#### 0.85 0.88 0.89 0.85 0.87 0.88 0.89 0.86 88.0 0.89 0.5 -(983)(985)(981)(976)(975)(974)(987)(981)0.85 0.85 0.85 0.84 0.85 0.86 0.86 0.87 0.87 0.87 0.45 -(969)(959)(953)(950)(963)(964)(966)(969)(960)(974)8.0 0.81 0.81 0.85 0.82 0.82 8.0 0.84 0.84 0.84 0.4 -(946)(930)(927)(944)(941)(941)(946)(942)(932)(946)0.81 0.82 8.0 0.79 0.79 0.78 0.78 0.81 0.81 8.0 0.35 -(886)(875)(880)(880)(868)(878)(883)(899)(873)(863)M21 Volatility Shock Mean **Success Proportion** 0.73 0.74 0.76 0.78 0.76 0.75 0.79 8.0 0.78 0.78 0.3 -(796)(802)(815)(791)(812)(812)(787)(810)(807)(809)0.8 0.72 0.72 0.76 0.74 0.74 0.74 0.75 0.75 0.76 0.75 0.25 -0.7 (682)(667)(685)(684)(686)(665)(689)(692)(682)(676)0.6 0.7 0.69 0.7 0.69 0.71 0.71 0.71 0.74 0.72 0.74 0.2 -0.5 (572)(526)(517)(532)(547)(536)(531)(522)(500)(542)0.65 0.69 0.67 0.65 0.66 0.65 0.67 0.64 0.66 0.64 0.15 -(358)(382)(378)(376)(411)(385)(385)(377)(365)(358)0.54 0.59 0.58 0.61 0.67 0.63 0.64 0.67 0.62 0.64 0.1 -(207)(222)(226)(207)(217)(215)(218)(221)(230)(238)

0.65

(112)

0.63

(43)

-0.5

0.52

(96)

0.43

(51)

-0.4

0.61

(108)

0.51

(45)

-0.3

0.6

(121)

0.58

(48)

-0.2

0.53

(98)

0.68

(41)

\_<del>0</del>.1

0.61

(120)

0.46

(50)

<u>-1</u>

0.05 -

0 -

0.53

(101)

0.63

(43)

-0.9

0.67

(121)

0.48

(44)

-0.8

0.54

(116)

0.55

(49)

-0.7

0.55

(123)

0.49

(45)

-0.6

M1 Level Shock Mean

## Number of Extra Measurement Days = 1 0.86 0.89 0.85 0.86 0.86 88.0 0.88 0.87 0.87 0.86 0.5 -(980)(982)(978)(982)(986)(979)(982)(981)(981)(986)0.84 0.83 0.85 0.86 0.83 0.86 0.86 0.86 0.86 0.87 0.45 -(973)(971)(971)(959)(963)(959)(973)(973)(976)(966)0.83 0.8 0.82 0.83 0.82 0.81 0.85 0.85 0.81 0.84 0.4 -(925)(944)(932)(935)(918)(942)(929)(943)(946)(941)8.0 0.79 8.0 0.78 0.78 0.81 0.78 8.0 8.0 8.0 0.35 -(889)(879)(875)(873)(879)(875)(898)(873)(882)(884)M21 Volatility Shock Mean **Success Proportion** 0.76 0.74 0.76 0.79 0.79 0.79 0.78 0.77 0.78 0.77 0.3 -(795)(807)(808)(818)(806)(792)(818)(800)(815)(787)0.8 0.74 0.72 0.76 0.71 0.72 0.74 0.72 0.71 0.73 0.73 0.25 -0.7 (689)(680)(675)(707)(677)(675)(688)(677)(667)(723)0.6 0.69 0.71 0.71 0.73 0.7 0.66 0.69 0.7 0.72 0.73 0.2 -0.5 (536)(540)(537)(555)(516)(537)(550)(530)(542)(555)0.65 0.66 0.59 0.65 0.64 0.68 0.64 0.64 0.64 0.67 0.15 -(352)(373)(373)(377)(371)(385)(388)(358)(376)(374)0.57 0.58 0.56 0.6 0.64 0.56 0.63 0.63 0.6 0.64 0.1 -(241)(222)(214)(233)(217)(242)(223)(214)(219)(230)0.63 0.57 0.59 0.65 0.56 0.63 0.62 0.61 0.59 0.56 0.05 -(126)(103)(105)(123)(105)(109)(96)(91)(96)(118)0.43 0.55 0.64 0.64 0.62 0.62 0.54 0.51 0.55 0.63

0 -

(51)

<u>-1</u>

(38)

-0.9

(42)

-0.8

(44)

-0.7

(47)

-0.6

M1 Level Shock Mean

(45)

-0.5

(48)

-0.4

(41)

-0.3

(49)

-0.2

(35)

-0.1

SVF Outperformance of Unadjusted GARCH Forecast

## Number of Extra Measurement Days = 2 0.85 0.88 0.87 0.87 0.87 88.0 88.0 0.89 0.89 0.89 0.5 -(978)(979)(982)(981)(978)(981)(984)(974)(986)0.86 0.85 0.85 0.83 0.85 0.87 0.88 0.85 0.85 0.87 0.45 -(962)(969)(963)(968)(968)(967)(979)(975)(976)(973)0.85 0.83 0.82 0.82 0.82 0.83 0.82 0.84 0.84 0.82 0.4 -(939)(943)(918)(933)(937)(942)(936)(943)(940)(945)0.8 0.78 0.78 0.79 0.81 0.82 8.0 0.81 0.82 0.81 0.35 -(878)(882)(893)(887)(892)(893)(877)(879)(879)(893)M21 Volatility Shock Mean **Success Proportion** 0.76 0.79 0.77 0.77 0.76 0.78 0.77 0.77 0.77 0.78 0.3 -(798)(786)(808)(787)(809)(790)(802)(802)(834)(813)0.8 0.71 0.71 0.71 0.72 0.74 0.73 0.75 0.76 0.76 0.72 0.25 -0.7 (677)(687)(686)(700)(704)(691)(684)(699)(680)(699)0.6 0.67 0.66 0.67 0.69 0.66 0.7 0.68 0.69 0.71 0.71 0.2 -0.5 (535)(535)(516)(512)(536)(520)(534)(540)(541)(558)0.64 0.65 0.63 0.61 0.71 0.62 0.65 0.69 0.65 0.64 0.15 -(354)(383)(373)(364)(369)(399)(375)(383)(386)(372)0.59 0.58 0.6 0.59 0.66 0.64 0.64 0.6 0.62 0.6 0.1 -(220)(236)(231)(237)(212)(233)(228)(235)(216)(227)0.63 0.64 0.54 0.6 0.54 0.5 0.59 0.6 0.63 0.63 0.05 -(101)(121)(107)(110)(110)(106)(114)(102)(115)(113)0.64 0.66 0.65 0.52 0.53 0.63 0.59 0.69 0.49 0.43 0 -(45)(35)(48)(35)(42)(51)(49)(44)(48)(47)

-0.5

-0.6

M1 Level Shock Mean

-0.9

-1

-0.8

-0.7

-0.4

-0.3

-0.2

\_<del>0</del>.1

### 0.85 0.86 0.86 0.87 0.87 0.87 0.89 0.89 0.87 0.87 0.5 -(980)(980)(982)(976)(984)(981)(986)(974)(981)0.85 0.83 0.84 0.84 0.85 0.86 0.85 0.86 0.86 0.86 0.45 -(956)(971)(964)(967)(967)(961)(968)(970)(977)(967)0.81 0.81 0.83 0.8 0.84 0.83 0.83 0.84 0.82 8.0 0.4 -(932)(933)(919)(939)(947)(939)(944)(933)(923)(928)0.79 0.78 0.77 0.79 0.78 0.82 0.81 0.79 0.83 0.81 0.35 -(892)(869)(871)(872)(876)(900)(880)(901)(858)(889)M21 Volatility Shock Mean **Success Proportion** 0.76 0.75 0.76 0.76 0.77 0.78 0.76 0.76 0.75 0.77 0.3 -(796)(818)(800)(811)(798)(796)(799)(803)(780)(807)0.8 0.72 0.71 0.74 0.73 0.74 0.72 0.75 0.73 0.77 0.75 0.25 -0.7 (693)(714)(669)(691)(686)(688)(691)(682)(671)(702)0.6 0.65 0.67 0.66 0.73 0.67 0.72 0.69 0.72 0.71 0.71 0.2 -0.5 (536)(527)(524)(515)(526)(521)(524)(543)(549)(555)0.62 0.65 0.66 0.67 0.61 0.62 0.68 0.71 0.67 0.65 0.15 -(364)(364)(372)(363)(381)(359)(367)(349)(379)(381)0.61 0.65 0.57 0.58 0.63 0.63 0.61 0.63 0.59 0.66

0.1 -

0.05 -

0 -

(192)

0.51

(112)

0.49

(41)

<u>-1</u>

(207)

0.59

(105)

0.44

(43)

-0.9

(223)

0.59

(110)

0.62

(42)

-0.8

(223)

0.6

(98)

0.41

(46)

-0.7

(227)

0.52

(120)

0.52

(50)

-0.6

M1 Level Shock Mean

(232)

0.56

(102)

0.57

(56)

-0.5

(229)

0.59

(108)

0.49

(45)

-0.4

(230)

0.54

(98)

0.51

(57)

-0.3

(231)

0.57

(109)

0.54

(37)

-0.2

(189)

0.58

(124)

0.61

(38)

-0.1

SVF Outperformance of Unadjusted GARCH Forecast

# Number of Extra Measurement Days = 4 0.85 0.85 0.87 0.87 0.88 0.87 0.9 0.87 0.89 0.9 0.5 -

	(982)	(979)	(975)	(985)	(983)	(980)	(983)	(969)	(982)	(985)	
0.45 -	0.85 (973)	0.83 (969)	0.84 (964)			0.85 (962)	0.87 (970)		0.89 (966)	0.85 (965)	
0.4 -	0.83 (942)	0.83 (934)	0.82 (930)	0.82 (938)		0.84 (936)	0.84 (951)	0.85 (948)	0.82 (937)	0.85 (931)	
0.35 -	0.81 (870)	0.79 (897)	0.78 (886)		0.8 (896)	0.82 (875)	0.81 (865)	0.81 (900)	0.8 (885)	0.83 (881)	
0.3 -	0.76 (797)	0.78 (810)		(799)		0.79 (816)	0.74 (794)	0.74 (790)	0.79 (807)	0.77 (797)	Succ
0.25 -	0.73 (694)	0.72 (697)		0.74 (686)		0.74 (688)	0.76 (709)	0.74 (658)	0.77 (687)	0.74 (652)	(
0.2 -	0.7 (554)	0.68 (534)	0.66 (537)	0.7 (526)	0.7 (528)	0.66 (542)	0.67 (525)	0.71 (561)	0.71 (515)	0.69 (545)	(
0.15 -	0.67 (363)	0.62 (349)	0.67 (389)				0.63 (362)	0.68 (386)	0.67 (377)	0.69 (374)	
0.1 -	0.6 (209)	0.63 (211)	0.64 (215)	0.62 (208)		0.62 (247)	0.63 (225)	0.62 (218)	0.64 (234)	0.62 (215)	

0.63

(111)

0.61

(56)

-0.7

0.65

(111)

0.57

(47)

-0.6

M1 Level Shock Mean

0.67

(84)

0.57

(42)

-0.5

0.59

(121)

0.36

(50)

-0.4

0.64

(98)

0.45

(44)

-0.3

0.64

(115)

0.72

(43)

-0.2

0.64

(103)

0.54

(35)

-0.1

M21 Volatility Shock Mean

0.59

(111)

0.52

(48)

<u>-1</u>

0.05 -

0 -

0.58

(107)

0.56

(48)

-0.9

0.52

(107)

0.51

(37)

-0.8



