Trends in cross border greenfield investments: winners and losers

15 December 2016

# Worldwide investment hotspots

## Brexit adds to worries about appetite for Europe

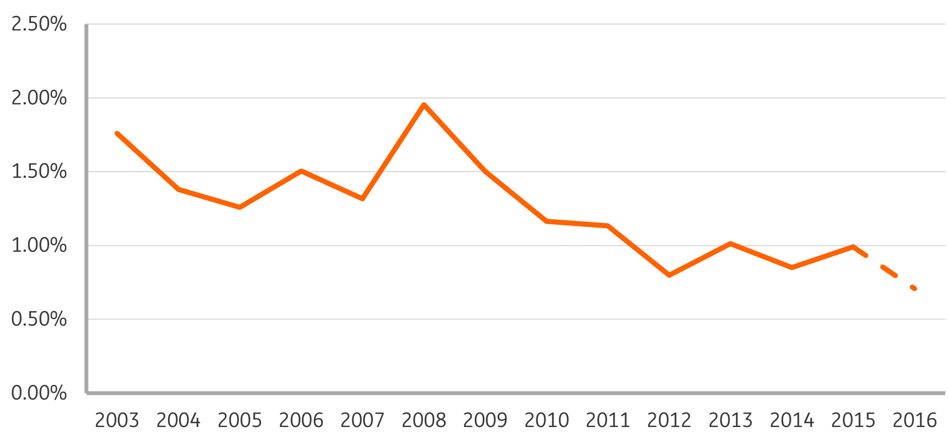
**Executive summary**

- Following a revival in 2015, when worldwide cross-border greenfield investment[1] grew 9%, a setback is in the making for this year. During the first three quarters of 2016 foreign greenfield investments were 0.5% lower than last year.
- Despite the strong growth in 2015, which was a correction to the steep decline in 2014 (-14%), global greenfield investment was still lower in 2015 than before the global economic crisis, both in money value and relative to GDP (Figure 1).
- India has overtaken China as the most popular destination for greenfield investment and Indonesia is a rising star as well. Asia is still the main destination.

Re-shoring brings production back home (back shoring) or closer to home (near shoring)

- Europe is losing ground as a destination for greenfield investment, especially Central and Eastern Europe (CEE). The decreasing incoming foreign direct investments (FDI) into the region implies that Eastern Europe benefits, at most, modestly from re-shoring away from China by some multinationals.
- Given that the CEE has not shown a general deterioration in economic investment conditions, the setback in incoming FDI appears to be, at least in part, a consolidation after the fast rise in the pre-crisis period.
- Southern Europe has contributed to the fall in popularity of Europe since the start of the global financial crisis. But the region has been holding up well since 2012.

**Fig 1. Global foreign greenfield investment in decline (percentage of world GDP)***




*Announced investments of which the value in some cases has been estimated. 2016 is an annualised figure based on the first nine months of 2016

Source: UNCTAD, IMF, FDI Intelligence, ING calculations

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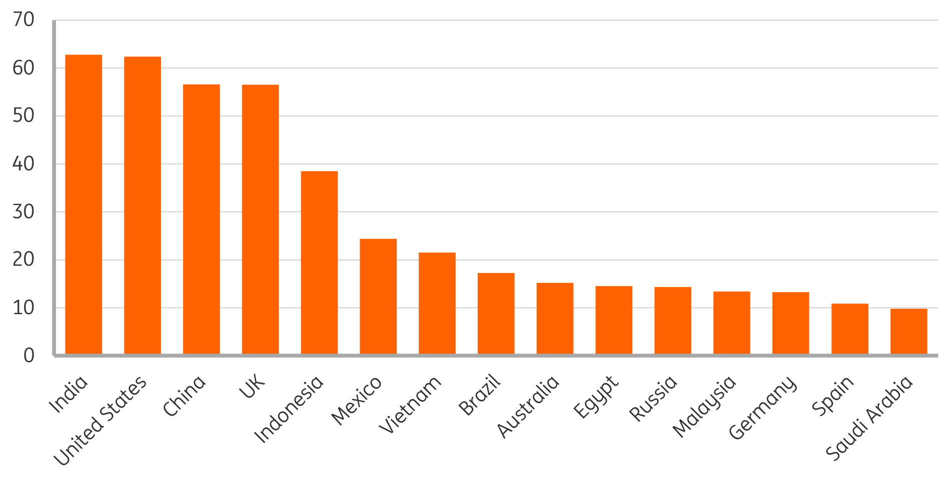
[1]Greenfield investments are non-financial investments, excluding mergers and acquisitions

- Western Europe provides a counterweight to the contraction in other European regions. After the start of the global financial crisis, FDI in this region shrank only in 2009. Indian and Chinese investors are ever more present in Western Europe.
- It should, however, be said that the performance of Western Europe has been dependent on a few countries only: the UK, the Netherlands and the small contributions of Switzerland and Finland.

**Fig 2. Inward greenfield direct investment in 2015 (US$bn)**




Source: FDI intelligence

- Brexit has already weighed on FDI into the UK, recent data suggests. Based on the inflows during the first nine months of 2016, inward FDI for the year will be a third lower than in 2015. Although this level would be around the average seen for 2011-14, we think that the majority of the negative effect from Brexit on FDI into the UK is yet to be seen.
- In addition, the negative impact of Brexit on incoming FDI is unlikely to be restricted to FDI into the UK because multinationals are likely to adopt a 'wait and see' policy for Western Europe until it becomes clear what the new trade and investment rules between the EU and the UK will be.
- Looking at sectors, it is coal and oil (products), among others, that have suffered since the start of the crisis from a decreasing popularity in Europe with foreign investors, although 2015 showed some improvement. Germany has seen the largest decline of FDI into the coal generated energy sector.
- The flip side of the European trend away from traditional power sources is the increasing foreign investment into the renewables industry.
- Business services and real estate are other industries that are bucking the overall negative trend in Europe.

# Introduction

Re-shoring brings production back home (back shoring) or closer to home (near shoring)

Many companies offshored or outsourced parts of their production to low wage countries in the 1990s and first half of the 2000s. An increasing flow of foreign direct investment (FDI) was the result, not only in money value but also as a share of GDP (Figure 1). Besides China, that became the 'factory of the world', Europe benefited as well. Central and Eastern Europe, in particular, bore the fruits of these investments.

Offshoring boils down to splitting up the production process geographically. In the years before the global financial crisis offshoring created many new global value chains. This led to much cross-border trade in intermediate products, resulting in fast growth of world trade.

In recent years some Western companies have re-shored parts of their production, either to their home country (back shoring) or to cheaper neighbouring countries (near shoring). Back shoring leads to fewer cross-border trades. Near shoring doesn't lead to less cross-border trade, but the transport distances that are involved with cross-border trade will diminish.

Back shoring reduces cross-border trade while near shoring shortens the transport distances involved in cross-border trade

Although still a very important production location, China is one of the countries that has experienced the consequences of re-shoring caused by the rise of Chinese wage costs. This raises the question of where the lost production is heading. Is another country or region replacing China as the 'factory of the world'? In this report (the first of a series on greenfield FDI), we look at whether Europe, and in particular Central and Eastern Europe, is benefiting from the decreasing popularity of China. In subsequent reports, we will consider the developments in North America, the CIS countries and Asia.

A lack of sufficient comparable data about corporate decisions on production locations makes it difficult to measure off- and re-shoring precisely. We use data about greenfield foreign direct investments (FDI) as a proxy for developments in off- and re-shoring.

It should be noted that greenfield FDI is not a perfect indicator for offshoring. Greenfield investment by foreign investors not only serves the purpose of setting up new offshore production locations, it is also done to sell products in local markets. This leads to fewer exports instead of more because home country exports are substituted by local production.

Non-financial cross-border (greenfield) investment remains valuable for net offshoring

However, recent research shows that offshoring for cost efficiency reasons still occurs often in Europe. Dachs and Zanker (2015) find that more than 12% of the 3,000 surveyed European companies offshored parts of their production that was previously done in the home country between 2010 and mid-2012. This means that greenfield FDI is still (partly) driven by offshoring which implies that greenfield FDI still holds information about offshoring.

This study also shows that offshoring still has the upper hand over re-shoring. Only 4% of the surveyed companies re-shored production that was previously offshored. At the same time, 12% of the companies offshored production between 2010-12.

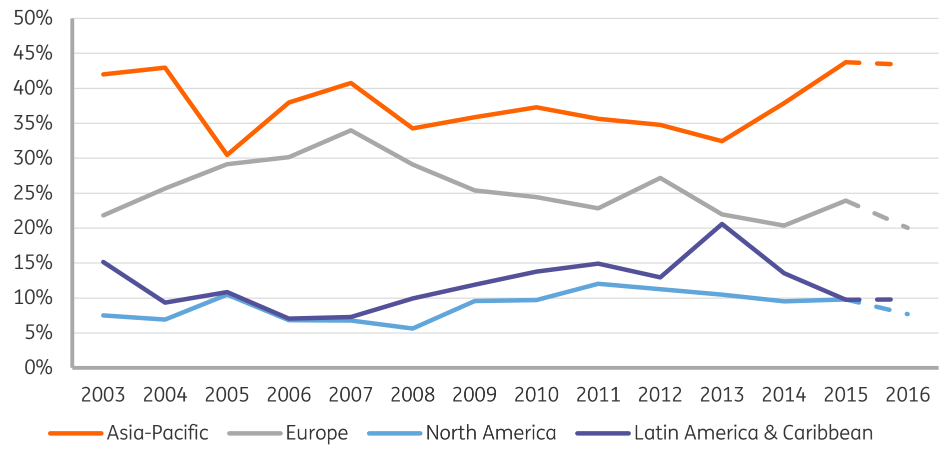
# Foreign direct investments into Europe: Who is hot and who is not?

## Central and Eastern countries drag Europe down

Europe's share in worldwide incoming greenfield FDI has been declining since the start of the financial crisis

Europe, and all regions within it, suffered a decline in the money value of incoming greenfield FDI in the first years after the outbreak of the Global Financial Crisis in 2007/08. This decline occurred in other parts of the world as well, but Europe has performed below average. This is witnessed by its declining share in worldwide incoming FDI (see Figure 3). Although some lost ground was recovered in 2015 when worldwide greenfield investments amounted to US$766bn, the data for the first nine months of this year shows that this is not an ongoing development.

**Fig 3. Europe less popular with foreign direct investors (share in global inward FDI flows)**



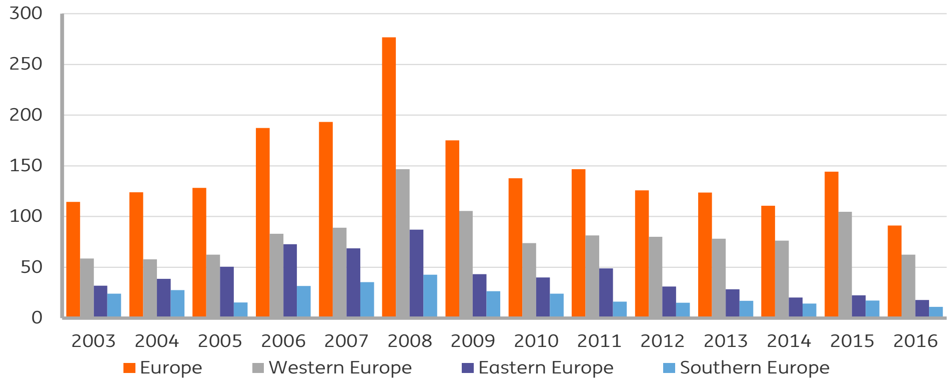

*2016 is an annualised figure on the basis of the first nine months of 2016
Source: FDI intelligence, IMF, ING calculations

European setback mainly due to decline in Central and Eastern Europe

The setback for Europe is primarily due to declining greenfield FDI into Central and Eastern Europe (CEE, see Figure 4). Polish, Czech, Bulgarian, Hungarian and Romanian shares in worldwide greenfield FDI are now two to four times as small as they were in 2007 (Figure 5).

Western Europe had a setback in 2009 but has subsequently stabilised at levels that, on average, are significantly better than in the years running up to the crisis (Figure 4). The acceleration of incoming greenfield FDI in 2015 has been short-lived. Most probably due to Brexit, the current year has thus far shown lower incoming FDI than last year.

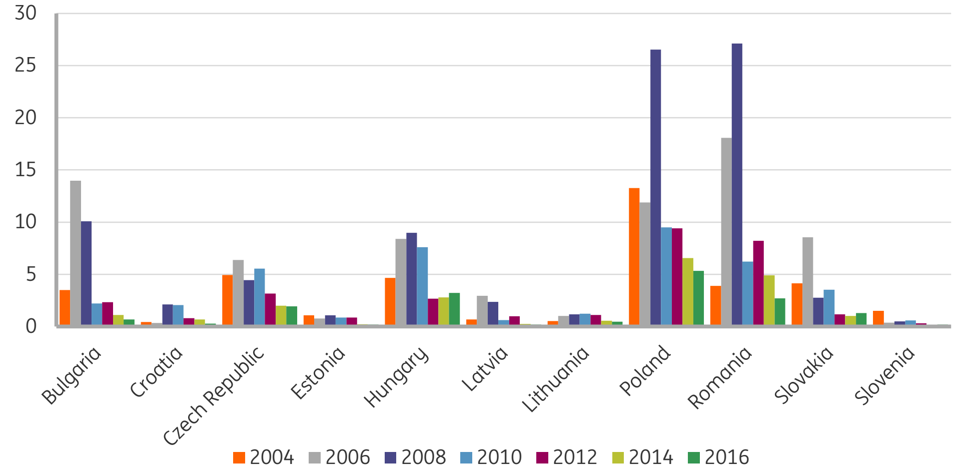
**Fig 4. Central and Eastern Europe drag down FDI into Europe (US$bn)**




2016 is an annualised figure based on the first nine months of 2016. **Western Europe:** Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Iceland, Liechtenstein, Monaco, Luxembourg, Netherlands, Norway, Sweden, Switzerland and UK; **Central and Eastern Europe:** Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia; **Southern Europe**: Andorra, Cyprus, Greece, Italy, Malta, Portugal and Spain

Source: FDI intelligence, calculations ING

**Fig 5. Decreasing popularity holds for most Central and Eastern European countries (US$bn)**




2016 is an annualised figure based on the first nine months of 2016

Source: FDI Intelligence, ING calculations

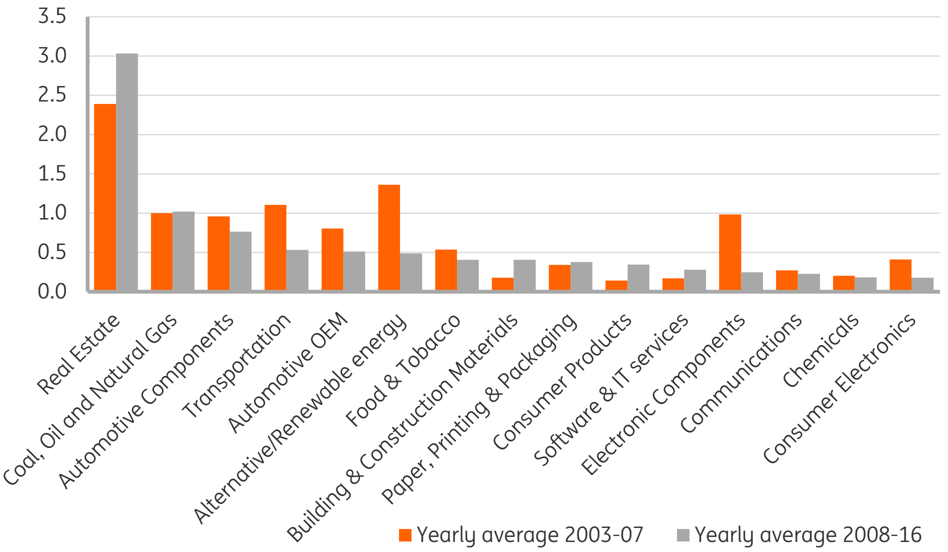
Sector trends differ within Central and Eastern Europe. For example, Romania's automotive sector receives increasing FDI while the Polish automotive sector shows a decrease

Poland is still the largest East European recipient of greenfield FDI, but Figures 5 and 6 show that the decline in incoming FDI is substantial. The contraction is most prominent in the sectors renewable energy (see *Focus* below), consumer electronics, electronic components, transportation and, to a lesser extent, automotive. Real estate on the other hand is one of the few sectors that shows considerable growth.

In Romania, the second largest recipient of FDI, the opposite has happened: FDI into real estate contracted and FDI into renewables increased (Figure 7).

For the automotive sector Poland and Romania show opposite developments as well. FDI increased in Romania and car production has doubled since 2007. In November 2016, Poland welcomed the announcement that Volkswagen would increase its production in Poland, but the average for the preceding eight years of incoming FDI into the Polish automotive sector has been lower than pre-crisis (Figures 6 and 7). The production of cars in 2015 was almost 40% lower than in 2007.

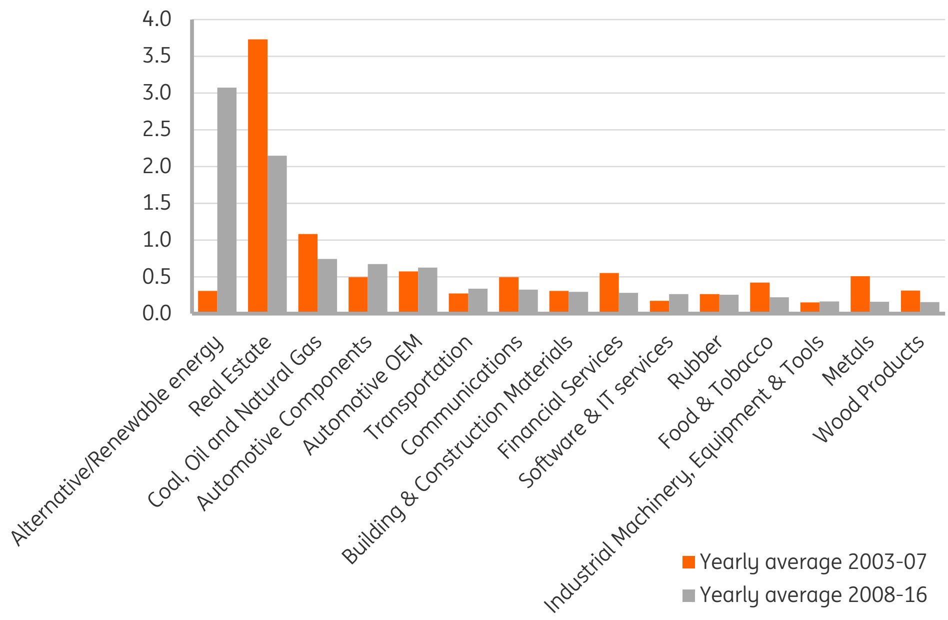
**Fig 6. Poland: Top-15 sectors average incoming greenfield FDI (US$bn)**




2016 is an annualised figure based on the first nine months of 2016

Source: FDI Intelligence Unit

**Fig 7. Romania: Top-15 sectors average incoming greenfield FDI (US$bn)**




2016 is an annualised figure based on the first nine months of 2016

Source: FDI Intelligence Unit

The fall in popularity of Central and Eastern European countries surprises somewhat because according to the indicator 'Ease of doing business' from the World Bank, the economic conditions for doing business in countries like Poland, Romania, Bulgaria and Hungary have, on average, been a lot better after the crisis than in 2007/08 when incoming FDI peaked in many CEE countries. The development of their competitiveness ranking according to the Global Competitiveness Index from the World Economic Forum has not been negative either over the past couple of years. So a deterioration of competitiveness cannot explain the decline in popularity of CEE either. This means other factors could be at play, such as increased (political) risks. In our view the setback in FDI shares is, at least partly, down to consolidation after the fast rise in the pre-crisis period.

At the same time the decreasing incoming FDI into the region implies that near-shoring by Western European multinationals from Asia to Eastern Europe is, at most, a modest trend.

## Focus: Power generation by coal crowded out by renewables

The EU has seen a surge of power generation through renewables at the expense of coal- and especially gas-generated power. This trend is expected to accelerate for coal. Most EU governments want to reduce coal use for environmental reasons.

The coal, oil, and natural gas sector shows decreasing incoming FDI while the renewable energy sector is popular with foreign investors

The surge in renewables has been accompanied by an increase of greenfield FDI into this sector. The flipside is that greenfield FDI into the coal, oil and natural gas sector has declined. Exceptions to this European trend are the UK and Poland.

The decline of the coal price puts pressure on the profitability of coal mines which has reinforced the contraction of investments into the coal in most European countries. Recently reductions in Chinese coal production pushed up coal prices and this could happen again. This could have a positive influence on investments into the European coal sector, but in our view this effect will be limited because we expect the downward trend in demand for coal to be the dominant factor.

Foreign investors scaled down their investments in the largest user of coal, Germany, anticipating government policies to cut coal generated power to reduce the greenhouse-effect. Regarding the speed of implementation, it should however be kept in mind that the vested (business and employment) interests in the large domestic coal sector in Germany have to be overcome and that the intention to shut down all nuclear plants by 2022 also puts limits on the speed at which this transition can take place.

Foreign companies continued after the financial crisis to invest at the same pace in the coal, oil and natural gas sector in Poland. Between 2010 and 2014 there was a big push by international companies for Poland to explore shale gas. However, Poland pulled out.

The UK even managed to attract more greenfield FDI money for the oil, coal and natural gas sector post financial crisis than in the years before. Foreign investments in coal after the start of the crisis realised the same year average as during the period 2003-07, and investments in other fossil fuels were a lot higher than pre crisis.

British coal FDI inflow will diminish related to the UK government coal-plant-termination plan

Foreign investments into British coal though will probably diminish in the years to come because the UK government has said it is committed to shut all coal power stations by 2025. Before that the government had already introduced a carbon tax to incentivise coal plant retirements.

Outside the top three coal users, the Czech Republic, responsible for 5% of EU coal-generated power, is also participating in the shift towards renewables, at least judged by the FDI flows. Incoming FDI into the coal, oil and natural gas sector is slowing down while investments into the sector of alternative and renewable power generators is up. Other Eastern European countries, such as Hungary, show the same trend.

Major Eastern European countries, except Poland, are also shifting to renewable greenfield FDI investment

For the time being Poland seems the only big European user that intends to continue using coal as its main power generator. Currently, 80% of Polish power generation comes from coal plants compared with an EU average of 25% and Poland plans to increase coal capacity by around 35% by 2020. A switch away from coal as a power source would not only see job losses at coal power plants, but also in the large domestic coal mining industry. This social implication, we feel, will make the government hesitant to force coal power plants to close. Wind turbine projects have been discouraged via legislating on having turbines located further away from residential areas.

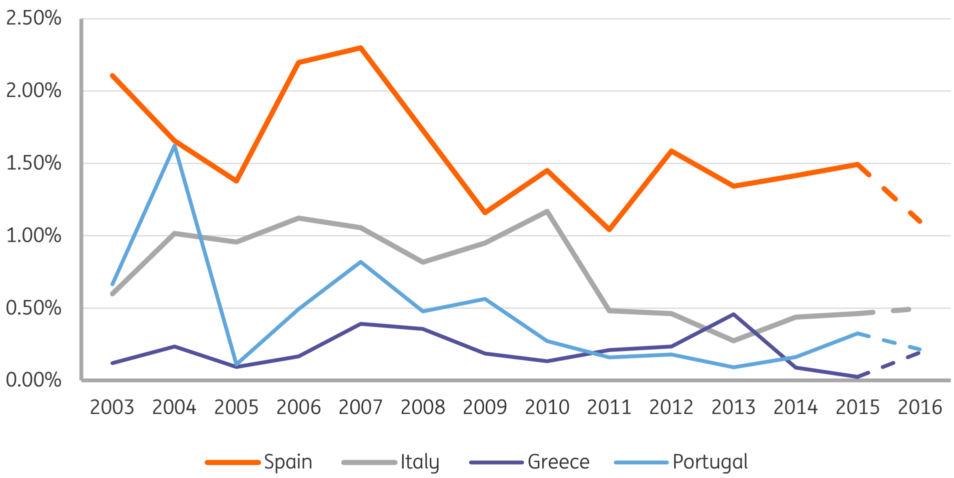
Higher demand for natural gas could be a consequence of reducing the demand for coal. Given the goal of most European governments to switch fully to renewables it remains to be seen to what extent this would lead to more consumption of natural gas.

Polish demand for coal, on the other hand, might provide some counterweight given the current policy intentions. As a result high FDI into the Polish coal sector might continue.

## Southern Europe: holding up well

Southern Europe also contributed to the fall of the European share in worldwide greenfield FDI in the years following the start of the financial crisis (Figure 8). But since 2012 the southern countries have held up quite well given that they were at the centre of the Eurozone debt crisis.

**Fig 8. Southern Europe: Greenfield FDI inflow (as a percentage of world GDP)**




2016 is an annualised figure based on the first nine months of 2016
Source: UNCTAD, ING calculations

Incoming FDI into Southern European is satisfactory. Different sectors in Spain and Italy are benefiting from the improving FDI performance

Spain has managed to stop its declining share in incoming FDI. In 2015 greenfield investment in Spain was still lower than in 2007 but 28% higher than in 2011. For the current year, though, Spain is showing a setback.

Italy and Portugal both show a recovery from 2013 onwards but, like Spain, FDI into Portugal looks to have declined this year. Greece experienced a short-lived recovery in 2012 but from 2013 onwards its share in worldwide incoming FDI fell again to reach its lowest level in 2015 since the start of the crisis in 2008.

Given the fact that real incomes in the Southern countries have been under downward pressure it doesn't seem plausible that recent greenfield FDI is largely directed at servicing local demand. It is more likely that the downward pressure on wages has incentivised FDI from enterprises that look for a relatively cheap place to produce.

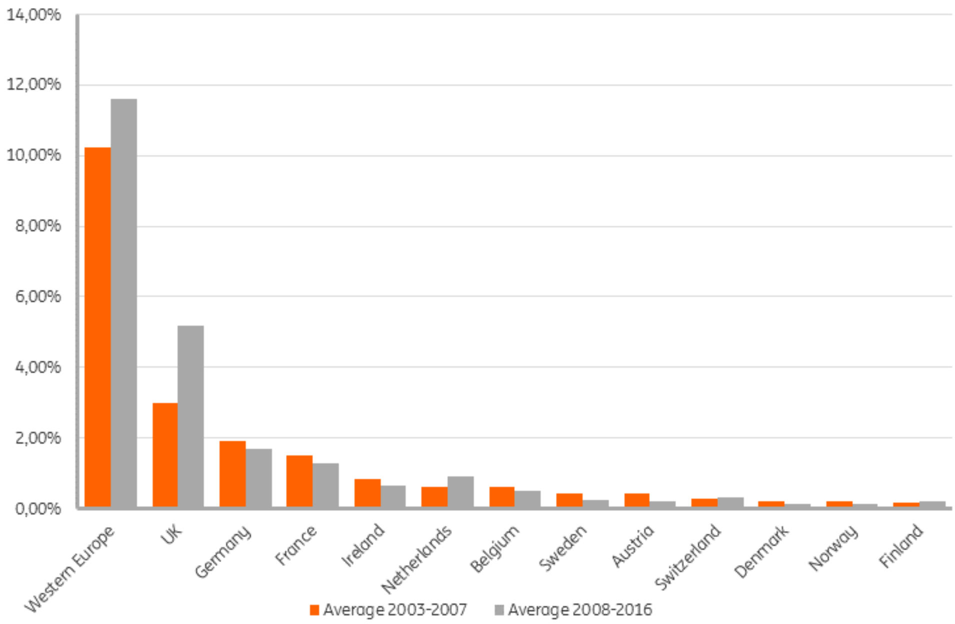
In Spain, the communications industry, pharmaceuticals and transportation are the sectors to have benefited from the recovery of FDI. In Italy, the communications, industrial machinery and automotive sectors have been behind the improving performance. Some other sectors, like real estate, also attracted FDI, but had already done so in the years immediately following the start of the crisis.

## Western Europe: Brexit puts growth on hold

The performance of Western Europe has been almost entirely dependent on the UK, and the Netherlands

Western Europe greenfield FDI has been providing a counterweight to the decline in other European regions. Inflow has increased from an yearly average of US$70bn during 2003-07 to US$90bn during 2008-16. The performance of Western Europe, however, depends entirely on the UK, the Netherlands and small contributions from Switzerland and Finland. Only these four countries escaped the European trend of declines in incoming greenfield FDI in money value and as a share of worldwide FDI (Figure 9).

**Fig 9. Western Europe: Greenfield FDI inflow (as a percentage of world total)**




Western European countries are accord with figure 3
Source: FDI Intelligence, ING calculations

Huge greenfield FDI into the UK mostly flows to real estate, renewable energy and coal, oil and natural gas sectors

The UK has attracted US$40bn of greenfield FDI per year since the start of the financial crisis, almost twice as much as during the five years preceding the financial crisis. The Netherlands has attracted US$7.0bn per year on average since the crisis, compared with a yearly average of US$4.2bn before the crisis.

Looking in more detail at the outstanding performance of the UK, shows growth of foreign greenfield investments in most sectors of the British economy with the lion's share of the money going into the real estate, renewable energy and coal, oil and natural gas sectors (Figure 10). Financial services comes in at fourth place.

The renewable energy sector climbed from the number five spot on the ranking of most popular industries among foreign investors during 2003-07 to number two in the years between 2009 and 2016. Automotive slid from the sixth to the ninth spot.

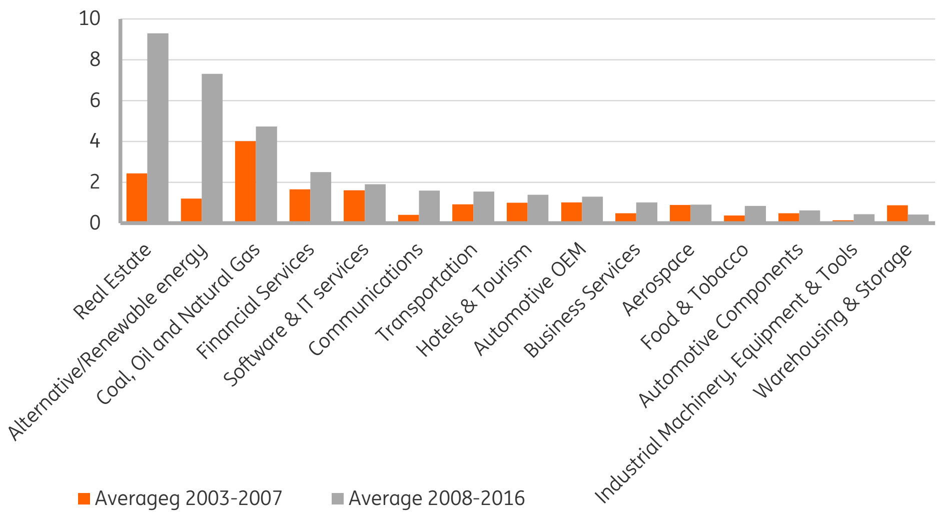
In the UK the increased role of China also catches the eye. Since the start of the financial crisis it is the second largest investor in the UK while it ranked only number 13 between 2003 and 2007. In particular, the real estate, hotel and tourism, financial and transport sectors have seen considerable Chinese investment.

Luxembourg is the other country that stepped up its investment in the UK considerably. After being the 16th largest investor in the years before the crisis, it now takes the 8th spot in the ranking.

The Chinese have become large investors in the UK and Netherlands

Looking at the Netherlands, the other country responsible for the good performance of Western Europe in attracting FDI in recent years, data shows that Chinese investors have also been active into the Netherlands. Financial services, communications and the food industry are the Dutch sectors that host most of the Chinese greenfield investments.

**Fig 10. UK: Top-15 sectors average incoming greenfield FDI (US$bn)**




*2016 is an annualised figure on the basis of the first nine months of 2016

Source: FDI intelligence, ING calculations

Brexit has created uncertainty about future trade and investment rules between the EU and the UK. This will put foreign greenfield investments in Western Europe on hold

The big question for the UK is, of course, whether it will continue to succeed in attracting as much greenfield FDI following its decision to leave the EU. The UK will become less attractive to companies that are currently using the UK as a hub to service demand from Continental Europe if the UK loses (full) access to the common market and import tariffs are applied by the EU.

Especially the financial sector will be hit. London serves as a hub for many foreign (American and other) financial service companies to service Continental Europe. Brexit has made it uncertain whether London will continue to fulfil this role as a financial hub. The annualised figure for the first nine months of this year of incoming greenfield FDI into the British financial sector has been, on average, more than 30% lower than in 2014 and 2015. Although this level is still close to the average foreign investment level of preceding years, we expect further declines. For as long as it remains uncertain what the trade rules between the UK and the EU will look like, multinationals cannot calculate which country is the most favourable production location and are likely to maintain a 'wait and see' policy. The result will be that FDI from non-European countries into Western Europe as a whole will be hurt by Brexit. So, although some sectors in Continental Europe might benefit in the long run from multinationals investing in the mainland of Europe instead of the UK, the negative impact in the short run of Brexit on incoming FDI is not restricted to the UK. Hence, it is no big surprise that incoming FDI into countries like Germany and the Netherlands has been a quarter to one third lower during the first nine months of this year than in 2015.

## Origin of FDI: India and China ever more present

Canada, Russia and the UK are mainly responsible for the decline in post-crisis incoming greenfield FDI into Europe

Looking at the origin of greenfield FDI into Europe (including cross-border investment within Europe), the data shows that decreasing FDI from Canada (-25%), Russia (-15%) and the UK (-7%) is responsible for the decline in European countries' incoming cross-border greenfield FDI during 2008-15 compared with 2003-07. The fall in Russia's average annual investment into the western part of Europe is even greater and equates to a drop of two thirds.

Investment from China into (Western) Europe has been rising fast since the start of the crisis.

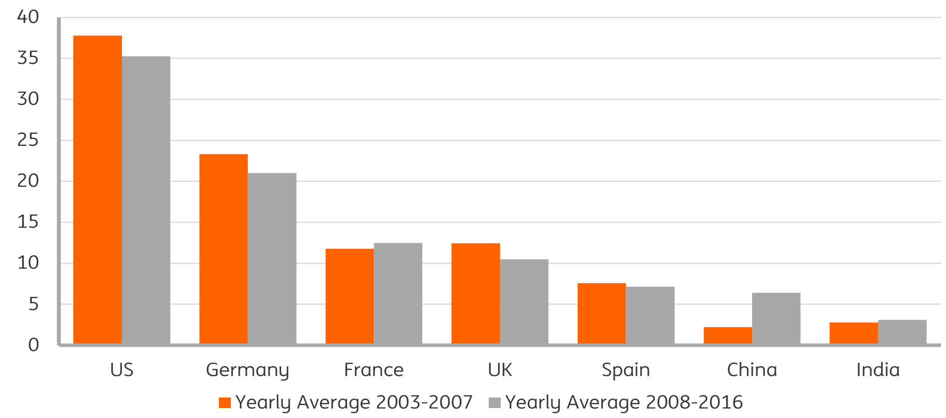
Continental European countries like Germany and the Netherlands also reduced their investments but only moderately. US investment shows only a marginal decline.

However, not all source countries have scaled back their investments into Europe, according to the data. China has significantly expanded its investments into Europe since the start of the financial crisis (Figure 11). The yearly average of Chinese greenfield investments into specifically Western Europe expanded even more during 2008-15, at US$2.3bn, five times higher than during the five years running up to 2008. China is now the 14$^{th}$ largest investor in Western Europe (including Western European countries themselves), ten spots higher than before the crisis.

With an average of US$2.9bn per year, India is now the third Asian investor behind Japan and China. Most of India's investments are in Western Europe.

Other countries that stepped up their investments in Europe are Switzerland and Japan. Of the big five only France increased FDI into the Europe (Figure 11).

**Fig 11. Top five greenfield investors into Europe plus China and India (US$bn)**




2016 is an annualised figure based on the first nine months of 2016

Source: FDI Intelligence, ING calculations

# Conclusion

After a decline of 14% in 2014, cross-border greenfield investment recovered in 2015. This non-financial foreign direct investment increased 9% to US$766bn. Greenfield investments are, however, still lower than pre-crisis and have been declining again in 2016.

Asia remains the main destination. India is the new leader. China is less popular with foreign investors. Europe is losing ground, especially Eastern Europe. Southern Europe also contributed to the falling popularity of Europe in the years following the fall of Lehman Brothers. Since 2012, however, the region has held up well, which is noteworthy given that it has been at the heart of the Eurozone debt crisis.

Western Europe has been providing a counterweight to the decline in other European regions since 2013, but the higher inflow of foreign investments almost fully depends on the UK and the Netherlands. The question is whether this will continue now that the British people have decided to leave the EU. The first signs seem to be negative. Based on the inflows during the first nine months of this year, FDI into the UK will be a third lower than last year. Although such an outcome would be around the average for 2011-14, we think that the largest part of the negative effect of Brexit on FDI into the UK, and thereby Europe, is yet to be felt because multinational enterprises will adopt a ‘wait and see’ policy.

Looking at sectors, it is coal and oil (products) that suffer most clearly from lower foreign investment into Europe, although 2015 showed some improvement. The flipside of the European trend away from traditional power sources is an increasing inflow into the renewables industry. Other European industries that are bucking the overall negative trend in Europe are business services and real estate.

## Disclaimer