-0.481** **(0.00)**	**0.818** **(0.00)**	**0.788** **(0.00)**	
$\ln$ C-ψ_t	**0.255** **(0.00)**	-0.030 (0.61)	**-0.672** **(0.00)**	**0.918** **(0.00)**	0.017 (0.77)	**-0.616** **(0.00)**	**0.954** **(0.00)**	0.009 (0.87)	**-0.730** **(0.00)**	**-0.445** **(0.00)**

Panel B. Contemporaneous Return Idiosyncrasy and Consumption Growth

$\Delta \ln Y_t =$	$\Delta \ln C_t$					
Decomposition	Baseline definition		Carhart (1997) 4-factor		Campbell et al (2001)	
Regression	A4.B.1	A4.B.2	A4.B.3	A4.B.4	A4.B.5	A4.B.6
$\ln AIV_t$	**0.363**		**0.464**		**0.428**	
	(0.03)		**(0.01)**		**(0.05)**	
$\ln \psi_t$		**0.468**		**0.549**		**0.546**
		(0.00)		**(0.00)**		**(0.00)**
ΔS_t	**-0.013**	**-0.013**	**-0.013**	**-0.013**	**-0.012**	**-0.013**
	(0.01)	**(0.01)**	**(0.02)**	**(0.01)**	**(0.02)**	**(0.02)**
$TERM_t$	0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.91)	(0.98)	(0.92)	(0.81)	(0.83)	(0.61)
ΔTB_t	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.21)	(0.18)	(0.22)	(0.22)	(0.44)	(0.40)
DIV_t	0.011	0.081	-0.059	-0.012	-0.067	0.006
	(0.93)	(0.55)	(0.54)	(0.91)	(0.68)	(0.96)
RET_t	-0.022	-0.021	-0.021	-0.020	-0.019	-0.017
	(0.23)	(0.24)	(0.23)	(0.24)	(0.34)	(0.30)
INF_t	**-0.155**	**-0.166**	**-0.171**	**-0.181**	**-0.185**	**-0.206**
	(0.02)	**(0.01)**	**(0.02)**	**(0.01)**	**(0.01)**	**(0.01)**
$ILLIQ_t$	-0.004	-0.003	-0.004	-0.004	-0.004	-0.004
	(0.29)	(0.30)	(0.26)	(0.27)	(0.20)	(0.23)
$\ln ASV_t$	**-0.469**		**-0.551**		**-0.318**	
	(0.00)		**(0.00)**		**(0.07)**	
$\ln APV_t$					-0.244	
					(0.34)	
$\Delta \ln Y_{t-1}$	-0.163	-0.160	-0.163	-0.161	-0.168	-0.165
	(0.14)	(0.13)	(0.12)	(0.12)	(0.12)	(0.13)
Adj. R^2	0.182	0.183	0.181	0.183	0.179	0.182

Panel C. Predicting Cumulative Consumption Growth from Quarter t-1 to t+1

$\Delta \ln Y_{t-1,\,t+1}$ =	$\Delta \ln C_{t-1,\,t+1}$					
Decomposition	Baseline definition		Carhart (1997) 4-factor		Campbell et al (2001)	
Regression	A4.C.1	A4.C.2	A4.C.3	A4.C.4	A4.C.5	A4.C.6
ln AIV_t	**1.025**		**1.316**		**1.291**	
	(0.00)		**(0.00)**		**(0.01)**	
ln ψ_t		**0.990**		**1.230**		**1.208**
		(0.00)		**(0.00)**		**(0.00)**
ΔS_t	**-0.017**	**-0.017**	**-0.017**	**-0.016**	**-0.016**	**-0.016**
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
$TERM_t$	0.002	0.002	0.001	0.001	0.001	0.001
	(0.30)	(0.31)	(0.34)	(0.34)	(0.50)	(0.45)
ΔTB_t	**-0.006**	**-0.006**	**-0.006**	**-0.006**	**-0.005**	**-0.005**
	(0.01)	**(0.01)**	**(0.01)**	**(0.01)**	**(0.03)**	**(0.03)**
DIV_t	0.478	0.455	0.308	0.260	0.208	0.292
	(0.15)	(0.18)	(0.28)	(0.39)	(0.55)	(0.32)
RET_t	0.008	0.007	0.009	0.008	0.018	0.014
	(0.58)	(0.56)	(0.51)	(0.51)	(0.22)	(0.25)
INF_t	**-0.354**	**-0.350**	**-0.393**	**-0.382**	**-0.434**	**-0.437**
	(0.00)	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
$ILLIQ_t$	0.000	0.000	0.000	0.000	-0.001	-0.001
	(0.89)	(0.90)	(0.90)	(0.94)	(0.61)	(0.81)
ln ASV_t	**-0.990**		**-1.228**		**-0.590**	
	(0.00)		**(0.00)**		**(0.00)**	
ln APV_t					-0.739	
					(0.17)	
Adj. R^2	0.210	0.212	0.218	0.220	0.213	0.218

Table A5. Predicting Consumption Growth Two to Eight Quarters Ahead with Return Idiosyncrasy

This table predicts consumption growth (Δln C) in quarter t+2 to t+8 with stock returns idiosyncrasy in quarter t. Idiosyncratic return variation is defined with the baseline decomposition (equations (1)-(3)), Carhart's (1997) 4-factor model (equation (6)), or Campbell et al. (2001) decomposition (equation (7)). Control variables are: change in credit spread (ΔS), term spread (TERM), change in the ten-year T-bond yields(ΔTB), dividend yield (DIV), inflation (INF), market premium (RET), stock market liquidity (ILLIQ). Control variables are unreported for brevity. Newey-West p-values are in parentheses. Boldface denotes significance at 10% or better.

k		Baseline definition		Carhart (1997) 4-factor		Campbell et al (2001)	
2	ln AIV_t	**0.249**		**0.288**		0.245	
		(0.01)		**(0.02)**		(0.12)	
	ln ψ_t		0.154		0.185		0.128
			(0.26)		(0.33)		(0.57)
3	ln AIV_t	**0.341**		**0.490**		**0.522**	
		(0.03)		**(0.01)**		**(0.04)**	
	ln ψ_t		**0.287**		**0.393**		**0.376**
			(0.01)		**(0.01)**		**(0.01)**
4	ln AIV_t	**0.338**		**0.444**		**0.480**	
		(0.01)		**(0.00)**		**(0.03)**	
	ln ψ_t		**0.280**		**0.362**		**0.348**
			(0.01)		**(0.01)**		**(0.01)**
5	ln AIV_t	**0.262**		**0.347**		0.281	
		(0.03)		**(0.01)**		(0.11)	
	ln ψ_t		**0.219**		**0.285**		**0.284**
			(0.01)		**(0.00)**		**(0.00)**
6	ln AIV_t	0.258		**0.327**		**0.444**	
		(0.11)		**(0.05)**		**(0.07)**	
	ln ψ_t		**0.183**		**0.247**		**0.252**
			(0.04)		**(0.07)**		**(0.03)**
7	ln AIV_t	0.069		0.086		0.229	
		(0.73)		(0.67)		(0.29)	
	ln ψ_t		-0.092		-0.073		-0.020
			(0.62)		(0.69)		(0.89)
8	ln AIV_t	**0.387**		**0.356**		0.349	
		(0.05)		**(0.06)**		(0.16)	
	ln ψ_t		**0.271**		**0.256**		**0.308**
			(0.02)		**(0.04)**		**(0.03)**
	Controls	Y	Y	Y	Y	Y	Y

Table A6. Predicting Investment Growth Two to Eight Quarters Ahead with Return Idiosyncrasy

This table predicts investment growth (Δln I), in quarter t+2 to t+8 with stock returns idiosyncrasy in quarter t. Idiosyncratic return variation is defined with the baseline decomposition (equations (1)-(3)), Carhart's (1997) 4-factor model (equation (6)), or Campbell et al. (2001) decomposition (equation (7)). Control variables are: change in credit spread (ΔS), term spread (TERM), change in the ten-year T-bond yields(ΔTB), dividend yield (DIV), inflation (INF), market premium (RET), stock market liquidity (ILLIQ). Control variables are unreported for brevity. Newey-West p-values are in parentheses. Boldface denotes significance at 10% or better.

k		Baseline definition		Carhart (1997) 4-factor		Campbell et al (2001)	
2	ln AIV_t	0.481		0.910		1.459	
		(0.38)		(0.14)		(0.11)	
	ln ψ_t		0.304		0.600		0.558
			(0.51)		(0.29)		(0.39)
3	ln AIV_t	**1.111**		**1.436**		1.228	
		(0.03)		**(0.02)**		(0.21)	
	ln ψ_t		0.535		0.720		0.607
			(0.12)		(0.15)		(0.29)
4	ln AIV_t	0.266		0.439		1.298	
		(0.60)		(0.43)		(0.18)	
	ln ψ_t		0.332		0.448		0.554
			(0.39)		(0.40)		(0.30)
5	ln AIV_t	0.602		0.716		0.792	
		(0.37)		(0.30)		(0.32)	
	ln ψ_t		0.232		0.305		0.297
			(0.55)		(0.50)		(0.52)
6	ln AIV_t	0.003		0.207		0.683	
		(1.00)		(0.73)		(0.42)	
	ln ψ_t		0.396		0.553		**0.751**
			(0.20)		(0.16)		**(0.06)**
7	ln AIV_t	0.085		-0.001		0.011	
		(0.90)		(1.00)		(0.99)	
	ln ψ_t		0.054		0.059		0.103
			(0.91)		(0.91)		(0.83)
8	ln AIV_t	0.602		0.239		-0.260	
		(0.33)		(0.70)		(0.74)	
	ln ψ_t		0.411		0.167		0.246
			(0.35)		(0.77)		(0.65)
	Controls	Y	Y	Y	Y	Y	Y