

Supplementary Materials: Back to the Future Betas: Empirical Asset Pricing of US and Southeast Asian Markets

Jordan French

Thailand

PICO	Pico Thailand Public Company Limited (PICO.BK)
GRAMMY	GMM Grammy PCL (GRAMMY.BK)
SNC	SNC Former Public Company Limited
KTB	Krungthai Bank PCL
TRUE	True Corporation Public Company Limited
PTT	PTT Public Company Limited
SCB	The Siam Commercial Bank Public Company Limited
TCJ	T.C.J. Asia Public Co. Ltd.
SCG	Sahacogen (Chonburi) Public Company Limited
SSI	Sahaviriya Steel Industries PLC (SSI)
LOXLEY	Loxley Public Company Limited
MK	M.K.REAL ESTATE DEVELOP
SUSCO	SUSCO Public Company Limited
HTC	Haad Thip Public Company Limited
OISHI	Oishi Group Public Company Limited
MAKRO	Siam Makro Public Company Limited
BTS	BTS Group Holdings Public Company Limited
THAI	Thai Airways International Public Company Limited
INET	Internet Thailand Public Company Limited
BTC	Bangpakong Terminal Public Company Limited
DELTA	Delta Electronics Thailand Public Company Limited
BDMS	Bangkok Dusit Medical Services Public Company Limited
DRACO	Draco PCB Public Company Limited
METCO	Muramoto Electron (Thailand) Public Company Limited
BEC	BEC World Public Company Limited
WORK	Workpoint Entertainment Public Company Limited
LEE	Lee Feed Mill PCL
STA	Sri Trang Agro Industry Public Company Limited
TLUXE	ThaiLuxe
TIPCO	Tipco Foods Public Company Limited
TVO	Thai Vegetable Oil Public Company Limited
FANCY	Fancy Wood Industries Public Company Limited
KYE	Kang Yong Electric Public Company Limited
UTP	United Paper Public Company Limited i
CEN	Capital Engineering Network Public Company Limited
TYCN	Tycoons Worldwide Group (Thailand)
TSTH	Tata Steel (Thailand) Public Company Limited
INOX	POSCO-Thainox Public Company Limited
TMD	Thai Metal Drum Manufacturing Public Company Limited
THIP	Thantawan Industry Public Company Limited
KKC	Kulthorn Kirby Public Company Limited
MAJOR	Major Cineplex Group Public Company Limited
AOT	Airports of Thailand Public Company Limited

TVI	Thaivivat Insurance Public Company Limited
AJ	A.J. Plast Public Company Limited
GENCO	General Environmental Conservation PCL
ITD	ITALIAN-THAI DEVELOPMENT
NMG	Nation Multimedia Group Public Company Limited
GEL	General Engineering Public Company Limited
CGD	Country Group Development Public Company Limited
Singapore	
Z74.SI	Singapore Telecommunications Limited
D05.SI	DBS Group Holdings Ltd
J36.SI	Jardine Matheson Holdings Limited
O39.SI	Oversea-Chinese Banking Corporation Limited
J37.SI	Jardine Strategic Holdings Limited
H78.SI	Hongkong Land Holdings Limited
C31.SI	CapitaLand Limited
C07.SI	Jardine Cycle & Carriage Limited
C6U.SI	Singapore Airlines Limited
G13.SI	Genting Singapore PLC
D01.SI	Dairy Farm International Holdings Limited
S63.SI	Singapore Technologies Engineering Ltd
C09.SI	City Developments Limited
S68.SI	Singapore Exchange Limited
U96.SI	Sembcorp Industries Ltd
CC3.SI	StarHub Ltd.
K17.SI	Keppel Land Limited
N21.SI	Noble Group Limited
T39.SI	Singapore Press Holdings Limited
C52.SI	ComfortDelGro Corporation Limited
U14.SI	UOL Group Limited
S59.SI	SIA Engineering Company Limited
S08.SI	Singapore Post Limited
B2F.SI	M1 Limited (B2F.SI)
S58.SI	SATS Ltd.
S21.SI	Genting Hong Kong Limited
N03.SI	Neptune Orient Lines Limited
S53.SI	SMRT Corporation Ltd
M35.SI	Wheelock Properties (Singapore) Limited
R01.SI	Raffles Medical Group Ltd
V03.SI	Venture Corporation Limited
H15.SI	Hotel Properties Limited
F17.SI	GuocoLand Limited
U04.SI	United Engineers Limited
H02.SI	Haw Par Corporation Limited
M04.SI	Mandarin Oriental International Limited
U19.SI	CITIC Envirotech Ltd.
O23.SI	OSIM International Ltd
W05.SI	Wing Tai Holdings Limited
H13.SI	Ho Bee Land Limited
B61.SI	Bukit Sembawang Estates Limited
B16.SI	GL LIMITED

S10.SI	Super Group Ltd.
S41.SI	Hong Leong Finance Limited
U10.SI	UOB-Kay Hian Holdings Limited
S24.SI	STATS ChipPAC Ltd
C14.SI	CWT Limited
K11.SI	Keppel Telecommunications & Transportation Ltd
F9D.SI	Boustead Singapore Limited
P15.SI	Pacific Century Regional Developments Limited
Philippines	
TEL	Philippine Long Distance Telephone
MA	Manila Mining Corporation
SMC	San Miguel Corporation
FPH	First Philippine Holdings Corporation
JGS	JG Summit Holdings, Inc.
GLO	Globe Telecom, Inc.
SECB	Security Bank Corporation
MBT	Metropolitan Bank & Trust Company
PCOR	Petron Corporation
MER	Manila Electric Company
FLI	FILINVEST LAND, INC.
RFM	RFM CORPORATION
MB	MANILA BULLETIN PUBLISHING CORPORATION
EVER	EVER-GOTESCO RESOURCES & HOLDINGS, INC.
RLC	ROBINSONS LAND CORPORATION
MHC	Mabuhay Holdings Corporation
PA	PACIFICA, INC.
MED	MEDCO HOLDINGS, INC.
SOC	SOCResources, Inc.
PRIM	Prime Media Holdings, Inc.
SPM	SEAFRONT RESOURCES CORPORATION
BLOOM	BLOOMBERRY RESORTS CORPORATION
LAND	CITY & LAND DEVELOPERS, INC.
ICT	INTERNATIONAL CONTAINER TERMINAL SERVICES, INC.
BEL	BELLE CORPORATION
COAT	CHEMREZ TECHNOLOGIES, INC.
SCC	Semirara Mining and Power Corporation
AEV	ABOITIZ EQUITY VENTURES, INC.
AGI	ALLIANCE GLOBAL GROUP, INC.
BDO	BDO UNIBANK, INC.
AC	Ayala Corporation
URC	UNIVERSAL ROBINA CORPORATION
SMPH	SM Prime Holdings, Inc.
DMC	DMCI HOLDINGS, INC.
LTG	LT GROUP, INC.
VUL	Vulcan Industrial & Mining Corporation
UBP	UNION BANK OF THE PHILIPPINES
BLFI	BDO Leasing and Finance, Inc.
PLC	Premium Leisure Corp
LRI	REPUBLIC CEMENT & BUILDING MATERIALS, INC.
COSCO	COSCO CAPITAL, INC.

MEG	MEGAWORLD CORPORATION
ATI	Asian Terminals, Inc.
HI	HOUSE OF INVESTMENTS, INC.
CPG	CENTURY PROPERTIES GROUP INC.
VVT	VIVANT CORPORATION
V	VANTAGE EQUITIES, INC.
WEB	PHILWEB CORPORATION
AB	ATOK-BIG WEDGE COMPANY, INC. "A"
STI	STI EDUCATION SYSTEMS HOLDINGS, INC.

Indonesia

Sumi Indo Kabel
MNC Investama
Sugih Energy
Modernland Realty
Pembangunan Jaya Ancol
Perusahaan Gas Negara
Petrosea
United Tractors
Fortune Indonesia
PP London Sumatra Indonesia
Bank Victoria International
Prasidha Aneka Niaga
Prima Alloy Steel Universal
Ramayana Lestari Sentosa
Indosat
Langgeng Makmur Industri
Lamicitra Nusantara
Mandom Indonesia
Matahari Putra Prima
Megatech
Telkomsel
Unilever Indonesia
Lautan Luas
Mitra Investindo
XL Axiata
Bank Danamon Indonesia
Buana Electronics
Century Extrusions Limited
Bumi Resources
MedcoEnergi
Citra Marga Nusaphala Persada
Citra Tubindo
PGN
Global Mediacom
Alliance Global Group, Inc
Roxas Holdings, Inc.
Darya-Varia Laboratoria
Delta Djakarta
Darma Henwa
Eratex Djaja

Fajar Surya Wisesa
 Ekadharna International
 FKS Multi Agro
 Gajah Tunggal
 First Media
 Garda Tujuh Buana
 Global Mediacom
 Gudang Garam
 Golden Energy Mines
 Harum Energy

Malaysia

0066.KL	VSOLAR GROUP BERHAD
1201.KL	Sumatec Resources Berhad
7096.KL	GPA Holdings Bhd (7096.KL)
0102.KL	CONNECTCOUNTY HOLDINGS BHD
0104.KL	GENETEC TECHNOLOGY BERHAD
8869.KL	Press Metal Bhd
4723.KL	JAKS Resources Berhad
1155.KL	Malayan Banking Berhad
1295.KL	Public Bank Berhad
6888.KL	Axiata Group Berhad
4197.KL	Sime Darby Berhad
6947.KL	DiGi.Com Berhad
6033.KL	Petronas Gas Bhd
5183.KL	Petronas Chemicals Group Berhad
1023.KL	CIMB Group Holdings Berhad
3816.KL	MISC Berhad
5819.KL	Hong Leong Bank Berhad
4863.KL	Telekom Malaysia Berhad
1066.KL	RHB Capital Berhad
5031.KL	Time Dotcom Bhd.
3026.KL	Dutch Lady Milk Industries Bhd
3719.KL	Panasonic Manufacturing Malaysia Berhad
4588.KL	UMW Holdings Bhd
4707.KL	Nestlé (Malaysia) Berhad
5681.KL	Petronas Dagangan Bhd
6012.KL	Maxis Berhad
2593.KL	United Malacca Berhad
4731.KL	Scientex Berhad
4324.KL	Shell Refining Company
5139.KL	Aeon Credit Service M Bhd
6139.KL	Syarikat Takaful Malaysia Bhd
6351.KL	Amway Malaysia Holdings Bhd
4448.KL	Tasek Corporation Berhad
3476.KL	Keck Seng Malaysia Bhd
1163.KL	Allianz Malaysia Berhad
1783.KL	Selangor Properties Bhd
5126.KL	Sarawak Oil Palms Bhd
5517.KL	Shangri-La Hotels Malaysia Bhd
5274.KL	Hong Leong Capital Berhad

5032.KL	Bintulu Port Holdings Bhd
2836.KL	Carlsberg Brewery Malaysia Bhd
3255.KL	Guinness Anchor Berhad
8621.KL	LPI Capital Bhd
4006.KL	Oriental Holdings Bhd
2089.KL	United Plantations Bhd
5168.KL	Hartalega Holdings Berhad
1899.KL	Batu Kawan Berhad
3689.KL	Fraser & Neave Holdings Bhd
2291.KL	Genting Plantations Berhad
5014.KL	Malaysia Airports Holdings Bhd
USA Industrial	
GY	GenCorp Inc. (GY)
TIK	Tel-Instrument Electronics Corp.
TXT	Textron Inc.
AIR	AAR Corp.
CAE	CAE Inc.
DCO	Ducommun Inc.
ORB	Orbital Sciences Corp
RTN	Raytheon Company
EXP	Eagle Materials Inc
JHX	James Hardie Industries plc
ABB	ABB Ltd.
ATU	Actuant Corporation
CMI	Cummins Inc.
GRC	Gorman-Rupp Co.
PLL	Pall Corporation
MMM	3M Co
ALG	Alamo Group, Inc.
CAT	Caterpillar Inc.
LNN	Lindsay Corporation
TWI	Titan International Inc
HW	Headwaters Inc
NCS	NCI Building Systems Inc
VMC	Vulcan Materials Company
CBI	Chicago Bridge & Iron Company N.V
PWR	Quanta Services Inc
DY	Dycom Industries, Inc.
AOS	A. O. Smith Corp
ENS	EnerSys
CCF	Chase Corporation
WTS	Watts Water Technologies Inc
SXI	Standex Int'l Corp.
DEL	Deltic Timber Corp
RYN	Rayonier Inc.
PCL	Plum Creek Timber Co. Inc.
WY	Weyerhaeuser Co
BLT	BHP Billiton plc
KMT	Kennametal Inc.
SWK	Stanley Black & Decker, Inc.

SKY	Skyline Corporation
NOC	Northrop Grumman Corporation
CRS	Carpenter Technology Corporation
SIF	SIFCO Industries Inc
CCC	Calgon Carbon Corporation
TNC	Tennant Company
DHI	D.R. Horton, Inc.
SNA	Snap-on Incorporated
AIN	Albany International Corp.
CFI	Culp, Inc.
AWX	Avalon Holdings Corp
TRR	TRC Companies, Inc.

USA Real Estate

American Tower Corporation (AMT)
Hersha Hospitality Trust (HT)
Alexander's Inc. (ALX)
American Campus Communities, Inc. (ACC)
American Realty Investors Inc. (ARL)
BBX Capital Corporation (BBX)
Brandy Wine Realty Trust (BDN)
Capstead Mortgage Corp. (CMO)
CBRE Group, Inc. (CBG)
LaSalle Hotel Properties (LHO)
Cousins Properties Incorporated(CUZ)
DDR Corp. (DDR)
Sotherly Hotels Inc. (SOHO)
Capital & Regional plc (CAL.L)
EPR Properties (EPR)
Equity One Inc. (EQY)
Equity LifeStyle Properties, Inc. (ELS)
First Potomac Realty Trust (FPO)
CBL & Associates Properties Inc. (CBL)
General Growth Properties, Inc (GGP)
Gyrodyne Co. of America Inc. (GYRO)
Healthcare Realty Trust Incorporated (HR)
Cedar Realty Trust, Inc. (CDR)
Inland Real Estate Corp. (IRC)
Investors Real Estate Trust (IRET)
Kimco Realty Corporation (KIM)
JW Mays Inc. (MAYS)
Jones Lang LaSalle Incorporated (JLL)
Kennedy-Wilson Holdings, Inc. (KW)
National Health Investors Inc. (NHI)
NorthStar Realty Finance Corp. (NRF)
Newcastle Investment Corp. (NCT)
PS Business Parks Inc. (PSB)
Pennsylvania Real Estate Investment Trust (PEI)
Power REIT (PW)
Public Storage (PSA)
RAIT Financial Trust (RAS)

Regency Centers Corporation (REG)
Roberts Realty Investors Inc. (RPI)
Ryman Hospitality Properties, Inc. (RHP)
SL Green Realty Corp. (SLG)
Senior Housing Properties Trust (SNH)
Simon Property Group Inc. (SPG)
The St. Joe Company (JOE)
Strategic Hotels & Resorts, Inc. (BEE)
Stratus Properties Inc. (STRS)
Sun Communities Inc. (SUI)
Sunstone Hotel Investors Inc. (SHO)
Supertel Hospitality, Inc. (SPPR)
Taubman Centers, Inc. (TCO)
USA Healthcare
Health Care Select Sector SPDR ETF (XLV)
3M Company (MMM)
Vanguard Health Care ETF (VHT)
iShares US Healthcare (IYH)
Abbott Laboratories (ABT)
ABIOMED, Inc. (ABMD)
Acadia Healthcare Company, Inc. (ACHC)
ACADIA Pharmaceuticals Inc. (ACAD)
Actavis plc (ACT)
Acura Pharmaceuticals, Inc. (ACUR)
Adamis Pharmaceuticals Corporation (ADMP)
Aeterna Zentaris Inc. (AEZS)
Aetna Inc. (AET)
Agenus Inc. (AGEN)
Akorn, Inc. (AKRX)
Albany Molecular Research Inc. (AMRI)
Alere Inc. (ALR)
Alexion Pharmaceuticals, Inc. (ALXN)
Align Technology Inc. (ALGN)
Alkermes plc (ALKS)
Allergan Inc. (AGN)
Alliance Healthcare Services, Inc. (AIQ)
Allied Healthcare Products Inc. (AHPI)
Alliqua, Inc. (ALQA)
Almost Family Inc. (AFAM)
UnitedHealth Group Incorporated (UNH)
Zimmer Holdings, Inc. (ZMH)
Intuitive Surgical, Inc. (ISRG)
Henry Schein, Inc. (HSIC)
Pharmacyclics Inc. (PCYC)
Gilead Sciences Inc. (GILD)
Regeneron Pharmaceuticals, Inc. (REGN)
Vertex Pharmaceuticals Incorporated (VRTX)
Celgene Corporation (CELG)
Incyte Corporation (INCY)
Mylan, Inc. (MYL)

Johnson & Johnson (JNJ)
 Pfizer Inc. (PFE)
 Bio-Techne Corp. (TECH)
 Centene Corp. (CNC)
 DENTSPLY International Inc. (XRAY)
 Exact Sciences Corporation (EXAS)
 Healthcare Services Group Inc. (HCSG)
 IDEXX Laboratories, Inc. (IDXX)
 Isis Pharmaceuticals, Inc. (ISIS)
 MannKind Corp. (MNKD)
 Molina Healthcare, Inc. (MOH)
 Neurocrine Biosciences Inc. (NBIX)
 Seattle Genetics Inc. (SGEN)
 Thoratec Corp. (THOR)

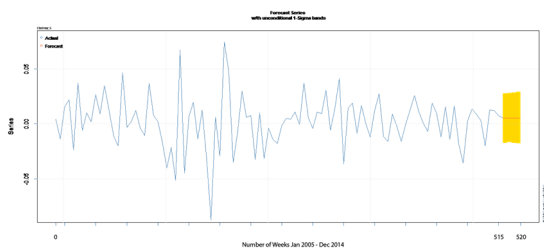
USA Utilities

C	Citigroup Inc
EIX	Edison Internationa
EXC	Exelon Corporation
ED	Consolidated Edison, Inc
D	Dominion Resources, Inc
DTE	DTE Energy Company
PEG	Public Service Enterprise Group Inc
HE	Hawaiian Electric Industries Inc.
IDA	IdaCorp, Inc.
AEP	American Electric Power Co., Inc
DUK	Duke Energy Corporation
WR	Westar Energy, Inc
CNL	Cleco Corporation
ETR	Entergy Corporation
POM	Pepco Holdings, Inc.
APU	AmeriGas Partners LP
ATO	Atmos Energy Corporation
FE	FirstEnergy Corp.
PPL	PPL Corporation
UGI	UGI Corporation
DUK	Duke Energy Corporation
NEE	NextEra Energy, Inc.
SO	Southern Company
AEP	American Electric Power Co., Inc
XEL	Xcel Energy Inc.
NU	Eversource Energy
WEC	WEC Energy Group, Inc
AES	The AES Corporation
NRG	NRG Energy, Inc
AEE	Ameren Corporation
TVC	Tennessee Valley Authority
CPK	Chesapeake Utilities Corporation
CWT	California Water Service Group
CNP	CenterPoint Energy, Inc.
LNT	Alliant Energy Corporation

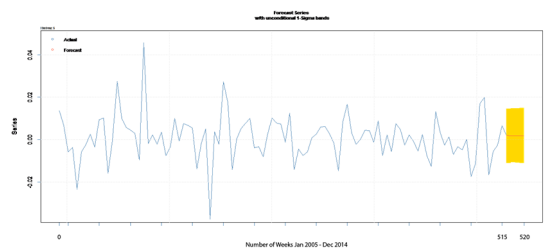
AVA	Avista Corp.
WGL	WGL Holdings Inc.
UTL	Unitil Corp.
TE	TECO Energy, Inc
SRE	Sempra Energy
PNM	PNM
CMS	CMS Energy Corp.
DGAS	Delta Natural Gas Company, Inc.
CDZI	Cadiz Inc. (CDZI)
RGCO	RGC Resources, Inc.
SJW	SJW Corp. (SJW
ALE	SJW Corp
AWR	American States Water Company
LG	The Laclede Group, Inc
OKE	ONEOK Inc.
USA Basic	
CVX	Chevron Corporation (CVX)
XOM	Exxon Mobil Corporation
SLB	Schlumberger Limited (SLB
COP	ConocoPhillips (COP)
DDC	Dominion Diamond Corporation
EMN	Eastman Chemical Co.
GFI	Gold Fields Ltd
FOE	Ferro Corporation
GGB	Gerdau S.A.
GNI	Great Northern Iron Ore Properties
HMY	Harmony Gold Mining Company Limited
IAG	IAMGOLD Corp.
SIM	Grupo Simec S.A.B. de C.V.
IMPUY	Impala Platinum Holdings Ltd
IKNX	Ikonics Corp
IFF	International Flavors&Fragrances
KGC	Kinross Gold Corporation
KRO	Kronos Worldwide, Inc
LXU	LSB Industries Inc.
MTL	Mechel OAO
NAK	Northern Dynasty Minerals Ltd.
NEM	Newmont Mining Corporation
PAL	North American Palladium Ltd.
OLN	Olin Corp
ZEUS	Olympic Steel Inc.
OMG	Reliance Steel & Aluminum Co.
RS	Reliance Steel & Aluminum Co.
SXT	Sensient Technologies
SA	Seabridge Gold, Inc.
TCK	Teck Resources Limited
X	United States Steel Corp.
VALE	Vale S.A.
WLT	Walter Energy, Inc.
WLB	Westmoreland Coal Co.

GRA	W.R. Grace & Co
WOR	Worthington Industries, Inc.
AUY	Yamana Gold, Inc. (AUY)
AA	Alcoa Inc. (AA)
ACH	Aluminum Corporation Of China
BCPC	Balchem Corp. (BCPC)
TRQ	Turquoise Hill Resources Ltd.
TNH	Terra Nitrogen Company, L.P
SYT	Syngenta AG
MRO	Marathon Oil Corporation
NOV	National Oilwell Varco, Inc
DNR	Denbury Resources Inc.
DVN	Devon Energy Corporation
HAL	Halliburton Company
IOC	InterOil Corporation
FGP	Ferrellgas Partners LP

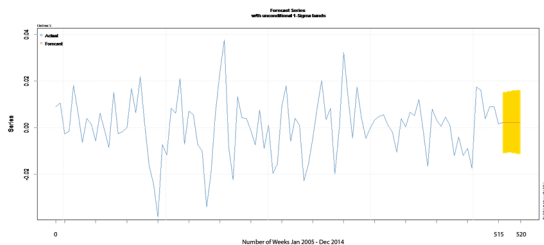
Indonesia



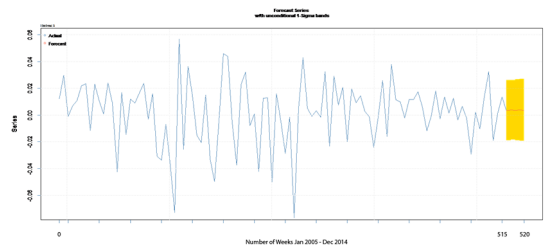
Malaysia



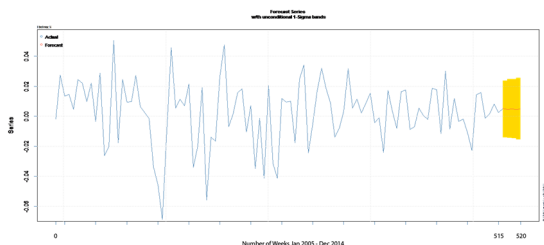
Singapore



Thailand



Philippines



USA

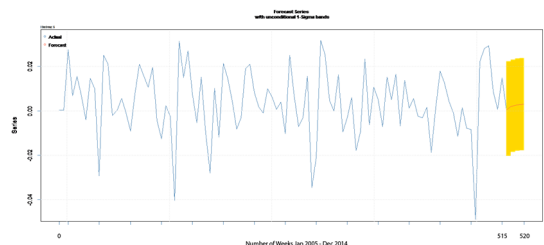


Figure S1. EGARCH models of market volatility and forecasts.

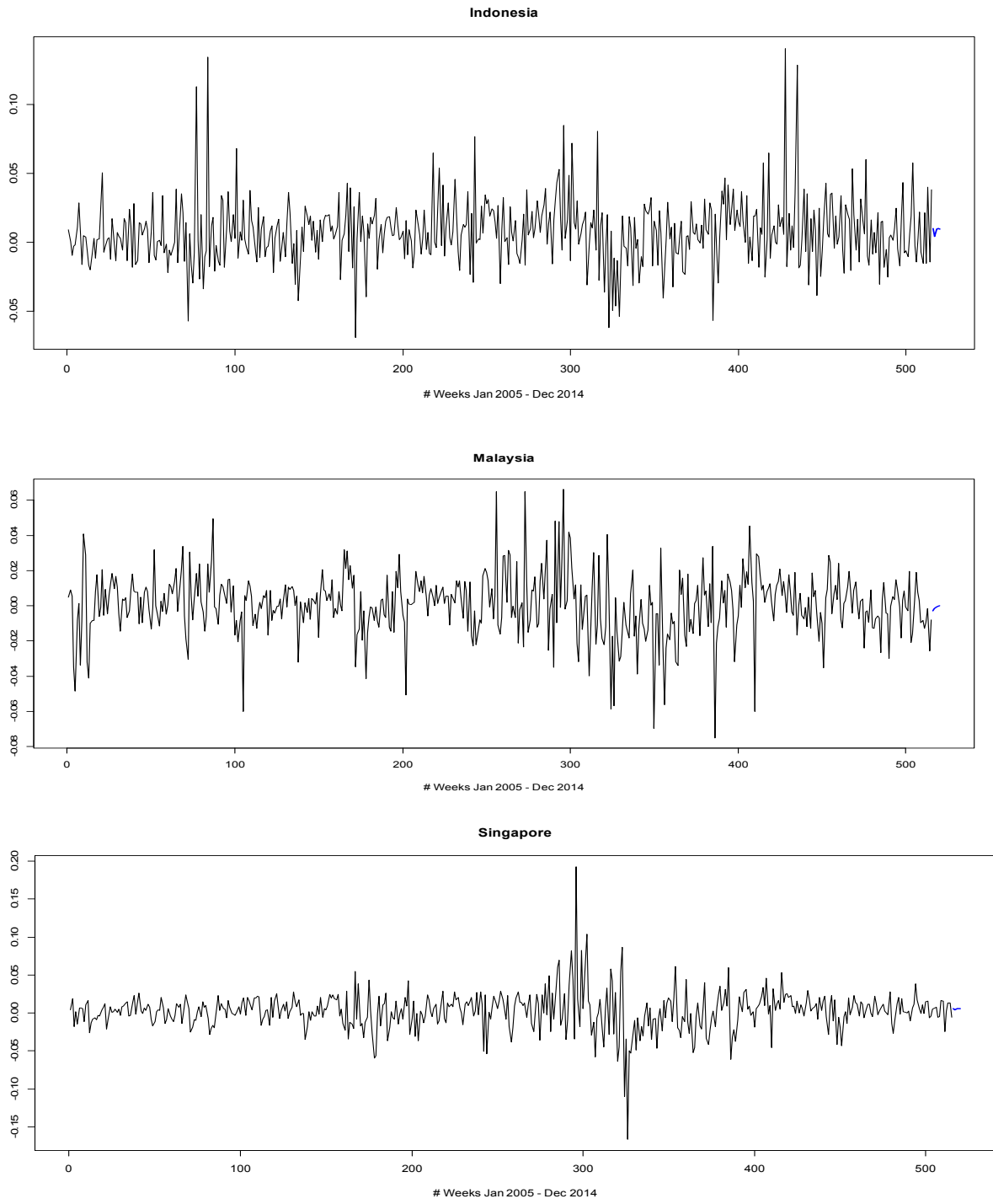


Figure S2. Cont.

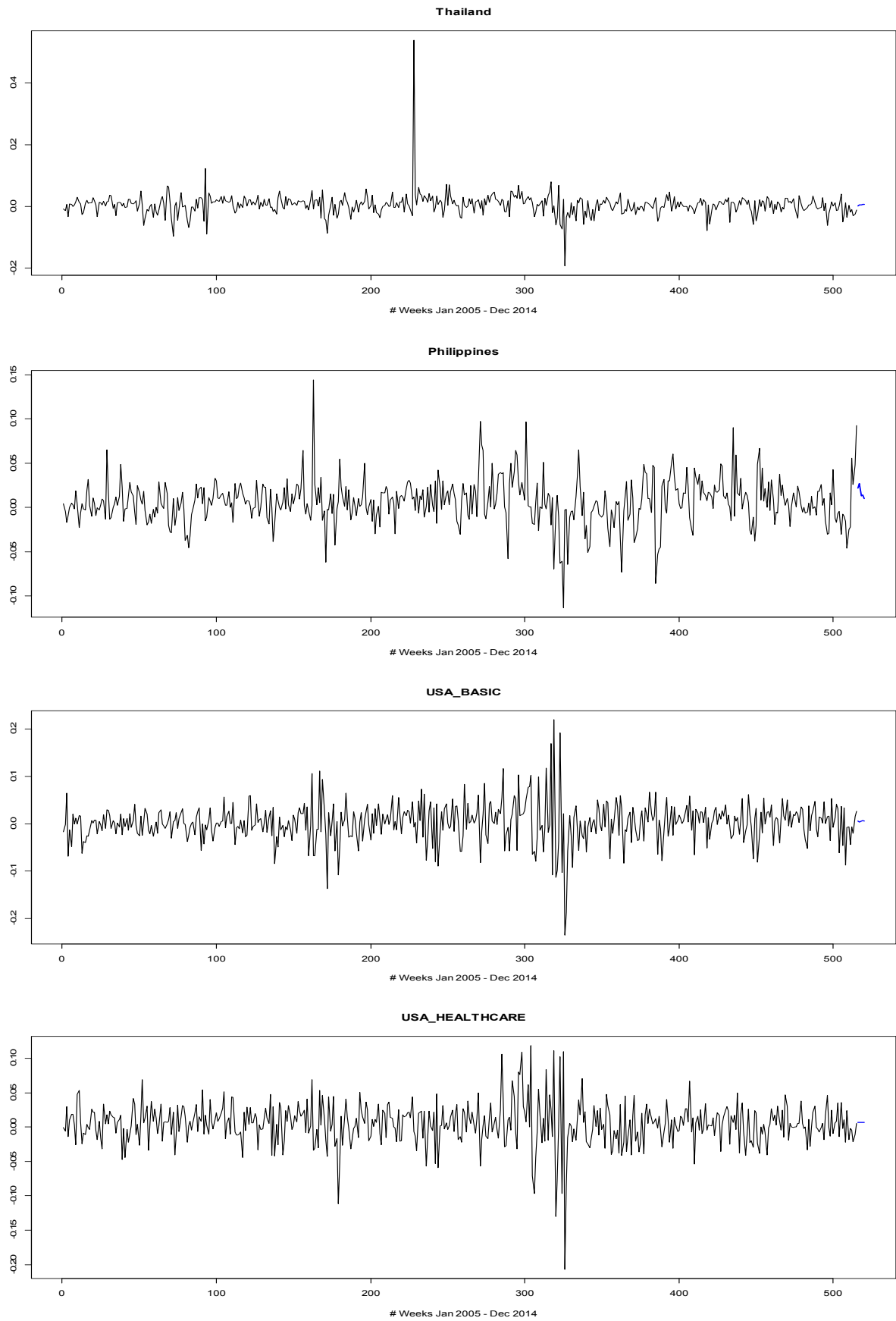


Figure S2. Cont.

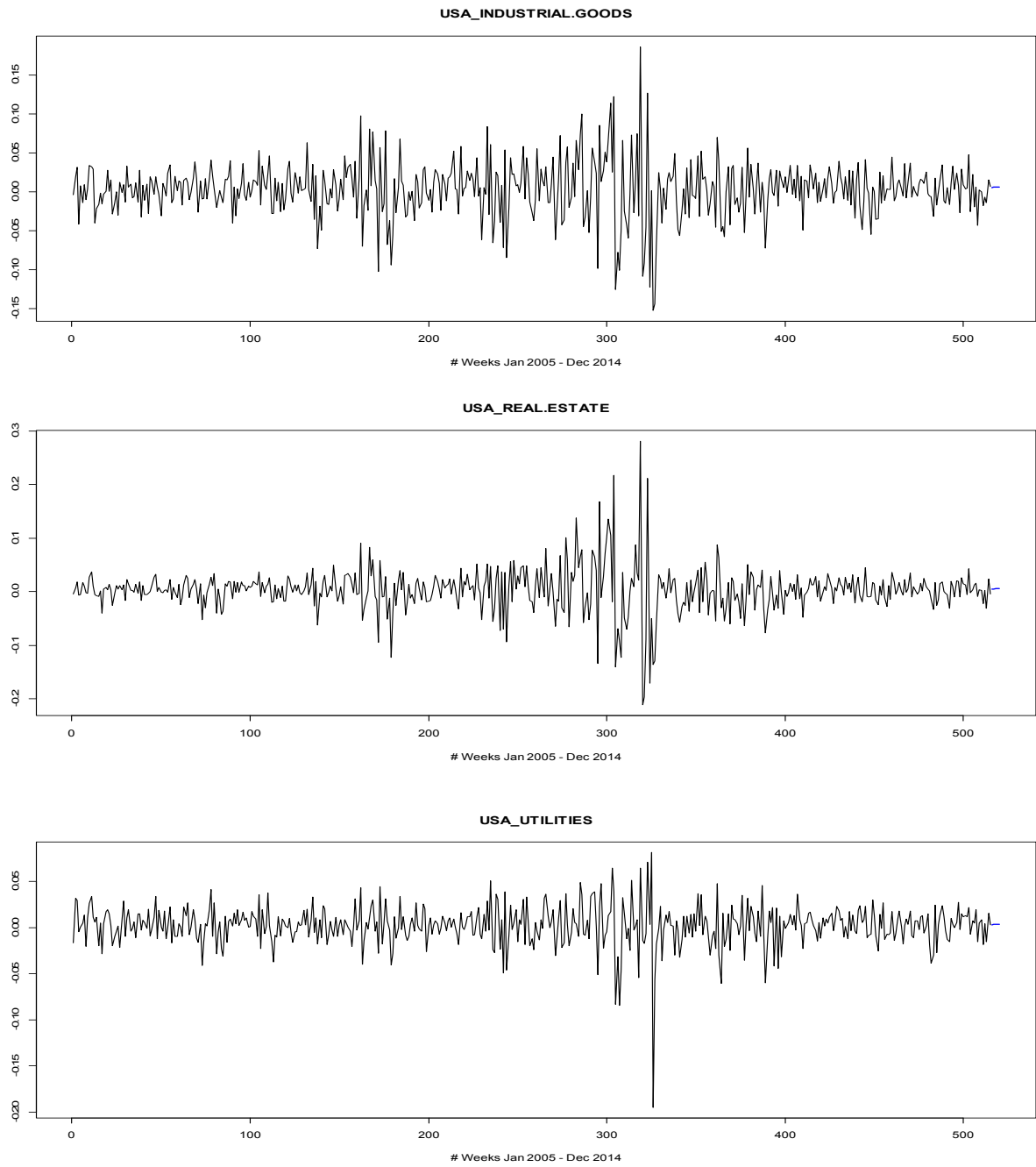


Figure S2. Neural Network Auto Regression.