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Screening of FDI towards the EU

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Preface

This study was commissioned by the Danish Business Authority in light of the proposal brought forward by the European Commission to establish a new framework for screening foreign direct investments (FDI) into the EU. The analytical scope and conclusions contained in the study are those of Copenhagen Economics alone.

The study builds on a unique database on FDI flows into individual EU Member States during 2003-2016. The database tracks the number of mergers & acquisitions (M&As) and greenfield investments and in many cases also the deal value of these transactions. The database includes both transactions undertaken by investors from third countries and cross-border transactions within the EU. For each transaction, we also have detailed information about the sector and the investor type. The database was established by Copenhagen Economics as part of the project *The World in Europe* commissioned by ESPON.

The EU proposal concerns mainly screening of M&As from third countries on grounds of security or public order but it cannot be ruled out that certain greenfield investments could be relevant to screen. Screening may also be relevant for certain intra-EU transactions.

In this study, we have used the database to provide an overview of M&As by investors from third countries. We have used the detailed information about the sectors and investor types to identify transactions that could potentially be covered by the new proposal. This will give an indication about the number of files that screening authorities in EU Member States would need to process if the scope of FDI screening is enhanced.

We have also used the experience from selected EU Member States to assess some of the possible implications of the new screening framework. In particular, we have carried out case studies of FDI screening in Germany and Finland, and we appreciate the information shared by the screening authorities in these countries.

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Executive summary

FDI is an important source of growth, jobs and innovation in the EU. While openness to FDI is likely to remain a key principle for the EU, a proposal from the European Commission has been put forward to establish a new framework for screening FDI into the EU. The main arguments for FDI screening relate to security and public order, and screening procedures are typically applied to investments in strategic sectors or assets and investments by state-owned enterprises (SOEs).

The proposal concerns mainly transactions where third country investors take over EU companies through mergers & acquisitions (M&As). In this study, we have analysed the destination, origin and sectoral composition of M&As in the EU by third country investors. As the debate in Europe has focused on M&As by SOEs and Chinese investors, we map both M&As by all third country investors, SOEs and Chinese investors.¹ Overall, the study finds that M&As in potentially sensitive sectors come from a variety of third countries whether the investors are private or state owned. This supports the relevance of a country neutral approach to FDI screening.

Investment patterns differ for different types of investors

During 2003-2016, third country investors completed 27,736 M&As in the EU. The UK, Germany and France accounted for around 60 per cent of the total number of M&As.

SOEs accounted for 620 M&As during 2003-2016 (2 per cent of the total number of M&As by third country investors). M&As by third country SOEs differ from the investment pattern of all third country investors. *First*, the UK, Germany and France accounted for around 40 per cent of the M&As by third country SOEs (compared to 60 per cent for all third country investors), and the SOEs more often conducted M&As in countries such as the Netherlands, Sweden, Italy and Finland. *Second*, M&As by SOEs have a different sectoral profile. M&As by SOEs were more concentrated in the utility sectors, natural resource extraction (electricity, gas, steam and air conditioning; and mining and quarrying), and transportation and storage. SOEs invested less often in information and communication compared to private investors.

Chinese investors accounted for around 800 of the M&As by third country investors (3 per cent of the total number of M&As by third country investors). M&As by Chinese investors differ from the investment pattern of all third country investors. *First*, Chinese investors more often than other investors conduct M&As in Germany and the Netherlands. *Second*, Chinese investors also invest differently across sectors than other third country investors with a high concentration of M&As in the manufacturing sector.

¹ See, among others, European Parliamentary Service (2017), *Foreign direct investment screening: A debate in light of China-EU FDI flows*.

The fact that different types of investors have different investment profiles across host countries in the EU and across sectors may suggest that the investors have different underlying motives for undertaking the investment. It may also imply that individual countries may become relatively exposed to specific types of investors in specific sectors. It is thus important for individual countries to have a good understanding of their portfolio of FDI and to monitor developments over time. It should be kept in mind, however, that the number of M&As by these types of investors remains relatively limited although increasing in both number and value.

M&As increasingly take place in potentially sensitive sectors

In this study, we have defined three scenarios for potentially sensitive sectors and analysed the number of M&As that have been conducted by third country investors in each of the scenarios.

In the *narrow scenario*, screening covers M&As in strategic utility sectors, defence and strategic assets related to computers, air transport and financial services. During 2003-2016, 5,484 M&As were conducted in these sectors and would require screening if this was the scope of screening within the EU. A larger share of M&As conducted by Swiss investors fall into the scenario (22 per cent of the total number of M&As are from Switzerland into the EU). The number of M&As that would be screened is 9,202 in the *middle scenario* and 13,929 in the *broad scenario*.

Based on these scenarios, we find that the number of potentially sensitive M&As has been relatively stable over time but also that the average value of the potentially sensitive deals has increased. The increasing size of potentially sensitive deals could be an argument for increased monitoring and screening of FDI in these sectors. In particular, the increasing number of M&As undertaken by SOEs in potentially sensitive sectors could warrant special attention.

There appears to be no clear pattern in the origin of M&As by SOEs in potentially sensitive sectors. A more complete picture of FDI by SOEs that could be strategically motivated required a more detailed analysis of the political and strategic context of individual third countries. This supports a country neutral approach to screening.

Screening procedures can help protect security and public order

Several EU Member States have proposed to amend or have already amended their screening procedures, and more countries may follow as the debate about FDI screening unfolds at both the EU and national level. Increasing the scope of FDI screening to cover more potentially sensitive sectors could help ensuring that FDI inflows from third countries do not compromise security and public order in the Member States. A common framework may also have the advantage to make EU screening less fragmented and better coordinated, and improved transparency and predictability is likely to make the EU more attractive for foreign investors.

Increasing the scope of FDI screening may have negative consequences

Increased FDI screening is likely to have negative consequences in terms of 1) the administrative resources required to conduct the screening, 2) increased compliance costs, uncertainty and delays experienced by the acquiring firms, and 3) risk of lower FDI inflows and reduced access to capital for domestic firms. As FDI screening is likely to have negative consequences for both the authorities and private firms, the scope of FDI screening should be continuously revised and updated by the national authorities to ensure a good balance between the need to maintain security and public order while at the same time to screen proportionately and reduce potential negative consequences.

Overall, we find that there is very little knowledge about the actual impacts of screening on the investment decision of private firms and on the FDI attractiveness of individual Member States and the EU as a whole. More knowledge is required before firm conclusions regarding the implications of the Commission's proposal can be fully assessed.

Irrespective of whether the individual EU government decides to maintain or amend its existing FDI national screening mechanisms (or continues to refrain from screening), the proposal from the Commission is likely to incur changes in FDI screening at the EU level that may have consequences for the individual Member State. Going forward, it will be important to monitor closely how the design and implementation of the framework will materialise at the EU level, and to assess how other Member States and third countries respond to the proposal.

Efficient screening procedures can reduce the negative consequences

Irrespective of the scope of screening in individual Member States, it is important that the screening mechanism is as efficient as possible to minimise the costs and reduce the risk of unintended negative consequences of screening. Experience from Germany and Finland suggest that the following initiatives can be implemented to reduce the negative consequences of screening:

- **Mandatory reporting** of acquisitions in critical areas can spare the responsible authority the administrative effort required to identify the cases but this will come at a cost to the acquirer.
- **Long time limits** for reopening screenings can give acquirers an incentive to comply with the mandatory reporting, but high compliance may come at the cost of increased uncertainty for the acquirer due to the longer period where the file can be opened. A **clear definition of the scope** for screening (in particular cross-sectoral screening) can reduce this uncertainty.
- **Standardisation** can bring down costs for the responsible authority and for the firm in case the costs are charged to the acquirer. Standardisation may also reduce delays and reduce the scope for discretion, which will reduce uncertainty.
- **Simple, predictable and transparent screening mechanisms** can reduce uncertainty and compliance costs for the firms. In particular, rules that make it easier to communicate with the companies save costs and time on both sides.
- **Treating all documents carefully and confidentially** can reduce concerns on the acquirer's side and speed up the process because the acquirer becomes more willing to cooperate and convey all required documents.

Next steps in processing the proposal

The proposed regulation on screening of FDI into the EU needs to be approved by the European Parliament and EU Member States in the Council. In parallel with this, the European Commission has proposed to proceed with two additional measures.

First, the Commission will set up a coordination group on inward FDI, which will cover all issues under the scope of the proposed regulation, including identifying sectors and assets that have strategic implications from a security, public order and/or control of critical assets point of view at national level, cross-border level or at European level. *Second*, by the end of 2018, the Commission will carry out an in-depth analysis of FDI into the EU, focusing on strategic sectors (such as energy, space, transport) and assets (key technologies, critical infrastructure, sensitive data) whose control may raise concerns for security or public order reasons.

This study finds that investment patterns in individual Member States differ across the type of investors, the sectoral composition and the origin of the acquirer. A place-based approach to establishing a national screening framework is required because potential risks and gains from FDI will likewise differ across countries. This indicates that individual Member States may benefit from making their own assessment of the proposed regulation and possible amendments to national FDI screening mechanism in place (if any).

Chapter 1

New framework for screening FDI into the EU

This study is an input to the debate about screening of foreign direct investment (FDI) into the EU and should be seen in the context of the proposal from the European Commission to establish a new framework for screening FDI into the EU. This chapter gives an overview of the new proposal and summarises some of the arguments for increased screening put forward in the debate.

1.1 New proposal for screening FDI into the EU

The EU has one of the most open investment regimes in the world² and anticipates FDI as an important source of growth, jobs and innovation.³ FDI takes place when a foreign firm establishes itself a region or expands an existing business (greenfield investments). FDI also takes place when a foreign firm acquires more than 10 per cent of the voting stock in an existing firm or merges with a local firm (M&A deals).

Foreign-owned firms account for around five per cent of the total number of jobs in the EU and 11 per cent of the production value.⁴ In addition to the direct footprint, foreign-owned firms may also integrate in local supply chains and increase economic activity in the host economies. Finally, foreign-owned firms can generate positive productivity spillovers that improve the competitiveness and economic growth prospects of EU firms.⁵ Job creation and positive spillovers help explain why EU Member States, like other nations around the world, make significant efforts to attract foreign investors.

While openness to foreign investment is likely to remain a key principle for the EU, there is growing concerns about foreign investors, notably state-owned enterprises, taking over European companies with key technologies for strategic reasons, and that EU investors often do not enjoy the same rights to make reciprocal investments.⁶ In light of this, the European Commission has put forward a proposal for establishing a framework for screening of FDI into the EU. The objective of the regulation is to “establish a framework for the Member States, and in certain cases the Commission, to screen foreign direct investments in the European Union, while allowing Member States to take into account their individual situations and national circumstances.”⁷

² Measured by the OECD (2016), *FDI Regulatory Restrictiveness Index 2016*.

³ European Commission (2017), *Harnessing Globalisation*.

⁴ Eurostat's Foreign Affiliates and Structural Business Statistics.

⁵ See Copenhagen Economics (forthcoming) for a quantification of spillovers of extra-European FDI on local firms located in the same region. The study also contains a detailed literature survey of productivity spillovers.

⁶ European Commission (2017), *Harnessing Globalisation*. This was also reflected in a common letter from the German, French and Italian governments to the Trade Commissioner Malmström.

⁷ European Commission (2017), *Proposal for a Regulation of the European Parliament and of the Council establishing a framework for screening foreign direct investments into the European Union*, {SWD(2017) 297 final}.

The proposed regulation does not require Member States to change their current screening procedures (if any) but it does entail a cooperation mechanism between the Member States and the Commission to inform each other of FDI that may threaten security or public order and to exchange information related to such investment, cf. Box 1.1.

Box 1.1 Overview of the proposal for a screening framework

The Commission proposes a new legal framework to enable Europe to preserve its essential interests. This includes:

- A European framework for screening of foreign direct investments by Member States on grounds of security or public order, including transparency obligations, the rule of equal treatment among foreign investment of different origin, and the obligation to ensure adequate redress possibilities with regard to decisions adopted under these review mechanisms.
- A cooperation mechanism between Member States and the Commission. The mechanism can be activated when a specific foreign investment in one or several Member States may affect the security or public order of another.
- European Commission screening on grounds of security or public order for cases in which foreign direct investment in Member States may affect projects or programmes of Union interest. This includes projects and programmes in the areas of research (Horizon 2020), space (Galileo), transport (Trans-European Networks for Transport, TEN-T), energy (TEN-E) and telecommunications.

The new EU-level investment screening framework will ensure transparency and predictability for investors and national governments. It will build on the national review mechanisms already in place in 12 Member States¹ and will not affect EU countries' ability to adopt any new review mechanisms or to remain without such national mechanisms. When it comes to decisions on foreign direct investments, the European framework will maintain the necessary national flexibility. Member States keep the last word in any investment screening.

Note: ¹Austria, Denmark, Germany, Finland, France, Latvia, Lithuania, Italy, Poland, Portugal, Spain and the United Kingdom.

Source: Copenhagen Economics based on the press release *State of the Union 2017 - Trade Package: European Commission proposes framework for screening of foreign direct investments*, Brussels, 14 September 2017.

The proposal clarifies that FDI covers investments “which establish or maintain lasting and direct links between investors from third countries and undertakings carrying out an economic activity in Member States. It does not cover portfolio investments” (p. 11-12). The proposal concerns mainly foreign investors taking over existing EU companies through mergers or acquisitions (M&As), but it cannot be ruled out that certain greenfield investments would be relevant to screen, e.g. due to the location of the new establishments.⁸

In this study, the main focus is on M&As in the EU by investors from third countries. During 2003-2016, M&As accounted for more than 70 per cent of the total value of FDI flows into the EU from third countries. The average deal value for an M&A transaction is around double the size than a greenfield project (around EUR 67 million compared to EUR 33 million).

⁸ The different types of FDI are described in more details in the annex to this study.

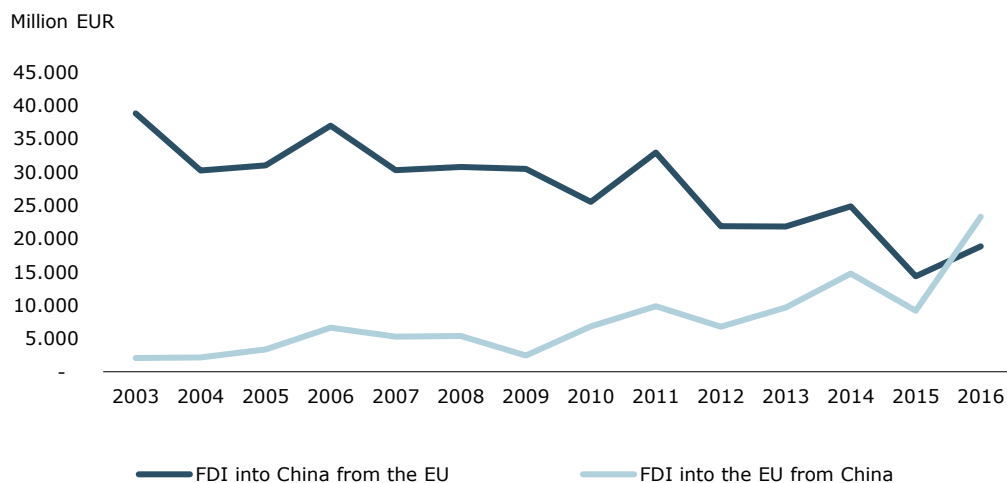
1.2 Arguments for screening put forward in the debate

Investment policies related to security and public order have existed for decades, and most countries have formulated the application of their investment policies related to security and public order in two dimensions:⁹

1. The specific characteristics of the asset that is object to the investment
2. The characteristics of the investor

Recently, lack of *reciprocity* has been brought forward as an argument for screening non-EU takeovers of European firms with key technological competences for strategic reasons. This argument was put forward by the German, French and Italian governments in their common letter to Trade Commissioner Malmström, and the ministers requested more effective instruments to combat such investments.¹⁰ This concern could, for example, be seen in context of the lack of reciprocal access for EU firms in the Chinese market. While numerous sectors are prohibited or restricted to EU firms in China, they are entirely open to Chinese firms in the EU.¹¹ In 2016, the value of Chinese FDI into the EU for the first time exceeded the value of EU FDI into China, cf. Figure 1.1.

Figure 1.1 The value of FDI between the EU and China



Note: The value of FDI is calculated in 2015 value. Data were extracted in August 2017 and include confirmed transactions. 342 transactions from China to the EU and 753 transactions from the EU to China were recorded with missing deal values in the period 2003-2016 (total of 1,045 transactions). Figures for China include also Hong Kong, Taiwan and Macau China.

Source: Copenhagen Economics' FDI database.

⁹ See OECD (2016), *Investment policies related to national security: A survey of country practices*, OECD Working Papers on International Investment 2016/02.

¹⁰ See http://www.bmw.de/Redaktion/DE/Downloads/S-T/schreiben-de-fr-it-an-malmstroem.pdf?__blob=publication-File&v=5.

¹¹ See, among others, European Parliamentary Service (2017), *Foreign direct investment screening: A debate in light of China-EU FDI flows*.

Screening according to the characteristics of the asset

Sensitive assets have traditionally referred to defence production. During the last decade, the scope of sensitive assets in many countries has broadened to include strategic sectors such as energy, telecommunications, health care, critical inputs and infrastructure. This development should be seen in light of the privatisation of previous State monopolies, which raised the need to protect public interests. Recently, the speed of digitisation has increased the need to screen foreign takeover of firms with access to or ability to control sensitive information and data. The high-tech sectors are also increasingly under scrutiny, cf. Box 1.2.

Box 1.2 Screening of takeovers in high-tech

In 2016, governments raised objections against a number of foreign takeovers, in particular when they involved the sale of strategic domestic assets to foreign companies. The approximate gross value of M&As withdrawn for regulatory reasons and having a value exceeding USD 100 million was roughly USD 167.9 billion, involving at least seven deals.

The main industries in which M&As were withdrawn for regulatory reasons in 2016 were high-tech manufacturing (e.g. pharmaceuticals, semiconductors and electronics) and telecommunication. One case affected the food and beverages sector.

As far as the home economies of targeted companies are concerned, European countries rank first (including, inter alia, France, Germany, Ireland and Sweden). On the buyer's side, investors from China were predominantly affected. Of seven M&As withdrawn for regulatory reasons, three were terminated because of national security related concerns in the screening process. All these cases concerned attempts by Chinese investors to acquire the assets of high-tech firms, including semiconductor manufacturing. Two M&As were withdrawn in 2016 because of concerns by competition or prudential authorities, and one foreign takeover was aborted for tax-related reasons. In addition, one M&A was withdrawn during the host-country approval process.

Source: UNCTAD (2017), *World Investment Report*.

Some countries have sector lists to safeguard security. Such lists have the advantage of relative clarity and predictability for investors, which limit the scope for using screening for protectionist purposes. Investment policies based on the concept of “security” give more flexibility but also more discretion for the screening authorities.

Screening according to the characteristics of the investor

The argument for screening according to the characteristics of the investor concerns foreign investors and especially foreign investors under government control due to the risk that the investment is strategically motivated. Foreign investors under government control may be state-owned or controlled, including through financing or other means of direction. Such investors may be regarded as agents of their home country governments, pursuing political agendas and implementing government strategies that are outside normal business considerations.¹² Thus, if the foreign investor is directly or indirectly controlled by a government, and also receives subsidised funds or capital for the investments,

¹² See Li and Xia (2017), *State-owned enterprises face challenges in foreign acquisitions*, Columbia FDI Perspectives 205.

there could be a stronger justification for screening the transaction as the investment could then be considered part of strategic or national industrial goals of a foreign state.¹³

The argument for screening foreign investors under government control has been put forward in relation to FDI by Chinese investments. China's long term industrial policy (Made in China 2025), for example, directs and supports Chinese companies (notably SOEs) to acquire – by way of increasing FDI – strategic technology abroad.¹⁴ China-specific concerns about security and unfair competition are to a large extent related to the particularities of the Chinese political economy, where state interference prevails over market forces, and the lines between the public and the private sector are blurred.¹⁵

1.3 Next steps in processing the proposal

The proposed regulation on screening of FDI into the EU needs to be approved by the European Parliament and EU Member States in the Council. In parallel with this, the European Commission has proposed to proceed with two additional measures.

First, the Commission will set up a coordination group on inward FDI, which will cover all issues under the scope of the proposed regulation, including identifying sectors and assets that have strategic implications from a security, public order and/or control of critical assets point of view at national level, cross-border level or at European level. *Second*, by the end of 2018, the Commission will carry out an in-depth analysis of FDI into the EU, focusing on strategic sectors (such as energy, space, transport) and assets (key technologies, critical infrastructure, sensitive data) whose control may raise concerns for security or public order reasons.

1.4 Concluding remarks

FDI is an important source of growth, jobs and innovation in the EU. While openness to FDI is likely to remain a key principle for the EU, a new proposal from the European Commission has been put forward to establish a new framework for screening FDI into the EU. The main arguments for FDI screening relate to security and public order, and screening procedures are typically applied to investments in strategic sectors or assets and investments by state-owned enterprises (SOEs). The proposal concerns mainly foreign investors from third countries taking over EU companies through M&A deals. In the next chapter, we provide an overview of the destination, origin and sectoral composition of M&As in the EU by third country investors.

¹³ This argument is discussed in more details in Mannheimer Swartling (2017), *EU FDI Screening – Legal considerations*.

¹⁴ MERICS (2016), *Made in China 2025*.

¹⁵ European Parliamentary Research Service (2017), *Foreign direct investment screening: A debate in light of China-EU FDI flows*.

Chapter 2

M&As in the EU by third country investors

This study draws on a database on global FDI flows towards Europe developed by Copenhagen Economics.¹⁶ The database contains detailed information about M&As and green-field projects conducted in EU Member States by third country investors during 2003-2016. We use the database to map M&As in the EU by third countries across destinations, origins and sectors. We also compare investment patterns for different types of investors and M&As by SOEs in particular. As the debate in Europe has focused on M&As undertaken by state-owned enterprises (SOEs) and Chinese investors, we map both M&As by all third country investors and Chinese investors.

The database includes information about the number of M&As and in most cases also the deal value of the transactions. For the purpose of this study, we focus mainly on the number of M&As by third countries because this is an indicator of the number of transactions that authorities in EU Member States may consider screening.

2.1 M&As from third countries towards the EU

During 2003-2016, a total number of 60,000 M&As are recorded in the EU in the applied FDI database, of which 46 per cent were undertaken by third country investors.

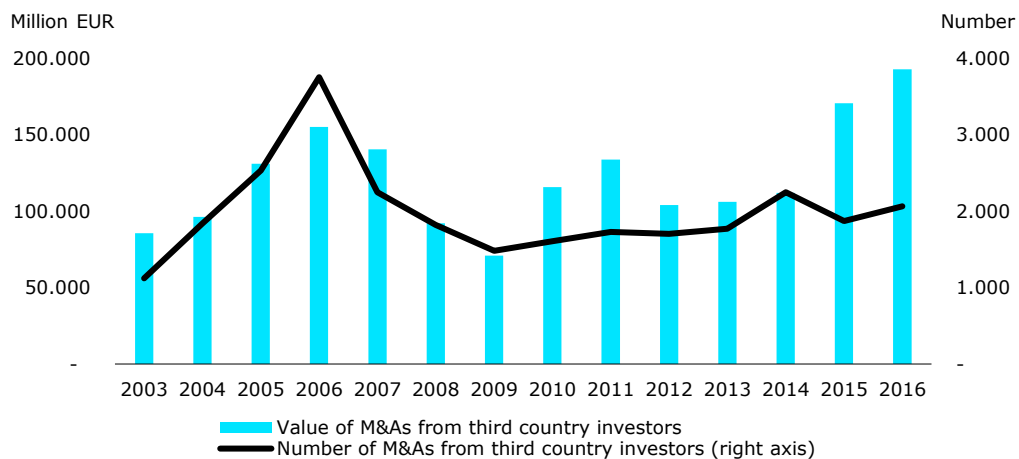
The number of M&As in the EU by third country investors peaked in 2006 just before the economic and financial crisis and has only recovered slowly after the crisis, cf. Figure 2.1. In 2016, third country investors undertook more than 2,000 M&As in the EU.

M&As are very lumpy and large M&A deals have a huge impact on year to year fluctuations in the value of M&As. Irrespective of such fluctuations, there is a clear increasing trend in the value of M&As in the EU by third country investors.¹⁷ In 2016, the value reached almost EUR 200 billion. As the total deal value has increased more than the number of deals, these figures suggest that the recorded M&As have become larger. During 2009-2014, the average deal value was thus EUR 143 million, whereas the average deal value was EUR 204 million in 2015-2016.

¹⁶ The database was developed for a study *The World in Europe* commissioned by ESPON. A detailed description of the study can be found at the ESPON web site <https://www-test.espon.eu/programme/projects/espon-2020/applied-research/world-europe-global-fdi-flows-towards-europe>. The database has been described in more details in the annex to this report. The database was updated to 2016 for the purpose of this study. A comprehensive slide deck with background figures has also been part of the delivery in this study.

¹⁷ It should be noted that not all the recorded M&As have an associated deal value, which has been made publicly available. Throughout the study, we list the full number of M&As and the value of M&As based on transactions where the deal value is available. We have made no attempt to estimate the missing deal values.

Figure 2.1 Total value and number of M&As in the EU by third country investors



Note: The value of M&As is calculated in 2015 value. Data were extracted in August 2017 and include confirmed transactions. 16,759 M&As are recorded with missing deal values in the period 2003-2016.

Source: Copenhagen Economics' FDI database.

Three countries, the UK, Germany and France, account for around 60 per cent of the total number of M&As from third countries into the EU, cf. Figure 2.2. The Netherlands, Sweden, Italy and Spain account for an additional 20 per cent. The remaining 21 Member States in combination account for the remaining 20 per cent.

Figure 2.2 M&As from third countries across EU Member States

Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As). 16,759 M&As are recorded with missing deal values in the period 2003-2016. The numbers are rounded such that a value of 0% can contain FDI projects. The distribution is made on the number of investments, meaning that large transactions matter the same as small projects

Source: Copenhagen Economics' FDI database.

During 2003-2016, SOEs from third countries completed more than 620 M&A deals in the EU. The three largest M&A recipients, the UK, Germany and France, only accounted for around 40 per cent of the M&As by third country SOEs, cf. Figure 2.3. SOEs thus tend to have a different investment pattern than other third country investors. The Netherlands, for example, accounted for 6 per cent of the total number of M&As from third countries but 13 per cent of M&As by SOEs in these countries. M&As by SOEs also tend to be overrepresented in Sweden, Italy and Finland.

Figure 2.3 M&As by SOEs across EU Member States

Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As). Of the 27,736 M&As by third country investors during the entire period, 621 have been registered as having been undertaken by SOEs. For 7,408 deals, we have no information about the investor type. The numbers are rounded such that a value of 0% can contain FDI projects. The distribution is made on the number of investments, meaning that large transactions matter the same as small projects.

Source: Copenhagen Economics' FDI database.

2.2 Origin of M&As towards the EU

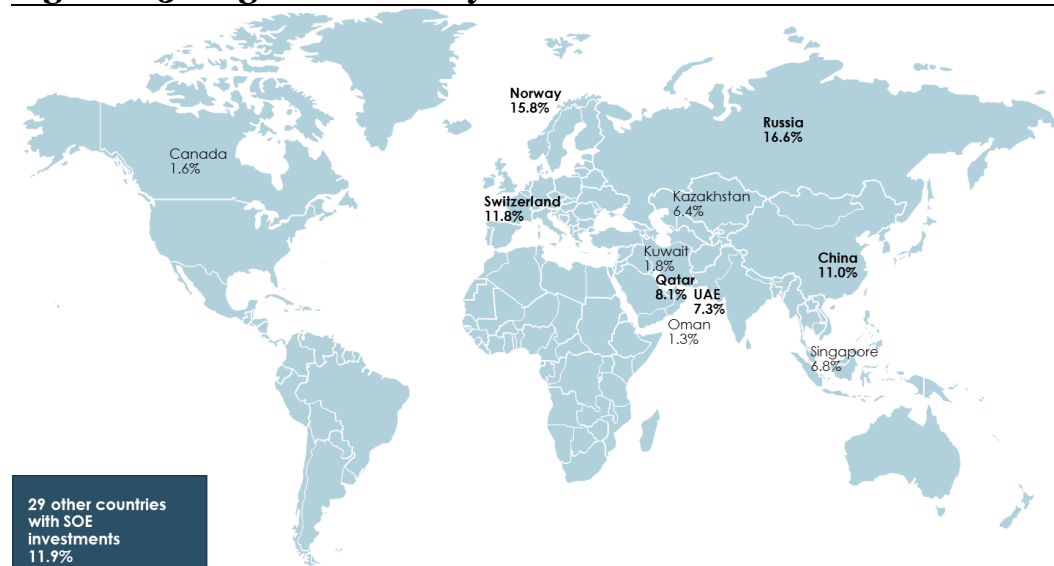
The US is by far the largest investor in the EU and accounted for more than half of the M&As by third country investors, cf. Figure 2.4. Switzerland is the second largest third country investor in the EU.

M&As by SOEs originate from very different countries than M&As by private companies. Of the 620 M&As by SOEs from third countries, almost 17 per cent are undertaken by Russian investors, cf. Figure 2.5. Two European countries, Norway and Switzerland, account for more than a quarter of the M&As by SOEs, and China comes in fourth as the origin of 11 per cent.

Figure 2.4 Origin of M&As towards EU Member States

Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As). The distribution is made on the number of investments, meaning that large transactions matter the same as other projects in this figure.

Source: Copenhagen Economics' FDI database.

Figure 2.5 Origin of M&As by SOEs towards EU Member States

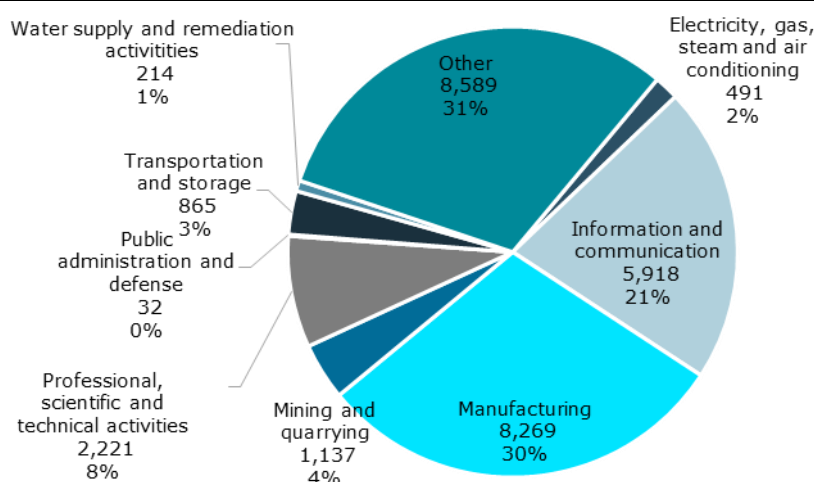
Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As). The distribution is made on the number of investments, meaning that large transactions matter the same as other projects in this figure. 621 investments into the EU from third countries were made by SOEs. There are 7,408 M&A projects with unknown ownership.

Source: Copenhagen Economics' FDI database.

2.3 The sectoral composition of M&As towards the EU

M&As by third country investors fall mainly in the manufacturing sectors, where 8,269 transactions have been recorded (30 per cent of the total number of M&As by third country investors), cf. Figure 2.6. The ICT sector accounts for an additional 20 per cent.

Figure 2.6 M&As in the EU by third country investors across sectors



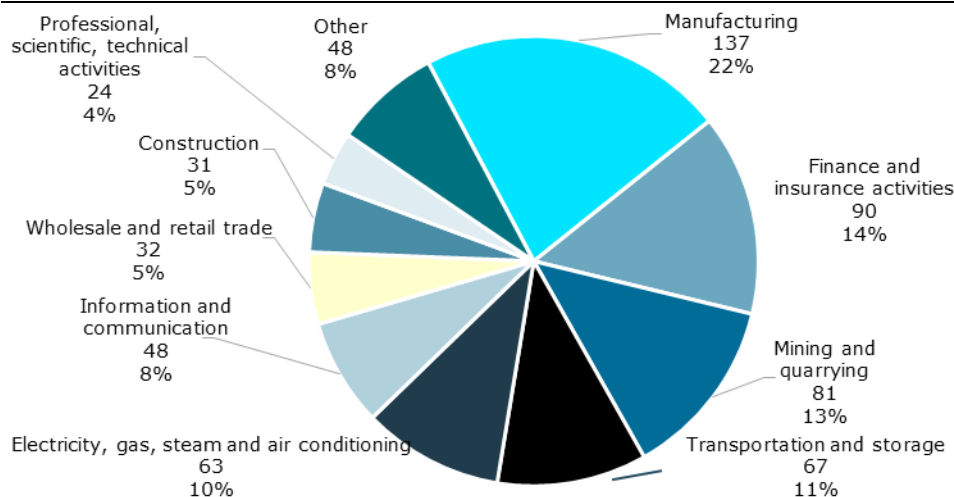
Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As). The distribution is made on the number of investments. The 'Other' sector includes accommodation, agriculture, construction, education, arts, entertainment, administrative- and support services, human health, real estate, wholesale and retail, finance and insurance and other services.

Source: Copenhagen Economics' FDI database.

SOEs from third countries seem to target other sectors than private investors. While mining and quarrying account for just 4 per cent of all third country M&As in the EU (cf. Figure 2.6), they account for 13 per cent of the M&As by SOEs in third countries (cf. Figure 2.7). SOEs in third countries also invest more in transportation and storage and in electricity, gas, steam and air conditioning than private firms. Transportation and storage account for 3 per cent of all M&As from third country investors but 11 per cent of SOE M&As from third countries. M&As from SOE in electricity, gas, steam and air conditioning account for 10 per cent of the total SOE M&As but just 2 per cent of all third country M&As.

For the information and communication sector the picture is the opposite. This sector accounts for 21 per cent of all M&As by third country investors, while the share is just 8 per cent for SOE M&As.

Figure 2.7 M&As in the EU by SOEs from third countries across sectors



Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As). The distribution is made on the number of investments. The 'Other' sector includes accommodation, agriculture, education, arts, entertainment, administrative- and support services, human health, real estate, water supply and other services.

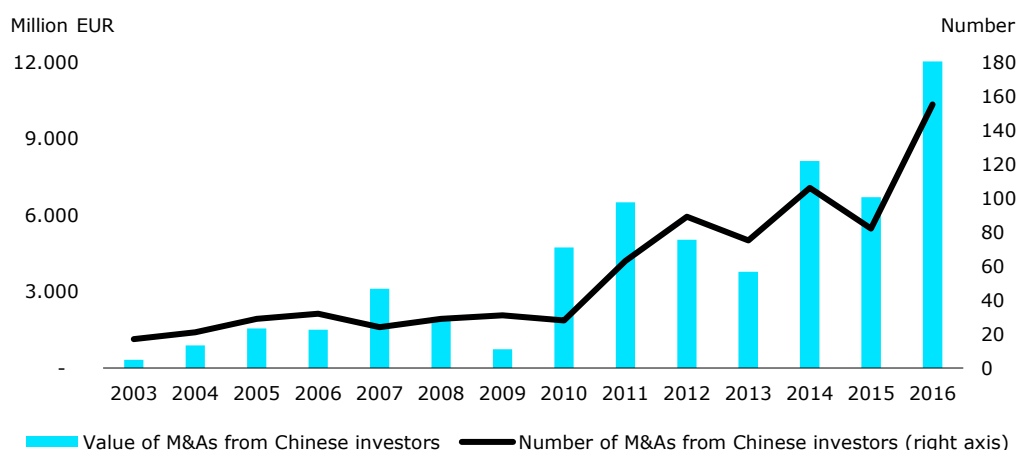
Source: Copenhagen Economics' FDI database.

2.4 M&As from China towards the EU

The number of M&As by Chinese investors has been increasing almost the entire period 2003-2016, only with drops in 2013 and 2015, cf. Figure 2.8. The value of Chinese M&As has followed track and reached more than EUR 12 billion in 2016. The peak in 2016 reflects some large M&A deals.¹⁸ Yinyi Real Estate, for example, acquired the Belgian manufacturing company Punch Powertrain for EUR 1.0 billion, and Bio Products Laboratory Ltd in the UK was bought by Kerui Group for EUR 1.0 billion.

¹⁸ A few large M&A deals were completed ultimo 2016 and 2017, and the different M&A databases record these transactions differently. In the Zephyr database used to construct the Copenhagen Economics FDI database, for example, the purchase of KUKA (a German firm) was split in two: First a 10 per cent acquisition in 2016 and then a full acquisition in 2017 of KUKA by Mecca International (Virgin Islands). The 2016 transaction amounted to EUR 1.2 billion and EUR 3.0 billion for the transaction in 2017.

Figure 2.8 Total value and number of M&As into the EU by Chinese investors



Note: The value of M&As is calculated in 2015 value. Figures for China include also Hong Kong, Taiwan and Macau China. Data were extracted in August 2017 and include confirmed transactions. There are 342 M&As recorded with missing deal values in the period 2003-2016.

Source: Copenhagen Economics' FDI database.

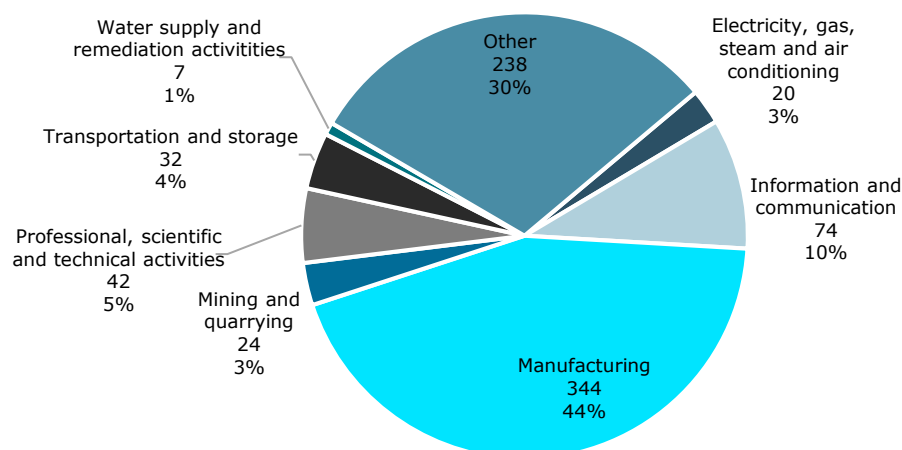
During 2003-2016, Chinese investors completed almost 800 M&A deals in the EU. The UK, Germany and France were the host for 54 per cent of the Chinese M&As, and other large recipients where the Netherlands and Italy, cf. Figure 2.9. While the UK received around 40 per cent of the total number of M&As by third country investors, only 24 per cent of the M&As by Chinese investors were targeted UK firms. The opposite is the case for Germany and the Netherlands, which receive a disproportionate high share of Chinese investors. While Germany received around 12 per cent of the total number of M&As by third country investor, for example, around 20 per cent M&As by Chinese investors were involved German firms.

Figure 2.9 M&As by Chinese investors across EU Member States

Note: The period covers 2003-2016. Figures for China include also Hong Kong, Taiwan and Macau China. Data were extracted in August 2017 and include confirmed transactions (number of M&As). There are 342 M&As recorded with missing deal values.

Source: Copenhagen Economics' FDI database.

Chinese investors also seem to invest differently than investors from other third countries. Chinese M&As are concentrated in the manufacturing sectors (44 per cent compared to 31 per cent for all third country investors). Another 10 per cent of the Chinese M&As were in the information and communication sector, which is less than the 21 per cent share for all third country M&As.

Figure 2.10 M&As in the EU by Chinese investors across sectors

Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As). The distribution is made on the number of investments. The 'Other' sector includes accommodation, agriculture, construction, education, arts, entertainment, administrative- and support services, human health, real estate, wholesale and retail, finance and insurance and other services.

Source: Copenhagen Economics' FDI database.

2.5 Concluding remarks

During 2003-2016, third country investors completed 27,736 M&As in the EU of which 2 per cent were undertaken by SOEs. The UK, Germany and France accounted for around 60 per cent of the total number of M&As but around 40 per cent of M&As by SOEs. SOEs more often than other investors conduct M&As in the Netherlands, Sweden, Italy and Finland. Chinese investors accounted for around 800 of the M&As by third country investors, and the number of transactions peaked in 2016 after a stepwise increase since 2010. The UK, Germany and France accounted for 54 per cent of the Chinese M&As. Chinese investors more often than other investors conduct M&As in Germany and the Netherlands.

The investment pattern of SOEs from third countries differs from the investment pattern of all third country investors. M&As by SOE investments were more concentrated in the utility sectors, natural resource extraction (electricity, gas, steam and air conditioning; and mining and quarrying), and transportation and storage. SOEs invested less often in information and communication compared to private investors. Chinese investors also invest differently than other third country investors with a high concentration of M&As in the manufacturing sector.

The fact that different types of investors have different investment profiles across host countries in the EU and across sectors may suggest that the investors have different underlying motives for undertaking the investment. It may also imply that individual countries may become relatively exposed to specific types of investors in specific sectors. It is thus important for individual countries to have a good understanding of their portfolio of FDI and to monitor developments over time.

It should be kept in mind, however, that the number of M&As by these types of investors remains relatively limited although increasing in both number and value.

Not all M&As are likely to concern strategic sectors and assets, and the number of relevant M&As from a screening perspective is thus significantly lower than the total number of M&As. In the next chapter, we make an attempt to define potentially sensitive sectors to narrow down the number of transactions that may warrant attention from screening authorities in EU Member States.

Chapter 3

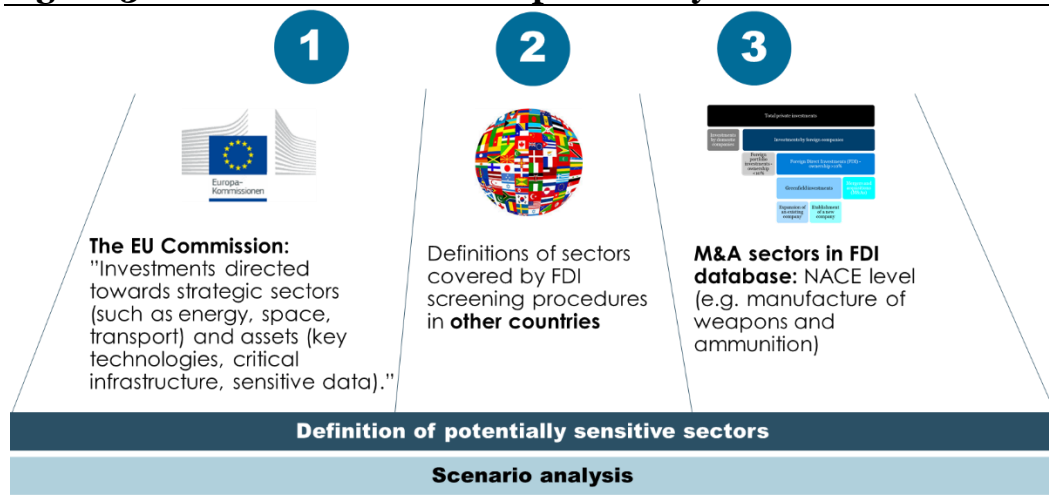
Global FDI inflows in potentially sensitive sectors

The proposed regulation on FDI screening mechanisms from the Commission is targeted potentially sensitive sectors, i.e. strategic sectors (such as energy, space and transport) and assets (such as key technologies, critical infrastructure and sensitive data) whose control may raise concerns for security or public order reasons. Different countries define potentially sensitive sectors very differently – some very narrowly and others very broadly. In this chapter, we assess the number of screenings that will need to be carried out by EU screening authorities in different scenarios of potentially sensitive sectors.

3.1 Definition of potentially sensitive sectors

We base our definition of potentially sensitive sectors on three sources of data as illustrated in Figure 3.1. *First*, we take the definition of strategic sectors and assets from the Commission as a starting point. *Second*, we look at definitions of sectors covered by screening mechanisms in other countries. *Third*, we take the sector classification from the applied FDI database as the overall frame for classifying potentially sensitive sectors. These sectors match the NACE classification used by Eurostat.¹⁹

Figure 3.1 How we have defined potentially sensitive sectors



Source: Copenhagen Economics based on a literature survey.

¹⁹ A full list of NACE Rev. 2 sector classifications can be found at <http://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF>.

For the purpose of this study, we have combined the various sources into three scenarios of potentially sensitive sectors:

1. **Narrow scenario:** This scenario includes strategic sectors (electricity, gas, stream and air conditioning supply; water supply; oil and gas), defence (explosives; weapon and ammunition; tanks, airplanes and rockets; defence, fire department and police) and strategic assets (computers; air transport and financial services).
2. **Middle scenario:** In addition to the sectors from the narrow scenario, this scenario includes critical infrastructure (ground transportation and maritime transport) and dual-use technology (electronic equipment; telecommunications; and computer programming and software).
3. **Broad scenario:** In addition to the sectors from the narrow and middle scenarios, this scenario includes additional critical assets (coal; metal; minerals; scientific R&D), additional dual-use technologies (machines; cars) and additional strategic sectors (pension; postal; movie and television; radio and data processing and hosting).

The three scenarios for potentially sensitive sectors are illustrated in Figure 3.2. During 2003-2016, 5,485 M&As fall under scenario 1 amounting to a total value of EUR 439 billion. 9,202 M&As fall under scenario 2, and 13,929 fall under scenario 3. All other sectors are classified as non-sensitive. While these scenarios can be designed in multiple ways, we find that the classification below offers a good starting point to discuss and get an overview of potentially sensitive M&As by third country investors in the EU.

Figure 3.2 Overview of the three scenarios for potentially sensitive sectors

Sector	Scenario 1: Narrow	Scenario 2: Middle	Scenario 3: Broad
Electricity, gas, steam, air conditioning supply	9% (16%)	5% (12%)	4% (8%)
Water supply	1% (1%)	1% (1%)	0% (1%)
Explosives	13% (14%)	8% (10%)	5% (7%)
Weapon and ammunition	8% (5%)	5% (4%)	3% (3%)
Tanks, airplanes and rockets	3% (2%)	2% (2%)	1% (1%)
Defense, fire department and police	1% (0%)	0% (0%)	0% (0%)
Air transport	2% (1%)	1% (1%)	1% (0%)
Oil and gas	8% (8%)	5% (6%)	3% (4%)
Computers	29% (23%)	17% (17%)	11% (12%)
Financial services	27% (29%)	16% (21%)	11% (15%)
Ground transportation		1% (2%)	1% (1%)
Maritime transport		2% (2%)	1% (2%)
Electronic equipment		4% (3%)	3% (2%)
Telecommunication		6% (10%)	4% (7%)
Computer programming and software		27% (10%)	18% (7%)
Coal			0% (0%)
Metal			2% (2%)
Minerals			0% (0%)
Machines			8% (5%)
Cars			3% (4%)
Scientific R&D			5% (3%)
Pension			2% (5%)
Postal			0% (0%)
Movie and television			2% (1%)
Radio			2% (4%)
Data processing and hosting			10% (4%)
Total number (value)	5,484 (EUR 439 billion)	9,202 (EUR 603 billion)	13,929 (EUR 844 billion)

Source: Copenhagen Economics based on NACE Rev. 2 sector classifications.

For the *narrow scenario*, more than half of the sensitive M&As concern computers (29 per cent in terms of the number of M&As and 23 per cent in terms of deal value) and financial services (27 per cent in terms of number and 29 per cent in terms of deal value). 13 per cent of the sensitive M&A deals are in the explosives sector accounting for 14 per cent of the deal value of M&As. The *middle scenario* adds new sectors, where computer programming and software add the largest number of new files (27 per cent in terms of the number of M&As and 10 per cent in terms of deal value). In the *broad scenario*, it is mainly deals categorised as data processing and hosting that increase the number of files relative to the middle scenario (10 per cent of the number and 4 per cent of the deal value).

3.2 M&As in the EU by third country investors in potentially sensitive sectors

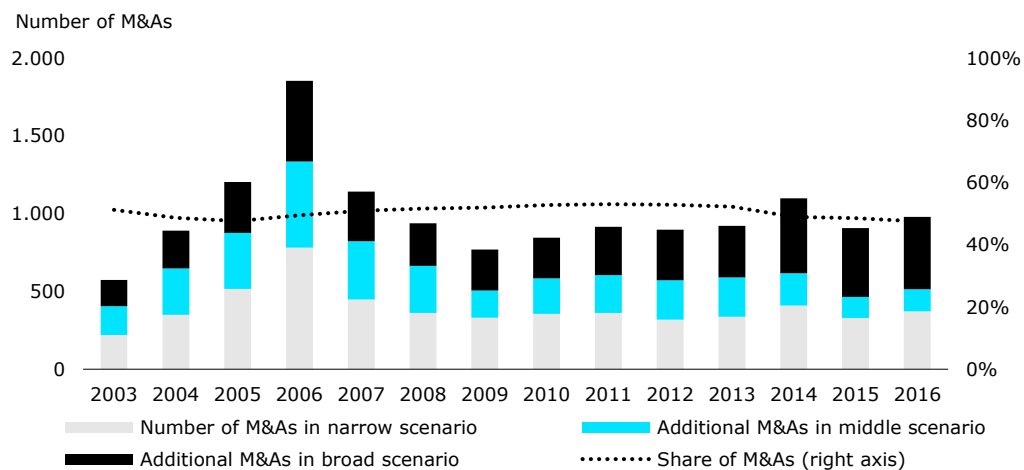
We have used the three scenarios to analyse the number of M&As from third countries towards the EU in potentially sensitive sectors. These are the M&As where foreign control may be worth screening for security or public order reasons – defined in a narrow, middle or broad sense.

The case studies carried out as part of this study show that the resources required to screen a M&A deal is unrelated to the size of the deal – measured both in terms of the resources required by the public authorities that undertake the screening and the number of documents the acquirer is requested to fill-in (see Chapter 4). We therefore concentrate on the number of M&As in each of the scenarios since this will be the main indicator of the resources required to conduct the screening.

Of the 27,736 M&As from third countries into the EU during 2003-2016, 5,484 deals fall into the narrow scenario for potentially sensitive sectors, 9,202 deals fall into the middle scenario for potentially sensitive sectors, and 13,929 deals fall into the broad scenario for potentially sensitive deals. The remaining 13,807 deals are not considered potentially sensitive in any of the scenarios defined in this report.

The distribution of M&As in the three scenarios appears to be relatively stable over time, and there is no clear tendency for M&As to have become more sensitive over time, cf. Figure 3.3. In fact, the share of potentially sensitive sectors, even in the broadest sense under scenario 3, seems to have fallen slightly over time. In 2016, 47 per cent of the 2,059 M&As from third countries fell under scenario 3. This share was 52-53 per cent during 2008-2013.

Figure 3.3 M&As in the EU by third country investors in potentially sensitive sectors

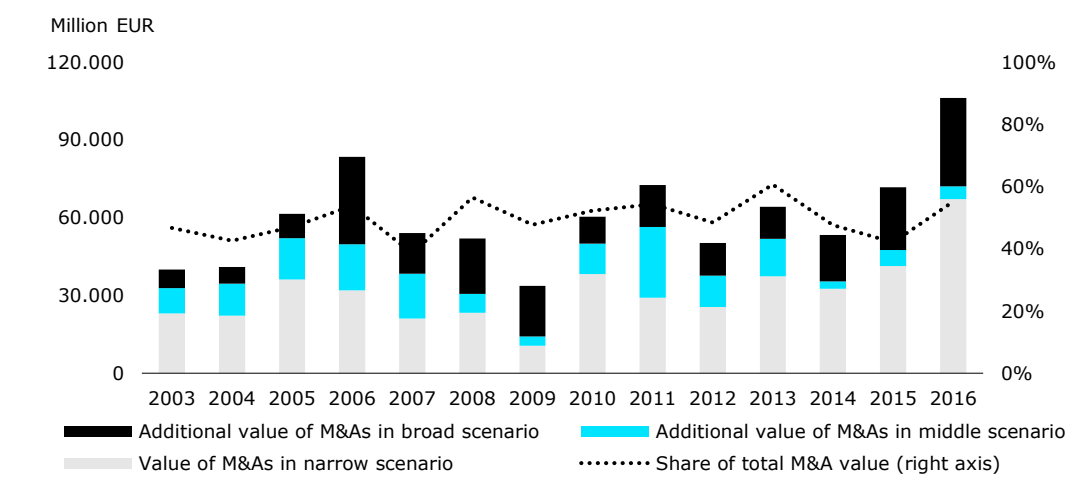


Note: Data were extracted in August 2017 and include confirmed transactions (number of M&As). The percentages refer to the broad scenario's share of all M&As from third countries.

Source: Copenhagen Economics' FDI database.

Measured in terms of deal value, M&As by third country investors do seem to have become more sensitive, cf. Figure 3.4. In 2016, 55 per cent of the total value of M&As by third country investors were in potentially sensitive sectors, and M&As in scenario 1 sectors accounted for more than 35 per cent alone.

Figure 3.4 Value of M&As in the EU by third country investors in potentially sensitive sectors



Note: Data were extracted in August 2017 and include confirmed transactions (value of M&As). Values were calculated in 2015 value. The percentages refer to the broad scenario's share of all M&A value from third countries.

Source: Copenhagen Economics' FDI database.

3.3 M&As in potentially sensitive sectors across EU Member States

The location of M&As in potentially sensitive sectors (in the narrow scenario) across EU Member States resembles the location of M&As in general. The UK, Germany and France account for 57 per cent of M&As in the potentially sensitive sectors, cf. Figure 3.5. M&As in potentially sensitive sectors tend to be slightly overrepresented in Cyprus, which is the location for around one per cent of total M&As but three per cent of M&As in the potentially sensitive sectors.

Figure 3.5 M&As by third country investors in potentially sensitive sectors across EU Member States



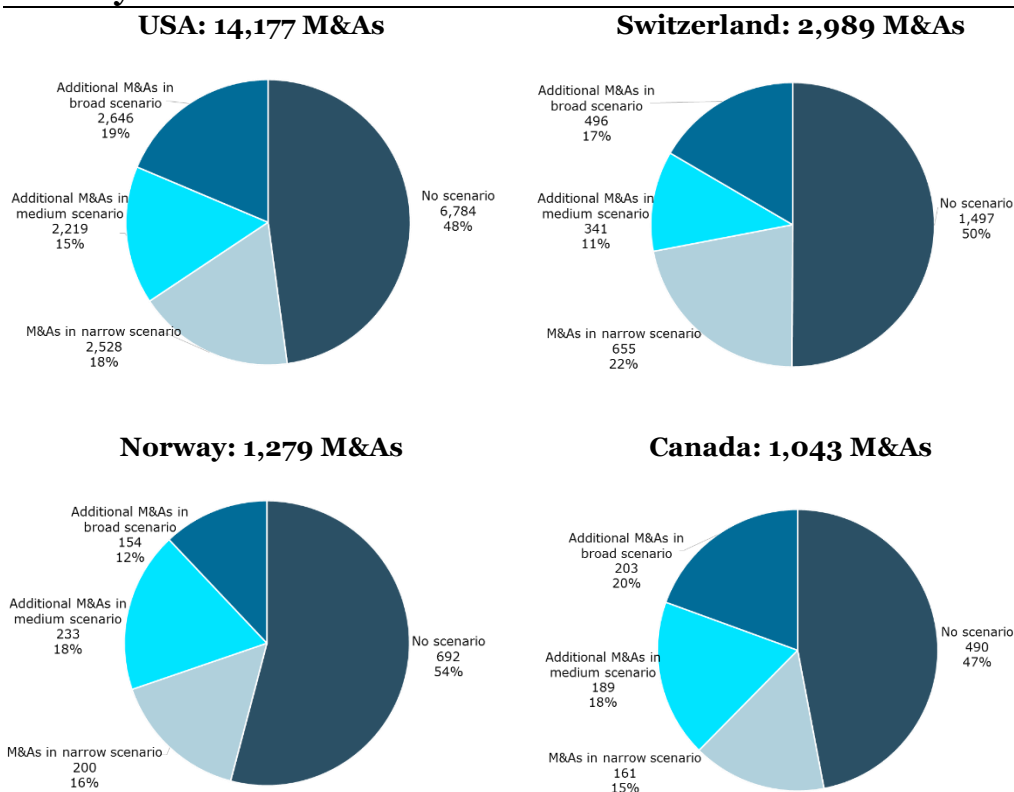
Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As). Potentially sensitive sectors in this map follow the narrow definition in scenario 1.

Source: Copenhagen Economics' FDI database.

3.4 Origin of M&As towards the EU in potentially sensitive sectors

The US is the main investor and accounted for 14,177 M&As during 2003-2016, cf. Figure 3.6. Almost half of these transactions are not considered potentially sensitive in any of the scenarios analysed here, and around 18 per cent of the M&As are conducted in sectors that are classified as potentially sensitive in the narrow scenario. This is slightly above Norway (16 per cent of the M&As in the narrow scenario) and Canada (15 per cent) but below Switzerland (22 per cent).

Figure 3.6 The potential sensitivity of M&As from main third country investors



Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As).

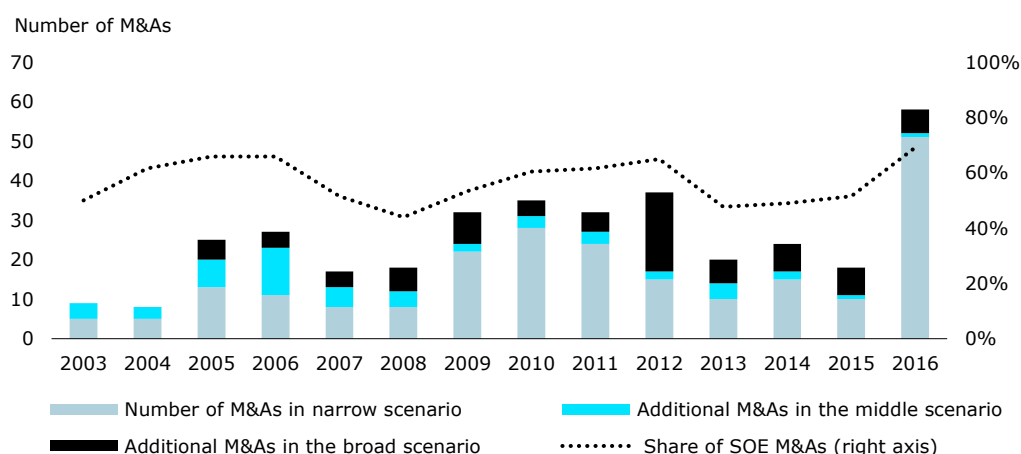
Source: Copenhagen Economics' FDI database.

3.5 M&As in the EU by SOEs in potentially sensitive sectors

M&As by SOEs in potentially sensitive sectors are particularly important from a screening perspective as these may be influenced by strategic motives. During 2003-2015, the number of M&As by SOEs in potentially sensitive sectors ranged from 10 to 40, cf. Figure 3.7. In 2016, 60 M&As by SOEs in potentially sensitive sectors were recorded of which 51 transactions were categorised as potentially sensitive in the narrow sense. In 2016, SOEs thus accounted for 69 per cent of the total number of M&As in potentially sensitive sectors. M&As by SOEs in potentially sensitive sectors accounted for around 50 per cent of the total value of M&As in these sectors in 2016, which is comparable to the share in other years, cf. Figure 3.8.

From a screening perspective, the increasing number of M&As undertaken by SOEs in potentially sensitive sectors could warrant special attention but it should also be kept in mind that the value of the deals is lower. Throughout the period, there are 7,408 M&As with unknown ownership, which indicates that there could be even more transactions by SOEs. It should also be noted that the state subsidised firms are not recorded as SOEs.

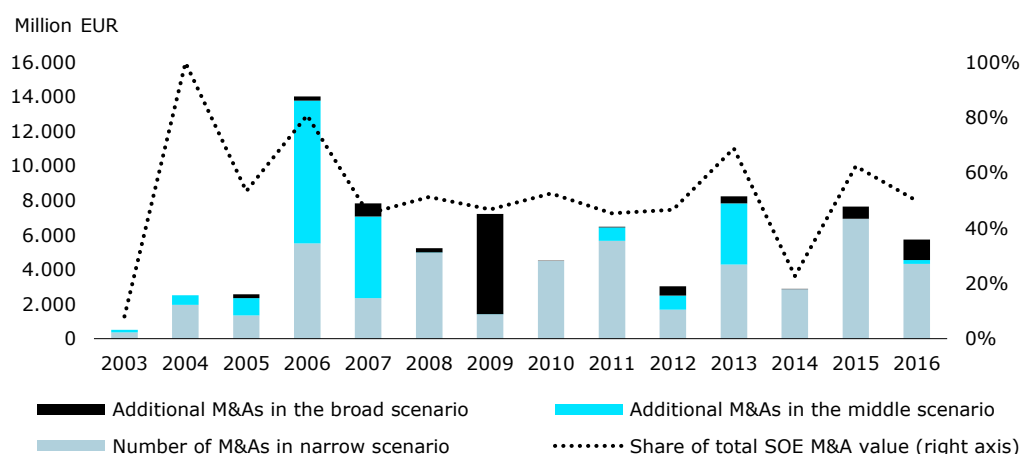
Figure 3.7 M&As in the EU by SOEs in potentially sensitive sectors



Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As). There are 7,408 M&As with unknown ownership. The percentages refer to the broad scenario's share of total SOE M&As from third countries into the EU in that year.

Source: Copenhagen Economics' FDI database.

Figure 3.8 Value of M&As in the EU by SOEs in potentially sensitive sectors

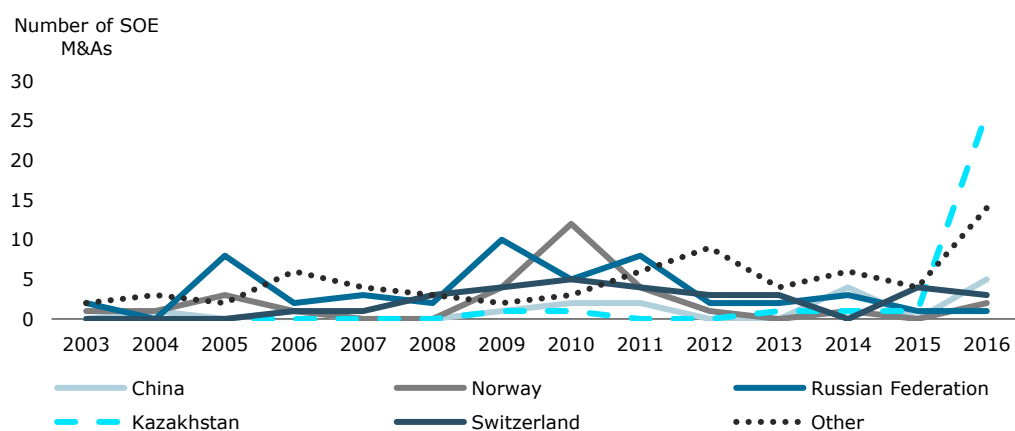


Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (value of M&As). Values were calculated in 2015 value. There are 7,408 M&As with unknown ownership. There are 316 transactions with missing deal values. The percentages refer to the broad scenario's share of SOE M&A value from third countries into the EU in that year.

Source: Copenhagen Economics' FDI database.

There appears to be no clear pattern in the origin of M&As by SOEs in potentially sensitive sectors, cf. Figure 3.9. A more complete picture of FDI by SOEs that could be strategically motivated required a more detailed analysis of the political and strategic context of individual third countries.

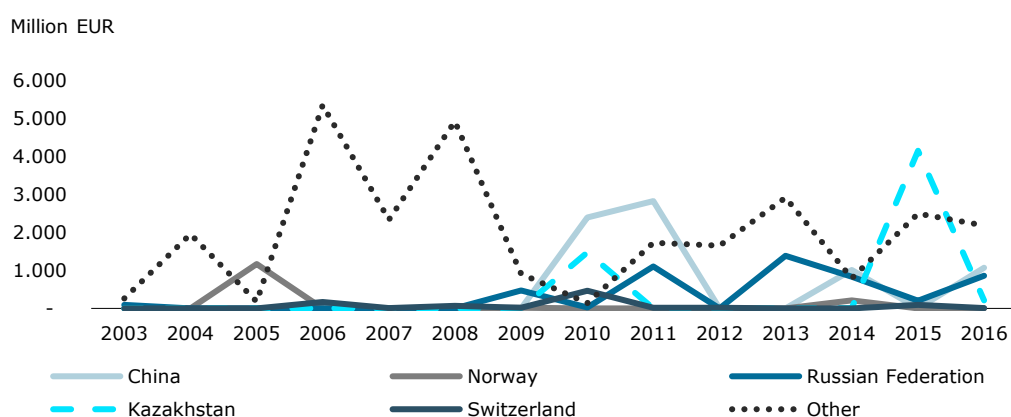
Figure 3.9 Origin of M&As by SOEs in potentially sensitive sectors



Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (number of M&As). The numbers are based on the narrow scenario. There are 7,408 M&A projects with unknown ownership. The many Kazakhstani M&As in 2016 reflect several minority investments in Dutch oil firms.

Source: Copenhagen Economics' FDI database.

Figure 3.10 Value and origin of M&As by SOEs in potentially sensitive sectors



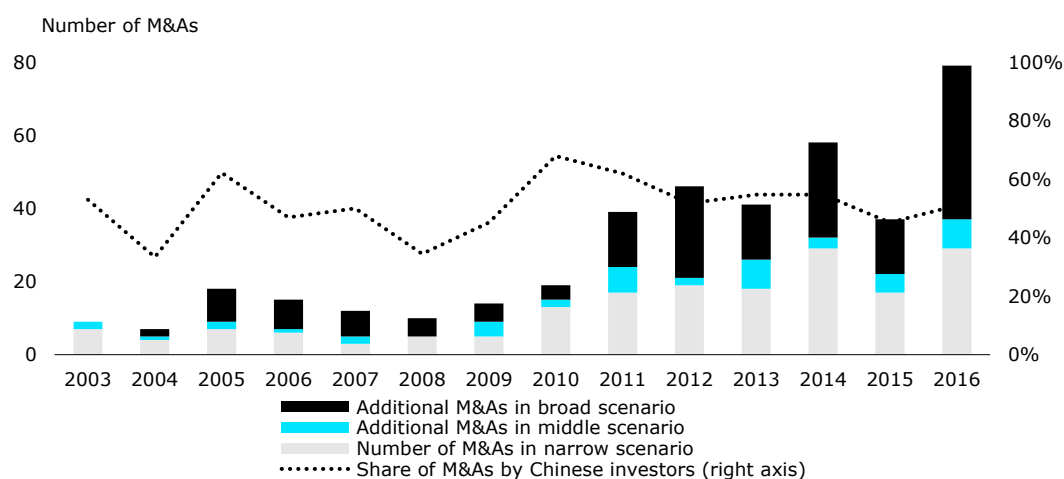
Note: The period covers 2003-2016. Data were extracted in August 2017 and include confirmed transactions (value of M&As). Values were calculated in 2015 value. The numbers are based on the narrow scenario. There are 7,408 M&A projects with unknown ownership. There are 116 transactions with missing deal values.

Source: Copenhagen Economics' FDI database.

3.6 M&As in the EU by Chinese investors in potentially sensitive sectors

The number of M&As by Chinese investors in potentially sensitive sectors has been increasing throughout the period, cf. Figure 3.11. This development is mainly driven by an increase in the number of M&As in the narrow and broad definitions of sensitive sectors. Taking into account the general increase in the number of Chinese M&As in the EU since 2010, we find that the share of potentially sensitive M&As, even in the broadest definition, has been relatively stable or has even dropped. In 2016, 51 per cent of the Chinese M&As were conducted in sectors that could be considered to be potentially sensitive compared to 68 per cent and 62 per cent in 2010 and 2011, respectively.

Figure 3.11 M&As in the EU by Chinese investors in potentially sensitive sectors



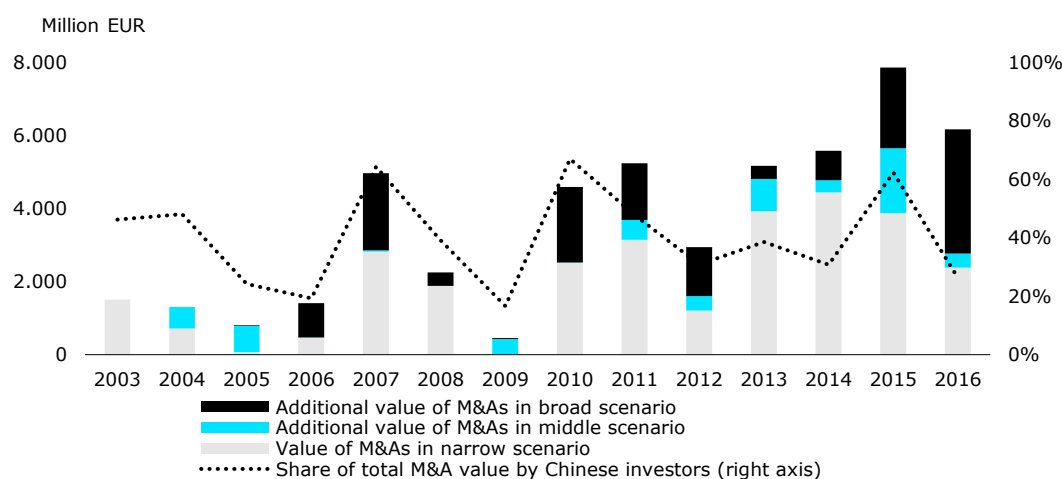
Note: Data were extracted in August 2017 and include confirmed transactions (number of M&As). China includes Hong Kong, Taiwan and Macau China.

Source: Copenhagen Economics' FDI database.

Measured in terms of value, no clear picture arises concerning the potential sensitivity of Chinese M&As, cf. Figure 3.12. In 2015, 62 per cent of the total value of Chinese M&As were potentially sensitive but the figure in 2016 was 26 per cent. The explanation is that M&As are generally very lumpy so that one large transaction one year will have a large impact.

In most years, the share of Chinese M&As in potentially sensitive sectors exceeds the share of the value, cf. Figure 3.11 and Figure 3.12. This shows that it is not only the largest FDI projects that are interesting from a screening perspective.

Figure 3.12 Value of M&As in the EU by Chinese investors in potentially sensitive sectors



Note: Data were extracted in August 2017 and include confirmed transactions (value of M&As). China includes Hong Kong, Taiwan and Macau China. Values were calculated in 2015 value.

Source: Copenhagen Economics' FDI database.

3.7 Concluding remarks

We have defined three scenarios for potentially sensitive sectors and analysed the number of M&As that have been conducted by third country investors in each of the scenarios. The case studies carried out as part of this study show that the resources required to screen an M&A deal is unrelated to the size of the deal. The number of M&As in each of the scenarios will thus reflect the resources that would have been required to screening the M&As.

In the *narrow scenario*, screening covers M&As in strategic utility sectors, defence and strategic assets related to computers, air transport and financial services. During 2003-2016, 5,484 M&As were conducted in these sectors and would require screening if this was the scope of screening within the EU. A larger share of M&As conducted by Swiss investors fall into the scenario (22 per cent of the total number of M&As are from Switzerland into the EU). The number of M&As that would be screened is 9,202 in the *middle scenario* and 13,929 in the *broad scenario*.

Based on these scenarios, we find that the number of potentially sensitive M&As has been relatively stable over time but also that the value of the potentially sensitive deals has increased. The increasing size of potentially sensitive deals could be an argument for increased monitoring and screening of FDI in these sectors. In particular, the increasing number of M&As undertaken by SOEs in potentially sensitive sectors could warrant special attention.

There appears to be no clear pattern in the origin of M&As by SOEs in potentially sensitive sectors. A more complete picture of FDI by SOEs that could be strategically motivated required a more detailed analysis of the political and strategic context of individual third countries. This supports a country neutral approach to screening.

Irrespective of the scope of screening in individual Member States, it is important that the screening mechanism is as efficient as possible to minimise the costs and reduce the risk of unintended negative consequences of screening. In the next chapter, we describe some initiatives that can make screening more efficient.

Chapter 4

Possible consequences of a new screening framework

In light of the ongoing debate about FDI screening and the proposal from the Commission, several Member States have proposed to amend or have already amended their screening procedures. More countries may follow. Such amendments could help ensuring that FDI inflows from third countries do not compromise security and public order in the Member States.

Changes to the existing screening mechanisms may have consequences for both the responsible screening authorities, acquirers from third countries and local firms in the EU. Irrespective of whether EU governments decide to maintain or amend existing FDI national screening mechanisms, the proposal from the Commission is likely to incur changes in FDI screening at the EU level that may have implications for the individual Member State.

This chapter draws on the existing literature to identify possible consequences of increased FDI screening and to identify initiatives that can enhance the efficiency of FDI screening and reduce unintended negative impacts. We use Finland and Germany as two cases to illustrate differences in screening processes.

4.1 Large variations in the scope for FDI screening

Twelve EU Member States already have screening mechanisms in place that may be used to address possible risks of FDI on the grounds of security or public order.²⁰

These countries differ widely in their scope of screening in terms of *sectoral coverage* and *threshold levels*. Germany and Finland, for example, both have sector-specific and cross-sectoral screening but differ in their applied threshold levels, cf. Box 4.1. Both countries have anti-circumvention rules in place to take indirect ownership into account.

The countries also differ in the *origin* of the acquirer targeted by screening. While some Member States screen both intra- and extra-EU investment, others screen only extra-EU investment. In Germany, for example, the sectoral screening covers all non-German investors, whereas the cross-sectoral screening covers non-EU and EFTA investors.

²⁰ European Commission (2017), *Foreign Direct Investment – An EU screening framework*. It should be noted that the countries may also vary in the extent to which the available screening mechanisms are actually being used.

Box 4.1 Key findings on the scope of screening

Sectoral scope

- *Germany*: Screening covers defence-related investments by non-German investors, including sectors that are particularly sensitive in terms of security such as military weapons and ammunition, military equipment, reconnaissance/sensor technology and support/protection technology.
- *Finland*: Screening covers organisations or business undertakings that produce or supply defence equipment or other services or goods important to military defence, and businesses producing dual-use goods.

Cross-sectoral scope

- *Germany*: Screening of acquisitions of a German enterprise (at least 25 per cent of the voting rights) by non-EU/EFTA investors whenever such an acquisition may endanger the public order or security. The majority of files completed by the German screening authorities fall into this category.
- *Finland*: Screening of acquisitions of a Finnish enterprise (at least 10 per cent of the voting rights) by non-EU/EFTA investors whenever such an acquisition may threaten key national interest.

Source: Copenhagen Economics based on case studies of German and Finnish screening mechanisms.

Finally, the countries differ in the *types of investors* prone to screening. Germany and Finland have no specific screening of SOEs but all foreign SOE acquisitions in the US, for example, require approval by the Committee on Foreign Investment of the United States (CIFUS).

A recent investigation of all cross-border acquisitions in the US from 1990 to 2012 found that acquisitions by foreign SOEs were no less likely to be completed than acquisitions by other foreign firms, but SOEs experienced a longer duration of deal making. In cases where the target firms participated in more R&D alliances in the US, implying the centrality of target firms in the US innovation system, SOE acquirers were less likely to complete their acquisition than foreign firms. This indicates that US regulators found it more difficult to justify such deals because of political and strategic considerations that stem from the fear of losing proprietary knowledge to foreign governments.²¹

4.2 The design of screening mechanisms also differs

Divergences can also be seen in the design of the screening procedures in place in individual Member States. The screening mechanisms can take two main forms: Prior authorisation mechanisms and ex-post screening mechanisms.

Prior authorisation mechanisms require investors to notify an investment covered before it is made and submit it for authorisation. This mechanism is exemplified below by the use of Finland as a case. In Finland, the acquirer is obliged to seek prior approval of the acquisition from the Finnish Ministry of Economic Affairs and Employment which consults with the Ministry of Defence, Finnish Defence Forces, National Emergency Supply Agency, and other ministries and agencies deemed necessary.

²¹ See Li and Xia (2017), *State-owned enterprises face challenges in foreign acquisitions*, Columbia FDI Perspectives 205.

The duration of a screening varies significantly from case to case but typically takes one month to three months:

- In a sector-specific screening, the acquisition is “on hold”, meaning pending and ineffective until the Ministry gives its approval; only then, the investment may proceed. The Finnish act on FDI screening does not set any time limit to the screening.
- In a cross-sectoral screening, the acquisition is effective and moves on during the screening process, but can be stopped and reversed in case the Ministry comes to the conclusion that the acquisition is not permitted.

A total of 35 applications and notifications have been given in Finland during 2012-2016. While no exact numbers are currently available, the number of applications in 2017 has been above average. Not a single acquisition has been rejected during the five years, and only one file has been subject to further investigation at the plenary meeting of the Finnish Government but was cleared after that.

Germany has the same sector-specific and cross-sectoral screening procedures in place as described above for Finland, but the screening is carried out ex-post the transaction.

Ex-post screening mechanisms allow the responsible authorities to carry out an ex-post control of investments already completed. Ex-post screening mechanisms normally also allow the investor to notify the investment voluntarily before it is completed in order to obtain clearance.

In Germany, for example, a recent amendment has made it possible for the Federal Ministry for Economic Affairs and Energy to start a cross-sectional procedure up to five years after the transaction was completed if the transaction was not reported. Before the amendment, the transaction was safe after three months. The 5 year-rule means a higher risk for acquirers if they do not report the acquisition, and the Ministry expects that the number of notifications will increase. A total of 39 screenings were carried out in 2015. Although the scope of screening was extended in 2017, only modest increase in the number of files has been registered so far. The Ministry expects that the increase in the number of files can be accommodated without more resources.

4.3 New screening procedures ahead in many Member States

The Commission’s proposal for establishing a framework for FDI screening is being discussed in many Member States, and several countries have proposed to amend or have already amended their screening procedures. Germany, France and Italy, for example, have recently taken action to strengthen their screening mechanisms, cf. Box 4.2.

Box 4.2 Recent amendments to screening procedures in Germany, France and Italy

Germany¹

In July 2017, the German Government amended the Foreign Trade and Payments Regulation to strengthen German review of foreign takeovers, particularly in strategic industry sectors. The reform extended the meaning of the term 'public order and security' to include critical infrastructure (in particular, energy, information technology, telecommunications, transport and traffic, health, water supply, food, finance and insurance). Any takeovers in critical infrastructure sectors are now subject to a mandatory filing requirement.

Moreover, the three-month time period within which the Ministry must open an investigation will now only begin once the Ministry becomes aware of the transaction. If a transaction is not notified to the Ministry and the Ministry is unaware of it, it may commence an investigation up to five years after transaction documents are signed. Once an investigation has commenced, the review periods have been extended, allowing the Ministry two months to complete its investigation if an application for a clearance certificate was made, and four months to review if no such application was made and the investigation was commenced by the Ministry. The time periods commence upon receipt of a full set of documents and are suspended if negotiations are taking place between the parties and the Ministry. Therefore, the overall review period could extend beyond the stated time periods.

France²

In 2014, the French government issued a decree allowing it to block foreign takeovers of French companies in strategic industries. The decree (2014-479) expanded the list of sectors in which foreign investors must seek authorisation from the French Ministry of Economy. The additional six sectors are energy, transport, water, telecommunications, infrastructure and public health. The decree also extended the list of circumstances under which the Ministry of Economy could refuse to give clearance to a transaction. In line with previous legislation, once the Ministry of Economy has received notification of a proposed foreign investment, it has a two-month period within which to conduct its review, failing which the transaction is deemed authorised.

Italy³

In 2012, the Italian Government issued Law Decree 21/2012, which gave the Government special powers in relation to companies owning or controlling 'strategic assets' in specified industries, namely (i) defence and national security, and (ii) energy, transport and telecommunications. The Government has special powers (including vetoing resolutions, blocking investments or imposing special terms and conditions) when it determines there is an actual threat to the interests of defence or national security, and more restricted powers in relation to an actual threat to the public interest in the energy, transport and communications sectors. Companies operating in these sectors are also subject to notification procedures. Presidential Decrees 35/2014 and 86/2014 regulate the procedure through which the government can exercise its special powers for the defence and national security sectors and the energy transport and communications sectors, respectively.

Note: ¹ Interview with Jürgen Seitel from the BMWI and public sites, including Allen & Overy (2017) *Foreign investment control in Germany*. ² Public sites, including Latham & Watkins (2014) *New French Regulations Tighten Control on Foreign Investments*. ³ Public sites, including Bird & Bird (2014) *The Italian Government's "golden powers" on strategic undertakings in the defence and national security sectors*.

Source: Copenhagen Economics based on the references above.

In the UK, as another example, the government has proposed new short and longer-term measures giving it greater scope to intervene where foreign investment could pose a risk to national security. Short-term reforms are intended to fill “gaps” in existing legislation, allowing the government to examine smaller deals in the dual-use and military sector and parts of the advanced technology sector. The reform will reduce the turnover threshold for review from £70 million to £1 million. Longer-term reforms focus on an expanded range of industries to include civil nuclear, defence, energy, telecommunications and transport sectors.²²

4.4 Potential consequences of increased screening

The current scope of sector-specific FDI screening in many Member States comes close to the narrow definition of potentially sensitive sectors under scenario 1. This scenario includes strategic sectors (electricity, gas, steam and air conditioning supply; water supply; oil and gas), defence (explosives; weapon and ammunition; tanks, airplanes and rockets; defence, fire department and police) and strategic assets (computers; air transport and financial services).

During 2003-2016, around 400 M&As per year were undertaken in sectors listed under scenario 1 and could be screened under the existing framework, cf. Figure 3.3 in Chapter 3. A broader scope of screening would increase the number of files to 650-1000 per year, depending on whether a middle or broad scope of screening is chosen. The number of files will vary from country to country. In 2016, the largest number of M&As that fall in the narrow definition of potentially sensitive sectors was registered in the UK (103 M&As), whereas Croatia, Estonia, Latvia, Lithuania and Slovakia have the no registered potentially sensitive M&As during this period.

Some of the potential impacts of increased screening are listed below. Here, we distinguish between potential implications for 1) the administrative resources required to conduct the screening, 2) the compliance costs, uncertainty and delays experienced by the acquiring firm, and 3) FDI inflows and access to capital for domestic firms.

Increased administrative costs for the responsible authority

Increasing the scope of sector-specific screening could increase the number of files at an EU level by a factor 1.5-2.5 (from 400 to 650-1,000 per year), and the responsible authority may need to scale-up on resources to avoid bottlenecks and unnecessary delays.

Screening is undertaken by relatively small teams in both Germany and Finland. In *Germany*, the screening unit consists of five people who handle the core tasks for all filings and the cooperation with experts from other ministries. The personnel costs for this core team make up a big part of the overall administrative costs of the FDI screening. Experts from other ministries are consulted as well. The size of the unit is not expected to increase although the recent amendment of the German screening framework is expected to increase the number of files. In *Finland*, two people undertake all screenings. The average cost of a screening was estimated to be EUR 2,000 in 2016, and this fee is borne by the applicant or the notifying party.

²² See, among others, Global Competition Review (2017), *UK proposes CFIUS-style framework for foreign investment*.

In both countries, the main cost drivers appear to be:

- **Identification** of cases requires significant resources, and it is the experience in Germany that mandatory reporting of acquisitions in critical areas saves the responsible authority the administrative effort in finding the cases themselves.
- The **number of files** whereas the deal size and sectoral affiliation of the target company appear to have little impact on the costs of screening.
- The **complexity** of the screening procedure. It is the experience that standardisation can bring down the costs per screening but only to a certain level because certain actions depend on the particular case and will be decided on an ad hoc basis.
- The **willingness** of the potential target/acquirer to cooperate and disclose the required information and documents. The involved firms are generally interested in avoiding delays, and disputes and discussions happen only rarely (particularly when specialised lawyers are involved). The screening authorities find that procedures to treat all documents carefully and confidentially can reduce concerns on the acquirer's side and speed up the process.

Increased compliance costs, uncertainty and delays for the acquirer

The broader the scope of screening, the more firms will need to apply for approval or notify the relevant authorities, and more firms therefore carry the costs of complying with the regulation. The more complex the regulation, the larger the compliance costs levied on the firms.

Costs also materialise in terms of delays because the screening process can take several months. In Finland and Germany, screening typically takes 1-3 months but the time period is extended in more complex files. The cooperation mechanism in the proposal by the Commission may delay the acquisition even more because further data may need to be collected and documents may need to be exchanged between the responsible authorities in two or more Member States. Delays can have significant costs for the acquirer in terms of foregone business and may influence the competitiveness of the firm.

Investors may in some cases be uncertain whether they are required to notify the authorities about a new M&A. Experience from Germany and Finland shows that initiatives to make the scope for sector-specific screening clearer and more transparent have reduced uncertainty on the investor side.²³ It is also the experience that cross-sectoral screening is more blurry and more often gives rise to uncertainty.

There is very limited knowledge about the costs related to FDI screening carried by the firms involved in the transaction. Case studies, surveys or other qualitative tools can be used to collect such cost estimates.

²³ See OECD (2015), *Impact of investment restrictive measures on investment*. The authors conclude that impacts on FDI flows remains difficult to assess because FDI data is highly lumpy and aggregated across sectors, which makes it difficult to relate changes in FDI flows to concrete changes in restrictions.

Lower FDI inflows and reduced access to capital

Foreign investors basically locate their investments where the risk-adjusted rate of return is the highest. If the screening mechanisms in place make M&As in a country more costly and/or uncertain, it will all else equal make the location less attractive relative to other locations.

Overall, there is very little knowledge about the impact of FDI restrictions on a country's FDI attractiveness. There appears to be very little correlation between the OECD's FDI Regulatory Restrictiveness Index (where screening and approvals enter as one component out of four) and the stock of FDI in a given country.²⁴ One explanation may be that other factors (e.g. the size of the market, cost levels and skills) are more important than FDI restrictions and screening.²⁵ Another explanation may be that FDI screening so far has been limited to certain sectors, typically related to the defence industry, which means that the impact on aggregate FDI flows will be relatively limited.

More detailed quantitative analysis could cast new light on the impact of FDI screening on FDI inflows. Such an analysis should take the main drivers of FDI into consideration and could be carried out at a sectoral level to capture the impact of sector-specific screening. Also, perspectives from third country investors who have applied for approval in one or more Member States or consider investing in the EU would be useful to gain an understanding about unintended negative consequences of FDI screening.

If the scope of screening increases, screening periods become lengthier and uncertainty increases, this could reduce the country's attractiveness as a FDI location and have some unintended negative impacts.

First, if foreign takeover becomes less likely it may reduce the incentive for entrepreneurs to start-up and invest in developing new products, particularly in strategic sectors. In fact, the ongoing debate in the EU may itself give rise to enough uncertainty about future screening mechanisms to have an impact on FDI inflows towards the EU already.

Second, lower FDI inflows will have the consequence that local firms have more limited access to capital, which may eventually reduce their competitiveness and long-term growth prospects.

In Finland and Germany, no complaints by foreign acquirers have been registered in relation to the approval procedure or lack of market access. Also, Finnish companies have made no complaint about hampered access to capital. The responsible authorities in the two countries have not experienced any signs of lower willingness to invest by foreign investors, and they have the view that screening has so far not had any impact on FDI.

²⁴ OECD (2015), *Impact of investment restrictive measures on investment*. The FDI Index contains four types of measures: Equity restrictions, screening and approval requirements, restrictions on foreign key personnel, and other operational restrictions (such as limits on purchase of land or on repatriation of profits and capital).

²⁵ Deutsche Bank (2015) *Recent trends in FDI activity in Europe*. Due to the already high degree of openness, Deutsche Bank concludes that there is virtually no scope for the EU to increase FDI by removing discriminatory regulation. Europe must find other ways to revive interest of foreign companies.

4.5 Status quo is not an option

Irrespective of whether individual countries decide to maintain or amend the existing screening mechanism, the proposal will have implications for each Member State.

First, if many Member States increase the scope of their FDI screening the EU as a whole may be perceived as more restrictive and less open to foreign investment. This could have negative consequences for all Member States – even countries without screening mechanisms in place – and in particular for smaller countries that may be less well known to third country investors.

Second, the proposed regulation cooperation mechanism between Member States is likely to require more administrative work for the responsible authorities in the Member States, because they will be required to share information with the Commission and authorities in other Member States in ongoing screening files. The EU cooperation mechanism is expected to include the following seven steps:²⁶

1. The Member State screens investment.
2. The Member State informs the Commission and other Member States.
3. The Commission and other Member States request additional information.
4. The Member State shares additional information.
5. Other Member States may issue comments. The Commission may issue opinion.
6. The Member State takes into consideration opinion and comments.
7. The Member State takes decision.

It remains unclear how this mechanism will work in practice, and it will be important to specify which documents can be requested by other Member States and the Commission, and it will be relevant to estimate the associated administrative costs to understand budgetary implications. Likewise, it will be important to assess costs to private firms in terms of compliance costs, uncertainty and delays for the acquirer as well as potential unintended negative impacts on domestic firms in terms of lower FDI inflows and reduced access to capital.

Third, the Commission will be able to screen foreign investment likely to affect projects or programmes of Union interest in the area of research (Horizon 2020), space (Galileo), and transport, energy and telecommunication networks (Trans-European networks – TEN). Again, it remains unclear how this screening will be carried out in practice and, consequently, how this will impact the screening authorities, third country investors and local firms in the EU.

Fourth, the consequences of the EU screening framework should also be seen in relation to how the proposal is received by the EU's trade and investment partners in third countries. If the proposal is seen as discriminatory and disproportionate, the proposal could trigger a negative reaction in third countries. Positive reciprocity (return favours) rather than negative reciprocity (return harm) may in some cases be a better way forward.²⁷

²⁶ European Commission (2017), *Foreign Direct Investment – An EU screening framework*.

²⁷ Nicolas (2014), *China's direct investment in the European Union: Challenges and policy responses*, EABER Working Paper 86.

Besides securing security and public order, the proposal may also have another positive impact. The Commission states that the EU screening framework will be transparent, non-discriminatory and predictable.²⁸ It is intended to “give enough flexibility to Member States on whether to maintain or not FDI screening mechanisms, but also to ensure a minimum degree of harmonisation and cooperation at the EU level, whilst enhancing the certainty and limiting the administrative burden for foreign investors”.²⁹ If the EU regulatory approach to FDI screening becomes less fragmented and better coordinated, improved transparency and predictability could have a positive impact on the EU’s FDI attractiveness.³⁰ Increased transparency could also reduce the scope for using FDI screening for protectionist purposes in individual Member States.

4.6 Initiatives can make screening more efficient

Irrespective of the scope of sector-specific and cross-sectoral screening, experience from other countries show that several initiatives can make the screening itself more efficient:

- **Mandatory reporting** of acquisitions in critical areas can spare the responsible authority the administrative effort required to identify the cases but this will come at a cost to the acquirer.
- **Long time limits** for reopening screenings can give acquirers an incentive to comply with the mandatory reporting, but high compliance may come at the cost of increased uncertainty for the acquirer due to the longer period where the file can be opened. A **clear definition of the scope** for screening (in particular cross-sectoral screening) can reduce this uncertainty.
- **Standardisation** can bring down costs for the responsible authority and for the firm in case the costs are charged to the acquirer. Standardisation may also reduce delays and reduce the scope for discretion, which will reduce uncertainty.
- **Simple, predictable and transparent screening mechanisms** can reduce uncertainty and compliance costs for the firms. In particular, rules that make it easier to communicate with the companies save costs and time on both sides.
- **Treating all documents carefully and confidentially** can reduce concerns on the acquirer’s side and speed up the process because the acquirer becomes more willing to cooperate and convey all required documents.

4.7 Concluding remarks

Several EU Member States have proposed to amend or have already amended their screening procedures, and more countries may follow as the debate about FDI screening unfolds at both the EU and national level. Revised screening mechanisms could help ensuring that FDI inflows from third countries do not compromise security and public order in the Member States. A common framework may also have the advantage to make EU screening less fragmented and better coordinated, and improved transparency and predictability is likely to make the EU more attractive for foreign investors.

²⁸ European Commission (2017), *Foreign Direct Investment – An EU screening framework*.

²⁹ European Commission (2017), *Proposal for a regulation of the European Parliament and of the Council establishing a framework for screening of foreign direct investments into the European Union*, Commission staff Working Document.

³⁰ Eaker and Sun (2014), *Chinese investment in the European Union and National Security*, Law China 9(1): 42-64.

Increased screening is likely to have negative consequences in terms of 1) the administrative resources required to conduct the screening, 2) increased compliance costs, uncertainty and delays experienced by the acquiring firms, and 3) risk of lower FDI inflows and reduced access to capital for domestic firms. As FDI screening is likely to have negative consequences for both the authorities and private firms, the scope of FDI screening should be continuously revised and updated by the national authorities to ensure a good balance between the need to maintain security and public order while at the same time to screen proportionately and reduce potential negative consequences.

Overall, we find that there is very little knowledge about the actual impacts of screening on the investment decision of private firms and on the FDI attractiveness of individual Member States and the EU as a whole. More knowledge is required before firm conclusions regarding the implications of the Commission's proposal can be fully assessed.

Irrespective of whether the individual EU governments decide to maintain or amend its existing FDI national screening mechanisms (or continue to refrain from screening), the proposal from the Commission is likely to incur changes in FDI screening at the EU level that may have consequences for the individual Member State. Going forward, it will be important to monitor closely how the design and implementation of the framework will materialise at the EU level, and to assess how other Member States and third countries respond to the proposal.

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Appendix A

The applied FDI database

Definition of FDI and the quality of FDI data

In this appendix, we describe how we define FDI and the components that we record as FDI. Here, we distinguish between greenfield investments and M&As. We illustrate how we collect data on FDI transactions, and we describe some of the differences between the data based on transactions and the national FDI data that can be obtained from international statistics.

Throughout this study, we follow the UNCTAD definition of FDI as being cross-border investments by a foreign company with a minimum 10 per cent ownership share.³¹ FDI can be measured in different ways:

- **FDI inflows vs. inward FDI stock.** FDI inflows within a given year measure all cross-border investments that have been made by foreign investors that year. The inward FDI stock within the same year measures all cross-border investments that have been made by foreign investors up until that year, i.e. the accumulated annual FDI inflows.
- **Gross vs. net FDI inflows.** Gross FDI inflows within a given year include all FDI made by foreign investors that year. Net FDI inflows subtract from gross FDI inflows the disinvestments made by foreign investors over the same period.

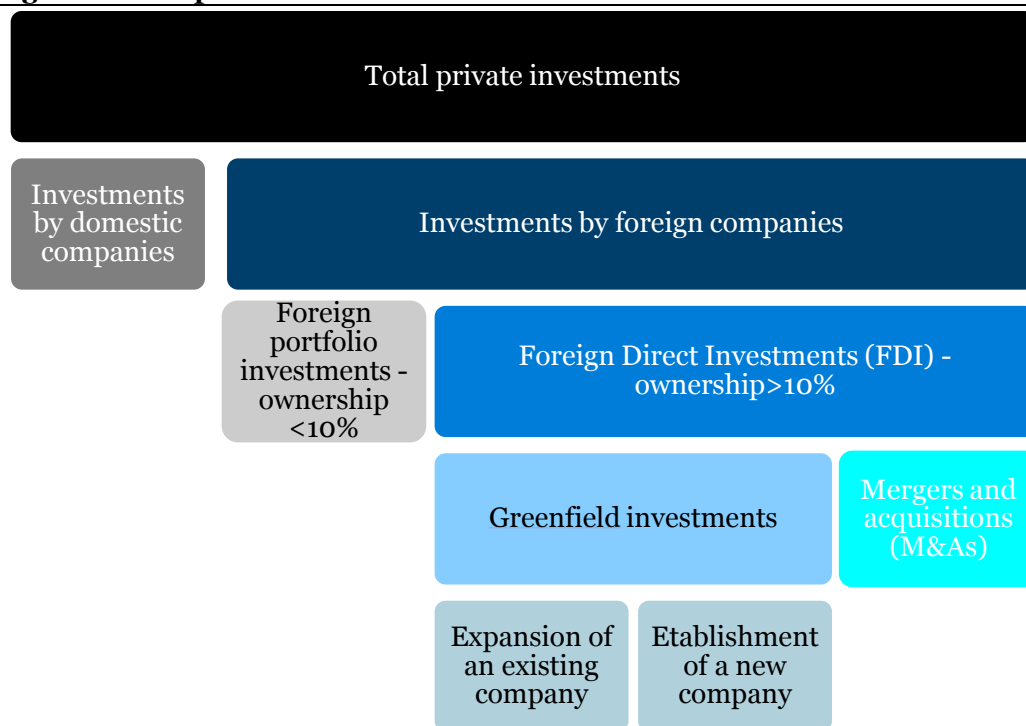
In this study, we are mainly interested in collecting data on gross FDI inflows because this is the relevant indicator in a screening context.

Composition of FDI

As illustrated in Figure A1, FDI is composed of two main components:

- **Greenfield investments.** This type of FDI takes place when a new foreign company establishes itself in the country or when a foreign-owned company that is already located in the country expands its business. Expansions of a foreign-owned company can, for example, be financed through reinvested earnings or intra-company loans.
- **Mergers and acquisitions.** Mergers and acquisitions (M&As) take place when a foreign company acquires more than 10 per cent of the voting stock in an existing domestic company.

³¹ UNCTAD (2007) Annex A. In: *World Investment Report 2007*.

Figure A1 Composition of FDI inflows

Source: Copenhagen Economics

Data on greenfield investments are available in the fDi Market database offered by the Financial Times (FT database). This database includes greenfield investments for all EU countries and almost all third countries. Annual inflows of greenfield investments by foreign companies are available for the period 2003-2016 and can be measured in terms of both the number of greenfield investment projects and the value of these investments. No data on disinvestments are available from this database.

Data on M&As are available in the Bureau Van Dijk Zephyr database (Zephyr database).³² This database also includes M&A data for all EU countries and almost all third countries. Annual M&As by foreign companies are available for the period 2003-2016 and can be measured in terms of both the number of M&As and the value of these investments. Bureau van Dijk collects the information from data scrapping from all publically available sources. The Zephyr database has certain cut-off thresholds for including the investment:

- The transaction represents at least 2 per cent of the target firm's total stock value, regardless of the value of the transaction, or
- The transaction has a trade value of at least GBP 1 million, regardless the share of the stock that is bought.

³² Other M&A databased are also available, such as Thomsen and Reuters, SNL, Census, Compustat and Worldscope. We have selected the Bureau Van Dijk database because it gives us the opportunity to combined M&A data with firm-level data in the Amadeus database. This could become an advantage in future parts of the analysis.

Thus, the Zephyr database contains M&A that are considered FDI with a ownership share of at least 10 per cent, and portfolio investments with an ownership share between 2 per cent and 10 per cent, or larger than GBP 1 million. In most cases there is information of the share percentage of the transaction. We do not use data on portfolio investments in this study because such investments are not covered by the proposal from the European Commission.

The database distinguishes between different types of M&As:

- Acquisitions: All transactions where the owner share exceeds 50% of the firm's value
- Mergers of two or more firms
- Buy-in/buy-outs: Acquisition where a group of employees or a fund buys at least 50% of the firm
- Minority stakes: The buyer buys at least 2% (or at least GBP 1 million) but less than 50%
- Capital market deals: IPOs and share buy-backs. Firms which are traded on the stock exchange for the first time or firms' buyback of shares

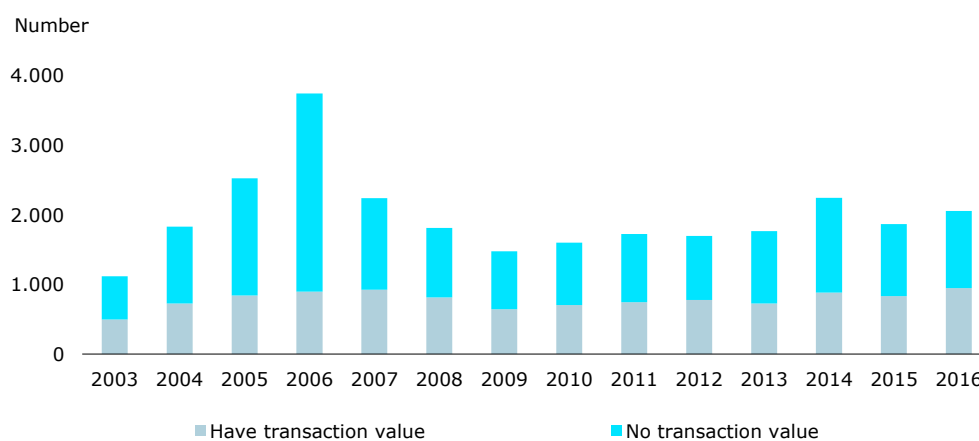
No data on disinvestments are available in the Zephyr database.

Problems with moving from transaction to national FDI

When we aggregate the data on FDI transactions collected in this study, we get a measure of gross national FDI inflows within a given year. This measure of national FDI inflows is not directly comparable with FDI inflows recorded by national statistics:

1. We measure gross FDI flows rather than the net FDI flows, which are available from international statistics. As we do not consider disinvestments, the value of national FDI inflows in this study will tend to be higher than the level of national FDI that can be obtained from international FDI statistics. Also, the difference will tend to be higher in periods with increasing disinvestments and liabilities.
2. FDI measures from national statistics take into account the appreciation and depreciation of the investment values. The CE FDI database does not have information to include changes of value after the investment is executed. This is not important when it comes to screening of investments because it is only the initial investment that is in scope.
3. FDI measures from national statistics in some cases take into account investments that pass through one country into another country. In this report, we have focused on FDI from third countries but screening of intra-EU FDI could also be relevant from an anti-circumvention perspective.
4. The Copenhagen Economics FDI database only includes deal values when these are made publicly available. There are thus a number of FDI transactions with missing deal values, cf. Figure A2. These transactions are still relevant from a screening perspective, and the number of transactions is therefore a preferred FDI indicator over the value of the transactions.
5. Another reason is that national statistics measures capital flows in a given year, which the applied FDI database measures multiple-year transactions in the year it has been announced.

Figure A2 M&As into the EU from third countries with and without a deal value



Note: The figure shows the number of M&A projects into the EU from third countries with and without transaction values. There were 16,739 transactions with missing values during 2003-2016.

Source: Copenhagen Economics' FDI database.