

# Forecasting Local Currency Bond Risk Premia of Emerging Markets: The Role of Cross-Country Macro-Financial Linkages

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## Online Appendix

This contains additional tables that report the active performance of trading strategies for all maturities separately, and lists Bloomberg definitions of all variables used in our experiments.

*Keywords:* Bond risk premia, Emerging markets, Factor extraction methods, Out-of-sample forecasting.

*JEL Classification:* C22, C53, C55, G12.

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## 1. Data List

Table A1: Dataset-Brazil

Number	Ticker	Description
1	2236689 Index	IMF Brazil Unemployment Rate
2	BZJCYTOT Index	Brazil Government Registered Job Creation Total NSA YTD
3	BZMW Index	Brazil Minimum Wage
4	BZREOFFR Index	Brazil Sao Paulo Secovi Real Estate Units Offered
5	BZRESTRT Index	Brazil Sao Paulo Secovi Real Estate Units Started
6	BZREPERD Index	Secovi Brazil Real Estate Units Average Sale Time Period
7	BZRESOLD Index	Brazil Sao Paulo Secovi Real Estate Units Sold
8	IBREINCM Index	FGV Brazil IGP-M Construction Prices INCC-M
9	USDBRL Curncy	USDBRL Spot Exchange Rate - Price of 1 USD in BRL
10	EURBRL Curncy	EURBRL Spot Exchange Rate - Price of 1 EUR in BRL
11	JPYBRL Curncy	JPYBRL Spot Exchange Rate - Price of 1 JPY in BRL
12	USDBRLV1M Index	USDBRL 1 Month ATM Implied Volatility
13	USDBRL25R3M Index	USDBRL 3 Month 25 Delta Risk Reversal
14	BISBBRR Index	Brazil Real Effective Exchange Rate Broad
15	IBOV Index	Ibovespa Brasil Sao Paulo Stock Exchange Index
16	PX_TO_BOOK_RATIO	Ibovespa Brasil Sao Paulo Stock Exchange Index
17	PE_RATIO	Ibovespa Brasil Sao Paulo Stock Exchange Index
18	GROSS_AGGTE_DVD_YLD	Ibovespa Brasil Sao Paulo Stock Exchange Index
19	DVD_PAYOUT_RATIO	Ibovespa Brasil Sao Paulo Stock Exchange Index
20	TOT_DEBT_TO_TOT_ASSET	Ibovespa Brasil Sao Paulo Stock Exchange Index
21	WCAUBRAZ Index	Bloomberg Brazil Exchange Market Capitalization USD
22	IFNCBV Index	Brazil Financial Index
23	BZLIQDTY Index	Bovespa Volume Brazil Settlement
24	IBOVIEE Index	Sao Paulo Stock Exchange Electrical Energy Index
25	CBRZ1U5 Curncy	Federative Republic of Brazil
26	BZSTSETA Index	Brazil Selic Target Rate
27	BZTJLP Index	Brazil BNDES Long Term Interest Rate TJLP
28	BZAD1Y Index	Anbima Brazil Govt Bond Fixed Rate 1 Year
29	BZAD2Y Index	Anbima Brazil Govt Bond Fixed Rate 2 Years
30	GEBR5Y Index	Brazil Government Generic Bond 5 Year
31	GEBR10Y Index	Brazil Government Generic Bond 10 Year
32	GEBU10Y Index	Brazil Government Generic Bond 10 Year USD
33	BZLNTOTA Index	Brazil Financial System Loans
34	BZLNPTOT Index	Brazil Financial Private System Loans
35	BZMBMB Index	Brazil Monetary Base
36	BZMS1 Index	Brazil Money Supply M1 Brazil M1
37	BZMS2 Index	Brazil Money Supply M2 Brazil M2
38	BZMS3 Index	Brazil Money Supply M3 Brazil M3

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Table A1 – Continued from previous page

Number	Ticker	Description
39	BZMS4 Index	Brazil Money Supply M4 Brazil M4
40	BRCDEFT Index	Brazil Personal Loans More Than 90 Days Late
41	BZIDINTL Index	Brazil International Daily Reserves
42	BRCCVEHB Index	Brazil Consumer Credit Operations for Vehicle Acquisition
43	BZPIIPCA Index	Brazil CPI IPCA Dec 1993=100
44	BZCILIVE Index	Brazil FIPE CPI Sao Paulo Living
45	BZCIFOOD Index	Brazil FIPE CPI Sao Paulo Food Main
46	BZCIPERS Index	Brazil FIPE CPI Sao Paulo Personal
47	BZCITRAN Index	Brazil CIPE CPI Sao Paulo Transportation
48	IPEAEXIN Index	Brazil IPEA Export Price Index
49	IPEAIMIN Index	Brazil IPEA Import Price Index
50	IBREIPAM Index	FGV Brazil IGP-M Wholesale Prices IPA-M
51	IBREIPA1 Index	FGV Brazil Wholesale Prices IPA-10
52	BZICINDX Index	CNI Brazil Industrial Confidence General
53	BZCCI Index	CNI Brazil Consumer Confidence
54	OLED BRAZ Index	OECD Brazil Composite Leading Ind. Total Trend Restored Stck
55	OEBRI003 Index	OECD Brazil Cons. Opin. Confidence Composite & OECD Indicators SA amp adj
56	MPMIBRMA Index	Markit Brazil Manufacturing PMI SA
57	BZTBALM Index	Brazil Trade Balance FOB Balance NSA
58	BZTBEXPM Index	Brazil Trade Balance FOB Exports
59	BZTBIMPM Index	Brazil Trade Balance FOB Imports NSA
60	BZTWBALW Index	Brazil Trade Balance Weekly Balance
61	BZDPGOD Index	Brazil General Government Net Debt
62	BZDPNDTL Index	Brazil Public Net Debt
63	BZPBPRDM Index	Brazil Public Primary Budget Result
64	BZCACURR Index	Brazil Current Account Monthly
65	BZCA%GDP Index	Brazil Current Account % of GDP Last 12 Months Accumulated
66	BZFDTMON Index	Brazil Foreign Direct Investment Net
67	BZDPNDT% Index	Brazil Public Net Debt % of GDP
68	BSRFTOFD Index	Brazil Total Federal Revenue
69	BZBGEXPN Index	Brazil Central Government Total Expenditures
70	BZPBNODM Index	Brazil Public Nominal Budget Result
71	BZBGPRIM Index	Brazil Central Government Primary Budget Surplus/Deficit
72	BZBGNOMI Index	Brazil Central Government Nominal Budget Surplus/Deficit
73	BZIPTLSA Index	Brazil Real Industrial Production SA 2012=100
74	BZIXEXTR Index	Brazil Industrial Production Activity Extractive Industry 2012
75	BZASSUBT Index	Brazil Auto Sales Subtotal
76	BZCNCNIS Index	CNI Brazil Manufacture Industry Capacity Utilization SA
77	BZCNSALS Index	CNI Brazil Manufacture Industry Real Sales SA 2006=100
78	BZCNEMPS Index	CNI Brazil Manufacture Industry Employment SA 2006=100
79	BZCNHOUS Index	CNI Brazil Manufacture Industry Working Hours SA 2006=100

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Table A1 – Continued from previous page

Number	Ticker	Description
80	BZVPTLVH Index	Anfavea Brazil Vehicle Production
81	BZVLTLVH Index	Anfavea Brazil Vehicle Sales Licensed
82	BZVXEXTL Index	Anfavea Brazil Vehicle Exports
83	BZVLTOTL Index	Anfavea Brazil Vehicle Sales Licensed Cars
84	BZRTRTSA Index	Brazil Retail Sales Volume SA
85	BZRTCOSA Index	Brazil Retail Sales Volume Construction Materials Index SA
86	BZRTFDSA Index	Brazil Retail Sales Volume Supermarket Food Beverages & Tobacco SA
87	BZRTFURN Index	Brazil Retail Sales Volume Furniture & Domestic Appliance
88	OEBRV008 Index	OECD Brazil Prod. Manufacturing Total Manufacturing SA 2010=100
89	BZEASA Index	Economic Activity GDP SA IBC-BR
90	BZEDTLEX Index	Brazil External Debt Brazil External Gross Debt
91	BZGDCAPX Index	Brazil GDP Qtrly Gross Formation of Fixed Capital SA 1995=100
92	BZGDFAMX Index	Brazil GDP Qtrly Family Consumption SA 1995=100
93	BZGDAGRX Index	Brazil GDP Qtrly Agriculture SA 1995=100
94	BZGDIDTX Index	Brazil GDP Qtrly Industry SA 1990=100
95	BZGDTRNX Index	Brazil GDP Qtrly Transformation Industry SA 1995=100
96	BZGDSERX Index	Brazil GDP Qtrly Services SA 1995=100
97	EHGDBR Index	Brazil Real GDP (Annual YoY %)

Table A2: Dataset-Indonesia

Number	Ticker	Description
1	IDWGCDN Index	Indonesia Wage for Constructio
2	IDWGSMN Index	Indonesia Wage for Household S
3	IDELHOUS Index	Indonesia Property Loans House
4	USDIDR Index	USD-IDR X-RATE
5	JPYIDR Index	JPY-IDR X-RATE
6	CADIDR Curncy	CAD-IDR X-RATE
7	USDIDRV1M Index	USD-IDR OPT VOL 1M
8	USDIDR25R3M Index	USD-IDR RR 25D 3M
9	BISBIDR Index	Indonesia Real Effective Excha
10	WCAUINDO Index	Bloomberg Indonesia Exchange M
11	MXID Index	MSCI INDONESIA
12	JCI Index	JAKARTA COMPOSITE INDEX
13	PX_TO_BOOK_RATIO	JAKARTA COMPOSITE INDEX-Price to Book Ratio
14	PE_RATIO	JAKARTA COMPOSITE INDEX- Price Earnings Ratio (P/E)
15	GROSS_AGGTE_DVD_YLD	JAKARTA COMPOSITE INDEX -Gross Aggregate Dividend Yield
16	DVD_PAYOUT_RATIO	JAKARTA COMPOSITE INDEX -Dividend Payout Ratio
17	TOT_DEBT_TO_TOT_ASSET	JAKARTA COMPOSITE INDEX - Total Debt to Total Assets
18	INDON CDS USD SR 5Y D14 Corp	INDON CDS USD SR 5Y D14
19	BIASINVP Index	BI Indonesian Bank Val

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Table A2 – Continued from previous page

Number	Ticker	Description
20	IDBRLDR Index	Indonesia Bank Ratio - Loan to
21	IDBRCAR Index	Indonesia Bank Ratio - Capital
22	IDBRNIM Index	Indonesia Bank Ratio - Net Int
23	IDBRROA Index	Indonesia Bank Ratio Return on
24	GTIDR1Y Govt	INDONESIA GOVERNMENT
25	GTIDR5Y Govt	INDONESIA GOVERNMENT
26	GTIDR10Y Govt	INDONESIA GOVERNMENT
27	GTUSDID5Y Govt	REPUBLIC OF INDONESIA
28	IDGBFRGN Index	Indonesia Govt Bond Outstandin
29	ELI GIND Index	J.P. Morgan EMBIG Indonesia So
30	IDBLHOUS Index	Indonesia Outstanding Loans by
31	IDBLOTHR Index	Indonesia Outstanding Loans by
32	IDBLSHOP Index	Indonesia Outstanding Loans by
33	IDWCTOTL Index	Indonesia Working Capital Loan
34	IDWCLIO Index	ID Total Working Capital Loans
35	IDWCCONS Index	Indonesia Working Capital Loan
36	IDWCMANU Index	Indonesia Working Capital Loan
37	IDBRNPLG Index	Indonesia Bank Ratio - Non Per
38	IDBDTD Index	Indonesia All Commercial Banks
39	IDBDALLR Index	Indonesia All Commercial Banks
40	IDBDALLF Index	Indonesia All Commercial Banks
41	IDM2YOY Index	Indonesia Money Supply M2 YoY
42	IDM1YOY Index	Indonesia Money Supply M1 YoY
43	IDRMR Index	Indonesia Reserve Base Money
44	IDPGDEBT Index	Indonesia Government Portfolio
45	IDNRIRR Index	Indonesia Net Foreign Assets I
46	IDGFA Index	Indonesia Net International Re
47	IDGFFORC Index	Indonesia International Reserv
48	IDCPIY Index	Indonesia CPI YoY
49	IDCCI Index	Bank Indonesia Consumer Confid
50	MPMIIDMA Index	Nikkei Indonesia Manufacturing
51	IDEXPY Index	Indonesia Exports YoY
52	IDBALTOL Index	Indonesia Trade Balance
53	IDEXPEGY Index	Indonesia Export Oil & Gas YoY
54	IDIMPTLY Index	Indonesia Import Total YoY
55	IDIMPEGY Index	Indonesia Import Oil & Gas YoY
56	IDEDTOTL Index	Indonesia External Debt Total
57	IDEDGI Index	Indonesia External Debt Govern
58	IDMPIYOY Index	Indonesia Industrial/Manufactu
59	ASEAINDO Index	Automotive Production by Indon
60	ASEAINDS Index	Automotive Sales for Indonesia

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Table A2 – Continued from previous page

Number	Ticker	Description
61	IDVHCLOC Index	Gaikindo Indonesia Motor Vehic
62	IDVHMTLC Index	Asosiasi Industri Sepedamotor
63	IDRSTOTY Index	Indonesia Retail Sales Survey
64	IDCETOTL Index	Indonesia Cement Consumption
65	IDTOTOT Index	Indonesia Tourist Arrivals
66	IDHTTOTL Index	Indonesia Hotel Occupancy Rate
67	OLE3INDO Index	OECD Indonesia Composite Leadi
68	IDEMUNE% Index	Indonesia Unemployment Rate
69	IDEMEMPL Index	Indonesia Number of People Emp
70	CPNFIDCU Index	BIS Indonesia Credit to Non Fi
71	EHPIID Index	Indonesia Consumer Price Index
72	IDTIBINC Index	Indonesia Business Tendency In
73	IDTIBPRD Index	Indonesia Business Tendency In
74	IDTIBTOT Index	Indonesia Business Tendency In
75	IDTINCGR Index	Indonesia Consumer Tendency In
76	IDTIIRCG Index	Indonesia Consumer Tendency In
77	IDTIHINC Index	Indonesia Consumer Tendency In
78	IDCABAL Index	Indonesia Balance of Payments
79	IDCAPORT Index	Indonesia BOP Financial Accoun
80	IDPUMANU Index	Indonesia Production Utilizati
81	IDPUTOTL Index	Indonesia Production Utilizati
82	IDCGRFY Index	Indonesia GDP Current Prices E
83	IDCGREXY Index	Indonesia GDP Current Prices E
84	IDCGRIMY Index	Indonesia GDP Current Prices E
85	IDCGRGY Index	Indonesia GDP Current Prices E
86	IDCGRHY Index	Indonesia GDP Current Prices P
87	EHGDID Index	Indonesia Real GDP (Annual YoY

Table A3: Dataset-Mexico

Number	Ticker	Description
1	MXUEUNSA Index	Mexico Unemployment Rate SA for Workers 15 and Older ENOE
2	MXWICONS Index	Mexico Formal Job Temporary & Permanent Workers Construction
3	MXWIRETL Index	Mexico Formal Job Temporary & Permanent Workers Retail
4	MXWITRCO Index	Mexico Formal Job Temporary & Permanent Workers Transportation & Communication
5	MXWICOSV Index	Mexico Formal Job Temporary & Permanent Workers Commercial Services
6	MXWIMANU Index	Mexico Formal Job Temporary & Permanent Workers Manufacturing
7	MXWITOTL Index	Mexico Formal Job Temporary & Permanent Workers Total
8	MXUETEPT Index	Mexico Employment Rate
9	MXMIMITO Index	Mexico Wages by Manufacturing Industry Total
10	IMEFMNOR Index	Mexico Manufacturing Index New Orders SA

Continued on next page

Table A3 – Continued from previous page

Number	Ticker	Description
11	IMEFNMNO Index	Mexico Non Manufacturing Index New Orders SA
12	MXBLMORT Index	Mexico Bank Lending Mortgages
13	MXCSBUIL Index	Mexico Construction Spending Buildings
14	USDMXN Index	USDMXN Spot Exchange Rate - Price of 1 USD in MXN
15	JPYMXN Index	JPYMXN Spot Exchange Rate - Price of 1 JPY in MXN
16	CADMXN Curncy	CADMXN Spot Exchange Rate - Price of 1 CAD in MXN
17	USDMXNV1M Index	USDMXN 1 Month ATM Implied Volatility
18	USDMXN25R3M Index	USDMXN 3 Month 25 Delta Risk Reversal
19	BISBMXR Index	Mexico Real Effective Exchange Rate Broad
20	WCAUMEX Index	Bloomberg Mexico Exchange Market Capitalization USD
21	MEXBOL Index	Mexican Stock Exchange Mexican Bolsa IPC Index
22	PX_TO_BOOK_RATIO	Mexican Stock Exchange -Price to Book Ratio
23	PE_RATIO	Mexican Stock Exchange - Price Earnings Ratio (P/E)
24	GROSS_AGGTE_DVD_YLD	Mexican Stock Exchange -Gross Aggregate Dividend Yield
25	DVD_PAYOUT_RATIO	Mexican Stock Exchange -Dividend Payout Ratio
26	TOT_DEBT_TO_TOT_ASSET	Mexican Stock Exchange - Total Debt to Total Assets
27	MXONBR Index	Bank of Mexico Official Overnight Rate
28	MEX CDS USD SR 5Y D14 Corp	United Mexican States
29	MXFRCINR Index	BOM Government Funding Rate Closing Interest Rate
30	MPTBF CMPN Curncy	MXN T-BILL 6 MO
31	MPTB1 CMPN Curncy	MXN T-BILL 1 YR
32	GMXN02YR Index	Mexico Generic 2 Year
33	GMXN05YR Index	Mexico Generic 5 Year
34	MXLCLFCB Index	Mexico Loans from Commercial Banks
35	MXLCMOLO Index	Mexico Mortgage Loans
36	MXLCCOLO Index	Mexico Consumption Loans
37	MXBDNPLR Index	Mexico Non-Performing Loans as % of Total Loans
38	MXLCEXSE Index	Mexico External Sector
39	MXBLCNST Index	Mexico Bank Lending Construction
40	MXBLMAIN Index	Mexico Bank Lending Manufacturing Industry
41	MXBLFFAF Index	Mexico Bank Lending Farming Forestry and Fishing
42	MXBLSAOA Index	Mexico Bank Lending Services and Other Activities
43	MXDFCONS Index	Mexico Private Sector Direct Financing Total
44	MXBLPERF Index	Mexico Bank Lending Performing Loans
45	MXBLNONB Index	Mexico Bank Lending Performing Loans for Non Bank Financial
46	MXMB Index	Mexico Monetary Base Money Base
47	MXMSM1 Index	Mexico Money Supply M1-M4 M1 Total
48	MXMSM2 Index	Mexico Money Supply M1-M4 M2 Total
49	MXMSM3 Index	Mexico Money Supply M1-M4 M3 Total
50	MXMSM4 Index	Mexico Money Supply M1-M4 M4 Total
51	MXDEINT Index	Mexico Federal Government Net Domestic Debt in Millions of Mexican Pesos

Continued on next page

Table A3 – Continued from previous page

Number	Ticker	Description
52	MXDEEXT Index	Mexico Public Sector Net External Debt in Millions of U.S. Dollars
53	MXERBUDD Index	Mexico Public Rev & Expend Budgetary Deficit YTD
54	MXIRINUS Index	Mexico International Reserves in USD
55	MXDBPDDV Index	Mexico Development Banks Total Public Demand Deposits Volume
56	MXDBPTDV Index	Mexico Development Banks Total Public Time Deposits Volume
57	2735E55 Index	IMF Mexico Financial Corp Deposits
58	MXPII Index	Mexico Producer Price Index
59	MFGSMANU Index	Mexico Fin Gds & Srvs Secondary Sector Manufacturing 2012
60	MFGSCONS Index	Mexico Fin Gds & Srvs Secondary Sector Construction 2012
61	MXPIIXO Index	Mexico Producer Price Index Ex Oil
62	MFGSMINE Index	Mexico Fin Gds & Srvs Primary Sector Mining 2012
63	MFGSELGA Index	Mexico Fin Gds & Srvs Tertiary Water Electricity and Gas 2012
64	MPPRIMPT Index	Mexico International Trade Import Price NSA 1980=100
65	MPPREXPT Index	Mexico International Trade Export Price NSA 1980=100
66	MXCPI Index	Mexico CPI
67	MXCCORE Index	Mexico Core CPI
68	MXCNFDAT Index	Mexico CPI Index 2010=100 Food Drinks and Tobacco
69	MXCNNFGD Index	Mexico CPI Index 2010=100 Non Food Goods
70	MXCNSERV Index	Mexico CPI Index 2010=100 Services
71	MXCNAGRI Index	Mexico CPI Index 2010=100 Agriculture
72	MXCNERAG Index	Mexico CPI Index 2010=100 Energy Rates Auth by Govt
73	MXCIHOUS Index	Mexico CPI by Expenditure Housing
74	IMEFMAIN Index	Mexico Manufacturing Index SA
75	IMEFNMIN Index	Mexico Non Manufacturing Index SA
76	IMEFMPRO Index	Mexico Manufacturing Index Production SA
77	SCMXPROI Index	Mexico Producer Confidence Indicator SA
78	MXMAAITR Index	Mexico Manufacturing Aggregate Trend Indicator
79	MXMAEXPT Index	Mexico Manufacturing Aggregate Trend Indicator Exports
80	MXMAMNOR Index	Mexico Manufacturing Aggregate Orders Indicator Manufacturing Orders SA
81	CSMXCONU Index	MX Consumer Confidence Index SA
82	CSMXPOSU Index	Mexico Compared Economic Situation with a Year Ago at Present SA
83	MXCLYLEA Index	Mexico Leading Indicator YoY
84	MXCLSALE Index	Mexico Seasonally Adjusted Leading Indicator
85	MXCLSACO Index	Mexico Seasonally Adjusted Coincident Indicator
86	MXTBBEXP Index	Mexico Trade Balance Exports Monthly Total USD Million
87	MXOTAMER Index	Petroleos Mexicanos (Pemex) Crude Oil Mexico Trade Data/Americas
88	MXOTEURO Index	Petroleos Mexicanos (Pemex) Crude Oil Mexico Trade Data/Europe
89	MXEXPETR Index	Mexico Nominal Current Account Balance
90	MXEXNONP Index	Mexico Exports by Sector Non Petroleum Mexico Exports Monthly Total USD Million
91	MXRETOT\$ Index	Mexican Remittances Money Sent from Workers Outside Mexico
92	IGAEINDX Index	Mexico Indicator of Economic Activity Index SA

Continued on next page



Table A3 – Continued from previous page

Number	Ticker	Description
93	IGAEPADI Index	Mexico Economic Activity Primary Activities Series Index SA
94	MINVCNST Index	Mexico Capital Investment Construction
95	MXPSTOTL Index	Mexico Industrial Production Total Seasonally Adjusted
96	MXPSOGSA Index	Mexico Industrial Production Oil and Gas Extraction Seasonally Adjusted
97	MXPSELEC Index	Mexico Industrial Production Utilities Seasonally Adjusted
98	MXPSCONS Index	Mexico Industrial Production Construction Seasonally Adjusted
99	MXPSMANF Index	Mexico Industrial Production Manufacturing Seasonally Adjusted
100	MXSATOTL Index	Mexico Antad Same-Store Sales Overall YoY%
101	MXSLMOGA Index	Mexico Gasoline Sales Monthly
102	MXSLDIES Index	Mexico Diesel Sales Monthly
103	MXMNMCEQ Index	Mexico Capacity Utilization Manufacture of Machinery and Equipment
104	MXMNPECO Index	Mexico Capacity Utilization Manufacture of Petroleum Products and Coal
105	MXVPTOTL Index	Mexico Vehicle Production Total Production
106	MXWRTWHO Index	Mexico Wholesale/Retail Sale Totl Whole
107	MXVHTOTL Index	Mexican Vehicle Sales Auto+truck NSA
108	MXVETOTL Index	Mexican Vehicle Exports Total
109	MDPCSAIN Index	Mexico Total Season Adjusted Index Base 2008
110	MINVTOSA Index	Mexico Gross Fixed Inv Total Seasonally Adjusted
111	MXR4TTSA Index	Mexico Real GDP by Industry Total SA
112	MXR4CNSA Index	Mexico Real GDP by Industry Construction SA
113	MXR4MFSA Index	Mexico Real GDP by Industry Manufacturing SA
114	MXR4RESA Index	Mexico Real GDP by Industry Wholesale and Retail Trade SA
115	MXGNTTAL Index	Mexico Nominal GDP Total SA
116	MXCACUAC Index	Mexico Nominal Current Account Balance
117	MXSDPRYO Index	Mexico Supply & Demand Private Consumption YoY
118	MXSDPUYO Index	Mexico Supply & Demand Public Consumption YoY
119	MXSDGCFY Index	Mexico Supply & Demand Total SA Annual Change 2008 Pesos
120	MEXHMEXY Index	Mexico House Price Index YoY
121	EHGDMX Index	Mexico Real GDP (Annual YoY %)

Table A4: Dataset-South Africa

Number	Ticker	Description
1	SATCTREM Index	Trade Activity Index Employment
2	SAPME Index	South Africa Barclays PMI Employment SA
3	SAUEQEMP Index	South Africa Labour- Employed
4	SAUEQABS Index	South Africa Labour - Labor Absorption Rate
5	SAUEQPRT Index	South Africa Labour - Labor Force Participation Rate
6	SAUEQNLF Index	South Africa Labour - Not in the Labor Force
7	EHUPZA Index	South Africa Unemployment Rate (%)
8	SATCTRBL Index	Trade Activity Index Backlog on Orders

Continued on next page

Table A4 – Continued from previous page

Number	Ticker	Description
9	SATCTEBL Index	Trade Expectations Index Backlog on Orders
10	SATCTRNO Index	Trade Activity Index New Orders
11	SATCTENO Index	Trade Expectations Index New Orders
12	SACSPSTO Index	SA Recorded Building Plans Total SA
13	SACSPSRB Index	SA Recorded Building Plans Residential Buildings SA
14	SACSPSNR Index	SA Recorded Building Plans Non-Residential Buildings SA
15	SACSPSAA Index	SA Recorded Building Plans Additions and Alterations SA
16	SACSCSTO Index	SA Completed Buildings Recorded Total SA
17	SACSCSRB Index	SA Completed Buildings Recorded Residential Buildings SA
18	SACSCSNR Index	SA Completed Buildings Recorded Non-Residential Buildings SA
19	SACSCSAA Index	SA Completed Buildings Recorded Additions and Alterations SA
20	ZAR Currency	USDZAR Spot Exchange Rate - Price of 1 USD in ZAR
21	EURZAR Currency	EURZAR Spot Exchange Rate - Price of 1 EUR in ZAR
22	GBPZAR Currency	GBPZAR Spot Exchange Rate - Price of 1 GBP in ZAR
23	JPYZAR Currency	JPYZAR Spot Exchange Rate - Price of 1 JPY in ZAR
24	TRYZAR Currency	TRYZAR Spot Exchange Rate - Price of 1 TRY in ZAR
25	USDZARV1M Index	USDZAR 1 Month ATM Implied Volatility
26	USDZAR25R3M Index	USDZAR 3 Month 25 Delta Risk Reversal
27	BISBZAR Index	South Africa Real Effective Exchange Rate Broad
28	TOP40 Index	FTSE/JSE Africa Top40 Tradeable Index
29	JFINX Index	FTSE/JSE Africa Financials Index
30	JBIND Index	FTSE/JSE Africa Basic Materials Index
31	JGIND Index	FTSE/JSE Africa Industrials Index
32	JGOLD Index	FTSE/JSE Africa Gold Mining Index
33	WCAUSAF Index	Bloomberg South Africa Exchange Market Capitalization USD
34	JALSH Index	FTSE/JSE Africa All Share Index
35	PX.TO.BOOK_RATIO	FTSE/JSE Africa All Share Index-Price to Book Ratio
36	PE_RATIO	FTSE/JSE Africa All Share Index- Price Earnings Ratio (P/E)
37	GROSS_AGGTE_DVD_YLD	FTSE/JSE Africa All Share Index -Gross Aggregate Dividend Yield
38	DVD.PAYOUT_RATIO	FTSE/JSE Africa All Share Index -Dividend Payout Ratio
39	TOT_DEBT_TO_TOT_ASSET	FTSE/JSE Africa All Share Index- Total Debt to Total Assets
40	REPSOU CDS USD SR 5Y D14 Corp	Republic of South Africa
41	SARPRT Index	South Africa Repo Avg Rate
42	GSAB2YR Index	South Africa Govt Bonds 2 Year Note Generic Bid Yield
43	GSAB3YR Index	South Africa Govt Bonds 3 Year Note Generic Bid Yield
44	GSAB5YR Index	South Africa Govt Bonds 5 Year Note Generic Bid Yield
45	GSAB10YR Index	South Africa Govt Bonds 10 Year Note Generic Bid Yield
46	SALQCMPN Index	South Africa Liquidations Cos
47	SACEI Index	South Africa Private Credit Extension
48	SACEINV Index	South Africa Private Credit Extension Investments
49	SACEMORT Index	South Africa Private Credit Extension Mortgage Advances

Continued on next page

Table A4 – Continued from previous page

Number	Ticker	Description
50	SACELEAS Index	South Africa Private Credit Extension Leasing Finance
51	SACELOAN Index	South Africa Private Credit Extension Total Loans and Advances
52	SACESALE Index	South Africa Private Credit Extension Installment Sales Credit
53	SACEHOUS Index	South Africa Private Credit Extension Of Which To Households
54	SAMYSAM3 Index	South Africa Money Supply M3 Seasonally Adjusted
55	SAMYM1 Index	South Africa Money Supply M1
56	SAMYM2 Index	South Africa Money Supply M2
57	SAMYM0 Index	South Africa Money Supply M0
58	199.055 Index	IMF South Africa Foreign Exchange Reserves in Millions of USD
59	SANOGOL\$ Index	South Africa Gold Reserves
60	SANOGR\$ Index	South Africa Gross Reserves
61	1995E55 Index	IMF South Africa Deposits in Rand
62	SACPI Index	South Africa CPI 2012=100
63	SABCI Index	SACCI South Africa Business Confidence
64	SAPMI Index	South Africa Barclays SA
65	SAPMIPP Index	South Africa Barclays PMI Prices NSA
66	SCP8COUN Index	South Africa CPI For Total Country NSA
67	SCP8EPNY Index	South Africa Ex Food NAB Petrol & Energy YoY
68	SCP8EENR Index	South Africa Ex Energy
69	MPMIZAWA Index	#N/A Invalid Security
70	SACWC Index	South Africa Consumer Confidence
71	SACWE Index	South Africa Consumer Confidence Economic Position in Next 12m
72	SACWF Index	South Africa Consumer Confidence Financial Position During Next 12m.
73	SACBLI Index	Composite Business Cycle Indicator - Leading Indicator
74	SACBLG Index	Composite Business Cycle Indicator - Lagging Indicator
75	SACBCI Index	Composite Business Cycle Indicator - Coincident Indicator
76	SANOPF\$ Index	South Africa Net Open Foreign Currency Position
77	SABBBAL Index	South Africa Budget Summary National Budget Balance
78	SATBAL Index	South Africa Trade Balance Incl Oil Arms & Bullion
79	SATBEX Index	South Africa Trade Balance Exports Incl Oil Arms & Bullion
80	SATBEOTH Index	South Africa Trade Export Other Gd
81	SATBIM Index	South Africa Trade Balance Imports Incl Oil Arms & Bullion
82	SABBEXP Index	South Africa Budget Summary National Expenditures
83	SABBREV Index	South Africa Budget Summary National Revenue
84	SACTLVL Index	South Africa Current Account SA
85	SACTMEX Index	South Africa Current Account SA - Merchandise Exports Free on Board
86	SACTGEX Index	South Africa Current Account SA - Net Gold Exports
87	SACTLMI Index	South Africa Current Account SA - Less Merchandise Imports
88	SACTCTR Index	South Africa Current Account SA - Current Transfers Net Receipts
89	NAAMTTMS Index	NAAMSA South Africa Total Market Sales Level
90	SARSTCSA Index	South Africa Retail Sales Total Sales Constant Prices SA 2012=100

Continued on next page

Table A4 – Continued from previous page

Number	Ticker	Description
91	SASRGEN Index	South Africa Retail Trade Sales Constant 2012 Prices General
92	SATWCOS Index	South Africa Wholesale Trade Constant 2000 Prices SA
93	SFMPPET Index	South Africa Manufacturing Production SA 2005=100 Petroleum Chemical Prod
94	SFPMI Index	South Africa Manufacturing Production SA 2010=100
95	SFMPFB Index	South Africa Manufacturing Production SA 2005=100 Food & Beverages
96	SFMPTCF Index	South Africa Manufacturing Production SA 2005=100 Textile Leather Footwear
97	SFMMPVP Index	South Africa Manufacturing Production SA 2005=100 Parts & Other Transport Equip
98	SAMSTGSA Index	South Africa Mining Sales Total Including Gold SA
99	SAMPGDSY Index	South Africa Mining Production Volume Gold SA YoY
100	SAMPPTSY Index	South Africa Mining Production Volume Total Inc Gold SA YoY
101	SACUI Index	South Africa Utilization of Production Capacity
102	SAPW09Y Index	South Africa Electricity Production Index Year on Year %
103	SABTHDIQ Index	South Africa Household Debt to Disposable Income of Households
104	SAGNDISA Index	South Africa Nominal Household Disposable Income SA
105	SAPW08Y Index	South Africa Electricity Consumption Year on Year %
106	SADXFCFR Index	South Africa Real GDP Gross Fixed Capital Formation SA
107	SASGAGR Index	South Africa Agriculture SA Constant Prices
108	SASGMINE Index	South Africa Mining SA Constant Prices
109	SASGMANU Index	South Africa Manufacturing SA Constant Prices
110	SASGELEC Index	South Africa Electricity SA Constant Prices
111	SASGCON Index	South Africa Construction sa constant 2000 prices
112	SASGWRH Index	South Africa Wholesale Retail Hotels SA Constant Prices
113	SADXRGS Index	South Africa Real GDP Expenditure on GDP
114	EHGDZA Index	South Africa Real GDP (Annual YoY %)

Table A5: Dataset-Turkey

Number	Ticker	Description
1	TULSUR Index	Turkey Labor Statistics Unemployment Rate SA
2	TULSER Index	Turkey Labor Statistics Employment Rate SA
3	TULSCO Index	Turkey Labor Statistics Employment in Construction SA
4	TULSSER Index	Turkey Labor Statistics Employment in Services SA
5	TULSIN Index	Turkey Labor Statistics Employment in Industry SA
6	TULSAGRI Index	Turkey Labor Statistics Employment in Agriculture SA
7	TULSLPAR Index	Turkey Labor Statistics Labor Participation Rate SA
8	TULSNO Index	Turkey Labor Statistics Non Agricultural Unemployment Rate SA
9	TULSYOU Index	Turkey Labor Statistics Youth Unemployment Rate SA
10	USDTRY Index	USDTRY Spot Exchange Rate - Price of 1 USD in TRY
11	EURTRY Index	EURTRY Spot Exchange Rate - Price of 1 EUR in TRY
12	JPYTRY Curncy	JPYTRY Spot Exchange Rate - Price of 100 JPY in TRY
13	USDTRYV1M Index	USDTRY 1 Month ATM Implied Volatility

Continued on next page

Table A5 – Continued from previous page

Number	Ticker	Description
14	USDTRY25R3M Index	USDTRY 3 Month 25 Delta Risk Reversal
15	CPIXBREX Index	Turkey Real Effective Exchange Rate (2003=100) CPI
16	XU100 Index	Borsa Istanbul 100 Index
17	XBANK Index	Borsa Istanbul Banks Sector Index
18	XUSIN Index	Borsa Istanbul Industrials Sector Index
19	PX_TO_BOOK_RATIO	Borsa Istanbul 100 Index-Price to Book Ratio
20	PE_RATIO	Borsa Istanbul 100 Index- Price Earnings Ratio (P/E)
21	GROSS_AGGTE.DVD.YLD	Borsa Istanbul 100 Index -Gross Aggregate Dividend Yield
22	DVD.PAYOUT_RATIO	Borsa Istanbul 100 Index -Dividend Payout Ratio
23	TOT_DEBT_TO_TOT_ASSET	Borsa Istanbul 100 Index - Total Debt to Total Assets
24	WCAUTURK Index	Bloomberg Turkey Exchange Market Capitalization USD
25	CTURK1U5 Curncy	Republic of Turkey
26	TUBRONRA Index	Turkey Overnight Lending Rate Announcement
27	TUBROBRA Index	Turkey Overnight Borrowing Rate Announcement
28	IECM1Y Index	Turkish Government Bond 1Y Compound Yield
29	IECM5Y Index	Turkish Government Bond 5Y Compound Yield
30	TUBOL54 Index	Turkey Banks Balance Sheet Deposits - Residents in Dollars (\$)
31	WAIRCASH Index	Weighted Average Interest Rates for Turkish Banks Loans - Cash
32	WAIRVEHI Index	Weighted Average Interest Rates for Banks Loans - Vehicles
33	WAIRHOUS Index	Weighted Average Interest Rates for Banks Loans - Housing
34	WAIRCOMM Index	Weighted Average Interest Rates for Banks Loans - Commercial
35	GTRU2YR Index	USD Turkey Govt Bond Generic Bid Yield 2 Year
36	GTRU5YR Index	USD Turkey Govt Bond Generic Bid Yield 5 Year
37	GTRU10YR Index	USD Turkey Govt Bond Generic Bid Yield 10 Year
38	TBRDELTA Index	Export Loans - Total
39	TBRDWCLT Index	Working Capital Loans - Total
40	TBRDTLTL Index	Total Loans
41	TUCRTOTL Index	Turkey Consumer Loans Total
42	DPMLAUTO Index	Deposit Money Banks Loans Private Sector - Automobile
43	DPMLINCC Index	Deposit Money Banks Loans Private Sector - Individual Credit Cards
44	DPMLHOUS Index	Deposit Money Banks Loans Private Sector - Housing
45	DPMLCOOT Index	Deposit Money Banks Loans Private Sector - Consumer & Other
46	TUNMM1 Index	Turkey Money Supply M1
47	TUNMM2 Index	Turkey New Money Supply M2
48	TUNMM3 Index	Turkey New Money Supply M3
49	TUNMTDTR Index	Turkey Money Supply Time Deposits TRY
50	TUNMSDFX Index	Turkey Money Supply Sight Deposits FX
51	TUNMSDTR Index	Turkey Money Supply Sight Deposits TRY
52	TUNMTDFX Index	Turkish Money Supply Time Deposits FX
53	TBRDLOAN Index	Turkey SME Loans Total
54	TURWL Index	Turkey Gross Foreign Exchange Reserves (Weekly)

Continued on next page

Table A5 – Continued from previous page

Number	Ticker	Description
55	TUDPPI Index	Turkey Domestic PPI
56	TUDPC Index	Turkey Domestic PPI Manufacturing
57	TUDPB Index	Turkey Domestic PPI Mining & Quarrying
58	TUDP6 Index	Turkey Domestic PPI Crude Petroleum & Natural Gas
59	TUDP10 Index	Turkey Domestic PPI Food Products YoY
60	TUDP29 Index	Turkey Domestic PPI Motor Vehicles Trailers & Semi-Trailers
61	TUDP25 Index	Turkey Domestic PPI Fabricated Metal Products Except Machinery & Equipment
62	TUCPI Index	Turkey CPI
63	TUCPF Index	Turkey CPI Food & Non Alcoholic Beverages
64	TUCPH Index	Turkey CPI Housing Water Electricity Gas & Other Fuels
65	TUCPHO Index	Turkey CPI Hotels Cafes & Restaurants
66	TUCPFH Index	Turkey CPI Furnishings Household Equipment & Routine House Maintenance
67	TUCPR Index	Turkey CPI Recreation & Culture
68	TUCXSG Index	Turkey CPI Ex Seasonal Goods
69	TUCXEF Index	Turkey CPI Ex Energy Food Non Alcoholic Bev Alcoholic Bev Tobacco & Gold
70	TUCOGY2S Index	Turkey Real Sector Confidence Index Volume of Orders (Current Situation) SA
71	TUCOGY3S Index	Turkey Real Sector Confidence Stocks of Finished Goods (Current Situation) SA
72	TUCOGY7S Index	Turkey Real Sector Confidence Index Export Orders (Next 3 Months) SA
73	TUCOREAL Index	Turkey Conf IndxReal Sect
74	TUCDCONF Index	Consumer Confidence
75	TUCOGY1S Index	TU Real Sector Confidence SA
76	TUCOGY9S Index	TU Business Situation SA
77	MPMITRMA Index	Markit Turkey Manufacturing PMI
78	TUCALVLP Index	Turkey Balance of Payments Portfolio Investment 12M YoY Level Change USD
79	TUCADIT Index	Turkey Balance of Payments Direct Investment in Turkey
80	TUDDTOTL Index	Turkey Domestic Debt Position Total
81	EHBBTR Index	Turkey Budget Balance (% GDP)
82	EHCATR Index	Turkey Current Account Balance (% GDP)
83	TUBTREV Index	Turkey Budget Deficit Revenue
84	TUTBEX Index	Turkey Trade Exports WDA
85	TUTBIM Index	Turkey Trade Imports WDA
86	ECOCTRN Index	Turkey Current Account Balance (Billion USD) NSA
87	TUKVDB17 Index	Turkey Short Term External Debt Stock
88	TUCSET Index	Turkey Motor Vehicle Industry Export Total
89	TUCSEP Index	Turkey Motor Vehicle Industry Export Passenger Cars
90	E50DGTR Index	EU Ind Prod Durable Consumer Goods Turkey SWDA
91	E50IGTR Index	EU Ind Prod Intermediate Goods Turkey SWDA
92	E50KGTR Index	EU Ind Prod Capital Goods Turkey SWDA
93	TUIOMT Index	Turkey Industrial Production Manufacturing 2010=100
94	TUINTURN Index	Turkey Industry Turnover 2010=100
95	TUIOSA Index	Turkey Industrial Production SWDA 2010=100

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Table A5 – Continued from previous page

<b>Number</b>	<b>Ticker</b>	<b>Description</b>
96	TUIOST Index	Turkey Industrial Production Mining 2010=100
97	TUIOET Index	Turkey Industrial Production Electricity 2010=100
98	TYCOLEVS Index	Turkey Capacity Utilization SA
99	TUCSPT Index	Turkey Motor Vehicle Industry Production Total
100	TUCSMT Index	Turkey Motor Vehicle Industry Sales Total
101	TUCSMP Index	Turkey Motor Vehicle Industry Sales Passenger Cars
102	TUTOARTO Index	Turkey Tourism Arriving Visitors Total
103	TUQRRESY Index	Turkey GDP at Constant Prices Final Consumption Expenditure of Residents YoY
104	TUQRIMY Index	Turkey Real GDP Imports of Goods and Services WDA YoY
105	EHGDTR Index	Turkey Real GDP (Annual YoY %)

## **2. Active Trading Strategies: Sharpe Ratios**



Table B1: Sharpe ratios across all maturities

## Panel A: Brazil

$rx_{t+1}^{(2)}$	$h = 1$	$h = 2$	$h = 3$	$h = 6$	$h = 9$	$h = 12$
<i>RW</i>	0.30	0.32	0.33	0.37	0.41	0.45
<i>Local – PCA</i>	0.79	0.78	0.78	0.75	0.68	0.58
<i>EMMacro – PCA</i>	0.82	0.81	0.79	0.68	0.59	0.55
<i>EMFinancial – PCA</i>	0.71	0.69	0.68	0.66	0.64	0.57
<i>EMGlobal – PCA</i>	0.79	0.80	0.82	0.84	0.79	0.69
<i>Local – PLS</i>	0.64	0.65	0.65	0.64	0.58	0.52
<i>EMMacro – PLS</i>	0.65	0.65	0.65	0.65	0.61	0.58
<i>EMFinancial – PLS</i>	0.72	0.72	0.73	0.72	0.66	0.67
<i>EMGlobal – PLS</i>	0.65	0.65	0.64	0.64	0.61	0.59
$rx_{t+1}^{(3)}$						
<i>RW</i>	0.19	0.20	0.21	0.27	0.33	0.40
<i>Local – PCA</i>	0.69	0.68	0.69	0.71	0.70	0.60
<i>EMMacro – PCA</i>	0.69	0.68	0.69	0.67	0.62	0.47
<i>EMFinancial – PCA</i>	0.62	0.61	0.61	0.57	0.55	0.49
<i>EMGlobal – PCA</i>	0.66	0.66	0.68	0.76	0.78	0.65
<i>Local – PLS</i>	0.56	0.55	0.55	0.53	0.49	0.44
<i>EMMacro – PLS</i>	0.54	0.53	0.53	0.53	0.50	0.44
<i>EMFinancial – PLS</i>	0.59	0.58	0.58	0.56	0.52	0.55
<i>EMGlobal – PLS</i>	0.58	0.57	0.57	0.55	0.57	0.54
$rx_{t+1}^{(4)}$						
<i>RW</i>	0.18	0.19	0.21	0.28	0.37	0.44
<i>Local – PCA</i>	0.68	0.67	0.67	0.66	0.66	0.60
<i>EMMacro – PCA</i>	0.66	0.66	0.66	0.63	0.55	0.41
<i>EMFinancial – PCA</i>	0.61	0.59	0.58	0.52	0.47	0.42
<i>EMGlobal – PCA</i>	0.66	0.64	0.66	0.70	0.73	0.65
<i>Local – PLS</i>	0.51	0.50	0.49	0.47	0.45	0.40
<i>EMMacro – PLS</i>	0.50	0.49	0.48	0.48	0.44	0.39
<i>EMFinancial – PLS</i>	0.53	0.52	0.52	0.51	0.50	0.50
<i>EMGlobal – PLS</i>	0.52	0.51	0.50	0.52	0.54	0.50
$rx_{t+1}^{(5)}$						
<i>RW</i>	0.10	0.11	0.13	0.23	0.36	0.46
<i>Local – PCA</i>	0.65	0.63	0.63	0.62	0.63	0.58
<i>EMMacro – PCA</i>	0.64	0.63	0.63	0.58	0.52	0.40
<i>EMFinancial – PCA</i>	0.36	0.33	0.29	0.19	0.14	0.14
<i>EMGlobal – PCA</i>	0.60	0.57	0.57	0.56	0.53	0.44
<i>Local – PLS</i>	0.47	0.46	0.45	0.43	0.40	0.36
<i>EMMacro – PLS</i>	0.49	0.47	0.46	0.42	0.45	0.46
<i>EMFinancial – PLS</i>	0.49	0.48	0.47	0.48	0.45	0.42
<i>EMGlobal – PLS</i>	0.48	0.47	0.47	0.48	0.47	0.42

Note: The table reports the Sharpe ratios for all maturities and across emerging markets separately for h-step ahead forecasts where  $h=1,2,3,6,9,12$ . based on the models specifications that are defined in Section 3.3. The results are based on portfolio performances for a mean-variance investor with relative risk aversion coefficient of five who decides portfolio weights based on the forecasts of corresponding model.

Table B2: Sharpe ratios across all maturities

## Panel B: Indonesia

$rx_{t+1}^{(2)}$	$h = 1$	$h = 2$	$h = 3$	$h = 6$	$h = 9$	$h = 12$
<i>RW</i>	0.44	0.46	0.47	0.48	0.46	0.43
<i>Local – PCA</i>	0.43	0.44	0.45	0.45	0.43	0.40
<i>EMMacro – PCA</i>	0.42	0.43	0.43	0.44	0.42	0.40
<i>EMFinancial – PCA</i>	0.58	0.53	0.48	0.38	0.32	0.30
<i>EMGlobal – PCA</i>	0.42	0.43	0.44	0.44	0.42	0.40
<i>Local – PLS</i>	0.82	0.80	0.80	0.80	0.68	0.51
<i>EMMacro – PLS</i>	0.77	0.75	0.76	0.76	0.64	0.47
<i>EMFinancial – PLS</i>	0.82	0.80	0.79	0.72	0.59	0.45
<i>EMGlobal – PLS</i>	0.78	0.77	0.77	0.77	0.65	0.47
$rx_{t+1}^{(3)}$						
<i>RW</i>	0.41	0.43	0.44	0.45	0.40	0.34
<i>Local – PCA</i>	0.29	0.28	0.28	0.26	0.22	0.19
<i>EMMacro – PCA</i>	0.50	0.43	0.38	0.27	0.21	0.19
<i>EMFinancial – PCA</i>	0.50	0.43	0.38	0.27	0.21	0.19
<i>EMGlobal – PCA</i>	0.76	0.76	0.78	0.87	0.77	0.67
<i>Local – PLS</i>	0.71	0.71	0.72	0.67	0.45	0.29
<i>EMMacro – PLS</i>	0.54	0.54	0.55	0.51	0.41	0.35
<i>EMFinancial – PLS</i>	0.68	0.67	0.66	0.56	0.44	0.31
<i>EMGlobal – PLS</i>	0.54	0.54	0.55	0.51	0.41	0.35
$rx_{t+1}^{(4)}$						
<i>RW</i>	0.40	0.41	0.43	0.42	0.35	0.28
<i>Local – PCA</i>	0.24	0.23	0.23	0.20	0.15	0.12
<i>EMMacro – PCA</i>	0.28	0.27	0.26	0.23	0.18	0.14
<i>EMFinancial – PCA</i>	0.49	0.43	0.38	0.28	0.23	0.20
<i>EMGlobal – PCA</i>	0.71	0.71	0.70	0.80	0.72	0.65
<i>Local – PLS</i>	0.65	0.65	0.66	0.60	0.37	0.20
<i>EMMacro – PLS</i>	0.52	0.53	0.54	0.50	0.41	0.34
<i>EMFinancial – PLS</i>	0.68	0.67	0.66	0.55	0.39	0.24
<i>EMGlobal – PLS</i>	0.51	0.52	0.54	0.50	0.41	0.34
$rx_{t+1}^{(5)}$						
<i>RW</i>	0.39	0.40	0.42	0.40	0.32	0.24
<i>Local – PCA</i>	0.22	0.21	0.21	0.17	0.12	0.08
<i>EMMacro – PCA</i>	0.26	0.25	0.24	0.20	0.15	0.11
<i>EMFinancial – PCA</i>	0.48	0.42	0.38	0.28	0.23	0.19
<i>EMGlobal – PCA</i>	0.33	0.33	0.32	0.29	0.24	0.20
<i>Local – PLS</i>	0.52	0.52	0.52	0.46	0.40	0.35
<i>EMMacro – PLS</i>	0.50	0.52	0.53	0.49	0.40	0.34
<i>EMFinancial – PLS</i>	0.67	0.67	0.67	0.56	0.36	0.20
<i>EMGlobal – PLS</i>	0.50	0.52	0.53	0.49	0.40	0.34

Note: See notes to Table B1.

Table B3: Sharpe ratios across all maturities

## Panel C: Mexico

$rx_{t+1}^{(2)}$	$h = 1$	$h = 2$	$h = 3$	$h = 6$	$h = 9$	$h = 12$
<i>RW</i>	0.41	0.39	0.37	0.30	0.22	0.13
<i>Local – PCA</i>	0.87	0.88	0.90	0.88	0.88	0.83
<i>EMMacro – PCA</i>	0.94	0.88	0.78	0.53	0.33	0.17
<i>EMFinancial – PCA</i>	0.98	0.95	0.90	0.84	0.76	0.58
<i>EMGlobal – PCA</i>	0.78	0.70	0.62	0.47	0.35	0.23
<i>Local – PLS</i>	0.97	0.97	0.96	0.87	0.80	0.73
<i>EMMacro – PLS</i>	0.88	0.86	0.85	0.80	0.74	0.68
<i>EMFinancial – PLS</i>	1.00	1.00	1.00	0.87	0.70	0.59
<i>EMGlobal – PLS</i>	0.88	0.86	0.85	0.80	0.74	0.68
$rx_{t+1}^{(3)}$						
<i>RW</i>	0.53	0.51	0.49	0.42	0.33	0.24
<i>Local – PCA</i>	0.73	0.68	0.65	0.57	0.51	0.45
<i>EMMacro – PCA</i>	1.01	0.99	0.97	0.88	0.79	0.71
<i>EMFinancial – PCA</i>	0.98	0.96	0.93	0.87	0.85	0.74
<i>EMGlobal – PCA</i>	0.94	0.86	0.80	0.67	0.58	0.50
<i>Local – PLS</i>	1.02	1.02	1.02	0.96	0.91	0.82
<i>EMMacro – PLS</i>	0.97	0.96	0.95	0.91	0.87	0.78
<i>EMFinancial – PLS</i>	1.05	1.05	1.02	0.89	0.86	0.75
<i>EMGlobal – PLS</i>	1.01	0.98	0.95	0.92	0.88	0.76
$rx_{t+1}^{(4)}$						
<i>RW</i>	0.60	0.58	0.57	0.48	0.38	0.28
<i>Local – PCA</i>	0.87	0.85	0.83	0.76	0.65	0.50
<i>EMMacro – PCA</i>	0.92	0.89	0.87	0.82	0.77	0.71
<i>EMFinancial – PCA</i>	0.89	0.88	0.87	0.82	0.79	0.70
<i>EMGlobal – PCA</i>	0.95	0.90	0.87	0.80	0.76	0.69
<i>Local – PLS</i>	0.92	0.92	0.92	0.89	0.86	0.77
<i>EMMacro – PLS</i>	0.88	0.87	0.86	0.84	0.82	0.76
<i>EMFinancial – PLS</i>	0.92	0.92	0.92	0.90	0.86	0.77
<i>EMGlobal – PLS</i>	0.89	0.87	0.87	0.84	0.82	0.75
$rx_{t+1}^{(5)}$						
<i>RW</i>	0.56	0.55	0.53	0.43	0.33	0.22
<i>Local – PCA</i>	0.71	0.69	0.69	0.69	0.63	0.49
<i>EMMacro – PCA</i>	0.79	0.78	0.77	0.73	0.68	0.63
<i>EMFinancial – PCA</i>	0.65	0.62	0.59	0.51	0.41	0.31
<i>EMGlobal – PCA</i>	0.76	0.72	0.68	0.58	0.47	0.35
<i>Local – PLS</i>	0.88	0.88	0.89	0.87	0.84	0.78
<i>EMMacro – PLS</i>	0.79	0.78	0.78	0.77	0.77	0.75
<i>EMFinancial – PLS</i>	0.90	0.91	0.93	0.91	0.85	0.79
<i>EMGlobal – PLS</i>	0.80	0.78	0.77	0.77	0.77	0.73

Note: See notes to Table B1.

Table B4: Sharpe ratios across all maturities

## Panel D: South Africa

$rx_{t+1}^{(2)}$	$h = 1$	$h = 2$	$h = 3$	$h = 6$	$h = 9$	$h = 12$
<i>RW</i>	0.67	0.67	0.68	0.68	0.66	0.69
<i>Local – PCA</i>	0.83	0.80	0.83	0.94	0.76	0.74
<i>EMMacro – PCA</i>	0.84	0.83	0.81	0.90	0.82	0.75
<i>EMFinancial – PCA</i>	0.73	0.73	0.73	0.72	0.69	0.71
<i>EMGlobal – PCA</i>	0.74	0.73	0.72	0.67	0.63	0.68
<i>Local – PLS</i>	0.63	0.63	0.63	0.64	0.63	0.63
<i>EMMacro – PLS</i>	0.62	0.65	0.63	0.62	0.57	0.58
<i>EMFinancial – PLS</i>	0.70	0.67	0.68	0.67	0.64	0.63
<i>EMGlobal – PLS</i>	0.78	0.82	0.86	0.86	0.87	0.85
$rx_{t+1}^{(3)}$						
<i>RW</i>	0.49	0.49	0.49	0.48	0.48	0.50
<i>Local – PCA</i>	0.92	0.89	0.85	0.78	0.69	0.67
<i>EMMacro – PCA</i>	0.83	0.79	0.78	0.62	0.55	0.63
<i>EMFinancial – PCA</i>	0.56	0.55	0.55	0.51	0.47	0.48
<i>EMGlobal – PCA</i>	0.56	0.54	0.53	0.46	0.40	0.42
<i>Local – PLS</i>	0.70	0.69	0.69	0.66	0.62	0.57
<i>EMMacro – PLS</i>	0.67	0.65	0.66	0.60	0.55	0.53
<i>EMFinancial – PLS</i>	0.81	0.80	0.80	0.76	0.71	0.57
<i>EMGlobal – PLS</i>	0.75	0.77	0.79	0.78	0.73	0.62
$rx_{t+1}^{(4)}$						
<i>RW</i>	0.42	0.42	0.42	0.42	0.43	0.44
<i>Local – PCA</i>	0.76	0.74	0.71	0.62	0.52	0.50
<i>EMMacro – PCA</i>	0.75	0.73	0.69	0.61	0.52	0.57
<i>EMFinancial – PCA</i>	0.51	0.50	0.48	0.43	0.39	0.39
<i>EMGlobal – PCA</i>	0.77	0.74	0.72	0.62	0.55	0.60
<i>Local – PLS</i>	0.63	0.61	0.57	0.59	0.57	0.39
<i>EMMacro – PLS</i>	0.55	0.55	0.57	0.56	0.55	0.50
<i>EMFinancial – PLS</i>	0.53	0.52	0.51	0.48	0.44	0.38
<i>EMGlobal – PLS</i>	0.58	0.57	0.56	0.48	0.38	0.30
$rx_{t+1}^{(5)}$						
<i>RW</i>	0.39	0.38	0.38	0.39	0.42	0.45
<i>Local – PCA</i>	0.41	0.39	0.38	0.35	0.32	0.33
<i>EMMacro – PCA</i>	0.65	0.64	0.61	0.52	0.47	0.52
<i>EMFinancial – PCA</i>	0.41	0.39	0.37	0.33	0.29	0.29
<i>EMGlobal – PCA</i>	0.58	0.57	0.56	0.52	0.48	0.48
<i>Local – PLS</i>	0.38	0.37	0.36	0.29	0.24	0.27
<i>EMMacro – PLS</i>	0.60	0.61	0.61	0.60	0.62	0.52
<i>EMFinancial – PLS</i>	0.45	0.43	0.43	0.39	0.37	0.32
<i>EMGlobal – PLS</i>	0.51	0.50	0.49	0.44	0.36	0.28

Note: See notes to Table B1.

Table B5: Sharpe ratios across all maturities

## Panel E: Turkey

$rx_{t+1}^{(2)}$	$h = 1$	$h = 2$	$h = 3$	$h = 6$	$h = 9$	$h = 12$
<i>RW</i>	-0.33	-0.36	-0.38	-0.42	-0.46	-0.48
<i>Local – PCA</i>	0.06	0.02	0.00	-0.05	-0.07	0.00
<i>EMMacro – PCA</i>	0.19	0.16	0.13	0.05	0.00	-0.03
<i>EMFinancial – PCA</i>	-0.06	-0.10	-0.12	-0.19	-0.13	-0.10
<i>EMGlobal – PCA</i>	0.12	0.09	0.06	-0.02	-0.08	-0.14
<i>Local – PLS</i>	0.36	0.36	0.36	0.32	0.27	0.19
<i>EMMacro – PLS</i>	0.40	0.38	0.37	0.36	0.34	0.26
<i>EMFinancial – PLS</i>	0.38	0.36	0.35	0.32	0.32	0.15
<i>EMGlobal – PLS</i>	0.38	0.36	0.36	0.35	0.26	0.18
$rx_{t+1}^{(3)}$						
<i>RW</i>	-0.31	-0.34	-0.37	-0.40	-0.44	-0.45
<i>Local – PCA</i>	0.12	0.09	0.05	0.04	0.03	0.09
<i>EMMacro – PCA</i>	0.09	0.04	0.02	-0.07	-0.10	-0.13
<i>EMFinancial – PCA</i>	-0.06	-0.11	-0.14	-0.20	-0.13	-0.09
<i>EMGlobal – PCA</i>	0.18	0.15	0.13	0.05	-0.01	-0.07
<i>Local – PLS</i>	0.38	0.38	0.38	0.34	0.29	0.22
<i>EMMacro – PLS</i>	0.40	0.39	0.39	0.36	0.30	0.25
<i>EMFinancial – PLS</i>	0.38	0.37	0.36	0.34	0.34	0.26
<i>EMGlobal – PLS</i>	0.39	0.38	0.38	0.38	0.31	0.21
$rx_{t+1}^{(4)}$						
<i>RW</i>	-0.32	-0.35	-0.38	-0.41	-0.45	-0.45
<i>Local – PCA</i>	0.09	0.06	0.03	0.02	0.03	0.10
<i>EMMacro – PCA</i>	0.13	0.08	0.06	-0.03	-0.07	-0.10
<i>EMFinancial – PCA</i>	0.14	0.10	0.05	-0.05	-0.05	-0.04
<i>EMGlobal – PCA</i>	0.21	0.19	0.17	0.11	0.05	-0.01
<i>Local – PLS</i>	0.38	0.38	0.38	0.35	0.29	0.21
<i>EMMacro – PLS</i>	0.39	0.39	0.39	0.36	0.30	0.24
<i>EMFinancial – PLS</i>	0.37	0.37	0.36	0.36	0.35	0.28
<i>EMGlobal – PLS</i>	0.38	0.38	0.38	0.37	0.34	0.21
$rx_{t+1}^{(5)}$						
<i>RW</i>	-0.31	-0.35	-0.39	-0.43	-0.45	-0.44
<i>Local – PCA</i>	0.13	0.09	0.06	0.06	0.06	0.15
<i>EMMacro – PCA</i>	0.19	0.15	0.12	0.04	0.00	-0.04
<i>EMFinancial – PCA</i>	0.20	0.16	0.11	0.01	0.01	0.00
<i>EMGlobal – PCA</i>	0.24	0.22	0.21	0.16	0.12	0.07
<i>Local – PLS</i>	0.37	0.38	0.38	0.35	0.30	0.23
<i>EMMacro – PLS</i>	0.38	0.38	0.38	0.36	0.31	0.25
<i>EMFinancial – PLS</i>	0.36	0.35	0.35	0.33	0.31	0.23
<i>EMGlobal – PLS</i>	0.38	0.38	0.38	0.37	0.34	0.24

Note: See notes to Table B1.

### **3. Active Trading Strategies: Utility Gains**

Table C1: Utility gains across all maturities

## Panel A: Brazil

$rx_{t+1}^{(2)}$	$h = 1$	$h = 2$	$h = 3$	$h = 6$	$h = 9$	$h = 12$
<i>Local – PCA</i>	115.08	106.10	97.65	74.62	59.10	20.49
<i>EMMacro – PCA</i>	153.09	151.49	147.03	110.20	63.06	61.03
<i>EMFinacial – PCA</i>	77.24	59.29	46.26	21.15	12.13	1.24
<i>EMGlobal – PCA</i>	96.09	102.47	108.43	116.39	106.61	61.61
<i>Local – PLS</i>	67.77	65.63	62.99	45.23	13.19	-21.15
<i>EMMacro – PLS</i>	62.05	58.85	54.60	38.99	16.09	-18.36
<i>EMFinacial – PLS</i>	84.03	80.63	77.69	50.42	10.23	-9.65
<i>EMGlobal – PLS</i>	64.56	59.88	53.54	36.25	16.13	-17.93
$rx_{t+1}^{(3)}$						
<i>Local – PCA</i>	65.85	49.22	42.93	55.64	77.83	36.32
<i>EMMacro – PCA</i>	68.53	52.93	63.00	67.89	52.84	-25.45
<i>EMFinacial – PCA</i>	26.09	5.00	-6.18	-26.65	-9.97	-28.37
<i>EMGlobal – PCA</i>	36.58	23.95	32.26	89.28	119.81	53.00
<i>Local – PLS</i>	75.81	71.95	67.38	39.47	-0.29	-50.45
<i>EMMacro – PLS</i>	56.17	50.94	46.49	28.52	0.57	-41.55
<i>EMFinacial – PLS</i>	85.44	78.83	73.83	44.49	7.48	-12.20
<i>EMGlobal – PLS</i>	74.94	66.95	64.22	31.62	17.72	-17.41
$rx_{t+1}^{(4)}$						
<i>Local – PCA</i>	66.97	45.07	34.94	36.20	50.77	3.51
<i>EMMacro – PCA</i>	24.99	3.06	-2.54	-32.98	-54.22	-160.48
<i>EMFinacial – PCA</i>	4.00	-18.83	-34.19	-80.14	-100.29	-139.38
<i>EMGlobal – PCA</i>	54.26	30.79	29.75	61.93	84.28	7.07
<i>Local – PLS</i>	54.71	51.35	48.10	14.54	-11.83	-54.40
<i>EMMacro – PLS</i>	55.11	47.87	37.04	26.00	-6.02	-39.19
<i>EMFinacial – PLS</i>	62.20	58.43	57.83	36.71	9.18	-5.91
<i>EMGlobal – PLS</i>	50.34	41.99	39.82	26.61	21.20	-16.46
$rx_{t+1}^{(5)}$						
<i>Local – PCA</i>	62.57	32.80	16.04	6.48	28.44	-29.83
<i>EMMacro – PCA</i>	17.41	-22.84	-42.42	-129.25	-137.08	-266.53
<i>EMFinacial – PCA</i>	50.06	39.01	27.65	-6.24	-33.10	-48.70
<i>EMGlobal – PCA</i>	10.57	-41.92	-73.68	-90.09	-101.69	-232.24
<i>Local – PLS</i>	47.94	41.89	36.52	14.41	-13.02	-54.13
<i>EMMacro – PLS</i>	48.72	39.70	29.24	-28.04	-6.22	-25.04
<i>EMFinacial – PLS</i>	60.75	54.85	51.48	40.27	9.86	-14.33
<i>EMGlobal – PLS</i>	40.47	32.01	34.10	20.40	7.37	-38.30

Note: The table reports the performance fees for all maturities and across emerging markets separately for h-step ahead forecasts where  $h=1,2,3,6,9,12$ . based on the models specifications that are defined in Section 3.3. The results are based on portfolio performances for a mean-variance investor with relative risk aversion coefficient of five who decides portfolio weights based on the forecasts of corresponding model.

Table C2: Utility gains across all maturities

## Panel B: Indonesia

$rx_{t+1}^{(2)}$	$h = 1$	$h = 2$	$h = 3$	$h = 6$	$h = 9$	$h = 12$
<i>Local – PCA</i>	-3.02	-3.92	-4.92	-6.89	-8.19	-10.05
<i>EMMacro – PCA</i>	-2.96	-4.53	-6.23	-8.83	-10.42	-9.96
<i>EMFinancial – PCA</i>	8.17	1.17	-7.82	-26.10	-31.66	-30.53
<i>EMGlobal – PCA</i>	-2.74	-4.25	-5.99	-9.13	-11.08	-11.27
<i>Local – PLS</i>	41.71	39.08	38.17	42.35	37.79	16.34
<i>EMMacro – PLS</i>	34.50	31.70	31.25	35.48	30.55	9.35
<i>EMFinancial – PLS</i>	39.30	35.46	33.08	24.13	14.02	-4.83
<i>EMGlobal – PLS</i>	34.89	32.72	32.18	35.75	30.95	8.91
$rx_{t+1}^{(3)}$						
<i>Local – PCA</i>	-19.47	-25.03	-30.78	-45.19	-49.75	-45.27
<i>EMMacro – PCA</i>	21.70	8.66	-4.99	-35.26	-47.73	-44.41
<i>EMFinancial – PCA</i>	21.70	8.66	-4.99	-35.26	-47.73	-44.41
<i>EMGlobal – PCA</i>	76.92	74.93	72.61	96.35	101.92	102.44
<i>Local – PLS</i>	58.64	57.02	57.60	53.59	26.53	-1.40
<i>EMMacro – PLS</i>	37.19	33.72	30.96	17.99	4.02	2.89
<i>EMFinancial – PLS</i>	44.04	37.41	32.31	4.52	-20.16	-52.18
<i>EMGlobal – PLS</i>	36.86	33.34	30.51	17.55	3.81	2.54
$rx_{t+1}^{(4)}$						
<i>Local – PCA</i>	-23.39	-31.42	-38.93	-52.04	-45.16	-32.14
<i>EMMacro – PCA</i>	-17.51	-25.46	-32.88	-48.43	-42.08	-28.77
<i>EMFinancial – PCA</i>	24.96	12.59	-0.59	-26.78	-24.28	-12.33
<i>EMGlobal – PCA</i>	67.51	60.40	43.07	86.49	108.55	128.28
<i>Local – PLS</i>	53.64	53.17	53.47	53.09	21.92	-19.56
<i>EMMacro – PLS</i>	28.17	25.57	25.04	15.14	6.88	14.22
<i>EMFinancial – PLS</i>	51.40	45.87	41.07	14.41	-16.31	-62.12
<i>EMGlobal – PLS</i>	27.60	25.00	24.52	14.51	6.86	14.15
$rx_{t+1}^{(5)}$						
<i>Local – PCA</i>	-26.04	-33.94	-41.13	-52.65	-42.48	-26.41
<i>EMMacro – PCA</i>	-20.17	-28.13	-35.33	-48.16	-37.69	-21.72
<i>EMFinancial – PCA</i>	16.58	5.17	-5.88	-27.69	-21.56	-12.47
<i>EMGlobal – PCA</i>	-15.13	-22.15	-28.78	-41.71	-32.51	-18.50
<i>Local – PLS</i>	39.27	35.75	28.06	13.98	18.96	36.87
<i>EMMacro – PLS</i>	21.21	19.86	20.08	12.57	11.22	20.13
<i>EMFinancial – PLS</i>	46.52	43.61	41.24	21.09	-19.15	-76.94
<i>EMGlobal – PLS</i>	20.52	19.16	19.53	11.96	10.97	19.88

Note: See notes to Table C1.



Table C3: Utility gains across all maturities

## Panel C: Mexico

$rx_{t+1}^{(2)}$	$h = 1$	$h = 2$	$h = 3$	$h = 6$	$h = 9$	$h = 12$
<i>Local – PCA</i>	19.28	19.85	20.86	24.82	33.37	38.99
<i>EMMacro – PCA</i>	18.11	15.23	12.55	6.22	0.86	-3.87
<i>EMFinancial – PCA</i>	19.84	18.66	16.72	21.36	26.77	26.67
<i>EMGlobal – PCA</i>	12.49	10.61	8.74	4.19	3.44	2.03
<i>Local – PLS</i>	22.75	24.83	26.50	26.79	30.39	32.94
<i>EMMacro – PLS</i>	18.72	19.65	21.20	22.47	23.87	28.12
<i>EMFinancial – PLS</i>	24.73	27.18	29.45	29.31	26.95	26.76
<i>EMGlobal – PLS</i>	18.67	19.67	21.19	22.46	23.69	28.12
$rx_{t+1}^{(3)}$						
<i>Local – PCA</i>	34.69	30.49	27.97	27.44	34.93	42.83
<i>EMMacro – PCA</i>	63.07	62.16	62.75	67.12	75.88	85.13
<i>EMFinancial – PCA</i>	53.73	52.83	50.77	62.02	83.73	92.39
<i>EMGlobal – PCA</i>	64.34	57.92	52.78	48.00	53.84	60.67
<i>Local – PLS</i>	69.90	74.29	78.00	86.34	100.35	107.33
<i>EMMacro – PLS</i>	63.07	65.00	67.35	76.43	90.15	97.15
<i>EMFinancial – PLS</i>	76.62	80.73	81.65	80.86	96.22	97.49
<i>EMGlobal – PLS</i>	66.02	64.97	64.32	77.81	89.22	94.16
$rx_{t+1}^{(4)}$						
<i>Local – PCA</i>	52.29	53.25	54.12	67.02	77.69	74.63
<i>EMMacro – PCA</i>	76.76	73.86	72.15	86.52	109.69	132.95
<i>EMFinancial – PCA</i>	56.50	59.19	60.65	78.51	105.53	123.67
<i>EMGlobal – PCA</i>	91.22	86.75	84.51	96.82	126.44	153.22
<i>Local – PLS</i>	76.36	81.88	86.74	104.59	131.46	146.79
<i>EMMacro – PLS</i>	61.39	61.99	64.89	86.20	113.84	138.56
<i>EMFinancial – PLS</i>	78.93	84.32	88.43	107.51	132.36	148.00
<i>EMGlobal – PLS</i>	65.03	64.79	66.87	86.36	114.23	136.34
$rx_{t+1}^{(5)}$						
<i>Local – PCA</i>	-32.39	-29.83	-26.35	12.19	22.74	9.80
<i>EMMacro – PCA</i>	47.88	49.63	52.25	76.29	103.07	129.11
<i>EMFinancial – PCA</i>	44.46	43.00	42.66	57.01	75.78	89.56
<i>EMGlobal – PCA</i>	61.92	59.01	57.62	72.82	94.03	110.54
<i>Local – PLS</i>	63.68	72.98	81.37	109.79	140.13	165.02
<i>EMMacro – PLS</i>	17.50	17.14	19.13	52.00	95.71	134.05
<i>EMFinancial – PLS</i>	81.82	94.11	106.17	134.59	158.53	183.17
<i>EMGlobal – PLS</i>	19.09	17.61	17.06	51.49	97.27	124.96

Note: See notes to Table C1.

Table C4: Utility gains across all maturities

## Panel D: South Africa

$rx_{t+1}^{(2)}$	$h = 1$	$h = 2$	$h = 3$	$h = 6$	$h = 9$	$h = 12$
<i>Local – PCA</i>	19.42	15.73	16.82	23.89	13.68	7.83
<i>EMMacro – PCA</i>	20.82	19.56	17.69	23.75	19.05	10.15
<i>EMFinancial – PCA</i>	10.92	10.14	9.59	8.04	6.88	6.10
<i>EMGlobal – PCA</i>	13.94	12.25	10.88	7.38	5.37	5.35
<i>Local – PLS</i>	-4.33	-4.95	-5.12	-4.41	-3.56	-7.34
<i>EMMacro – PLS</i>	-6.09	-1.61	-5.36	-2.89	-5.98	-11.38
<i>EMFinancial – PLS</i>	7.74	4.68	4.59	3.48	3.00	-1.51
<i>EMGlobal – PLS</i>	5.89	10.01	13.17	14.88	18.93	10.67
$rx_{t+1}^{(3)}$						
<i>Local – PCA</i>	72.13	66.36	59.84	48.57	33.36	27.92
<i>EMMacro – PCA</i>	55.16	48.44	44.24	20.41	19.24	33.42
<i>EMFinancial – PCA</i>	1.34	-0.22	-1.54	-8.93	-19.01	-22.00
<i>EMGlobal – PCA</i>	9.48	6.35	3.74	-8.28	-21.47	-22.23
<i>Local – PLS</i>	26.74	26.55	25.80	23.39	16.04	-4.29
<i>EMMacro – PLS</i>	21.96	17.69	17.13	3.77	-5.55	-17.92
<i>EMFinancial – PLS</i>	56.05	56.91	57.09	51.79	44.33	8.02
<i>EMGlobal – PLS</i>	40.79	46.77	51.04	49.31	38.99	7.30
$rx_{t+1}^{(4)}$						
<i>Local – PCA</i>	41.63	30.28	19.56	-25.93	-73.16	-51.50
<i>EMMacro – PCA</i>	50.60	42.97	25.81	-3.37	-34.12	-14.83
<i>EMFinancial – PCA</i>	-4.49	-8.16	-11.65	-23.94	-38.26	-38.81
<i>EMGlobal – PCA</i>	45.00	35.70	21.32	-31.71	-64.15	-40.85
<i>Local – PLS</i>	29.90	22.90	11.56	15.99	11.71	-45.34
<i>EMMacro – PLS</i>	1.77	5.39	7.00	-0.10	-5.25	-25.42
<i>EMFinancial – PLS</i>	4.42	2.49	0.83	-8.22	-17.62	-28.71
<i>EMGlobal – PLS</i>	22.07	20.16	17.92	-2.49	-26.95	-34.26
$rx_{t+1}^{(5)}$						
<i>Local – PCA</i>	-40.49	-42.40	-43.20	-39.65	-39.03	-35.79
<i>EMMacro – PCA</i>	-38.50	-36.14	-41.10	-102.75	-147.09	-128.42
<i>EMFinancial – PCA</i>	-35.22	-35.80	-36.51	-32.40	-36.67	-37.00
<i>EMGlobal – PCA</i>	-30.62	-28.49	-29.62	-34.52	-53.30	-60.29
<i>Local – PLS</i>	-13.21	-15.75	-16.34	-30.69	-41.95	-39.71
<i>EMMacro – PLS</i>	-49.04	-52.79	-76.18	-76.60	-77.86	-119.01
<i>EMFinancial – PLS</i>	-34.31	-36.84	-35.05	-40.57	-35.87	-38.82
<i>EMGlobal – PLS</i>	-30.59	-28.51	-30.63	-41.29	-54.86	-59.01

Note: See notes to Table C1.

Table C5: Utility gains across all maturities

## Panel E: Turkey

$rx_{t+1}^{(2)}$	$h = 1$	$h = 2$	$h = 3$	$h = 6$	$h = 9$	$h = 12$
<i>Local – PCA</i>	55.51	53.75	53.07	43.01	-23.82	-15.65
<i>EMMacro – PCA</i>	74.69	72.85	69.95	58.04	-5.87	-7.40
<i>EMFinacial – PCA</i>	41.82	41.03	42.94	45.15	-13.19	3.21
<i>EMGlobal – PCA</i>	63.61	63.22	61.86	48.91	-22.16	-28.78
<i>Local – PLS</i>	97.88	99.63	100.97	101.17	44.76	29.13
<i>EMMacro – PLS</i>	97.09	100.30	100.34	104.14	51.38	38.51
<i>EMFinacial – PLS</i>	88.54	87.12	86.97	81.34	21.12	-14.58
<i>EMGlobal – PLS</i>	97.99	98.91	100.50	101.55	41.43	22.93
$rx_{t+1}^{(3)}$						
<i>Local – PCA</i>	36.09	35.56	34.77	21.70	-18.52	4.72
<i>EMMacro – PCA</i>	41.32	39.63	39.40	29.18	-12.37	-14.50
<i>EMFinacial – PCA</i>	15.77	13.17	10.34	0.83	-40.33	-14.64
<i>EMGlobal – PCA</i>	50.53	50.74	50.44	37.40	-10.29	-13.16
<i>Local – PLS</i>	84.30	86.98	89.72	87.05	48.36	33.92
<i>EMMacro – PLS</i>	87.12	89.48	92.47	92.01	55.75	40.03
<i>EMFinacial – PLS</i>	77.23	76.85	77.60	69.90	32.63	19.20
<i>EMGlobal – PLS</i>	84.88	86.94	89.72	88.06	50.02	24.42
$rx_{t+1}^{(4)}$						
<i>Local – PCA</i>	24.88	24.38	23.82	10.84	-13.45	16.62
<i>EMMacro – PCA</i>	38.88	36.74	36.23	23.99	0.85	0.58
<i>EMFinacial – PCA</i>	47.85	43.81	36.20	9.73	7.84	21.49
<i>EMGlobal – PCA</i>	46.80	46.58	46.01	29.60	3.54	4.07
<i>Local – PLS</i>	81.84	84.63	87.38	81.84	60.34	32.76
<i>EMMacro – PLS</i>	84.08	86.89	90.13	86.74	66.14	35.11
<i>EMFinacial – PLS</i>	76.86	77.52	78.85	71.97	58.45	48.70
<i>EMGlobal – PLS</i>	81.35	83.80	86.63	81.53	63.96	21.40
$rx_{t+1}^{(5)}$						
<i>Local – PCA</i>	26.68	26.19	25.60	18.05	7.17	43.34
<i>EMMacro – PCA</i>	45.74	44.64	44.66	37.21	27.02	28.64
<i>EMFinacial – PCA</i>	58.14	55.79	50.34	33.25	40.42	53.17
<i>EMGlobal – PCA</i>	50.88	50.81	50.82	41.36	29.76	33.07
<i>Local – PLS</i>	81.96	85.04	88.07	85.78	75.34	53.77
<i>EMMacro – PLS</i>	83.82	87.20	90.81	90.05	79.29	53.17
<i>EMFinacial – PLS</i>	72.41	72.78	74.23	67.74	57.65	43.66
<i>EMGlobal – PLS</i>	81.01	84.08	87.26	85.05	80.24	50.37

Note: See notes to Table C1.