

Global trade research note: From feast to famine

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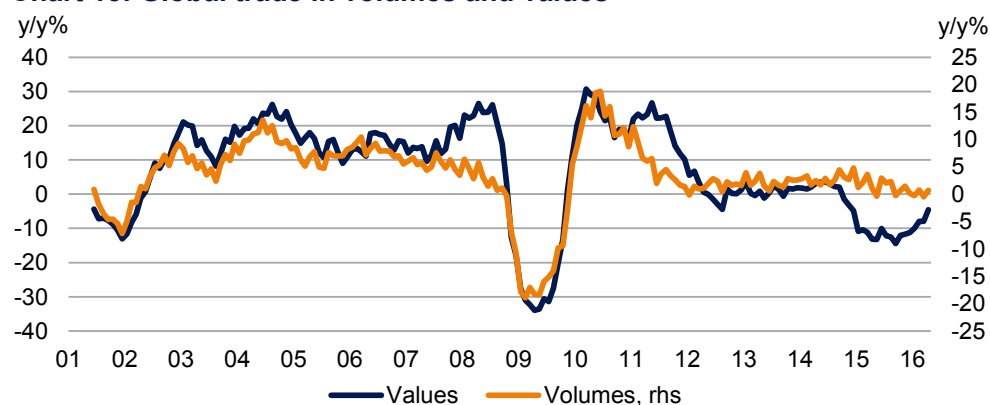
Executive summary

Global trade growth has been subdued by historical standards since 2012, and weakened further in 2015. The key question is whether this is a cyclical or structural phenomenon. We find there is undeniably a structural element, so this weaker trade growth is set to last. This has implications for asset class performance and economic growth, particularly in small, open economies, and so consequently also for policymakers. Structurally lower interest rates and a global tendency towards currency wars seem a likely outcome.

Introduction

Global trade growth has been subdued by historical standards since 2012, and weakened further in 2015. This year is looking a little better, but again relative to history trade looks to be struggling. Of course, it is important to distinguish between volumes and values. The latter, particularly in 2015, are exposed to dollar valuation effects and commodity price slumps. Trade volumes, as chart 13 shows, have held up better than trade values, but still look weak on a historical comparison.

Chart 13: Global trade in volumes and values



Source: Thomson Datastream, Schroders Economics Group, 24 June 2016.

The key question is whether this weakness results purely from weaker global demand (it is a cyclical phenomenon) or whether the relationship between global demand and trade has changed in some fundamental way (trade weakness is a structural phenomenon).

Some cyclicality,
but we see long
term weakness
in trade

Based on our own analysis and looking through the existing academic literature, the short answer is that there is undeniably a structural element. It is important to understand whether there is hope for a reversal of the changed relationship between trade and global GDP, and in turn some investment conclusions or example, will this prompt more ferocious trade and currency wars? Is the emerging market export-led growth model dead?

Blame game: is the trade slowdown structural or cyclical?

Weaker trade growth does coincide with weaker global GDP growth; average global GDP growth 1999-2006 was around 4.5%, compared to growth of 3.5% since the crisis ended. Some cyclical effect is expected but the trade multiplier (the growth in trade generated by every unit of growth in GDP), has also fallen (chart 14 on next page). This suggests a structural element to the decline in trade.

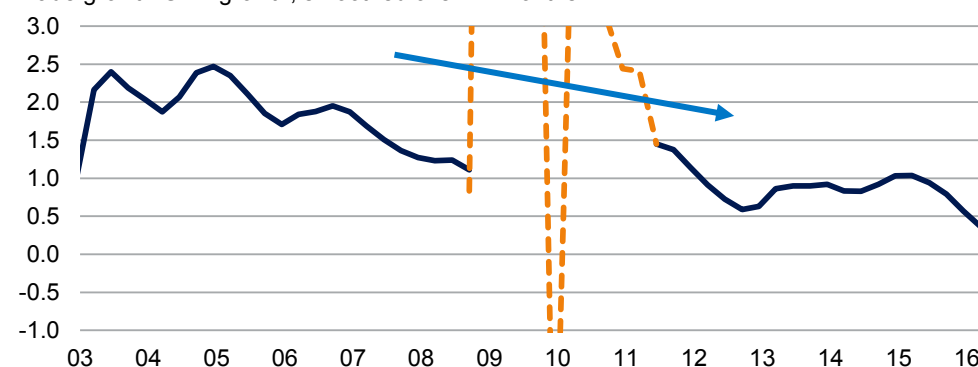
In addition, there are a number of studies which have utilised regression models to identify the relationship between trade and growth (commonly referred to in the literature as the elasticity of trade with respect to growth, or trade elasticity). These studies tend to concur in finding a reduced trade elasticity in the post-crisis period compared to the preceding 10–15 years. But, importantly, one particularly found

Research note (continued)

that trade elasticity dropped from 2.2 in the period 1986–2000 to 1.5 in the 2001–07 period, and 0.7 for 2008–13. As the authors note, this implies that the change in the trade-growth relationship was underway before the Global Financial Crisis (GFC), despite the high economic growth enjoyed in the early 2000s. The paper finds a roughly 50:50 split between structural and cyclical explanations for the recent trade slowdown. However, they also found a trade elasticity of 1.3 in the 1970–85 period.

Chart 14: Global trade multiplier

Trade growth/GDP growth, smoothed over 12 months



Source: Thomson Datastream, Schroders Economics Group. 24 June 2016.

This suggests that the 1986 to 2000 was an exceptional period, and we examine how it differed compared to the present. The post-crisis period is also exceptional, and trade weakness today is the result of more than just a faded tailwind.

What has caused the structural shift? (Blame game: is it all China's fault?)

Pre-crisis

Fading tailwinds even before the crisis

It appears that the structural weakening of trade was underway before the crisis (chart). We believe a number of fading tailwinds were behind this decline. In particular, the boost delivered to global trade through the industrialisation of east Asia and the trend of outsourcing was beginning to fade.

Industrialisation helps drive trade because developing new industries is an import intensive process: both industrial commodities and capital goods are needed in large quantities and must usually be imported. A significant increase in demand for these goods also boosts investment in exporting countries which is more import intensive than consumption or government spending. Global growth then becomes more trade intensive, if the industrialising economies are large enough. The combined economies of east Asia, including China, would meet this qualification.

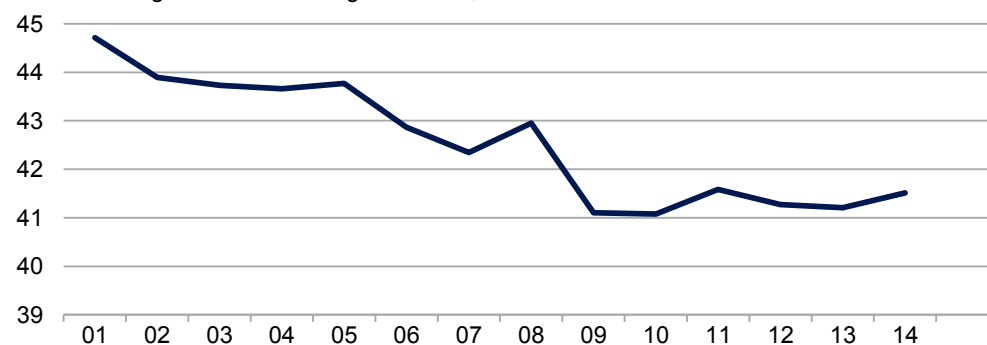
Supply chain fragmentation (or outsourcing), boosts international trade as it takes a formerly domestic process and moves it across the world. The construction of a car, for example, goes from generating no international trade to having each component being manufactured in a different country and subsequently crosses borders.

Both forces declined in the 2000s as the Asian economies matured (in the case of industrialisation) and as the scope for outsourcing diminished. While outsourcing grew over this period, it became less dominant in trade flows. Data on the topic is not plentiful, but we can get some idea of the role played by outsourcing by looking at the share of intermediate goods in global trade (chart 15a and 15b on the next page). This has become a less dominant part since the 1990s, leading to a declining trade multiplier.

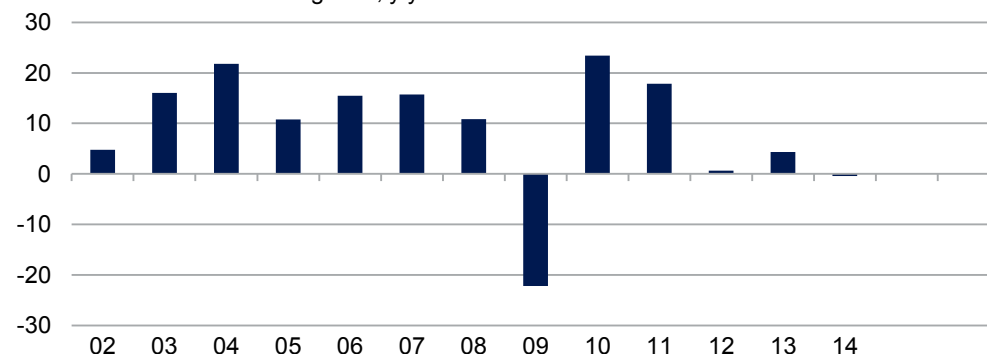
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Charts 15a and 15b: The end of outsourcing?

Intermediate goods as share of global trade, %



Global trade in intermediate goods, y/y%



Source: UN Comtrade, Schroders Economics Group. 10 June 2016.

On-shoring,
re-shoring, or
just slower
offshoring?

Another suggested explanation for the trade slowdown post-crisis has been “re-shoring”, that is advanced economies are bringing production back on shore. Data on this is difficult to obtain, so we use trade in intermediate goods as a proxy. The chart above shows how growth in this trade has slowed dramatically post-crisis, essentially flat-lining from 2012. This does not support the idea of re-shoring, which would imply contracting trade in intermediate goods, but it does suggest outsourcing may have plateaued. This would be enough to reduce the trade intensity of growth, and looks a likely culprit for at least part of the trade slowdown experienced since the crisis

Financial crises
knock trade off
course

We can not overlook that the break in the trade relationship followed the GFC – it is possible the crisis itself is the cause. An IMF working paper³ found that countries which suffer a financial crisis experience a “large and persistent” decline in imports, with a much smaller effect on exports. Further, when a financial crisis occurred simultaneously with a global downturn, trade losses were larger and recovery more protracted; even 10 years after the crisis, in such cases, imports were still 10% below normal levels (compared to what an economic model would predict). A global financial crisis and downturn, to extrapolate, would be expected to have significant and long-lasting negative effects on trade.

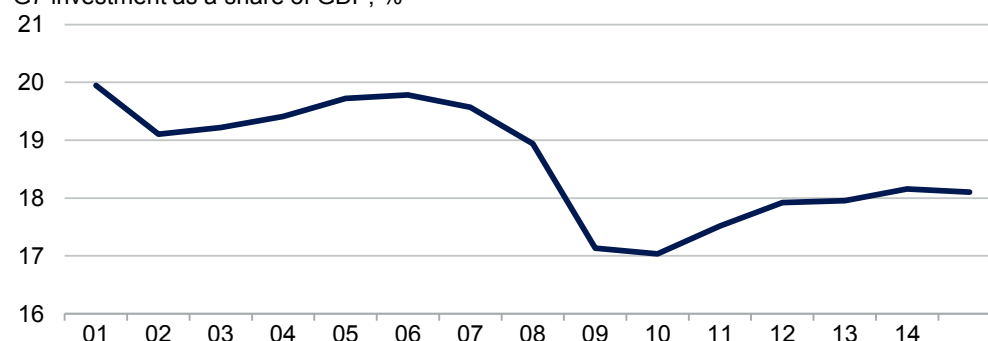
In terms of transmission mechanisms, there are a few to consider. A financial crisis increases volatility and uncertainty, which weighs on import-intensive investment in the short term. It also damages credit channels, both through a deterioration in asset quality but also in prompting tighter financial regulation, which can impact the medium term investment outlook. There is some evidence of this occurring in the G7 economies since the crisis (chart 16 on the next page). Finally, disruptive events like the GFC can force exporters out of markets as they consolidate and retrench, only to find entry costs prevent re-entering, what might be called a “reverse beachhead” effect.

³Abiad, A., Mishra, P., Topalova, P., “How does trade evolve in the aftermath of financial crises?” IMF Working Paper (January 2011).

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Chart 16: Investment has fallen since the crisis

G7 investment as a share of GDP, %



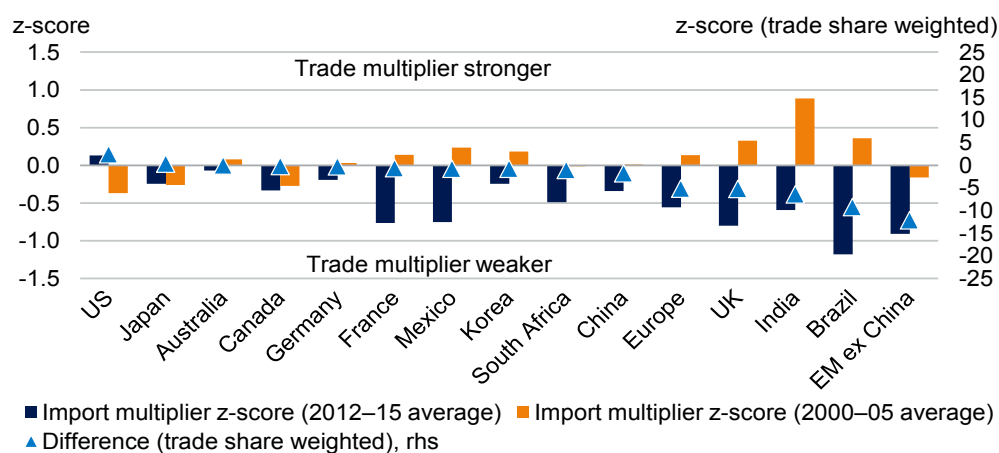
Note: Annual data from 2000–2015 using individual national accounts. Source: Thomson Datastream, IMF, Schroders Economics Group, 6 June 2016.

We should also touch on protectionism, given the recent concerns flagged by the World Trade Organisation. However, while this may be a growing concern, it does not look to have been a major driver over the pre-crisis period, which did not see a large increase in tariffs. Of course, this does not preclude an increase in the coming years, and we are already seeing large increases in tariffs on steel.

Patient Zero: is one country responsible?

Alternatively, the trade slowdown may have its roots in specific countries. We examine trade performance pre- and post-crisis by country, with a focus on imports to identify the source of demand weakness. We use real values, which will go some way towards removing price effects, though the commodity price slump will still have an impact.

Chart 17: Import multipliers have fallen post-crisis



Note: The import multiplier is defined as import growth/domestic demand growth. A z-score is taken over the period Q3/96-Q3/15, with volatile readings discounted. Readings are defined as volatile if they are more than 3 times the long term average export multiplier. The "Difference (trade share weighted)" is the difference between the 2012-15 period z-score and the 2000-05 period z-score, multiplied by the specific country's share of global imports. Source: Thomson Datastream, IMF, Schroders Economics Group, 10 June 2016.

Chart 17 looks at the trade multiplier for imports, using domestic demand rather than GDP as the denominator. Most major economies have seen a decrease in this metric in the post-crisis period, with the largest falls coming in China and the US, while EM excluding China has also seen a sizeable fall. Germany and Japan have also seen decreases, but elsewhere the change does not seem substantial.

What has driven the individual declines?

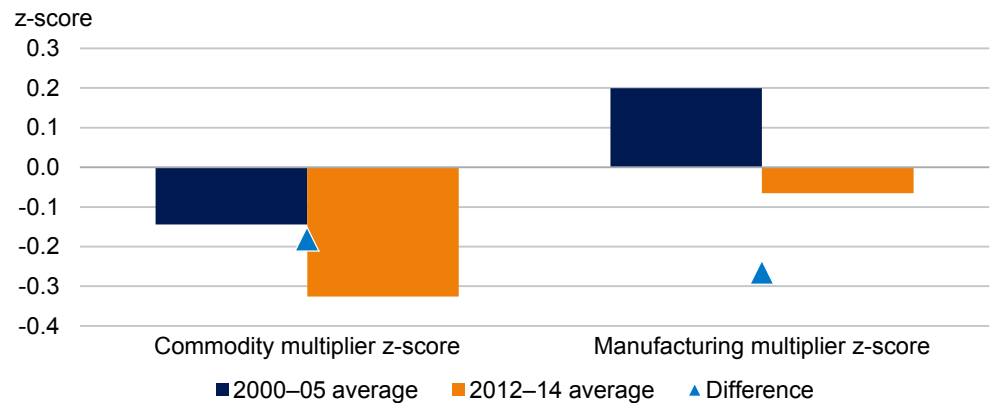
When we break down Chinese domestic demand by merchandise type, we find a fall in import intensity of both commodities and manufactured goods (chart 18 on next page). The latter, we believe, can be explained by China moving up the value chain of manufacturing and so needing to import fewer high end goods. At the same time still producing much of the lower end and intermediate goods needed domestically.

China's transition has reduced import demand

Research note (continued)

This is supported by a 2014 paper which found evidence of increasing domestic value added in Chinese firms.⁴ Meanwhile, the fall in commodities can be chiefly explained by the transition of China’s economy away from the old investment-led growth model and towards services, necessitating fewer imports of industrial commodities per unit of growth.

Chart 18: China commodity and manufacturing import multipliers using real domestic demand

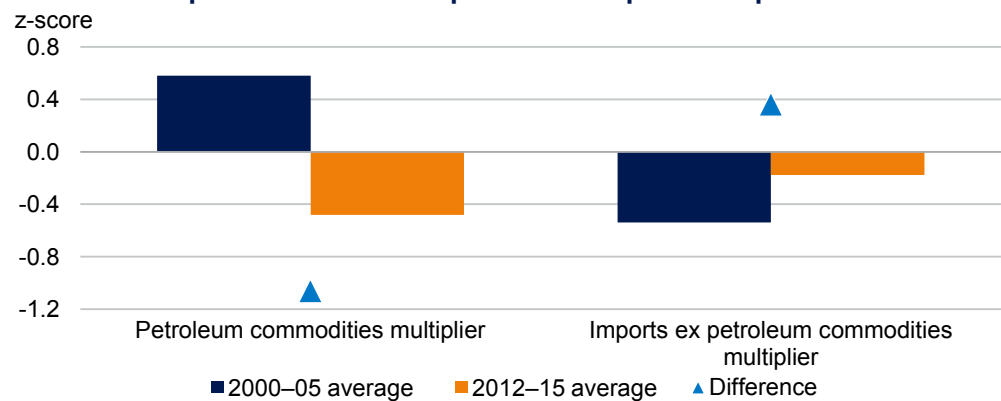


Source: UN Comtrade, Schroders Economics Group, 8 April 2016.

Fracking has disrupted US trade

For the US we might think of two potential culprits. One is the growth of the shale industry, driving down oil imports for a given level of growth, and the other is “re-shoring”, as production is brought back from overseas. It turns out that the petroleum import multiplier has fallen (chart 19), while the import multiplier excluding petroleum has actually risen. The decline in US import intensity therefore looks to be at least partly driven by the growth of the shale industry (there may also be a hit to demand such as more efficient cars and lower consumer disposable income, which we have not investigated here).

Chart 19: US petroleum and non-petroleum import multiplier



Note: Quarterly data is used from Q3 1996 to Q3 2015, with volatile readings adjusted. Data is in real terms and is seasonally adjusted before being normalised. Source: Thomson Datastream, US Census Bureau, Schroders Economics Group, 4 May 2016.

End of the commodity supercycle also hurts trade flows

In emerging markets excluding China, there are likely three factors at work. One is the slowdown or halting of outsourcing, of which they were the primary trade beneficiaries. Separate to this, but linked to China, is the end of the commodity supercycle, which means investment will generally fall in commodity exporters. Growth consequently becomes less import intensive, as the process of extraction itself requires very few traded inputs. Finally, a handful of EM economies have implemented policies aimed at restricting imports since the crisis, either through quotas and tariffs (India and Russia) or compression of domestic demand (Brazil,

⁴Looi, K., Tang, H., “Domestic Value Added in Exports: Theory and Firm Evidence from China” mimeo, World Bank (2014).

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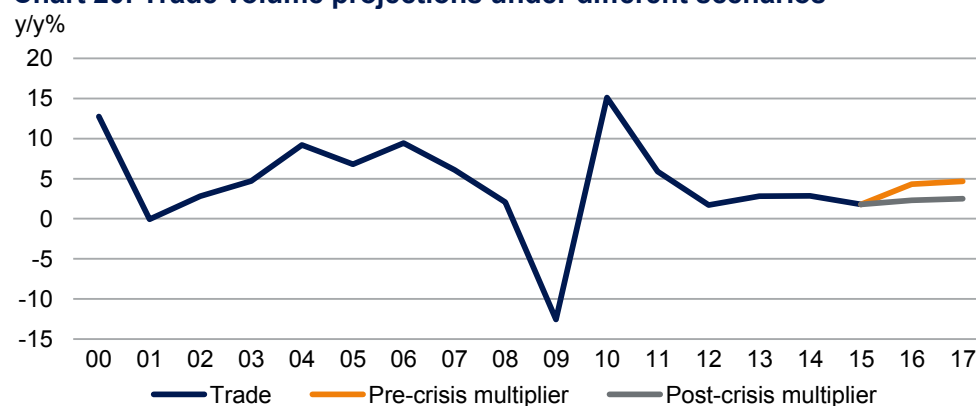
Indonesia). In addition, the fall in oil prices has seen the removal of subsidies in some EM economies, which will reduce the quantity of oil imported for a given level of domestic growth, again reducing trade intensity.

Outlook and investment implications

Overall, though there remains a cyclical component of trade growth, we have identified a number of structural headwinds to trade. Should these subside, the trade multiplier can return to its previous levels, and trade can rebound. Otherwise, trade growth is likely to remain subdued relative to its history. Chart 20 shows projections of trade (based on our growth forecasts) under the pre and post-crisis trade multipliers, for an idea of the two extremes.

However, it seems unlikely that many of the headwinds identified will fade. The impact of the GFC, based on IMF research, is set to linger for several years more at least. It is also difficult to see globalisation finding new legs; China is transitioning to a consumption led economy and moving up the production value chain. We would need a similarly large economy to go through a similar process of integration into global supply chains, and the only candidates are India or Africa. India is the closer of the two but faces significant challenges and appears to lack the desire to become a manufacturing powerhouse. A five to ten year wait seems likely, at the very least.

Chart 20: Trade volume projections under different scenarios



Source Thomson Datastream, Schroders Economics Group, 24 June 2016.

Leaner years
ahead for export
reliant
economies

We seem more closely to the lower bound in chart than the upper. Trade liberalisation could help, but if anything protectionism appears to be on the rise. This bleaker outlook for trade growth has a range of investment implications.

First, consider that economies previously highly dependent on export led growth now face structurally lower growth rates. This mainly applies to emerging market economies, though some small developed market economies could also be included in this grouping. Earnings growth is likely to be impacted, and will underperform the historic trend.

Lower growth will also mean lower policy rates and lower yields in these economies. Less export orientated economies should see a relative outperformance of growth compared to these countries. Therefore we see a case for more selective investment, particularly within EM, to take advantage of relative performance gaps.

As well as responding to a lower growth world with lower interest rates, policymakers are also likely to be tempted to resort to currency devaluation more frequently. The currency wars we have seen post-crisis therefore look set to continue, generating greater volatility in the foreign exchange markets. Related to this, currency volatility will also cause volatility in inflation. Inflation itself will face less downward pressure with globalisation running out of steam, so we face the possibility of a more stagflationary world, a difficult obstacle to overcome for policymakers.