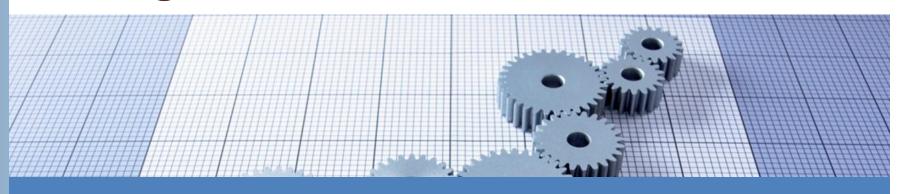
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Capital Flows to Frontier Emerging Markets – May 2017

Yvette Babb (AC) (44-20) 7742-0634 yvette.babb@jpmorgan.com J.P. Morgan Securities plc

See the end pages of this presentation for analyst certification and important disclosures.

Understanding capital flows

International investors optimal portfolio allocation decisions

"Cross-border capital flows reflect decisions by resident and non-residents to allocate investments across countries. Investments in a particular country are more desirable the higher the risk-adjusted returns relative to those from investing in other countries. Expected returns from investing in a particular country can be related to factors such as growth and interest rate differentials, risk appetite of investors and quality of domestic policy making and institutions"

IMF (2016) Understanding the Slowdown in Capital Flows in Emerging Markets, WEO, Chapter 2, April 2016

Determinants of capital flows: push factors influence whether inflow surges occur and riskiness of flows, while pull factors determine direction and magnitude of surges

Push/Pull factors

- Growth differential vis-à-vis United States
- Interest rate differential vis-à-vis the United States

Push factors

- Commodity prices
- Global liquidity
- US Corporate Spread
- US Yield Gap
- Global risk aversion

Structural country specific factors

- Trade openness
- Reserves
- Exchange rate regime
- Institutional quality
- Income per capita
- Capital openness
- Financial development

+

- Public finances

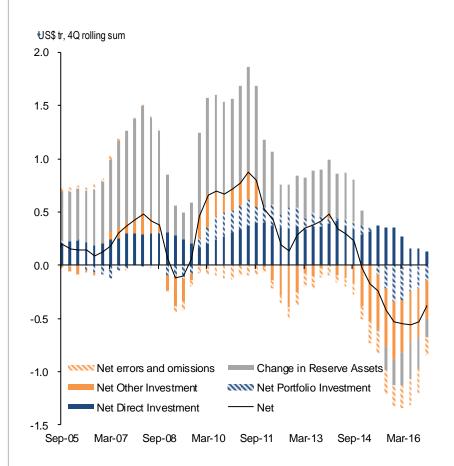


Determinants of flows differ across type of inflow (gross or net) and across instruments

Hannan S. (2017) The Drivers of Capital Flows in Emerging Markets Post Global Financial Crisis, IMF Working Paper WP/17/52 IMF (2016) Understanding the Slowdown in Capital Flows in Emerging Markets, WEO, Chapter 2, April 2016

Capital flows

Capital flows to EM



Source: IMF and J.P. Morgan.

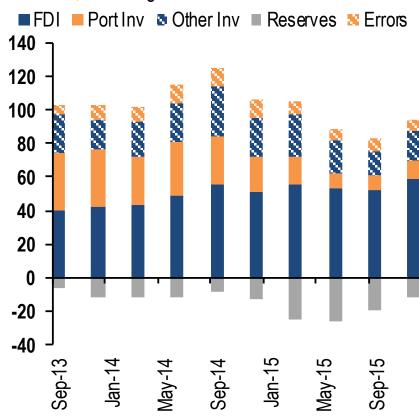
Data for EM includes China, India, Korea, Indonesia, Taiwan, Thailand, Malaysia, Singapore, Hong Kong, Philippines (Asia), Russia, Turkey, Poland, South Africa, Israel, Romania, Hungary, Czech Republic (EMEA), Brazil, Mexico, Argentina, Venezuela, Colombia, Chile, Peru, Ecuador, Uruguay (Latam)

NB - Balance of Payment data challenges in 60 LIDC countries limits scope for analysis

Araujo et al (2017) most comprehensive dataset on LIDC capital flows – shows that 9 countries received over 80% of non-FDI private inflows 2010-2014 (US\$29bn per annum)

Capital flows to Frontier EM

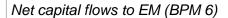
US\$ bn, 4Q rolling sum

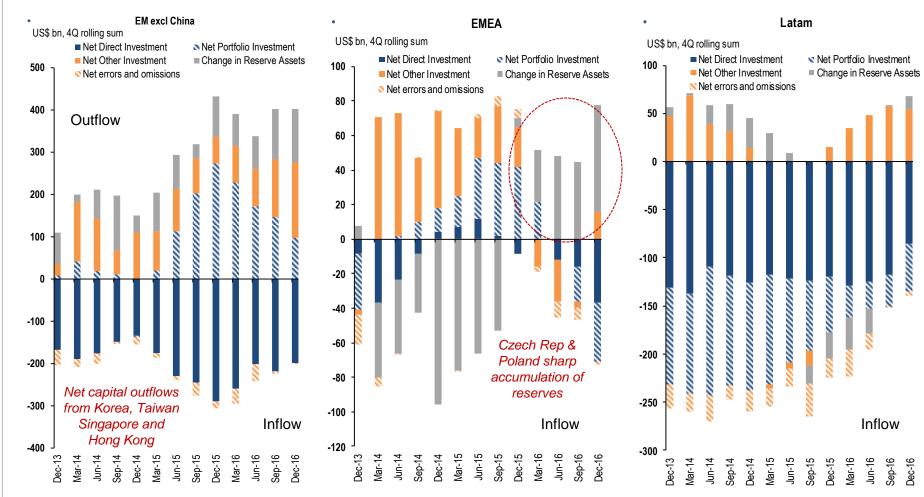


Source: IMF and J.P. Morgan, Positive flow represents net outflow and vice versa. Data for Frontier EM includes 25 countries, which form part of Next Generation Emerging Market Index (which includes in total 31 markets), including Angola, Armenia, Belize, Bolivia, Costa Rica, Ecuador, Egypt, El Salvador, Georgia, Ghana, Guatemala, Honduras, Iraq, Jamaica, Jordan, Mongolia, Nigeria, Pakistan, Paraguay, Sri Lanka, Suriname, Tunisia, Vietnam, Zambia (5 low income developing countries, 7 lower middle income countries and 9 higher middle income countries)

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Capital flows: BOP data show rise non-resident portfolio flows to EMEA and LATAM

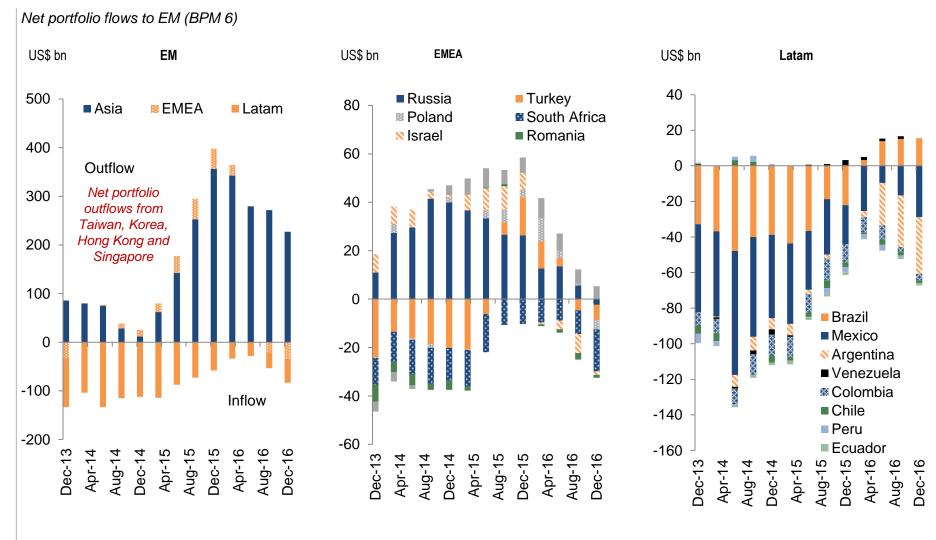




Source: national sources and J.P. Morgan. Positive flow represents net outflow and vice versa.

Data for Emerging Europe and Africa (EMEA) includes Russia, Turkey, Poland, South Africa, Israel, Romania, Hungary, Czech Republic. Latin America (Latam) includes Brazil, Mexico, Argentina, Venezuela, Colombia, Chile, Peru, Ecuador, Uruguay

Capital flows: BOP data show rise non-resident portfolio flows to EMEA and LATAM



Source: national sources and J.P. Morgan. Positive flow represents net outflow and vice versa.

Non-resident inflows: direct investment

Direct Investment	Direct Investment Liabilities													
US\$ mn	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	
NEXGEM	42,877	43,522	43,649	41,754	41,669	40,819	41,059	41,373	40,795	44,090	40,044	33,774	34,506 %	6 of GDP
Armenia	376	346	527	545	615	404	260	199	122	178	140	157	193	1.8
Belize	110	92	118	134	140	141	134	151	94	59	69	63	109	6.3
Bolivia	1,389	1,750	1,725	1,614	1,115	657	613	547	417	504	354	190	-	0.5
Costa Rica	2,800	3,205	3,116	3,095	3,354	3,276	3,067	3,392	3,371	3,145	3,270	3,326	3,247	5.6
Ecuador	702	727	750	629	658	773	819	755	861	1,060	1,046	989	870	0.9
Egypt	3,652	4,192	4,101	4,114	4,690	4,612	6,123	6,380	6,416	6,925	7,151	6,933	7,448	2.2
El Salvador	385	242	309	149	227	509	532	656	570	497	573	498	617	2.3
Georgia	951	956	1,030	1,003	1,463	1,750	1,728	2,003	1,774	1,571	1,670	1,663	1,635	11.5
Ghana	2,705	3,227	3,667	3,593	3,314	3,364	3,046	3,036	3,260	3,192	-	-	-	7.4
Guatemala	1,340	1,353	1,278	1,228	1,182	1,166	1,174	1,130	1,182	1,176	1,197	1,187	1,141	1.7
Honduras	1,088	1,069	1,075	1,158	1,270	1,294	1,400	1,304	1,286	1,317	1,301	-	-	6.1
Iraq	3,735	5,131	5,275	5,296	5,014	4,782	4,628	4,265	3,766	3,316	2,907	2,687	2,490	1.5
Jamaica	477	545	576	579	576	582	658	706	837	925	950	857	770	5.5
Keny a	-	-	-	-	-	-	-	-	-	1,486	1,345	1,047	746	1.1
Mongolia	1,971	2,060	1,495	1,152	933	338	-51	-54	-237	94	375	-4,198	-4,109	-37.3
Nigeria	7,693	5,608	5,204	4,642	4,664	4,694	4,290	3,534	3,592	3,064	3,228	3,509	3,681	0.9
Suriname	237	187	160	130	-167	-60	35	49	296	195	106	155	191	5.3
Tunisia	2,666	1,832	1,748	1,714	1,770	1,831	1,922	2,088	1,927	2,002	1,974	1,923	1,977	4.7
Vietnam	8,718	8,900	9,107	9,125	9,170	9,200	9,332	9,550	9,630	11,800	12,390	12,790	13,500	6.7
Zambia	1,883	2,100	2,389	1,855	1,681	1,508	1,349	1,683	1,633	1,583	-	-	-	7.4

Source: IM F, J.P. Morgan. Tunisia, Egypt, Nigeria are national statistic sources. NEXGEM countries listed in table

Non-resident inflows: portfolio

US\$ mn, 4Q rolling sum	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16
NEXGEM	30,509	24,885	17,876	17,125	17,950	9,748	10,959	7,610	4,508	7,761	4,285	3,417	6,036
Armenia	691	695	663	671	-36	-39	243	255	245	262	21	51	73
Belize	-	-	-	-	-	-	-	-	-	-	-	-	-
Bolivia	-	-	-	-	14	23	11	16	15	13	50	51	-
Costa Rica	3,143	2,583	2,350	2,150	1,486	906	2,026	951	1,136	724	-373	412	422
Ecuador	-75	-6	-7	1,994	1,993	1,992	2,743	1,493	1,498	848	104	-646	1,355
Egypt	3,072	2,963	3,464	1,237	286	-2,084	-2,024	-639	-2,360	-129	-74	-1,287	-722
El Salv ador	-	-	-11	-	-	-	-	Egypt No	ovember 2016	devaluation	orompted -US	\$1bn in inflow	s in 4Q16-
Georgia	-209	-43	9	312	394	247	205	10	-35	-71	-31	66	-246
Ghana	1,134	659	432	479	751	-	Ghana - US	S\$750 m E uro	bond issūand	e and US\$1.6	6 billion in fixe	d income inflo	ows in 2016
Guatemala	394	926	1,064	1,047	1,334	833	-6	-17	-25	-57	-58	661	719
Honduras	498	1,007	508	530	530	20	20	-4	-4	-1	-10 -	-	
Iraq	817	841	33	36	29	25	36	37	34	-15	-40	-44	-37
Jamaica	144	99	176	338	1,086	782	858	501	1,670	1,797	1,466	1,869	43
Keny a		-	-	-	-	-	-	-		34	212	337	639
Mongolia	1,459	-142	238	270	276	311	-85	544	238	277	287	127	454
Nigeria	17,451	13,652	7,781	6,200	7,879	5,293	5,469	4,087	612	2,535	2,493	1,556	2,738
Suriname	-	-	-	-	-	-	-	-	-	-	-	***************************************	
Tunisia	133	180	181	127	146	161	239	340	429	401	316	191	88
Vietnam	1,636	1,381	1,008	612	643	93	28	-123	-153	-65	-78	71	511
Zambia	222	90	-12	1,125	1,141	1,185	1,196	159	1,209	1,207	-Pic	k up in inflows	s in 4Q17 -

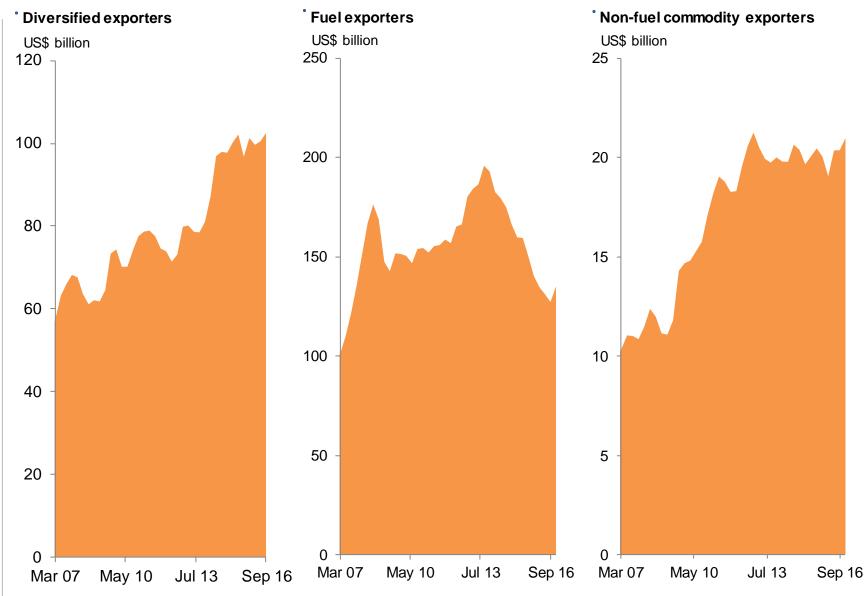
Source: IM F, J.P. Morgan. Tunisia, Egypt, Nigeria are national statistic sources. NEXGEM countries listed in table

Non-resident inflows: other investment

Other Investm	ent Liabilities												
US\$ mn	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16
NEXGEM	23,987	29,641	31,005	34,196	37,702	37,351	38,896	38,384	28,917	29,075	28,311	34,857	41,802
Armenia	536	415	64	-213	-280	249	285	377	502	369	426	318	433
Belize	10	38	71	26	47	17	3	46	-28	-1	-28	-56	6
Boliv ia	3,176	3,133	2,909	2,473	1,594	832	762	885	796	802	788	854	-
Costa Rica	979	604	647	541	695	261	202	117	359	644	630	549	100
Ecuador	3,517	4,186	2,169	2,064	3,233	3,472	4,337	5,768	3,179	2,871	4,161	4,071	4,297
Egypt	614	-1,190	-1,627	395	1,839	3,534	3,750	5,036	5,283	6,675	7,694	7,103	7,607
El Salvador	697	744	740	584	628	-342	-656	-302	-351	293	904	694	741
Georgia	101	182	-89	-109	227	381	760	1,038	1,031	1,255	1,138	1,071	1,293
Ghana	917	1,210	844	538	320	-102	-608	-735	-931	-1,053	-	-	-
Guatemala	635	831	281	310	121	292	1,149	1,447	1,017	341	-322	-990	-920
Honduras	668	574	638	660	345	453	393	168	451	387	347	-	-
Iraq	2,756	4,131	4,212	3,904	1,100	1,360	1,352	797	893	-959	1,116	4,970	7,203
Jamaica	166	598	838	818	601	421	418	334	-2,189	-2,236	-2,373	-2,719	-38
Keny a	-	-	-	-	-	-	-	-	-	4,625	4,233	4,768	5,626
Mongolia	1,384	1,482	1,546	1,138	1,464	1,247	1,216	1,390	920	686	1,049	5,133	5,017
Nigeria	816	2,343	5,046	8,004	9,934	10,661	10,765	6,219	3,831	-250	-1,973	-1,786	275
Suriname	173	207	323	368	335	468	466	651	624	390	263	153	163
Tunisia	6,560	5,863	6,983	6,907	9,385	8,629	9,765	8,703	6,754	8,221	6,170	8,098	8,848
Vietnam	-	4,200	5,332	5,541	5,840	5,238	4,547	6,449	6,657	5,119	4,090	2,626	1,151
Zambia	283	90	79	246	275	281	-11	-4	118	896	-	-	-

Source: IM F, J.P. Morgan. Tunisia, Egypt, Nigeria are national statistic sources. NEXGEM countries listed in table

EM Frontier – net reserve accumulation stalls amidst diversified and nonfuel exporters

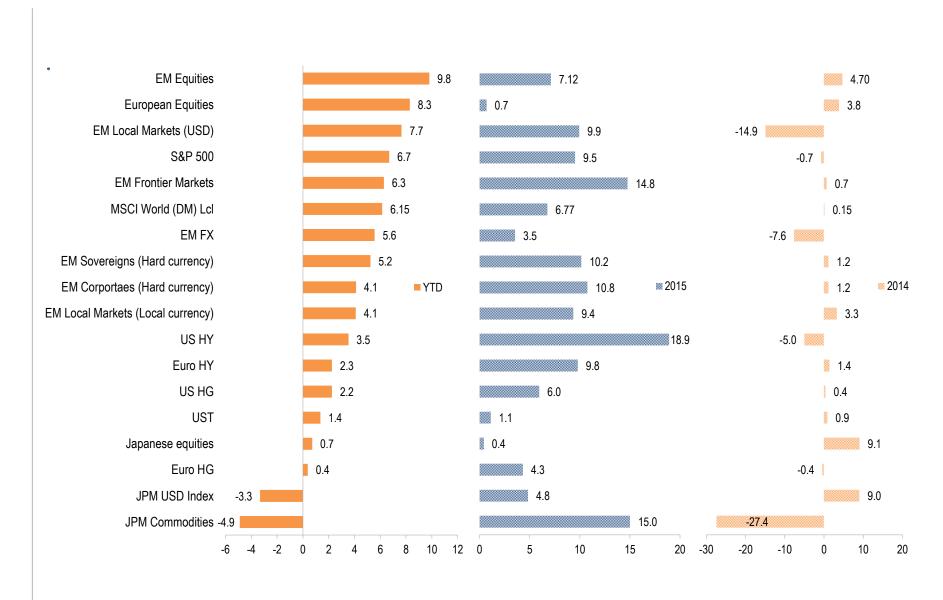


Source: IMF, central banks

Diversified exporters include Senegal, Cameroon, Cote d'Ivoire, Ghana, Honduras, Kenya, Vietnam, Armenia, El Salvador, Pakistan, Sri Lanka, Tunisia, Costa Rica, Jordan, Suriname

Fuel exporters include Bolivia, Nigeria, Egypt, Angola, Ecuador, Gabon, Iraq, Paraguay Non fuel exporters include Mozambique, Mongolia, Zambia, Guatemala, Belize, Georgia, Jamaica J.P.Morgan

Chasing the returns: EM and Frontier markets deliver solid returns in 2016, with sell-off in EM post US elections reversing



Source: Bloomberg and J.P. Morgan.

EM flow momentum has been strong following widespread outflows at the end of 2016

						Japan	Euro					Euro
	EM FI	US HG FI	US HY FI	US Equities	EM Equities	Equities	Equities	Munis	Mortgages	TIPS	Euro HG FI*	F
Jan 2015	2.2	13.79	2.69	-20.08	-5.3	4.89	17.82	4.79	2.19	-0.03	3.58	
Feb 2015	6.3	15.57	9.30	1.41	3.1	2.77	39.07	2.83	1.27	1.15	4.31	
Mar 2015	1.7	9.51	-3.18	-1.72	-4.2	14.77	44.06	1.31	1.05	2.42	4.88	
Apr 2015	2.6	6.67	1.24	-34.15	3.1	8.00	19.67	0.53	0.48	1.30	1.44	
May 2015	2.1	11.49	-1.73	-20.89	2.7	13.35	5.52	-0.98	0.21	0.55	-0.38	
June 2015	-0.6	2.41	-5.84	-7.37	-6.2	16.19	12.74	-2.50	0.40	0.26	-3.12	
Jul 2015	1.4	-2.47	-4.39	-14.14	-12.6	19.64	31.52	-1.19	0.53	-0.09	0.04	
Aug 2015	-9.2	-9.03	-5.03	-21.60	-24.9	14.93	12.80	-2.21	1.07	-1.77	-0.07	
Sep 2015	-7.3	-3.34	-2.97	-9.91	-10.4	10.13	9.47	-1.22	0.99	-0.59	-2.21	
Oct 2015	-3.2	5.54	8.00	-2.46	2.7	-1.43	12.12	2.12	1.91	-0.21	0.15	
Nov 2015	-3.8	3.92	-3.43	-4.81	-6.6	-0.99	8.33	2.04	1.05	0.33	1.21	
Dec 2015	-6.5	0.73	-11.11	-14.90	-5.5	4.27	9.07	5.47	0.28	-0.22	-0.57	
Jan 2016	-2.9	5.96	-4.40	-25.50	-10.4	7.60	2.57	4.39	1.55	-1.24	-2.93	
Feb 2016	-0.7	6.56	2.23	-16.09	-3.8	-0.42	-7.22	4.93	2.84	-0.65	-2.45	
Mar 2016	7.3	14.88	11.70	8.81	8.5	-0.67	-11.64	5.72	2.61	1.66	3.58	
Apr 2016	4.5	13.84	3.02	-12.83	1.7	-9.08	-12.92	5.51	1.68	1.83	2.94	
May 2016	0.5	14.38	-5.83	-19.45	-5.6	-0.55	-10.47	7.16	1.45	0.48	1.43	
Jun 2016	3.2	14.84	-3.80	-22.57	-2.4	1.18	-18.09	6.51	0.64	-0.14	0.53	
Jul 2016	17.3	18.08	6.65	-1.87	11.3	-1.78	-25.50	6.82	1.01	1.14	2.99	
Aug 2016	11.8	18.70	-0.15	-9.52	9.2	1.62	-11.32	6.83	0.76	1.13	2.49	
Sep 2016	9.9	11.38	-0.10	-13.17	4.0	-6.52	4.41	3.70	0.76	1.01	0.60	
Oct 2016	4.8	9.88	1.63	-12.70	6.4	-3.43	-6.18	0.98	0.30	2.00	-0.27	

-0.13

0.32

0.00

-0.13

-0.13

-0.07

-8.14

0.57

0.71

-2.20

-2.20

0.17

-10.66

-7.60

0.88

0.45

-0.28

2.61

Note: Data as of April 26th, 2017. *Euro flows have been converted to USD.

2.25

2.55

4.43

10.52

15.13

8.34

-7.51

6.36

-0.12

1.74

-7.53

1.96

23.76

16.67

-5.14

16.96

15.84

-0.08

Source: EPFR Global, J.P. Morgan, Bloomberg

-9.4

-3.6

4.0

7.8

10.3

8.0

Nov 2016

Dec 2016

Jan 2017

Feb 2017

Mar 2017

Apr 2017

3.15

0.67

1.27

0.98

1.32

0.24

-0.41

-0.42

-0.27

-1.20

-1.13

1.00

0.19

0.18

-2.06

-3.89

-0.94

0.38

0.27

-0.61

-9.7

-7.4

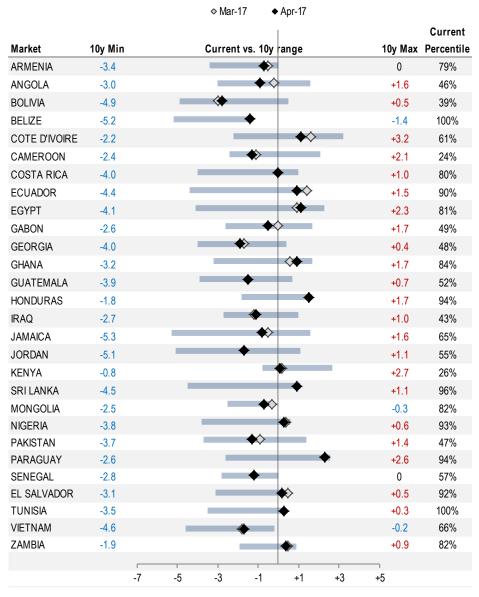
3.0

5.6

5.8

8.0

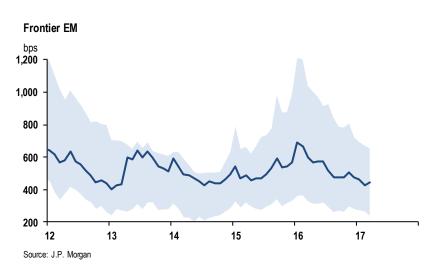
Market views on Frontier EM: relative client positioning in EMBI Global Diversified



Source: J.P. Morgan EM Strategy Client Survey

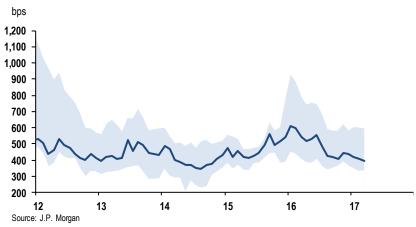
Note: score ranges from -10 to +10 indicating significant underweight to significant overweight

Sovereign bond spreads – sharp rise up to 1Q16 largely reversed



Note: Line represents median (area 10 – 90th percentile)

* Frontier EM diversified exporters spread to worst



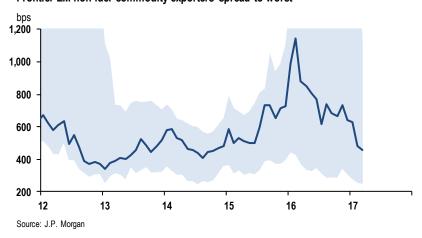
Note: sample includes Armenia, Costa Rica, El Salvador, Jordan, Pakistan, Sri Lanka, Suriname, Tunisia, Vietnam, Ethiopia Kenya, Ghana, Cote d'Ivoire, Cameroon, Honduras, Senegal

Frontier EM fuel exporters spread to worst



Note: sample includes Nigeria, Bolivia, Egypt, Iraq, Ecuador, Angola, Paraguay, Gabon .

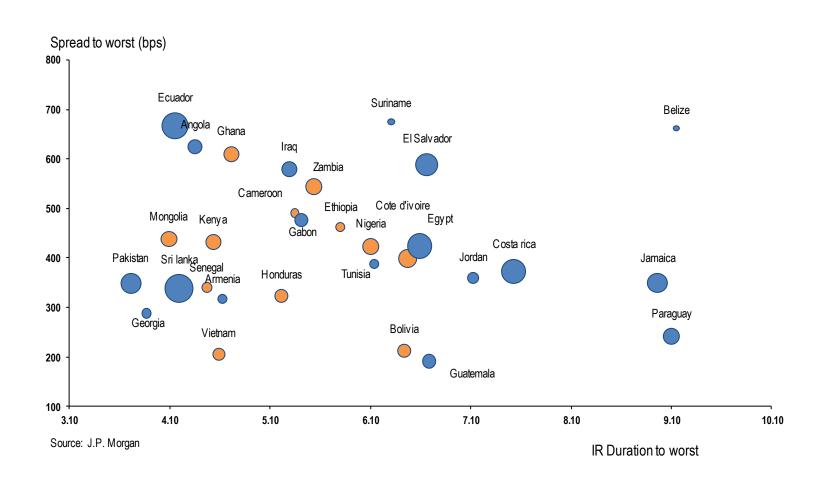
Frontier EM non-fuel commodity exporters spread to worst



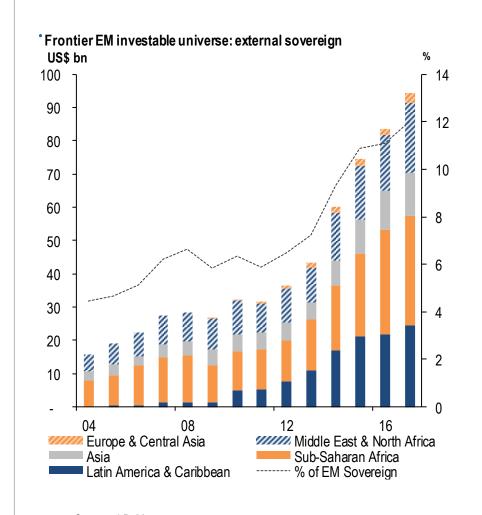
Note: sample includes Mozambique, Zambia, Mongolia, Guatemala, Georgia, Jamaica, Belize

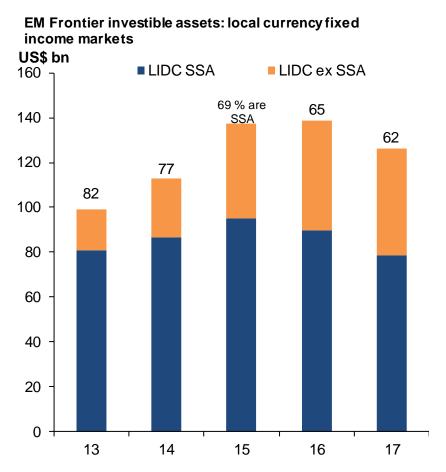
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EM Frontier sovereign bond spreads



Financial development and capital openness: the stock of investable emerging and frontier assets is growing





Source: J.P. Morgan

JP Morgan expects Senegal, Cote d'Ivoire, Nigeria, Sri Lanka, Vietnam, Jamaica & Ecuador to return to the market in 2017 Source: J.P. Morgan

Local market development strategies include introduction of benchmark bonds, primary dealers, trading platforms

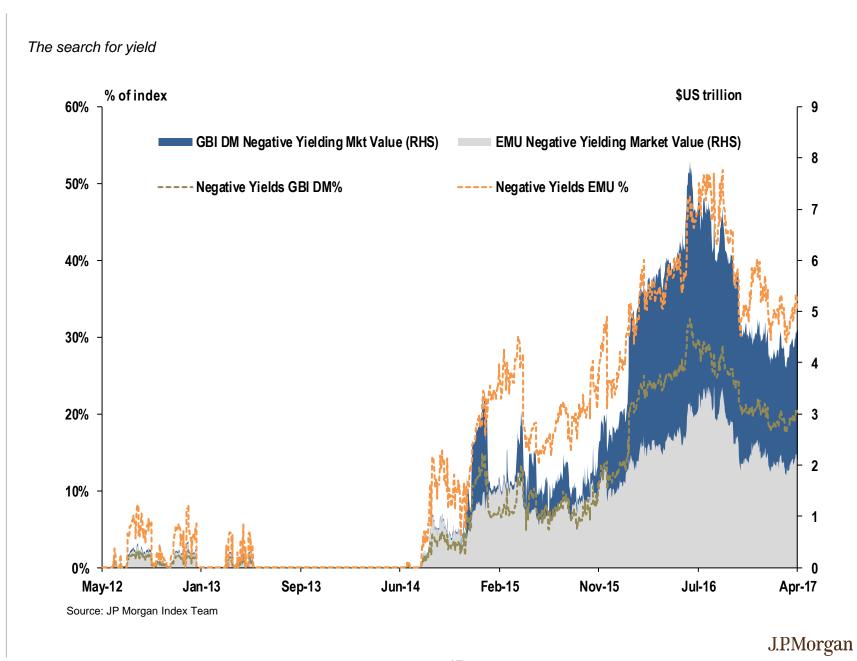
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US and UK 10Y yields to finish the year 76bp and 66bp higher from current levels, respectively

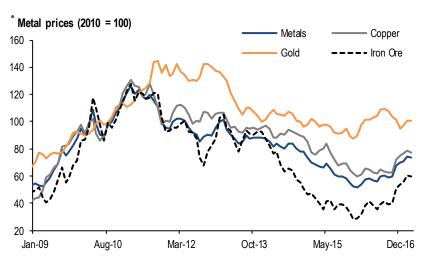
10Y benchmark yields and forecasted yields across regions; % 3.5 US 10y — UK 10y — EUR 10y — JPY 10y 3.0 Dec-17, 3.00 • 2.5 2.0 Dec-17, 1.70 👃 1.5 1.0 Dec-17, 0.90 * 0.5 Dec-17, 0.15 * 0.0 -0.5 Apr-13 Oct-13 Oct-14 Apr-15 Oct-15 Apr-16 Oct-16 Apr-17 Oct-17 Apr-14

Source: J.P. Morgan, Bloomberg, as of Apr 14, 2017 COB

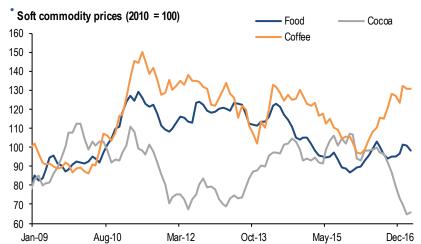
Global liquidity, negative yields and the search for return



Commodity prices – forecasts imply that energy and metal prices to remain off the lows of 2016







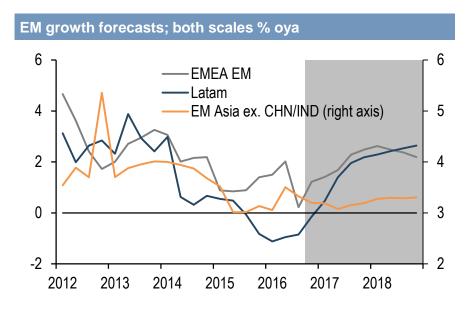
J.P. Morgan Commodity Forecasts 4Q17 2017 1Q17 2Q17 3Q17 54.50 Brent (av g \$/barrel) 56.00 60.00 52.50 55.78 Gold (US\$/t oz.) 1,262 1,244 1,210 1,180 1,214 Copper (US\$/t oz.) 5,400 5,689 6,000 5,700 5,734

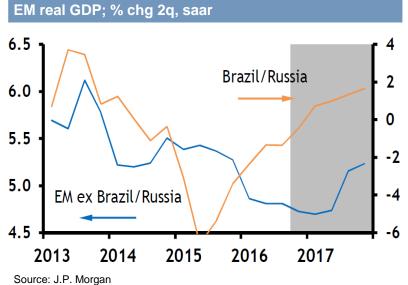
	1Q18	2Q18	3Q18	4Q18	2018
Brent (av g \$/barrel)	50.00	55.00	57.00	60.00	55.50
Gold (US\$/t oz.)	1,225	1,260	1,330	1,350	1,291
Copper (US\$/t oz.)	5,500	5,700	5,600	5,700	5,625

Source: J.P. Morgan forecasts as of 28 April 2017

Source: ICCO, IMF

EM growth has bottomed but remains below potential – risk appetite buoyed by stabilization in EM-DM growth differential





Real GDP; %oya except where noted								
		2017 (%q/q, saar)			_			
	2016	1Q	2Q	3Q	4Q	2017	2018	Potential
Developed markets	1.6	1.8	2.5	1.8	1.8	2.0	1.7	1.5
Emerging markets	3.8	4.3	4.2	4.6	4.4	4.3	4.5	4.8
EM Asia	5.9	5.7	5.7	6.1	5.7	5.8	5.6	6.0
EMEA EM	1.5	1.6	1.8	2.1	2.0	1.9	2.7	3.0
Latin America	-0.8	2.9	1.7	2.0	2.3	1.6	2.5	2.4

Source for all charts: BIS, IMF, J.P. Morgan

Frontier EM and LIDC growth dynamics

Fronter EM and SSA growth trend



Source: IMF, J.P. Morgan. Note: Shaded region represent 10-90th percentile

Annex: Next Generation Emerging Market economies

JP Morgan Next Generation Emerging Market Countries

	Low Income Developing Country	World Bank Income Group (Lov	v/middle income)	Region		GDP (US\$ billion, current 2016)
Ethiopia	V	LIC		Sub-Saharan Africa	Diversified exporter	73
Mozambique	V	LIC		Sub-Saharan Africa	Non-fuel commodity exporter	11
Senegal	V	LIC		Sub-Saharan Africa	Diversified exporter	15
Bolivia	V	LMIC		Latin America & Caribbean	Fuel exporter	35
Cameroon	V	LMIC		Sub-Saharan Africa	Diversified exporter	29
Côte d'Ivoire	V	LMIC		Sub-Saharan Africa	Diversified exporter	35
Ghana	V	LMIC		Sub-Saharan Africa	Diversified exporter	43
Honduras	V	LMIC		Latin America & Caribbean	Diversified exporter	21
Kenya	V	LMIC		Sub-Saharan Africa	Diversified exporter	69
Mongolia	V	LMIC		East Asia & Pacific	Non-fuel commodity exporter	11
Nigeria	V	LMIC		Sub-Saharan Africa	Fuel exporter	406
Vietnam	V	LMIC		East Asia & Pacific	Diversified exporter	201
Zambia	V	LMIC		Sub-Saharan Africa	Non-fuel commodity exporter	21
Armenia		LMIC		Europe & Central Asia	Diversified exporter	10
Egypt		LMIC		Middle East & North Africa	Fuel exporter	332
El Salvador		LMIC		Latin America & Caribbean	Diversified exporter	27
Guatemala		LMIC		Latin America & Caribbean	Non-fuel commodity exporter	68
Pakistan		LMIC		South Asia	Diversified exporter	284
Sri Lanka		LMIC		South Asia	Diversified exporter	83
Tunisia		LMIC		Middle East & North Africa	Diversified exporter	42
Angola			UMIC	Sub-Saharan Africa	Fuel exporter	96
Belize			UMIC	Latin America & Caribbean	Non-fuel commodity exporter	2
Costa Rica			UMIC	Latin America & Caribbean	Diversified exporter	58
Ecuador			UMIC	Latin America & Caribbean	Fuel exporter	98
Gabon			UMIC	Sub-Saharan Africa	Fuel exporter	14
Georgia			UMIC	Europe & Central Asia	Non-fuel commodity exporter	14
Iraq			UMIC	Middle East & North Africa	Fuel exporter	167
Jamaica			UMIC	Latin America & Caribbean	Non-fuel commodity exporter	14
Jordan			UMIC	Middle East & North Africa	Diversified exporter	39
Paraguay			UMIC	Latin America & Caribbean	Fuel exporter	27
Suriname			UMIC	Latin America & Caribbean	Diversified exporter	4

Source: IMF, World Bank, JP Morgan

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