Ashmore

Five stylised facts about EM and commodities

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The narrative of Emerging Markets (EM) as a commodity play is simple, intuitively appealing and not particularly flattering. Since commodity prices are notoriously volatile, it follows that commodity dependent EM countries will also be volatile and possibly notorious! Yet, EM countries have developed a great deal since the 1980s. Today, they are a very diverse bunch. Besides, commodity specialisation is not a bad thing *per se*.

In light hereof, this report seeks to establish basic stylised facts about commodity specialisation in EM countries using recent data. This report also discusses some of the implications arising from the stylised facts and raises a question for future research.

Data

The following analysis is based on estimates of commodity imports and exports for the 79 most traded EM countries constructed from the bottom up using Standard International Trade Classification (SITC) data from 2014-2015. The data comes from the 2016 UNCTAD *State of Commodity Dependence Report* as well as data from IMF's *Direction of Trade Statistics* (DOTS) and IMF's *World Economic Outlook* (WEO).[1,2,3] The Appendix lists the countries in the sample and basic information on the structure of their exports and imports.

Five stylised facts about EM commodity specialisation

This section presents five stylised facts about the commodity exposure of EM countries. Figure 1 summarises commodity exposures for the whole sample as well as sub-samples of specialist commodity exporters and non-specialists. We define specialist commodity exporters as EM countries, where commodities make up more than half of their total exports.

Fig 1: **Commodity exposures by region and specialisation**

	Commodities (% of total exports)	Share of EM GDP	Number of countries
All EM countries			
All	**58%**	**100%**	**79**
Asia	33%	56%	12
Eastern Europe	32%	13%	15
Latin America	68%	18%	21
Africa	82%	5%	19
Middle East	57%	8%	12
Specialist commodity exporters			
All	**81%**	**34%**	**47**
Asia	78%	5%	2
Eastern Europe	85%	48%	3
Latin America	77%	75%	17
Africa	85%	93%	18
Middle East	76%	78%	7
Non-specialists			
All	**24%**	**66%**	**32**
Asia	25%	95%	10
Eastern Europe	18%	52%	12
Latin America	31%	25%	4
Africa	33%	7%	1
Middle East	32%	22%	5

Source: Ashmore, UNCTAD, IMF.

Stylised Fact 1

Specialist commodity exporters make up about two-thirds of EM countries, but only one-third of EM GDP

- In GDP terms, EM countries are mainly specialised in non-commodity exports. Specialist commodity exporters only account for 34% of the combined GDP of the sample. However, numerically the commodity specialists make up the majority (47 compared to 32 non-specialists). Non-specialists make up 66% of sample GDP.

The old unflattering narrative of EM countries as pure commodity plays retains its intuitive appeal, but it is outdated and no longer supported by the data

[1] The 2016 version is the most recent *State of Commodity Dependence Report*: http://unctad.org/en/PublicationsLibrary/suc2017d2.pdf. The report uses data from 2014 and 2015. We do not think that this makes a material difference the results, because the structure of economies change only slowly over time.

[2] The 2016 State of Commodity Dependence Report calculates the commodity share of exports and imports using the following codes in the Standard International Trade Classification (SITC), Third Revision: 0 + 1 + 2 + 3 + 4 + 667 + 68 + 971.

[3] IMF's *Direction of Trade Statistics* can be found here: http://data.imf.org/?sk=9D6028D4-F14A-464C-A2F2-59B2CD424B85
The IMF's *World Economic Outlook* database is located here: https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx

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Stylised Fact 2

There is huge variation in commodity export specialisation across EM countries and regions

- Asia and Eastern Europe are predominantly non-commodity specialists. Only two of the twelve Asian economies in the sample are majority commodity exporters and they account for only 5% of Asian GDP. In Eastern Europe, there are only three specialist commodity exporters out of 15 countries, which jointly make up 48% of Eastern European GDP, but this drops to just 11% if Russia is excluded from the sample.
- By contrast, Latin America, Africa and Middle East are predominantly specialist commodity exporters. Specialist commodity exporters in these regions account for 75%, 93% and 78% of regional GDP, respectively.

EM countries fall into two categories – heavily specialist commodity producers and non-specialists with dramatically different exposures to commodities

Fig 2: **Commodity exposures by region and specialisation**

	Net commodity exports (% of GDP)	Commodity imports (% of GDP)
All EM countries		
All	**5%**	**11%**
Asia	-1%	14%
Eastern Europe	2%	10%
Latin America	6%	9%
Africa	9%	12%
Middle East	10%	12%
Specialist commodity exporters		
All	**12%**	**10%**
Asia	17%	10%
Eastern Europe	21%	2%
Latin America	8%	9%
Africa	10%	12%
Middle East	24%	9%
Non-specialists		
All	**-5%**	**13%**
Asia	-4%	15%
Eastern Europe	-3%	12%
Latin America	-3%	10%
Africa	-8%	16%
Middle East	-10%	17%

Source: Ashmore, UNCTAD, IMF.

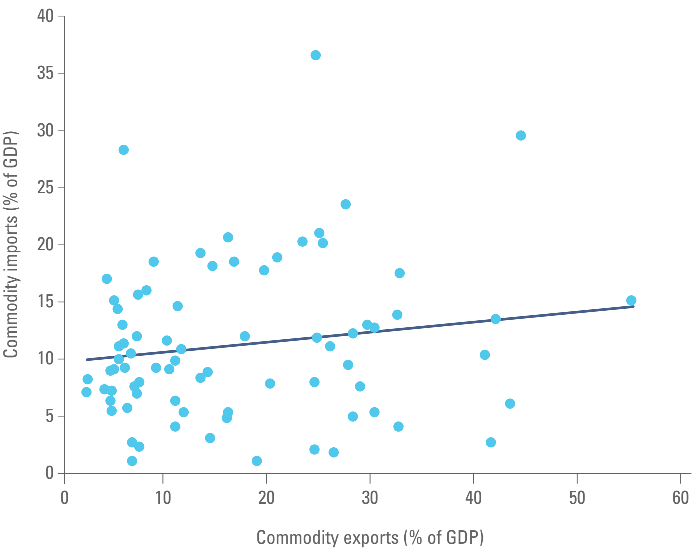
Stylised Fact 3

Economic exposure to commodities is far lower than commodity exports imply

- Net commodity exports – that is, commodity exports minus commodity imports expressed as a share of GDP – are significantly lower than commodity export shares in total trade. Net commodity exports average 5% of GDP for the full sample (Figure 2). Within this aggregate, Asia's net commodity exports are -1% of GDP, i.e. Asia is a net commodity importing region, while Eastern European net commodity exports average a very modest 2% of GDP. Even the specialist commodity exporters in Africa, Latin America and Middle East have surprisingly low economic exposures to commodities with net commodity exports of just 9%, 6% and 10% of GDP, respectively.
- When the sample is divided into specialists and non-specialists, net commodity exports to GDP of the former is 12% compared to -5% for the latter. Net commodity exports as a share of GDP vary from 8% to 24% within the group of specialists, while the non-specialists all turn out to be net commodity importers with net exposures ranging from -10% to -3% of GDP.

Economic exposure to commodities is far lower than exports imply, because commodity imports now offset roughly two-thirds of EM commodity exports

Fig 3: **Positive relationship between commodity exports and imports**



Source: Ashmore, UNCTAD, IMF.

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Stylised Fact 4

EM commodity imports offset two-thirds of EM commodity exports

- A high level of commodity imports is the main reason why net commodity exposures are relatively low, even among the specialist commodity exporters. Commodity imports average 11% of GDP in the sample. The range of commodity imports goes from a low of 9% of GDP in Latin America to a high of 14% of GDP in Asia. Figure 3 illustrates a weak, but positive relationship between GDP shares of commodity exports and imports across the sample.
- In terms of their economic importance, commodity imports are generally more similar across EM countries than commodity exports. Specialist commodity exporters import commodities to the tune of about 10% of GDP, which is not very different from the non-specialists, which import commodities to the tune of 13% of GDP. Hence, the main differences in net commodity exposures across EM countries arise primarily from differences in the structure of exports rather than imports.
- Low net commodity exposure means that generalised commodity price shocks should perhaps not be as large a concern as they are often made out to be. For example, a four-standard deviation shock to commodity prices relative to the mean (which implies a one in a hundred event) would boost Asian GDP by 0.1% and detract 0.2% from Eastern European GDP. The impact on Latin America would be -0.6% of GDP and -0.9% and -1% of GDP in Africa and the Middle East, respectively. In isolation, none of these shocks would suffice to push regional growth rates even close to outright negative territory.[4]

Stylised Fact 5

Specialist commodity exporters tend to be highly specialised

- When a country is a specialist commodity exporter, its average commodity share of total exports is generally very high. Referring back to Figure 1, on average 81% of exports are commodities if a country is a specialist commodity exporter. By contrast, commodities only make up 24% of total exports for the non-specialists. This sharp contrast in the degree of specialisation carries over to regional sub-groups. Among the specialists, commodities make up between 76% and 85% of total exports across the five EM regions compared to just 18% to 33% across the regions for the non-specialists.
- The specialists replicate their heavy commodity specialisation in the types of commodities they produce, as one might expect. Figure 4 shows net commodity exports by broad commodity types (fuel, food and others). The specialists tend to have highly concentrated net exports in just one of these types. By contrast, the non-specialists are far less concentrated in specific commodity types.

Fig 4: **Net commodity exports (% of GDP), by region, specialism and commodity type**

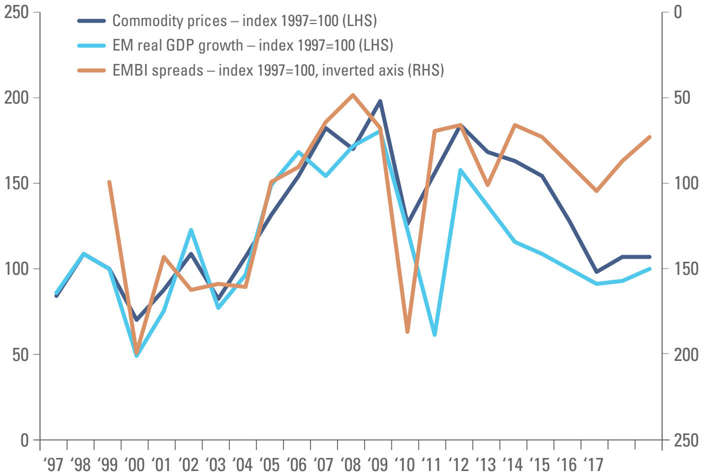
	All Coms	Fuel	Food	Other
All EM countries				
All	**5%**	**2%**	**1%**	**3%**
Asia	-1%	-3%	1%	2%
Eastern Europe	2%	1%	0%	1%
Latin America	6%	0%	3%	3%
Africa	9%	2%	0%	7%
Middle East	10%	13%	-3%	1%
Specialist commodity exporters				
All	**12%**	**7%**	**1%**	**5%**
Asia	17%	1%	-1%	16%
Eastern Europe	21%	20%	0%	1%
Latin America	8%	1%	4%	4%
Africa	10%	2%	0%	7%
Middle East	24%	28%	-3%	2%
Non-specialists				
All	**-5%**	**-5%**	**0%**	**0%**
Asia	-4%	-4%	1%	-1%
Eastern Europe	-3%	-4%	1%	1%
Latin America	-3%	-4%	0%	0%
Africa	-8%	-8%	0%	0%
Middle East	-10%	-7%	-3%	0%

Source: Ashmore, UNCTAD, IMF.

The low net exposure of EM countries to commodities raises an important question: why are growth rates and sovereign spreads still so correlated with commodity prices?

Discussion

Fig 5: **Commodity prices, spreads and growth**



Source: Ashmore, JP Morgan, Thomson-Reuters, IMF World Economic Outlook.

[4] In reality, commodity shocks will coincide with other shocks, including financial ones. Moreover, there may be multiplier effects to the extent that the commodity shock impacts the fiscal stance. This means that the economic shocks associated with commodity price shocks may be different from the estimates produced here.

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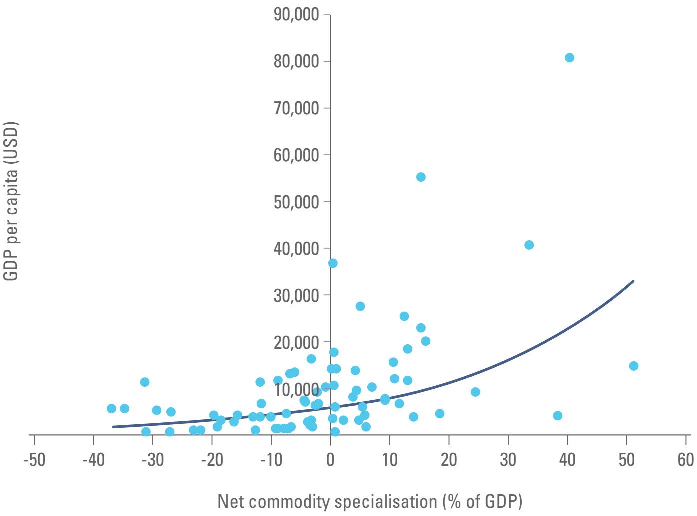
Investors link commodities to EM, because commodity prices are positively correlated with EM growth rates and sovereign bond spreads, at least at the broadest level of aggregation as shown in Figure 5. This positive correlation is often taken to imply causality, since commodity prices are widely regarded as exogenous with respect to individual EM countries.[5]

However, the presumption of causality should be viewed with caution. As shown above, EM countries are very diverse, so it is not possible to generalise about the strength of the relationship between commodities and economic performance across all EM countries. Also, even the specialist net commodity exporters import large quantities of commodities, wherefore their net commodity exposures are lower than their gross export exposures, to the point, in fact, where a good proportion of EM countries are net commodity importers, particularly in Asia. Some countries, such as Singapore, import large quantities of commodities, but re-export them after processing. Commodity specialisation is actually positively correlated with per capita GDP across the sample as shown in Figure 6.

Fig 6: **Net commodity specialisation and GDP per capita**



Source: Ashmore, UNCTAD, IMF.

This underlines another key point, namely that, commodity dependence is not a bad thing *per se*. Some countries have comparative advantages in producing commodities, particularly if they have low population densities and high resource endowments. Whether specialisation in commodities turns out to be a blessing or a curse largely depends on how individual EM countries handle the unique challenges associated with specialisation in commodities.

These include:

a) Macroeconomic issues, such as Dutch Disease, which arise due to the sudden windfalls and violent slumps associated with commodity prices;

b) Finance issues, including possible loss of access to international finance during slumps in commodity prices; and

c) Governance issues, which arise from the tendency for commodity wealth to arise from a small number of sectors of the economy.

These three challenges mean that sound government policies are particularly important in specialist commodity producers.

Conclusion

Based on bottom-up estimates of commodity exports and imports, this report has produced five stylised facts about EM commodity specialisation. The majority of EM countries are specialist commodity exporters, but, in GDP terms, they only make up about one-third of EM. Economic exposure to commodities across EM is far lower than implied by commodity exports, which is largely due to the fact that some two-thirds of EM commodity exports are offset by commodity imports. There is generally huge variation in commodity specialisation across EM countries and regions.

The simple thesis of EM countries as commodity plays therefore does not stand up to closer scrutiny except for the most specialised commodity producers. Looking ahead, it is likely that commodity specialisation in EM will decline further as development continues to broaden economic complexity.

The observation that the economic exposure to commodity shocks is materially lower than implied by gross commodity export exposure raises an important question: why are growth rates and sovereign spreads still so correlated with commodity prices?

One possible hypothesis is that investors still harbour outdated views of EM countries as pure commodity plays. Such views may lead investors to sell their EM assets in response to observed changes in commodity prices. Such behaviour would make it empirically challenging to disentangle the effects on growth and spreads of financial tightening due to capital outflows from the direct effect of commodities. Indeed, it is quite possible that commodity prices are not exogenous to EM at all. For example, if portfolio outflows are large enough to adversely impact EM growth rates then the resulting slower growth rates in EM could in turn depress global growth rates and push down commodity prices.[6]

[5] That is, most individual EM countries are not individually large enough to influence global prices.

[6] Whether this happens is an empirical question, which we will not tackle in this report. EM countries are heavily finance constrained. They now make up about 60% of global GDP (PPP-adjusted), but they only account for 20% of global fixed income.

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Appendix: Data (2014/2015 average)

Country	Commodity Exports (USD m)	Commodity imports (USD m)	Net commodity exports % of GDP
Africa			
Angola	45,961	5,684	28
Botswana	6,701	4,441	15
Cameroon	4,249	2,693	5
Ethiopia	4,916	5,020	0
Gabon	6,954	956	37
Ghana	10,144	4,418	16
Ivory Coast	10,667	4,554	19
Kenya	3,621	5,599	-3
Morocco	7,458	16,338	-8
Mozambique	3,688	3,209	3
Namibia	3,224	2,722	4
Nigeria	77,068	16,651	11
Senegal	1,952	2,835	-6
South Africa	43,982	27,640	5
Tanzania	4,888	4,294	1
Zambia	7,189	3,167	16
Rwanda	549	610	-1
Zimbabwe	2,400	1,278	15
Democratic Republic of the Congo	5,898	1,754	11
Asia			
India	122,500	243,500	-6
Indonesia	94,568	55,684	4
South Korea	66,471	208,500	-10
Sri Lanka	3,635	6,804	-4
Pakistan	5,766	21,387	-6
Malaysia	77,830	61,945	5
Philippines	11,241	21,064	-3
Singapore	75,787	113,342	-12
Thailand	57,134	71,453	-4
Vietnam	36,944	33,646	2
China	249,558	834,311	-5
Mongolia	5,097	1,619	29
Middle East and North Africa			
Iraq	66,121	17,255	21
Jordan	2,056	10,186	-23
Bahrain	10,428	4,383	17
Oman	34,015	8,571	31
Lebanon	2,017	8,334	-13
Qatar	90,387	5,838	39
Morocco	7,458	16,338	-8
Saudi Arabia	217,500	37,996	23
United Arab Emirates	228,500	62,174	40
Egypt	12,707	25,684	-4
Tunisia	3,591	7,243	-8
Israel	21,143	20,963	0

Country	Commodity Exports (USD m)	Commodity imports (USD m)	Net commodity exports % of GDP
Eastern Europe			
Latvia	3,314	3,144	1
Lithuania	7,170	9,263	-5
Poland	22,677	31,839	-2
Romania	8,638	10,048	-1
Russia	321,435	17,869	18
Serbia	2,127	4,002	-5
Slovakia	6,576	11,234	-5
Turkey	34,058	54,388	-3
Ukraine	12,269	16,169	-3
Armenia	1,095	1,279	-2
Azerbaijan	15,314	1,227	22
Belarus	11,115	12,409	-2
Georgia	859	1,961	-7
Hungary	6,802	14,385	-6
Kazakhstan	53,175	3,609	24
Latin America			
Mexico	74,128	68,010	1
Jamaica	1,195	2,554	-10
Panama	8,882	6,054	6
Paraguay	8,173	2,784	18
Peru	31,391	10,263	11
Suriname	1,288	613	13
Uruguay	6,463	2,928	6
Venezuela	51,016	8,284	5
Trinidad and Tobago	7,425	3,188	15
Argentina	42,502	12,864	5
Belize	468	399	4
Bolivia	10,384	1,830	25
Brazil	132,000	53,184	4
Costa Rica	3,705	3,976	-1
Chile	60,523	19,556	16
Colombia	36,507	13,524	7
Dominican Republic	4,201	6,790	-4
Ecuador	20,638	7,993	12
El Salvador	1,296	3,634	-9
Guatemala	6,613	5,946	1
Honduras	4,075	3,708	2

Source: IMF, UNCTAD, Ashmore.

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