Who’s Afraid of Foreign Investment Screening?

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ABSTRACT

In recent years, most advanced economies have adopted or tightened their existing foreign investment screening mechanisms (ISMs), which empower national authorities to restrict foreign takeovers in strategic sectors. In 2019, the EU adopted the first regional investment screening framework. Against this backdrop, we document the main features of FDI screening regimes in the EU and other major advanced economies. We fill in a gap in research literature by developing a composite index measuring the restrictiveness of national ISMs, which is suitable for cross-country comparisons. We document the heterogeneity of national designs and the lack of legislative convergence within the EU. At a time of increased geopolitical tensions, we analyze how country-specific macroeconomic characteristics (such as China exposure and technological specialization) and geopolitical factors shape the restrictiveness of national ISMs. We analyze how investment screening regimes could reconcile openness to growth-fostering inward FDI with enhanced scrutiny of potentially hostile foreign takeovers. We demonstrate how ISMs can coexist alongside otherwise liberal investment regimes. We also investigate the impact of ISMs on FDI inflows. We build a comprehensive database mapping the outcome of screening decisions and provide a tentative assessment of the impact of screening on transactions.

Keywords: FDI, Investment Screening Mechanisms, Geo-Economic Fragmentation, National Security

JEL classification: F21, F23, F52, F55

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NON-TECHNICAL SUMMARY

After decades of increasing global economic integration, rising geopolitical tensions have led to a surge in restrictions on trade and capital flows often motivated by national security considerations. Against this backdrop, most advanced economies have adopted or tightened their existing investment screening mechanisms (ISMs), which empower national authorities to review, and potentially condition or prohibit, transactions that may threaten domestic interests, including national security and public order. A number of advanced economies, which have traditionally been open to foreign investments, implemented stricter scrutiny of foreign transactions from the late 2010s onward. Alongside these national developments, in 2019 the EU adopted a common FDI cooperation screening framework.

In this paper, we analyze whether ISM mechanisms can reconcile openness to growth-fostering inward FDI with a desire to ensure enhanced scrutiny of potentially hostile foreign takeovers. Although ISMs may be necessary to protect strategic assets, they may also reduce the efficiency of capital allocation (Ioannou et al., 2023). We analyze the impact of FDI screening on attractiveness and check whether it has contributed to legislative convergence within the EU.

This paper makes several contributions to the scarce body of literature on ISMs (Danzman and Meunier 2023). First, we have built a comprehensive database mapping the main features of FDI screening regimes in major advanced economies (EU countries, the USA, the UK, Australia, Canada, Norway and Japan). We provide a composite index measuring the restrictiveness of screening regimes. EU countries do not systematically have the strictest regimes, suggesting they remain competitive in comparison to other advanced economies. The index is also helpful for tracking the pace of legislative convergence within the EU, in light of the European Commission's evaluation of the EU cooperation mechanism expected by the end of 2023. While the EU regulation aims to facilitate convergence in national screening regimes, the index outlines their heterogeneity (see figure 1).

Second, we show that restrictive ISMs can coexist alongside an otherwise liberal investment environment. We compare the ISM restrictiveness index with other measures of FDI restrictiveness and show how it complements the existing literature. Overall, the recent tightening of national ISMs has not resulted in investors reappraising the most attractive destinations. Indeed, some of the most restrictive countries are attractive to foreign investors, at least as measured by FDI inflows. Transparent foreign investment screening regulations may even improve the perceived transparency of government regulations and hence, enhance attractiveness.

Third, we show how macroeconomic and geopolitical factors shape the restrictiveness of ISMs. We focus on three factors that may result in more restrictive regimes: i) exposure to China, ii) natural resources and technological specialization and iii) geopolitical factors. Advanced economies that are highly exposed to investments from China tend to be more restrictive. The restrictiveness of national ISMs also correlates with the number of patents per capita. Technology transfer associated with foreign acquisitions may be a greater concern in economies with a larger share of R&D in sectors related to critical technology. Countries that are geo-politically aligned with the USA tend to have stricter ISMs, while negative sentiment towards the Chinese Belt and Road Initiative (based on an analysis of international media sentiment, see García-Herrero and Schindowski, 2023) correlates with more restrictive ISMs.

Fourth, we assess the impact of ISMs on transactions. We analyse whether stricter national regulations result in a higher number of transactions being blocked. We build a comprehensive database on the outcome of screening decisions and document which target sectors and investors are most impacted by ISMs. Although a large number of transactions are subject to review, the number of blocked transactions is limited, suggesting that ISMs strike a balance between openness to FDI and the protection of national interests. Lastly, we show that the ISM restrictiveness index is a good predictor of implementation practices, with stricter regimes resulting in a higher number of screened, mitigated or blocked transactions.
Qui a peur du filtrage des investissements ?

RÉSUMÉ


Mots-clés : IDE, contrôle des investissements, fragmentation géoéconomique, sécurité nationale
1 Introduction

After decades of increasing global economic integration, characterized by the expansion of cross-border lending and trade, geopolitical tensions and a growing debate about the merits of globalization have led to a surge in restrictions on trade and capital flows. Import restrictions and export controls based around national security concerns are on the rise, increasing the risk of geo-economic fragmentation (Aiyar et al., 2023). Surveys such as Kearney’s 2023 FDI Confidence Index¹ suggest that investors are increasingly concerned by geopolitical tensions and anticipate a change in the nature of globalization, with a shift toward regionalization.

Against this backdrop, most advanced economies have adopted or tightened their existing investment screening mechanisms (ISMs), which empower national authorities to review, and potentially condition or prohibit, transactions that may threaten domestic interests, including national security and public order.² A number of advanced economies, which have traditionally been open to foreign investments, implemented stricter scrutiny of foreign transactions from the late 2010s onward (e.g. the U.S. with the Foreign Investment Risk Review Modernization Act of 2018). Alongside these national developments, in 2019 the EU adopted a common FDI cooperation screening framework. As a result, 60% of global FDI inflows went to countries that apply cross-sectoral FDI screening in the late 2010s, i.e. twice the share of global FDI inflows that were potentially subject to security-motivated screening in the 1990s (OECD, 2020).³

In this paper, we analyze whether ISM mechanisms can reconcile openness to growth-fostering inward FDI with a desire to ensure enhanced scrutiny of potentially hostile foreign takeovers. Although ISMs may be necessary to protect national assets, they may also reduce the efficiency of capital allocation (Ioannou et al., 2023). We analyze the impact of FDI screening on attractiveness and check whether it has contributed to legislative convergence within the EU. In particular, we assess the restrictiveness of national ISMs and analyze the impact of screening on attractiveness and investment. While a number of other economic regulatory tools address

¹The FDI Confidence Index, first released in 1998, is an annual indicator developed by A.T. Kearney, a worldwide management consulting company.
²“Screening” and “screening mechanisms” hereinafter refer to procedures for assessing, investigating, authorising, conditioning, prohibiting or unwinding FDI on grounds of national security or public order. In most national laws, the definitions of “security” and “public order” are deliberately quite vague, leaving governments broad scope for assessing national security risks that change over time.
³This estimate relies on a sample of 62 economies. It only encompasses mechanisms that apply across sectors.
national-security concerns (export controls, economic sanctions...), we focus on inward foreign investment screening. These mechanisms can block pending transactions and unwind closed deals, and as such, they are among the most disruptive national security-related regulations for firms (Eichensehr and Hwang, 2022).

We make several contributions to the related literature. First, we have built an index mapping the main features of FDI screening regimes in major advanced economies (EU countries, the USA, the UK, Australia, Canada, Norway and Japan). To the best of our knowledge, such an index does not currently exist. Although one of the four dimensions of the OECD’s FDI regulatory restrictiveness index focuses on screening and approval requirements, it excludes screening mechanisms applied for national security reasons (Kalinova et al., 2010), which are at the core of contemporary investment screening mechanisms. More recently, Bauerle Danzman and Meunier (2023) have developed the Politics and Regulation of Investment Screening Mechanisms dataset (PRISM hereinafter) that documents how certain features of investment screening mechanisms have evolved over time. However, it focuses on qualitative coding and does not provide a synthetic quantitative index. Building on both the methodology of the OECD’s RRI and the scope of the PRISM database, we provide a composite index that measures the restrictiveness of foreign investment screening laws on national interest and national security grounds. We illustrate the heterogeneous situation prevailing in the EU despite the adoption of a cooperation framework in 2019. We compare the index with other measures of FDI restrictiveness and show how it complements the existing literature. We show how strict ISMs may coexist within an otherwise liberal investment regime. Indeed, some of the most restrictive countries are attractive to foreign investors, as reflected by FDI inflows.

Second, we explore whether the restrictiveness of national ISMs correlates with country-specific characteristics. We focus on three factors that may result in more restrictive regimes: i) exposure to China, ii) natural resources and technological specialization and iii) geopolitical factors.

Third, we assess the impact of ISMs on investment trends. We analyse whether stricter national regulations result in a higher number of transactions being blocked. We build a comprehensive database on the outcome of screening decisions and document which target sectors and investors

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4Outbound investment screening regimes are far less common than inward investment screening regimes. At the time of writing, the Biden administration had issued an Executive Order establishing an Outbound Investment Program to prohibit certain outbound US investments to China in several technology sectors. As regards other OECD countries, only Korea and Japan review outbound investment. Both regimes only cover a narrowly-defined list of industries or technologies.
are most impacted by ISMs.

The remainder of the paper is organised as follows. In Section 2, we review the relevant literature and describe the rise of FDI screening regimes in advanced economies. Section 3 documents recent trends in inward FDI into the EU by industry and country of origin. We pay particular attention to investments originating from the BRICS countries, with a focus on China and Russia. In section 4, we build a composite index to gauge the restrictiveness of national ISMs. Lastly, section 5 provides an assessment of the impact of ISMs on investment.

2 Historical perspective and literature review on ISMs

The global rise of investment screenings illustrates a paradigm shift away from decades of global economic integration. From the 1970s onward, most economies opened up to FDI in order to benefit from foreign knowledge, access to finance and technological spillovers (Kobrin, 2015). While foreign investments provide significant benefits, most advanced economies have recognised the need to mitigate the risk where individual transactions may be contrary to national interest (Lenihan, 2018). Since 1975, the USA and Australia followed by Canada have had a legislative framework in place to review foreign investment on a case-by-case basis. Other major advanced economies subsequently adopted similar regimes (e.g. France and Germany in the early 2000s). Overall, investment screening coexisted alongside an otherwise liberal investment regime. For instance, early adopters of ISMs, such as the USA and Canada, were also advocates of financial openness (Bauerle Danzman and Meunier, 2023).

In the aftermath of the Global Financial Crisis, perceived national security risks from foreign investment have increased on the back of rapid technological progresses and changes in the international security environment. Although most national ISMs do not overtly single out any particular country, recent literature focuses on ISMs as a response to the rise of Chinese outward investment (Bauerle Danzman and Meunier, 2023; McCalman et al., 2022) and stresses the importance of national security threats from Russia in the development of ISMs in Central and Eastern European countries (Danzman and Meunier, 2023b). In 2019, the EU adopted a common FDI cooperation screening framework, that aims to strike a balance between the need to maintain an open investment environment and to restrict capital movement on grounds of na-
tional security and public order (see Appendix A and Danzman and Meunier (2023c) for further
details of investment screening in Europe). The Covid-19 pandemic also strengthened govern-
ments’ commitment to preventing the sale of strategic domestic assets (Evenett, 2021). Hence,
in 2020, Australia, Canada and a number of European countries imposed stricter restrictions
on FDI to protect distressed national assets from opportunistic takeovers by foreigners. Within
the EU, Spain, Italy, France and Germany had been first to respond by amending their FDI
regimes (e.g. by expanding the scope of sectors subject to review or lowering the acquisition
threshold that triggers a review). More recently, Russia’s invasion of Ukraine has highlighted
the importance of a wide range of infrastructure and technologies for national security, resulting
in increased scrutiny of investment connected to Russia and Belarus, as recommended by the
European Commission (Commission, 2022a).

At the same time, the notion of national security has expanded beyond the defense industry
to assets previously not deemed strategic. The scope of most FDI regimes now encompasses
transactions relating to critical infrastructure (whether physical or virtual, including data pro-
cessing and storage and financial infrastructure), communication networks, advanced technologies
(AI, robotics, bio-technologies, etc.). At the time of writing, more than half of the OECD’s 37
members had put in place cross-sectoral screening mechanisms (where the government can review
investments in any sector), compared to less than a third a decade earlier (OECD, 2020). Figure
1 shows that an increasing number of countries have shifted from sectoral mechanisms (where
the government has the authority to review a list of sectors, shown in orange) to a cross-sectoral
(red) or mixed mechanism (dark red), where the government can review investments in any sec-
tor and subject a specific list of sectors to stricter review requirements. Countries that continue
to screen transactions in specific sectors only have expanded the number of sectors subject to
review over time, from 4 on average in 2007 to 10 in 2021 (Danzman and Meunier, 2021). Figure
2 shows the ever-increasing number of sectors covered by sector-specific ISMs.

However, only a handful of advanced economies (e.g. Australia, France and Canada) have opted for a wider
public interest test for government intervention in foreign investment. In most jurisdictions, the focus remains on
"national security", albeit broadly interpreted and not clearly defined in legislation (Roberts, 2022).
Note: The coverage of ISMs has shifted from sectoral mechanisms (orange) to cross-sectoral (red) or mixed mechanisms (dark red). Yellow tiles indicate no ISM. The darker the tile, the wider the coverage.
Source: PRISM database; © 2021, last update March 2023; Sarah Bauerle and Sophie Meunier.

Figure 1: Expanding coverage of national ISMs

Note: The number of sectors covered in a sector-specific mechanism ranges from 0 (white) to 28 (dark red). Zero values may reflect two different situations. On the one hand, Italy adopted a sectoral ISM in 2012 and hence, had no screening in place from 2007 to 2011. On the other hand, Australia (in 2017) and the USA (in 2020) moved from a cross-sectoral mechanism (where the government can review investments in any sector) to a mixed mechanism (where the government can i) review investments in any sector and ii) subject a list of sectors to stricter review requirements).
Source: PRISM database; © 2021, last update March 2023; Sarah Bauerle and Sophie Meunier.

Figure 2: Expanding number of sectors screened over time
Although recent literature discusses the potential economic consequences of geopolitical fragmentation on trade and capital flows, the literature on ISMs is still in its infancy. One strand of international economics literature analyses the effect of restrictions on capital on FDI flows. For instance, Binici et al. (2010) show that capital controls impact both the volume and composition of capital flows. Most of the existing literature uses the RRI as indicator of FDI restrictions (Albori et al. 2021; Eichenauer and Wang 2022; Ro 2022). However, the RRI excludes restrictions based on national security, and is therefore not suitable for tracking the ever-increasing scope of ISMs (Chan and Meunier, 2022). Recent political economy literature focuses on countries’ decisions to adopt a national ISM and proposes explanations for the adoption of such mechanisms (Chan and Meunier 2022; Danzman and Meunier 2021; Eichenauer et al. 2021). Danzman and Meunier (2023a) argue that ISMs have not been designed as protectionist instruments, but rather as part of a new toolbox of trade and investment policy instruments designed to ensure the EU’s open strategic autonomy. ISMs thus reflect a shift from economic to security logic in addressing the tension between the benefits and vulnerabilities of open markets, including among relatively close partners (Lenihan, 2018). Overall, the scarcity of literature reflects the lack of a comprehensive database on ISMs (Rebucci and Ma, 2019). We contribute help fill this void by providing an index suitable for comparing the main features of national ISMs.

3 Foreign Direct Investment into the EU since the early 2000s

3.1 Data and definitions

In this section, we document the trends in inbound investments that have led to the recent expansion of ISMs into advanced economies. To map merger and acquisitions (M&As) activity in the EU, we use data retrieved from Zephyr. We focus on brownfield investments, which correspond to the acquisition of equity stakes in existing companies (see Appendix B for further details).

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6 In that respect, ISMs tend to reach a balance between these two lines, as illustrated by Ufimtseva (2020), who builds an "FDI acceptability threshold" as the "maximum point of political tolerance for any given foreign investment", given political or economic consequences for domestic firms.

7 Zephyr is a database curated by Bureau Van Dijk listing all major operations involving limited liability companies. Using micro data allows us to explore in depth the targets and origins of investments and to disentangle cross-border investment operations (where a foreign investor acquires ownership of an asset it did not control before the investment) from those stemming from intra-corporate restructuring, which often lead to a change in the assets’ ownership structure.

8 We use as origin the country of the Global Ultimate Owner (GUO). However, the GUO is not always identified. In such cases, we use the parent company country (as displayed by the information provider) and we consider as
3.2 Advanced economies dominate Foreign Direct Investments into the EU

Over the period 2000-2021, close to 30% of M&A operations destined for EU countries came from the US, by far the single largest foreign investor in the EU. A similar share originated from other non-EU G7 countries (the UK, Canada and Japan, Figure 3).\(^9\) While the share of the US has remained broadly stable over time, other G7 countries have progressively reduced their exposure over time.\(^10\) The share of the BRICS countries remains quite low. Over the last two decades, the number of operations originating from investors headquartered in those countries has increased visibly from a low base, to reach almost 10% in 2014 and 2017 before shrinking thereafter.

Note: "Other G7": Canada, the UK and Japan; BRICS: Brazil, Russia, India, China and South Africa; OTH: all other countries except the US, Switzerland and those included in "Other G7" and BRICS. The shares on the left-hand side panel are calculated over the 1998-2022 period. Sources: BvD Zephyr and authors’ calculations.

Figure 3: Origin of cross-border M&As within the EU (number of transactions and share of all transactions)

The breakdown by destination region of non-EU investments into the EU is represented in Figure 4, together with changes in the number and amount of operations.\(^11\) Before Brexit, the UK used to be the destination of one-third of the total number of cross-border investments from outside the EU. Besides the UK, an increasing share of cross-border investments has targeted South

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\(^9\)Operations emanating from Switzerland are disproportionately high considering the size of the economy and may include round tripping and other forms of triangular operations. Switzerland is also the location many corporations have chosen for their headquarters.

\(^10\)This may result from a combination of factors, including Brexit and the uncertainty surrounding the application of investment protection mechanisms within the TTIP and CETA free trade agreements.

\(^11\)Aggregate deal values can display substantial jumps in certain years owing to a single large operation; as a result, the chart reporting deal values depicts a less clear-cut trend that that representing the number of transactions.
European countries. Central and Eastern European countries have experienced a boom in the number of M&As in 2013-2015, even though the aggregate value remains extremely low. The proportion of investments targeting Austria, Germany and France has shrunk over time, owing to the increased interest of non-EU investors in peripheral countries.

Note: CEE: Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia; Ger. & Aut.: Germany and Austria; North Europe: Denmark, Estonia, Finland, Ireland, Latvia, Lithuania and Sweden; South Europe: Croatia, Cyprus, Greece, Italy, Malta, Portugal and Spain.

Sources: BvD Zephyr and authors' calculations.

Figure 4: Distribution of M&As by destination region, number of operations (left-hand side, percentage shares and number of transactions) and value (right-hand side, percentage shares and billions of euro)

In terms of who invests where (Figure 5), the US and other G7 countries tend to distribute their operations in a uniform manner (either in number or in deal value) across EU macro regions. BRICS countries focus more on Germany and Southern Europe, especially in aggregate value terms. Switzerland (as origin) and Benelux countries (as target) are over-represented in value terms, as many firms tend to locate their headquarters in these two countries for fiscal reasons. Central and Eastern European countries remain on the margins of foreign investment flows. The recent Chinese push linked to the Belt and Road Initiative (launched in 2013) and the Cooperation between China and Central and Eastern European Countries initiative did not significantly change this situation. Manufacturing plays a prominent role in this trend as Germany and Italy are two manufacturing powerhouses in the EU, possessing leading-edge technologies.

However, the deal value of these operations is not reported in a relatively high number of instances.

Cooperation between China and Central and Eastern European Countries, formerly known as 17+1 from 2019 to 2021, is a diplomatic initiative promoted and led by China (+1) and founded in 2012 in Budapest. It involves both Eastern European EU members and candidate countries. The framework has sparked fierce debate in the EU about relations with China and the role of those EU members adhering to the initiative in shaping such relations. After more than 10 years of regular summits, several participants have expressed disappointment as regards the results (especially in terms of investments attracted). Several EU member countries withdrew from the format in 2022 or announced their intention to do so.
Manufacturing attracts the bulk of foreign investments, followed by ICT and financial services, both in terms of number of operations and their value (Figure 6).

Figure 5: Flows of inbound M&As operations by region of origin and region and sector of destination; number of operations (left, units) and aggregate value (right, euro)

Manufacturing attracts the bulk of foreign investments, followed by ICT and financial services, both in terms of number of operations and their value (Figure 6).

Figure 6: Distribution of inbound M&As by sector of destination; number of deals (left-hand side) and aggregate deal value (right-hand side, billions of euro)

3.3 Investments from China peaked in 2016

Although most national ISMs do not overtly single out any particular country, a number of jurisdictions have shaped their own perception of risks to national security in relation to the
increasing presence of Chinese investment. Throughout the early 2010s, an increasing volume of foreign investment in the EU originated from BRICS countries, driven predominantly by Chinese operations. This is notably linked to the Chinese government’s wish to push Chinese corporations, especially those who are state-owned, to “go global”, coupled with a considerable amount of available liquidity stemming from regular current account surpluses (Molnar et al., 2021). This strategy corresponded to the goals of diversifying geographic risk, acquiring new technologies and enhancing diplomatic ties with receiving economies. The subsequent sharp decline in the total number of BRICS investments is almost entirely driven by the decline of Chinese investors, following the tightening of capital controls in 2017 (Figure 7).\textsuperscript{14}

Moreover, in terms of sectors, BRICS countries focus on manufacturing. On average over the 1998-2022 period, manufacturing represented 44\% of all BRICS operations in EU countries as opposed to only 32\% for non-BRICS. But at the same time, the share of the total value of investments by BRICS countries in manufacturing is much smaller than that of the rest of the world. Hence, the average deal value is significantly smaller for BRICS than for non-BRICS countries.

Aside from manufacturing, the 4 most investment-intensive subcategories (Food & Beverages, Computers, electronics and optics, electrical equipment and transport equipment) account for more than half of total investments (Figure 7). When focusing on BRICS investors, basic met-

\textsuperscript{14}The capital controls movement was triggered in 2017 by a buying spree which dramatically increased outflows, thus pressuring the exchange rate and forcing the People’s Bank of China to intervene on the foreign exchange markets.
als are very prominent but, more importantly, the share of transport equipment doubles when compared to the rest of the world. This is largely due to Chinese investors’ focus on transport equipment, especially in the 2014-2019 period. Many of these acquisitions concerned the aerospace and automotive sectors.

![Figure 8: Distribution of M&As in manufacturing across subcategories (shares); all investors (left), BRICS investors (right)](image)

Note: shares are computed on the period 1998-2023. Sources: BvD Zephyr and authors’ calculations.

3.4 Investments from Russia remain limited

Heightened geopolitical tensions on the back of Russia’s invasion of Crimea (2014) and Ukraine (2022) called for greater vigilance over Russian direct investment within the EU.\(^{15}\)

However, Russian investments in EU firms remain limited, according to data from Bureau van Dijk. In 2021, Russia accounted for merely 1.3% of the number of acquisitions by foreign investors in existing EU companies and 2.1% of greenfield investments (Commission, 2022c). Based on the number of transactions completed between 2015 and 2021, Russia was the 11th largest foreign investor in the EU, accounting for 0.9% of the number of investments, and 0.7% of the value of investments from all non-EU jurisdictions (Commission, 2022c). Although Russian investments appear relatively limited, Russian individuals or entities had controlling and non-controlling stakes in 28,000 companies in the EU, which corresponds to 0.1% of the number of EU companies in 2020 (Commission, 2022b).\(^{16}\) The top EU countries by number of Russian-controlled companies are the Czech Republic (with 25% of the total number of EU companies

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\(^{15}\)In 2022, the European Commission has called upon Member States to use their existing screening mechanisms to assess threats related to such investments, and urged those that do not have such a mechanism to set up one. See Appendix A for further details.

\(^{16}\)In 58% of the EU companies under Russian control or influence, assets are held by a natural person, in 10% by a company and in 1% by a public authority. The Russian government controls assets mainly in Cyprus (34% of the cases), Ireland (16%) and the Netherlands (Figure 10).
controlled by Russia), Latvia, Germany, Cyprus and Bulgaria (Figure 10). In 2020 and 2021, the sectors in which Russian investors had the largest presence were "wholesale", "real estate" and "professional scientific and technical activities" (Figure 9).

Note: all sectors considered, the number of companies under Russian control or influence amounted to 28,334 companies in 2020, including 15,576 companies under control and 12,758 under influence. For example, for real estate, 5,184 EU firms were either under Russian influence or control (left-hand scale). Hence, out of 10,000 EU firms, 38 real estate firms were either under Russian influence or control (right-hand scale).

Sources: European Commission and authors’ calculations.

Figure 9: EU firms under Russian influence or control by sector

Sources: European Commission and authors’ calculations.

Figure 10: The top 4 EU countries by number of Russian-controlled and Russian-influenced companies
4 Comparing national investment screening mechanisms

4.1 A composite index for comparing national ISMs

4.1.1 Existing databases and lack of a quantitative index on ISMs

Despite the expansion and tightening of FDI screening regimes worldwide, we are unaware of the existence of any indicator suitable for cross-country comparisons. Although the OECD aggregates several coded dimensions into an index to gauge restrictions on foreign investments, including “screening and approval requirements”, it excludes screening mechanisms applied for national security reasons (Kalinova et al., 2010), which are at the core of contemporary investment screening mechanisms.17 Other indexes on capital controls developed in the literature (Chinn and Ito 2008; Fernández et al. 2016) also exclude restrictions imposed for security reasons.

More recently, Bauerle Danzman and Meunier (2023) built a comprehensive database on investment screening regulation in 38 OECD countries.18 However, it focuses on qualitative coding and does not provide a synthetic quantitative index.

4.1.2 Motivation and purpose of the index

To fill the data gap, we have built a composite index suitable for cross-country comparisons. Our objective is twofold. First, we aim to compare the main features of national ISMs and analyse potential legislative convergence within the EU. Second, we seek to gauge the restrictiveness of national ISMs and their potential impact on investment. For example, a lack of transparency or predictability, extensive call-in powers or the possibility of unwinding a transaction for a considerable period of time after its completion might increase legal uncertainty, and therefore have a dissuasive effect on investors.

17 The OECD’s FDI Regulatory Restrictiveness Index (RRI) measures statutory restrictions on FDI. It ranges from 0 (no regulatory impediments to FDI) to 1, with higher values corresponding to tighter restrictions. Measures taken for reasons of public order and essential security interests are not scored. Actual enforcement of statutory restrictions, which is difficult to assess, is not factored in.

18 The PRISM database maps changes over time (from 2007 to 2022) to the main features of national ISMs (scope, thresholds triggering a review, treatment of foreign government-owned entities, net benefit tests, transactions subject to pre-notification or authorization, government power to monitor and enforce the rules and institutional setup).
4.1.3 Methodology

Building on the methodology of the OECD’s RRI and on the scope of the PRISM database (Bauerle Danzman and Meunier, 2023), we provide a composite index measuring the restrictiveness of foreign investment screening laws motivated by the need to protect national core interests. To do so, we built a comprehensive ISM database\(^{19}\) covering legislation in force in the first half of 2023 in advanced economies, i.e. EU countries\(^{20}\) and other major advanced economies (the USA, the UK, Canada, Australia, Norway and Japan).\(^{21}\)

We focus on five broad features of national ISMs (see Appendix D for further details):

- **identity of the investor** subject to review and territorial scope of the ISM (origin of investors subject to review, special treatment for specific investors based on citizenship or residency, enhanced scrutiny for investors controlled by foreign governments, extraterritorial scope of national legislation, international cooperation on FDI screening);

- **sectoral scope** of the ISM (cross-sectoral vs sectors and business activities subject to review, coverage of greenfield investments);

- **transactions subject to review** (monetary or market share-based thresholds triggering a review);

- **screening procedure** (ex-ante notification vs ex-post screening, mandatory vs voluntary notification, investigation powers of the competent authorities, length of the review process, existence of a fast-track procedure, etc.);

- **enforcement** of the mechanisms (invalidity of legal transactions completed without having first obtained the competent authority’s approval, mitigation measures to address the authorities’ objections to a transaction, sanctions for non-compliance, right of appeal, etc.).

\(^{19}\)We used publicly available documents on investment screening laws supplemented by other sources, including reports from the OECD, the European Commission and legal counsels. In particular, questions frequently asked by investors (as reflected in national authorities’ or legal counsels’ guidance for investors) provide insights into the factors to be considered when planning a transaction and the features of national ISMs most likely to impact investors.

\(^{20}\)At the time of writing, some EU countries did not have an ISM in place, but had initiated a consultative or legislative process expected to result in the adoption of a new mechanism (Cyprus, Croatia, Greece, Ireland, and Sweden) or amendments to an existing one (Romania). Bulgaria was the only EU country without an existing ISM or any legislative initiative in progress.

\(^{21}\)These countries belong to the OECD, and are therefore committed to pursuing liberal economic policies and having transparent investment-related regulations.
4.1.4 Caveats

Several caveats should be borne in mind. First, screening criteria do not systematically determine ex-ante the restrictiveness of national ISMs. The identification of potentially threatening transactions relies on combinations of several criteria and parameters (e.g. nationality-related criteria, sector-specific parameters, investor-specific thresholds and potential exemptions to all or part of the screening rules). The interplay between these criteria and parameters, and the values set for them, result in a large variety of designs. This variety contributes to challenges in comparing different mechanisms and their scope of application (Pohl and Rosselot, 2020). To address this caveat, we have thoroughly analysed the main features of national regimes. When designing the index, we paid particular attentions to exemptions and modulating criteria.

Second, although the degree of restrictiveness of screening regimes can vary greatly depending on how rules are applied, actual enforcement of national investment screening regimes is not factored in. Just like the OECD’s RRI, the ISM index does not take account of perceptions of the investment climate or implementations issues, which are difficult to assess. Similarly, the degree of transparency or discretion of national authorities in granting approvals is not factored in. In most jurisdictions, publicly available information is limited regarding the outcome of national security reviews and the reasons for these decisions. To address this caveat, we check whether the ISM composite index (which maps restrictiveness ex-ante, based on national legislation) correlates with the restrictiveness of national schemes as reflected in (ex-post) implementation practices (see Section 5).

4.2 Results: main features and relative restrictiveness of national ISMs

4.2.1 Identity of the investor and territorial scope of the ISM

Most jurisdictions subject FDI to different levels of scrutiny depending on the identity of the investor, as a means of balancing the need to attract growth-enhancing investment with a desire to protect national interests. Most mechanisms use nationality or residency as a trigger criterion when selecting potentially threatening transactions. Some jurisdictions differentiate further by subjecting specific nationalities to exemptions or, on the contrary, to enhanced scrutiny. In a number of countries, exemptions apply to partners in regional integration agreements (such as the EU or the EEA), trade agreements (WTO) or military alliances (NATO, Five Eyes). In
other jurisdictions, provisions apply equally to potential foreign and domestic investors.

Investors’ links to foreign governments (or foreign public entities) that may plan operations for strategic reasons entail specific risks for national security interests. In a number of countries, links to foreign governments are merely one of the factors to be considered in the risk assessment. In other jurisdictions, enhanced scrutiny applies to foreign investments by state-owned enterprises (SOEs) or private investors assessed as being closely linked to foreign governments. For instance, SOEs may have to comply with extended disclosure obligations, be subject to lower screening thresholds or require prior governmental consent for their investments.

Restrictions are relatively limited in Czechia and Poland (Figure 11, left panel). Exemptions apply to a wide range of countries (EU countries for Czechia, and EU, EEA and OECD investors for Poland). By contrast, screening regimes are much stricter in Canada and Japan and apply to all foreign investors. These countries also subject SOEs to enhanced scrutiny. Few national regimes have an extraterritorial dimension, the UK being a notable exception. The definition of US business post FIRRMA has also allowed for increasingly assertive extraterritorial applications of CFIUS authorities. Also, following the adoption of EU Regulation 2019/452, international cooperation on investment screening is a common feature in the EU.

Note: The index ranges from 0 (relatively open ISM) to 1 (relatively restrictive ISM).

Figure 11: ISM restrictiveness index- I. Investor-related parameters and II. Scope of the ISM
4.2.2 Sectoral scope and coverage of greenfield investments

Most jurisdictions apply sector-related criteria to determine whether a planned transaction might threaten national security or national interests. While national security-related concerns over FDI initially narrowly focused on foreign influence in defense contracts, the current scope of most ISMs is very broad (e.g. critical infrastructure, advanced technologies and sensitive personal data). Initially, most countries operated based on detailed lists of sectors, companies or individualised assets (the least restrictive approach), which provide more predictability to investors. As risk perception evolved, sector-specific lists gave way to cross-sectoral review mechanisms of enterprises in any sector or to a blend of cross-sectoral and sector-specific mechanisms (Pohl and Rosselot, 2020). As a result, most countries have implemented all-embracing cross-sectoral screening with broadly defined review criteria that focus on specific risks rather than industries.

The sectoral scope is relatively narrow in the Netherlands and in Portugal (Figure 11, right-hand-side panel), where screening applies only to the electricity, gas and telecommunications sectors and the energy, transport and telecommunication sectors. The sectoral scope is much broader in Canada, Australia and Romania. These countries also screen the creation of new businesses (greenfield investments), resulting in stricter regimes.

4.2.3 Transactions subject to review and minimum thresholds triggering a review

Screening is usually triggered either by the size of an equity stake or the share of voting rights in the target enterprise that the investor would hold after a transaction. The restrictiveness of these parameters depends on the value of the thresholds applied (the lower the threshold, the stricter the ISM), in conjunction with exemptions for a subset of investors or transactions.

Shareholding and monetary thresholds are relatively less restrictive in Poland, Romania and, to a lesser extent, Denmark and Italy (Figure 12, left-hand side). Poland applies relatively high shareholding trigger thresholds, in conjunction with a monetary threshold which filters out transactions in small target companies. Although trigger thresholds are closer to the median of the sample in Denmark, Italy and Romania, both Romania and Italy apply minimum monetary thresholds, while the Danish screening regime does not apply to greenfield investments below a certain monetary threshold. At the other end of the sample, screening regimes are relatively
stricter in Canada, and, to a lesser extent, in Japan, Germany and France. In Canada, all investments, including minority investments (regardless of value) are subject to the national security review process, resulting in the highest score. The lowest shareholding threshold is in Japan, where it was lowered in 2020 from 10% to 1% for foreign investment in Japanese listed companies active in sectors relevant to national security, and where monetary thresholds only apply to a subset of transactions (loans).

Note: the index ranges from 0 (relatively open ISM) to 1 (relatively restrictive ISM).

Figure 12: ISM restrictiveness index - III. Thresholds triggering a review and IV. Screening procedure

4.2.4 Screening procedure

Depending on the ISM, notification can be either mandatory, combined with a set of penalties for non-compliance, or voluntary. In both cases, the relevant authority have powers to "call in" for review transactions that fall within the scope of the ISM (e.g. transactions that meet the prescribed trigger thresholds). In a few jurisdictions, national authorities also have the discretion to review transactions that do not meet the prescribed thresholds. Lastly, short and transparent timelines reduce uncertainty by offering investors a quick decision regarding the acceptability of their projects.

The screening procedure is relatively less restrictive in Portugal, where the mechanism does not impose a mandatory notification procedure (Figure 12, right panel). By contrast, the screening
process is stricter in Poland and Germany. In both countries, the review is relatively lengthy and national authorities can investigate a transaction that has not been notified for a significant period of time (up to five years) after its completion.

4.2.5 Enforcement and sanctions

In cases of non-compliance with notification requirements and approval procedures, national authorities have a range of enforcement powers, including the power to invalidate a transaction or to impose criminal sanctions.

All ISMs in our sample allow the relevant authorities to order a divestment or declare an investment null and void (Figure 13, left panel). Sanctions include monetary fines and criminal sanctions for individuals, including imprisonment (e.g. in Germany, the UK or Australia). In most countries, approval may be granted on certain conditions (mitigation measures). Only a few counties on the right-hand side of the sample exclude the possibility of such arrangements, resulting in stricter screening regimes. Most countries allow investors to seek recourse against screening decisions. In a few cases, a subset of transactions or specific decisions are not subject to appeal.

Overall, enforcement powers and sanctions are limited in Lithuania, Latvia and Norway. At the other end of the sample, screening regimes are stricter in Hungary, Poland and Austria, owing to the impossibility of addressing the authorities’ objections to a transaction by providing remedies or to limited appeal rights.

4.2.6 ISM restrictiveness index

The most robust mechanisms are found in Australia, Japan and Canada, which have been filtering investments for a long time. EU countries do not systematically have the strictest regimes, suggesting that they remain relatively competitive compared to other advanced economies. While the EU regulation aims to foster convergence in national screening regimes, the index highlights the heterogeneity of national designs. Few restrictions apply in Portugal, Austria and the Netherlands (Figure 13, right-hand side), whereas screening regimes are stricter and have been amended

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22 Fines may be up to the value of the transaction, as is the case in the USA, or calculated as a percentage of worldwide turnover, as seen in the UK.

23 For example, in the USA, CFIUS actions and decisions are subject to judicial review, whereas the decisions of the President to suspend or prohibit any covered transaction may only be challenged on constitutional grounds.
more recently in France and Germany. The latter two countries already had screening regimes in place in the early 2000s and were the earliest proponents of the EU framework for screening inward investment (Chan and Meunier, 2022).

### 4.3 Comparing the ISM index with existing indicators of FDI restrictiveness

We document how the ISM index correlates with existing measures of FDI restrictiveness and competitiveness, such as the OECD’s RRI, the index developed by Fernández et al. (2016) and the World Economic Forum’s Global Competitiveness Index.

Figure 14 shows the lack of correlation between the ISM restrictiveness index and the RRI, which excludes restrictions on FDI on national security grounds. As a check on robustness, we investigate potential correlations with other indices and find similar results. Hence, investment

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24A linear regression confirms the lack of statistically significant relation between the two indexes. However, the ranking of the ISM index is consistent with that of the RRI for both ends of the distribution. Canada and Portugal get, respectively, the highest and lowest scores with both indexes. Testing potential correlations between the ISM index and the "screening and approval" dimension of the RRI is not practicable since most countries (especially EU countries) do not apply "screening and approval" restrictions as defined by the RRI. The few countries applying such restrictions are also those reaching the highest scores according to the ISM restrictiveness index (Australia, Canada and Japan).

25Neither the index on controls on FDI inflows (which excludes restrictions based on security grounds) developed by Fernández et al. (2016) or the World Economic Forum (WEF) index ("Business impact of rules on FDI") correlate with the ISM restrictiveness index (see Figure 14).
screening can coexist alongside an otherwise liberal investment regime. Indeed, there is no systematic correlation between the restrictiveness of national ISMs and attractiveness to foreign investors, as reflected by foreign investment inflows.  

Overall, the ISM restrictiveness index usefully complements existing indicators, which focus on distinct mechanisms for controlling inward investment and exclude screening on national interest or national security grounds.

Note: both RRI and ISM indexes range from 0 (relatively open regime) to 1 (relatively restrictive), whereas the WEF index ranges from 1 (extremely restrictive) to 7 (not restrictive at all). The correlation sign is in line with expectations. The correlation between the ISM restrictiveness index and the RRI is positive: in both cases, the higher the index, the stricter the regime. By contrast, the correlation between the WEF and the ISM index is slightly negative: the lower the WEF index, the more restrictive the regime.

Sources: OECD, WEF and author’s calculations.

Figure 14: RRI, WEF and ISM restrictiveness indexes

4.4 Determinants of the restrictiveness of national ISMs

We explore whether the restrictiveness of national ISMs correlates with country-specific macroeconomic characteristics. We consider three potential explanatory factors.

First, recent literature has focused on ISMs as a response to the rise of Chinese outward investment. Hence, we check whether the restrictiveness of national ISMs correlates with variables reflecting commercial links and exposure to Chinese investors.

Second, we focus on natural resources and technological specialization. Technology transfer associated with foreign acquisitions might be a greater concern in economies with a larger share of R&D in sectors related to critical technology. Resources-rich countries might also be more likely

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26Japan, one of the most restrictive countries, receives limited inflows. By contrast, Australia and Canada, which also have relatively stricter regimes, are attractive destinations for foreign investors. FDI inflows averaged nearly 3% of GDP between 2015 and 2021, i.e. above the OECD average. At the other end of the sample, Portugal, whose ISM is relatively less restrictive, also attracts large foreign investment inflows relative to the size of its economy (3% of GDP on average between 2015 and 2021).
to scrutinize foreign takeovers in the mining industry.\textsuperscript{27} Third, geopolitical factors might be another driver of FDI screening. We check whether the restrictiveness of national ISMs correlates with geopolitical distance from either the U.S., China or Russia, based on voting patterns at the United Nations General Assembly.\textsuperscript{28} We also test sentiment towards the Belt and Road Initiative as a proxy for geopolitical distance from China.\textsuperscript{29} For each of the factors listed above, we test a range of indicators to ensure robustness (see Figure 15).

Overall, correlation coefficients are low, suggesting that there is no single factor explaining the restrictiveness of national ISMs, but rather a range of idiosyncratic characteristics. The highest correlations are found for indicators of China exposure, R&D in critical technologies and public sentiment towards the Belt and Road Initiative.

\textsuperscript{27}For instance, both Australia and Canada, whose ISMs are among the most restrictive, receive large FDI inflows in the mining and quarrying sectors.

\textsuperscript{28}We use several measures of geopolitical alignment between countries: the "ideal point distance" proposed by Bailey et al. (2017) and the $S$ score proposed by Signorino and Ritter (1999).

\textsuperscript{29}To measure sentiment towards the Belt and Road Initiative (BRI), Garcia-Herrero and Schindowski (2023) extract data from the Global Database of Events, Language, and Tone (GDELT), a platform covering TV broadcast, print and online news in over 100 languages across the world. The authors cover the period between January 1st, 2017 and October 5th, 2022. A positive sentiment means that the public media in the country favours the BRI, whereas a negative tone indicates a negative sentiment towards the BRI. The higher the tone, the more supportive the country is towards the BRI.
Note: green (or red) bars show a positive (or negative) correlation. The sample includes 21 advanced economies.

* Only includes the 19 EU countries of our sample.

** material import dependency represents the share of physical imports in direct material input (which comprises domestic extraction and physical imports) of a given economy.

Figure 15: Correlation coefficients between the ISM restrictiveness index and country-specific characteristics

Linear regressions suggest a statistically significant positive relationship between the ISM restrictiveness index and the share of Chinese value added embodied in final domestic demand (Figure 17, left-hand side). The relationship between the ISM restrictiveness index and the number of patents per capita is also significant (Figure 17, right-hand side). Finally, we find a statistically significant negative relationship between the ISM restrictiveness index and sentiment toward the Belt and Road Initiative (BRI). Negative sentiment towards the BRI is associated with stricter
ISMs (Figure 16, right-hand side). However, results should be interpreted with caution due to the small sample size.

Our results concur with research literature. Bauerle Danzman and Meunier (2023) show that countries with a higher FDI stock from China are more likely to impose new screening regulations, while Eichenauer et al. (2021) find that countries with higher levels of technological development and with a stricter regulatory environment for foreign investment are more likely to introduce investment screening. Similarly, Chan and Meunier (2022) conclude that countries with higher technological levels were more supportive of FDI screening due to concerns over technological transfer, based on interviews with high-level EU and country officials involved in the negotiation process for the EU FDI screening framework. Danzman and Meunier (2023b) also stress the importance of national security threats from Russia in the development of ISMs in Central and Eastern European countries and find that countries that border Russia are much more likely to have developed an ISM earlier than other member states.

Note: the left-hand side chart depicts the relationship between the ISM restrictiveness index and geopolitical distance from the US. We use the ‘ideal point distance’ (IPD) proposed by Bailey et al. (2017), which is based on voting patterns at the United Nations General Assembly (2016-2021, average). The higher the IPD, the greater the geopolitical distance. The ISM restrictiveness index ranges from 0 (relatively open regime) to 1 (relatively restrictive). Hence, a negative correlation suggests that countries aligned to the US implement relatively stricter screening regimes (left-hand side).

The right-hand side chart shows the relationship between the ISM restrictiveness index and sentiment towards the Belt and Road Initiative (Garcia-Herrero and Schindowski, 2023). A positive sentiment means that public media in the country favours the Belt and Road Initiative (BRI), whereas a negative tone indicates a negative sentiment. The correlation between the ISM restrictiveness index and sentiment towards the BRI is negative, suggesting that countries that feel most negatively about the BRI implement stricter ISMs (right-hand side).

Sources: Bailey et al. (2017), Garcia-Herrero and Schindowski (2023) and author’s calculations.

Figure 16: ISM restrictiveness index and geopolitical distance from the US (left-hand side) and from China (right-hand side)
Assessing the impact of ISMs on investment decisions

5.1 Challenges in assessing the impact of ISMs on investment decisions

Screening regimes may affect the value of individual transactions and the volume of total FDI through several channels (Eichenauer and Wang, 2022). In particular, investors may purchase a lower stake to avoid triggering a review in jurisdictions where monetary or shareholding thresholds apply. ISMs may also have a deterrent effect. Projected acquisitions may be prohibited, abandoned or unwound by the regulator, resulting in acquisitions being suspended or diverted to other jurisdictions.\(^{30}\)

Determining whether the recent tightening of ISMs has affected foreign investment flows is challenging for a number of reasons. First, foreign investment screening, which has become widespread in advanced economies, is one of many factors that could influence FDI inflows. Literature suggests that the key determinants of FDI flows are sound macroeconomic conditions (investment returns, access to markets...), together with institutional factors (good governance, low sovereign risk and a stable legal system). Overall, the recent tightening of national ISMs

\(^{30}\)Publicly available information on transactions provides anecdotal evidence of transactions being scaled down as a result of an ISM being in place.
has not coincided with investors’ reappraisal of the most attractive destinations.\textsuperscript{31} Indeed, surveys such as Kearney’s FDI Confidence Index show that when making investment decisions, investors prioritize market stability and the transparency of government regulations. Literature suggests that political and regulatory uncertainty is negatively correlated with M&A activity at the macro and firm levels (Bonaine et al., 2018). In this respect, transparent foreign investment screening regulations might improve the perceived transparency of government regulations and hence, bolster the business climate. A second challenge relates to the relative volatility of FDI inflows. Inflows can vary considerably from year to year depending on the timing of a small number of large transactions.\textsuperscript{32} As such, a couple of years is too short a period on which to draw conclusions concerning the impact of policy changes. Lastly, FDI inflows is a net figure, which captures both incoming FDI and divestment of existing FDI. Hence, it is tricky to identify whether a change in inflows is driven by a reduction in the former or an increase in the latter. While foreign investment screening may affect incoming FDI, it is unlikely to impact divestment.

To assess the impact of FDI screening on planned transactions, we focus on national governments’ statistics on foreign investment applications and screened foreign investments, which reflects incoming FDI rather than net inflows. However, the lack of publicly available information contributes to challenges in assessing the impact of foreign investment screening. Figure 18 shows that while most countries provide information on the number of screened and blocked investments, the financial value of blocked transactions is not available. Similarly, the value of a screened transaction is rarely published.

\textsuperscript{31}For instance, Kearney’s FDI confidence index shows that from 2018 to 2022, the USA, Japan, Canada and Germany have remained the three most attractive destinations for global FDI, despite the tightening of their national ISMs observed over that period.

\textsuperscript{32}Covid-19 related disruptions had a major impact on FDI flows globally, contributing to challenges in assessing the impact of the tightening of ISMs over this period.
Note: The degree of transparency varies from white (no information available from the national authorities) to light green (intermediate situation with little information) and finally to dark green (complete information made available for users) for each identified criterion.

Sources: national and European Commission annual reports on foreign investment screening (2022); authors’ representation.

Figure 18: Variations in the transparency of information published by national authorities and the European Commission

5.2 A large number of transactions is subject to review

We estimate the impact of foreign investment screening on planned transactions by dividing the share of screened investments by the total number of investments initiated in a given year.\textsuperscript{33}

Owing to the broad scope of national ISMs, a large number of transactions is subject to review. Figure 19 shows that in the USA, screened transactions represented one-third of the total number of FDI transactions initiated each year over the period 2020-2022. This share is even higher when greenfield investments, which do not fall within the scope of the US regulation, are excluded. In the EU, about 20\% of transactions initiated by foreign investors were screened in 2021 under the EU cooperation framework (Commission, 2022c).\textsuperscript{34}

\textsuperscript{33}Statistics on planned investments reflect intended rather than actual transactions. Depending on data availability, the denominator may reflect either the number of investments initiated or the number of planned investments for a given year. Hence, the scope of the numerator, which includes planned transactions, is not fully comparable with that of the denominator.

\textsuperscript{34}In 2021, 13 Member States submitted a total of 414 notifications, pursuant to Article 6 of the FDI Screening Regulation, out of over 4,000 transactions (equity stakes and greenfield investments) initiated by foreign investors in the EU27 (i.e. around 10\%). However, given that the five countries responsible for 85\% of all notifications do not cover greenfield investment in their national laws, the share of screened investments may be closer to 20\% (when considering only the number of foreign acquisitions, i.e. excluding greenfield investments from the denominator).
Note: any transaction can be notified to CFIUS by notice or declaration (i.e. an abbreviated notification), including certain transactions subject to mandatory filing requirements. CFIUS also has the authority to review pending or completed transactions even in the absence of a voluntary filing (*non-notified* transactions).

Sources: US Bureau of Economic Analysis (BEA), CFIUS and authors’ calculations.

Figure 19: Share of FDI transactions screened in the US (% of total investments and % of brownfield investments)

Note: owing to the lack of official data on the number of FDI transactions in Europe, we provide a range of estimates based on two proxies. First, blue bars depict the number of screened investments over the total number of FDI transactions initiated in a given year, as provided by: the Bureau of Economic Analysis (BEA) for the USA, the Department of International Trade (DIT) for the UK and estimations based on Bureau van Dijk’s (BvD) data for EU countries. Second, red bars show the number of screened investments over the total number of planned investments, as measured by Ernst&Young’s (EY) annual attractiveness surveys. However, whereas the BvD database only considers extra-EU incoming direct investment, EY’s European Investment Monitor database excludes M&As (but includes EU incoming FDI). These different scopes partly explain the different estimates. Percentages may exceed 100% due to an under-estimation of the number of FDI transactions. In addition, screened transactions reflect planned rather than actual transactions.

Sources: national and European Commission annual reports, US BEA, UK DIT, EY attractiveness surveys, authors’ calculations.

Figure 20: Share of FDI transactions screened by national ISMs (% of total transactions)
5.3 A number of transactions are withdrawn or accepted under conditions

Although a large number of transactions are subject to review, most cases are approved without conditions. Hence, in the vast majority of cases, FDI screening is a matter of administrative scrutiny. Building on publicly available information for 2021 and 2022, Table 1 shows that transactions are seldom blocked, suggesting that ISMs strike a balance between openness to capital and scrutiny of potentially threatening transactions. The share of blocked transactions is higher in Canada (for transactions screened only under the national security review). Conditions and mitigation measures are also frequent. They concern close to 10% of all transactions in most countries and as much as 54% in France. A significant number of transactions are also withdrawn during the review process. Such transactions are either definitively abandoned (when investors do not accept mitigation measures or when such measures cannot resolve the authorities’ national security concerns) or else withdrawn and re-filed. As a result, screening may lengthen the time needed to complete a transaction, which might marginally reduce the efficiency of capital allocation.

<table>
<thead>
<tr>
<th>2021 or 2022*</th>
<th>US</th>
<th>EU</th>
<th>CA</th>
<th>AU</th>
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<td>24</td>
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<td>121</td>
<td>306</td>
<td>83</td>
<td>294</td>
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<td>52</td>
<td>104</td>
<td>39</td>
<td>14</td>
<td>67</td>
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<td>9</td>
<td>18</td>
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</tr>
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<td>SI authorized with conditions (%)</td>
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<td>23%</td>
<td>1.3%</td>
<td>54%</td>
<td>5%</td>
<td>11%</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withdrawn SI (nb)</td>
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<td>5</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Withdrawn SI (%)</td>
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<td>3%</td>
<td>23%</td>
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<td>4</td>
<td></td>
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<tr>
<td>Blocked SI (%)</td>
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<td>1%</td>
<td>1%</td>
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<td><strong>Inward flows of FDI (billion US$)</strong></td>
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<td>168</td>
<td>66</td>
<td>25</td>
<td>-71</td>
<td>27</td>
<td>46</td>
<td>19</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: * latest available data. **At least 1 and 2 blocked transactions: information obtained from the media but not included in national ISM reports.

US: 524 screened investments refer to the total number of covered declarations, notices and non-notified transactions filed in 2022.

EU: 414 refers to the total number of notified transactions under art. VI of the EU regulation in phase 2, while 453 is the total number of transactions in phase 1 of the EU ISM (Commission, 2022c).

CA: domestic authorities launched 24 in-depth reviews for national security reasons in 2021-22. However, 826 foreign investments were screened for both economic and national security motives the same year.

AU: the total number of screened investments for national security reasons is not communicated. However, 39 transactions were approved with conditions and 67 without conditions during fiscal year 2021-2022. The number of withdrawn or blocked investments is not known. The total number of screened investments (for both national security and economic reasons) was 6,651.

IT: Italy screened 608 investments in 2022, but only 294 for security reasons within the scope of the "Golden Power“ rule.

Sources: national and regional ISM reports (see FIRB (2021) for Australia, ICA (2021) for Canada, ICA (2022) for France, ISGF (2022) for Germany, Relazione annuale (2022) for Italy, CIFRAS (2021) for Spain, NSIA (2023) for the UK, and CFIUS (2021) for the US).

Table 1: Outcome of national security reviews
5.3.1 ICT and manufacturing are the sectors most screened, reflecting the focus of ISMs on critical infrastructure and technologies

Figure 21 shows that ICT, manufacturing and financial activities are particularly subject to screening in the EU and the USA, reflecting the focus of ISMs on critical technologies and infrastructure. In the EU, ICT and, to a lesser extent, manufacturing and financial services, are over-represented in the number of screened transactions. In 2021, transactions in the ICT sector represented 22% of the number of foreign investments into the EU, but up to 36% of all screened transactions. To a lesser extent, manufacturing (which encompasses critical infrastructure and technologies like defence, aerospace, energy and semiconductor equipment) accounted for 25% of the number of screened transactions in the EU (vs 19% of the number of foreign investments into the EU).

![Screened transactions by business sector in the USA and the EU (2021)](image)

Notes: In the EU, ICTs represent 22% of all foreign transactions and 36% of screened transactions. Hence, 16% of ICT transactions are screened. For the USA, screened transactions include declarations and notices. Sources: Commission (2022b), CFIUS and authors’ calculations.

Figure 21: Screened transactions by business sector in the USA and the EU (2021)

5.4 The origin of investors involved in screened transactions is broadly consistent with overall investment trends

Screening practices are broadly consistent with investments trends. Figure 22 shows that investments from the USA represent 40% of all transactions screened in the EU, in line with the share of US inward FDI into the EU. By contrast, China and Russia are slightly over-represented in the number of screened transactions.

35Lenihan (2018) notably shows that FDI restrictions practices also relate to close allies, due to non-military rivalry notably economic competition.
Notes: China represented 4% of all foreign transactions in the EU in 2021 and 7% of the total number of screened transactions. 16% of Chinese transactions were screened.

For the USA, the scope of screened transactions includes declarations and notices.

Sources: Commission (2022b), CFIUS and authors’ calculations.

Figure 22: Origin of investors involved in screened transactions in the USA and the EU in 2021

While China represented 4% of foreign investment into the EU in 2021, it accounted for close to 7% of all screened transactions. Overall, 16% of Chinese investments into the EU were screened in 2021 under the EU cooperation framework. Investments from China also made up a large part of screened transactions in the US and the UK, reflecting the focus of most ISMs on investors controlled by foreign governments. In Canada, Chinese and Russian investors were over-represented in the number of investments subject to extended review in 2021-22. Anecdotal evidence for Germany suggests that in-depth reviews of investments overwhelmingly involve Chinese investors (Merics, 2023). In most countries, investments involving Chinese investors comprise the bulk of blocked transactions. According to Roberts (2022), all four deals blocked by CFIUS under the Trump administration related to China.

Consequently, Chinese investments into the EU have shifted towards greenfield investments since 2020 (Merics, 2023), which are typically subject to fewer screening measures by national governments.

36In the UK (in 2022), China represented 42% of call-in notices, i.e. where scrutiny is deemed to be needed for national security, and 53% of final orders, where a decision has been taken for national security reasons. The nature of state-owned entreprises for China is also particularly important for Israeli ISM, see Ella (2019).
EU cooperation mechanism

<table>
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<th>Canada</th>
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<td>30</td>
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National mechanisms

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<thead>
<tr>
<th>Origin of investors</th>
<th>China</th>
<th>USA</th>
<th>UK</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share in US transactions (%)</td>
<td>1</td>
<td>4</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Share in US screened transactions (%)</td>
<td>12</td>
<td>8</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Share in CA transactions (%)</td>
<td>2</td>
<td>38</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Share in CA screened transactions (%)</td>
<td>29</td>
<td>0</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Share in CA blocked transactions (%)</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Share in UK transactions (%)</td>
<td>2</td>
<td>77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share in UK blocked transactions (%)</td>
<td>53</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share in DE transactions (%)</td>
<td>3</td>
<td>17</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Share in DE screened transactions (%)</td>
<td>12</td>
<td>36</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Share in ES transactions* (%)</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Share in ES screened transactions (%)</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: value of FDI transactions in 2019 (*2018 for Spain). Investments screened in 2021 or 2022 depending on data availability.
Sources: national and European Commission annual reports, Merics, BvD, OECD.

Table 2: Origin of investors involved in screened transactions

5.4.1 The ISM restrictiveness index is consistent with enforcement practices

The ISM ex-ante restrictiveness index is consistent with enforcement practices. The most restrictive countries are those with the highest percentage of transactions that are either prohibited, withdrawn or authorized with conditions (Figure 23). Hence, the ISM restrictiveness index is a relatively good predictor of implementation practices, with stricter regimes resulting in a higher number of transactions being blocked.
Note: the ISM index ranges from 0 (relatively open regime) to 1 (relatively restrictive). Only a few countries are represented owing to data availability issues.

Sources: national annual reports and authors’ calculations.

Figure 23: Transactions authorized with conditions (blue) and planned transactions withdrawn, prohibited or mitigated (orange)
6 Conclusions

Recent literature analyzes the risks of geo-economic fragmentation stemming from the rise of trade and capital flow restrictions motivated by national security considerations. We make several contributions to the scarce body of literature on ISMs.

First, we provide a composite index measuring the restrictiveness of screening regimes. EU countries do not systematically have the strictest regimes, suggesting they remain competitive in comparison to other advanced economies. The index is also helpful for tracking the pace of legislative convergence within the EU, in light of the evaluation of the EU cooperation mechanism expected by the end of 2023. While the EU regulation aims to facilitate convergence in national screening regimes, the index outlines the heterogeneity of national systems designs.

Second, we show that restrictive ISMs can coexist alongside an otherwise liberal investment environment. Overall, the recent tightening of national ISMs has not resulted in investors reappraising the most attractive destinations. Transparent foreign investment screening regulations may even improve the perceived transparency of government regulations and hence, enhance attractiveness.

Third, we show how macroeconomic and geopolitical factors shape the restrictiveness of ISMs. Countries that are highly exposed to investments from China tend to be more restrictive. The restrictiveness of national ISMs also correlates with the share of patents per capita. Technology transfer associated with foreign acquisitions may be a greater concern in economies with a larger share of R&D in sectors related to critical technology. Countries that are geo-politically aligned with the USA tend to have stricter ISMs, while negative sentiment towards the Belt and Road Initiative correlates with more restrictive ISMs.

Fourth, we assess the impact of ISMs on transactions. Although a large number of transactions are subject to review, the number of blocked transactions is limited, suggesting that ISMs strike a balance between openness to FDI and the protection of national interests.

Lastly, we show that the ISM restrictiveness index is a good predictor of implementation practices, with stricter regimes resulting in a higher number of blocked transactions.

Avenues for future research include testing the statistical significance of the ISM restrictiveness index to analyse the impact of FDI screening on transactions. Should outbound investment screening regimes become widespread, the scope of the index could also be extended to cover the related mechanisms.
Appendix A  Cooperation on investment screening in the EU

In March 2019, the European Union adopted the first pan-European investment screening framework (ISF), which entered into force in October 2020. The EU ISF is the first of many new unilateral trade and investment policy instruments created since the EU’s Common Commercial Policy took a more ‘assertive’ turn, especially towards China, which the EU referred to in 2019 as a ‘systemic rival’. It aims to strike a balance between the need to keep the EU open to foreign investors and the willingness o protect Member States’ essential interests, while reflecting national governments’ various concerns.

A.1 The EU FDI screening mechanism

A.1.1 Scope of the EU cooperation framework

The 2019 EU screening mechanism enables Member States and the Commission to raise concerns about specific transactions that may threaten ‘security or public order in more than one Member State’, regarding investments in critical technologies and infrastructure, media and personal data. It applies to any FDI, i.e. greenfield or M&A.

Article 6 of Regulation (EU) 2019/452 defines the cooperation process when FDI is undergoing screening within the host Member State. If a Member State decides to screen an incoming FDI on its territory, it must inform both the Commission and other Member States of its decision. The Member State remains the final decision-maker (Figure A1). Hence, accountability is not the key focus of the Regulation (OECD, 2022).

See Meunier (2017) on the political conditions under which responsibility for the negotiation of agreements on FDI was transferred from the national level to the EU in the 2009 TFEU. See Nibe et al. (2022) for further details on the adoption of the EU ISF.
According to Article 7, when a Member State or the Commission considers that an incoming FDI in another Member State - which has not been screened - is likely to be a threat, it can address comments or an opinion to the host Member State, which gives the EU mechanism an extraterritorial dimension (Figure A2). However, the notification process under Article 7 is currently underused (OECD, 2022).

In determining whether an FDI is likely to affect security or public order, Member States and the Commission may consider the potential effects on critical infrastructures, critical technologies, supply of critical inputs, access to sensitive information, freedom and pluralism of the media. Member States may also consider the profile of the investor, in particular whether the investor is
directly or indirectly controlled by a foreign government. Although EU Regulation 2019/452 does not explicitly target specific nationalities,\textsuperscript{38} some of its provisions overlap with the characteristics of Chinese investment in Europe in the late 2010s (Merics, 2019).\textsuperscript{39}

### A.2 An incomplete mechanism

The EU FDI cooperation framework still requires further improvements (OECD, 2022). Firstly, the absence of investment screening mechanisms in certain Member States hinders the overall cooperation framework at the EU level. This is particularly true for those countries that serve as an entry point for foreign capital in the EU.

Secondly, limitations in the scopes or different definitions of Member States’ domestic screening frameworks impede legislative convergence. In addition, the majority of national mechanisms are limited to M&A transactions and do not cover greenfield investments\textsuperscript{40} despite the prominence of these investments in some countries.\textsuperscript{41}

Thirdly, waning political impetus for investment screening coupled with inadequate resources and poor governance practices may undermine progress at EU level. A first review of the EU mechanism is planned for October 2023, 3 years after its implementation.

\textsuperscript{38}However, in 2022, the European Commission explicitly called for greater vigilance with regard to Russian and Belarusian investments in a specific Guidance (Commission, 2022a). This is the first time that the European Commission has singled out two countries when it comes to FDI. The Guidance therefore allows for the possibility of discriminating on the ground of an investors’ nationality, thus reflecting a geopolitical context.

\textsuperscript{39}According to Merics (2019), a large share of Chinese investments targeted European technology and innovation assets in the years preceding the adoption of EU Regulation 2019/452. In addition, over the past two decades, about 60% of Chinese FDI in the EU originated from state-owned or sovereign entities in China. According to 2018 data on acquisitions, a large share of Chinese M&A transactions - 83% - could actually fall within the scope of the EU Regulation on ISMs (Merics, 2019).

\textsuperscript{40}While the EU Regulation covers both M&A and greenfield investments, national screening laws are often limited to M&As.

\textsuperscript{41}For example, in China, in 2022, greenfield investment overtook M&As for the first time since 2008 on the back of investments in electric vehicle battery factories (Merics, 2023).
Appendix B  Recent trends in M&As: data and definitions

According to international standards, a foreign direct investment (FDI) is a category of cross-border investment in which an investor resident in a country establishes a lasting interest in and a significant degree of influence over an enterprise resident in another economy.\(^4\) This definition leaves many aspects unresolved and requires further refinement. In terms of capital transfer, the degree of influence over a certain asset can vary significantly according to the ownership structure of the asset itself.\(^3\) For the sake of simplicity, we define an FDI operation as one that leads the investor to hold more than 10% of the capital, which is a standard criterion in economic literature.

FDI can be divided into greenfield investments (a brand new production plant) and brownfield investments (the acquisition of an existing asset). As highlighted in Takayama (2023), the critical discriminating factor between the two classes of investments is the role of the physical capital as opposed to that of the intangible capital (know-how, reputation, customer base ...). Firms seeking to reduce production costs will be more likely to set up a new plant through a greenfield investment. Moving closer to the end market can also play a role. Conversely, brownfield investments are preferred by firms wishing to take advantage of the targets’ intangible assets, making advanced economies a coveted target.

In this paper, we focus primarily on brownfield investments (mergers and acquisitions, M&As), which represent the lion’s share of FDI in the EU.\(^4\) In addition, micro data on M&As are more easily accessible. Furthermore, while only a handful of national ISMs screen greenfield investments, most ISMs focus on the acquisition of existing assets.\(^5\)


\(^3\)Owning a “thin” share may turn into significant influence if the asset’s capital is spread among a large number of shareholders, as is typically the case in public companies. In private companies, only shareholders controlling the majority of capital (alone or in concert) can truly exert control over corporate governance. Accounting for the effective influence of the relevant shareholder in the company can be extremely complicated from a computational point of view and requires information on the ownership structure that is not readily available.

\(^4\)According to the European Commission, in 2017 the EU was the destination for nearly EUR 270 billion of foreign brownfield investment and about EUR 82 billion in greenfield investment.

\(^5\)Unlike the acquisition of an existing asset, a greenfield investor would be unlikely to run the risk of deploying capital in an unfriendly jurisdiction, therefore making greenfield investment screening more rare. In addition, recipient governments might be less likely to screen greenfield investment, as they deliver new jobs, technology and managerial expertise.
Appendix C  Foreign controlled EU enterprises (inward FATS)

C.1 Foreign Affiliates Statistics (FATS): methodology and definitions

Inward FATS measure the commercial presence through affiliates in foreign markets. Hence, "inward statistics on foreign affiliates" describe the activity of foreign affiliates resident in the compiling economy. A "foreign affiliate" is an enterprise resident in the compiling country over which an institutional unit not resident in the compiling country has control. FATS data published by Eurostat are broken down by country of ultimate controlling institutional unit (UCI) of a foreign affiliate.46

C.2 EU firms under foreign control

We focus on Inward FATS to provide an overview of EU firms under foreign control.47 In 2020, more than 250,000 EU firms were under foreign controls. However, the vast majority of these firms remain under European control, with intra-EU controlled firms accounting for 60% of the total number of EU firms under foreign control (figure C1). The USA and the United Kingdom control respectively 8% and 7% of EU firms under foreign control.

Figure C1: Percentage of EU firms and occupied persons under foreign control in 2020

Source: Eurostat (inward FATS)

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46 The concept of "control" is defined as the ability to determine the general policy of an enterprise by choosing appropriate directors, if necessary. In this context, enterprise A is deemed to be controlled by an institutional unit B when B controls, either directly or indirectly, more than half of the shareholders' voting power or more than half of the shares (FATS-R, Article 2).

47 Owing to different scopes and definitions, statistics from Bureau Von Dijk and Eurostat FATS differ.
C.3 EU firms under Russian and Chinese control

Russia and China account for around 2% of the total number of EU firms under foreign control. In other words, the number of EU firms under Russian or Chinese control is roughly equivalent to 1/4 of the number of EU companies controlled by the USA. Russian-controlled firms are concentrated in Eastern Europe, whereas Chinese-controlled firms are mainly located in Western Europe. This result is even more striking when considering the number of EU firms under extra-EU foreign control: in Latvia, Slovenia, Lithuania, Czechia or Bulgaria, Russia controls more than 10% of the total number of EU firms under extra-EU foreign control. In Latvia, almost 30% of all firms under foreign control are controlled by Russia (figure C2).

Figure C2: Share of EU firms under Russian or Chinese controls out of the total number of EU firms under extra-UE foreign control

Source: Eurostat (inward FATS)
Appendix D  Assessing the restrictiveness of national investment screening mechanisms: a composite index

D.1 Overview

The composite index compares the restrictiveness of national ISMs on grounds of national security and national interest. The measures scored reflect the legislation in force in 2023, including temporary measures adopted in the wake of the Covid-19 pandemic. The index ranges from zero (relatively open ISM) to one (relatively restrictive ISM) and covers five dimensions: 

i) investor-related parameters and territorial scope of the ISM; 

ii) sectoral scope and coverage of greenfield investments; 

iii) transactions subject to review and thresholds triggering a review; 

iv) screening procedure; 

v) enforcement and sanctions for non-compliance.

D.2 Rules for scoring

The highest score for any dimension is capped at 1 (full range of restrictions on FDI on national security grounds) and the lowest is 0 (no restrictions on foreign investments). Scores are scaled down when restrictions only apply to a subset of investors or transactions. Each dimension consists of several items, the scores of which are averaged to obtain the dimension score. For most items, the score is either 1 (existence of restrictions on national interests or national security grounds), 0.5 (restrictions apply to a subset of transactions or investors) or 0 (absence of restrictions). In other cases, scores range from 0 to 1 and reflect the empirical distribution of the sample, with 0.25, 0.5 and 0.75 corresponding to, respectively, the first quartile, the median and the third quartile of the distribution. For example, scores are calculated to reflect the distribution quantiles for items relating to the minimum thresholds triggering a review (see Table D3) or to the length of the review process (see Table D4). The country score is obtained by averaging the scores for all five dimensions.

D.3 Measures scored

D.3.1 Identity of the investor and territorial scope of the ISM

Most jurisdictions subject FDI to different levels of scrutiny depending on the identity of the investor. The first dimension of the index focuses on investor-related parameters and on the territorial scope of national ISMs (see Table D1 for further details on the scoring grid). It
consists of three items: a) differentiation and exemptions based on the identity of the investor; b) treatment of investors controlled by foreign governments; c) global outreach and extraterritorial application of national legislation.

**Differentiation and exemptions based on the identity of the acquirer or owner:** Most mechanisms use nationality or residency as a trigger criterion in the selection of potentially threatening transactions. Scores are scaled down when a subset of nationalities are exempted from the application of all or parts of the screening rules. Symmetrically, we assign higher scores to ISMs that subject specific nationalities to enhanced scrutiny. Scores are scaled down when national laws include the investor’s nationality as a factor merely to be considered in the risk assessment without overtly discriminating against specific nationalities.

**Foreign government control and SOEs:** We assign higher scores to jurisdictions subjecting foreign investments by state-owned enterprises (SOEs) to enhanced scrutiny. Scores are scaled up when restrictions are overtly discriminatory for SOEs. Conversely, scores are scaled down when links to foreign governments or foreign public entities are a risk factor merely to be considered when assessing potential threats to national security.

**Global outreach and extraterritorial application:** We assign higher scores to ISMs with an extraterritorial dimension. International cooperation on foreign investment screening is also factored in. Scores are scaled up when ISMs allow operational collaboration on individual cases or exchange of intelligence on individual investors (e.g. the EU cooperation mechanism). By contrast, broad and unspecific cooperation arrangements that do not involve intelligence sharing are not factored in.
## I. Investor-related parameters and territorial scope of the ISM

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Scoring Grid</th>
<th>Up to</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.A</td>
<td><strong>Definition of foreign investors</strong></td>
<td>$0.75 \times A.1 + 0.25 \times A.2$</td>
<td>1</td>
</tr>
<tr>
<td>I.A.1</td>
<td><strong>Origin of investors subject to review</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exemptions for a subset of nationalities</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Partial exemptions for a subset of nationalities</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All foreign investors</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign investors and nationals for defence-related transactions</td>
<td>0.825</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign and domestic investors for all transactions subject to review</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>I.A.2</td>
<td><strong>Stricter rules for specific countries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I.B</td>
<td><strong>Foreign government control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$C.1 + C.2$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.B.1</td>
<td><strong>Enhanced scrutiny for foreign government control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One of the factors to be considered in the risk assessment</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I.B.2</td>
<td><strong>Stricter rules for specific foreign governments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greater vigilance recommended</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I.C</td>
<td><strong>Extraterritoriality and regional cooperation on investment screening</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$B.1 + B.2$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.C.1</td>
<td><strong>Extraterritorial application</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>I.C.2</td>
<td><strong>International cooperation on investment screening</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total I</td>
<td>$0.5 \times A + 0.25 \times B + 0.25 \times C$</td>
<td>1</td>
</tr>
</tbody>
</table>

Table D1: Scoring grid- I. Territorial scope: investors subject to review, extraterritorial scope and regional cooperation on foreign investment screening.
D.3.2 Sectoral scope and coverage of greenfield investments

The second dimension of the index focuses on the sectors to which FDI screening regulations apply. It consists of three main items (see Table D2): a) cross-sectoral vs sector-specific screening; b) activities subject to enhanced scrutiny; c) coverage of greenfield investments.

**Cross-sectoral vs sector-specific screening:** Entity-specific screening mechanisms, which are relatively less restrictive, score lowest. Such regimes only review planned foreign participation in or acquisitions of these individual domestic companies (mostly operating in sensitive sectors). We assign a 0.5, intermediate score, to sector-specific regimes, which list sectors or activities that are considered sensitive to national interests. Cross-sectoral schemes and mixed regimes are stricter: they provide governments with broad review powers over foreign investments.

<table>
<thead>
<tr>
<th>II. Sectoral scope: sectors subject to review and coverage of greenfield investments</th>
</tr>
</thead>
</table>

### II.A Cross-sectoral vs sector-specific screening

<table>
<thead>
<tr>
<th>Detailed list of assets/companies</th>
<th>0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed list of sectors</td>
<td>0.5</td>
</tr>
<tr>
<td>Cross-sectoral or mixed</td>
<td>1</td>
</tr>
</tbody>
</table>

### II.B Activities subject to review

| Below the list of 5 areas covered by the EU Regulation | 0.25 |
| 5 areas covered by the EU Regulation                 | 0.5  |
| Above the list of 5 areas covered by the EU Regulation | 1    |

### II.C Coverage of greenfield investments

| Yes                                             | 1    |
| Yes above a certain monetary threshold           | 0.5  |
| No                                              | 0    |

Total II \[ 0.33 \times A + 0.33 \times B + 0.33 \times C \] Up to 1

Table D2: Scoring grid- II. Sectoral scope of the ISM

---

48 A couple of countries apply a combination of cross-sectoral and sector-specific FDI screening.
Sectors to which FDI regulations apply: Activities listed in the EU Regulation are used as a benchmark for scoring.\(^{49}\) Hence, scores are higher (or lower) when the sectoral scope of national ISMs is broader (or narrower) than that of the EU Regulation.

Coverage of greenfield investments: In most jurisdictions, greenfield investments are not covered by national ISMs and require no filing.\(^{50}\) We assign higher scores to mechanisms covering greenfield investments. Scores are scaled down when greenfield investments are only screened for a subset of sectors or above a certain monetary threshold.

D.3.3 Transactions subject to review and minimum thresholds triggering a review

We consider both financial and shareholding trigger thresholds.

Equity holdings or voting rights thresholds: Threshold values range from 1% to 50% in our sample, with higher scores assigned to lower thresholds. When national legislation provide for multiple thresholds, we consider the lowest threshold. Some countries differentiate trigger thresholds according to asset-related (e.g. lower thresholds for sensitive sectors) or investor-related parameters (SOEs, acquirers from specific countries). Scores are scaled up when lower thresholds apply to a subset of investors or to transactions in sensitive activities.

Monetary thresholds: A few jurisdictions use monetary thresholds to filter out small transactions in absolute terms, possibly in conjunction with other asset-or investor-related criteria. We assign lower scores to jurisdictions exempting small transactions from application of the ISM.

\(^{49}\)The EU Regulation list comprises: a) critical infrastructure, whether physical or virtual, including energy, transport, water, health, communications, media, data processing or storage, aerospace, defence, electoral or financial infrastructure, and sensitive facilities, as well as land and real estate crucial for the use of such infrastructure; b) critical technologies and dual-use items, including artificial intelligence, robotics, semiconductors, cybersecurity, aerospace, defence, energy storage, quantum and nuclear technologies as well as nanotechnologies and biotechnologies; c) supply of critical inputs, including energy or raw materials, as well as food security; d) access to sensitive information, including personal data, or the ability to control such information; and e) the freedom and pluralism of the media.

\(^{50}\)Greenfield investments aim to create a new entity, as opposed to the acquisition of an existing entity.
III. Thresholds: how large must the transaction be to trigger a review?

<table>
<thead>
<tr>
<th>III.A Shareholding thresholds</th>
<th>$0.75 \times A.1 + 0.25 \times A.2$</th>
<th>Up to 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>III.A.1 Threshold level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 25% or majority</td>
<td>0.125</td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>10%, acquisition of control or qualifying holding</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>5% to 10%</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>Below 5%</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>III.A.2 Sector-specific and country-specific thresholds</td>
<td>$A.2.1 + A.2.2$</td>
<td>Up to 1</td>
</tr>
<tr>
<td>III.A.2.1 Lower threshold for sensitive areas and/or listed companies</td>
<td>Yes</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>III.A.2.2 Lower threshold for specific investors (e.g. foreign SOEs)</td>
<td>Yes</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>III.B Monetary thresholds</td>
<td>$0.75 \times B.1 + 0.25 \times B.2$</td>
<td>Up to 1</td>
</tr>
<tr>
<td>III.B.1 Existence of a monetary threshold</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Yes for a subset of transactions</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1.0</td>
</tr>
<tr>
<td>III.B.2 Sector-specific and country-specific monetary thresholds</td>
<td>$B.2.1 + B.2.2$</td>
<td>Up to 1</td>
</tr>
<tr>
<td>III.B.2.1 Lower monetary thresholds for sensitive areas</td>
<td>Yes</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>III.B.2.2 Lower monetary thresholds for specific investors</td>
<td>Yes</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Total III</td>
<td>$0.5 \times A + 0.5 \times B$</td>
<td>Up to 1</td>
</tr>
</tbody>
</table>

Table D3: Scoring grid- III. Thresholds triggering a review
D.3.4 Screening procedure

The fourth dimension of the index consists of three main items (see Table D4): a) notification requirements; b) ex-officio screening and national authorities’ call-in powers; c) length of the review process.

Notification requirements: We focus on three features. First, we score whether approval should be obtained prior to (relatively stricter ISM) or after closing of (relatively less restrictive ISM) the planned investment. Second, we focus on the existence of standstill provisions. Submitting a notification may trigger a standstill obligation, whereby the parties cannot implement the transaction pending clearance by the authorities. Scores are higher when filing or the review process has a suspensory effect on the closing of the transaction. Third, we score whether notification requirements are mandatory (relatively stricter ISM) or voluntary (relatively less restrictive ISM) for transactions involving national interest or national security concerns. Overall, scores are scaled down when filing requirements apply to a subset of transactions or investors.

Ex-officio screening: In most jurisdictions, national authorities have discretion to review transactions that fall under the scope of mandatory notification or mandatory pre-authorisation. Scores are scaled up when national authorities can also review transactions that do not fall under the scope of mandatory notification or pre-authorisation requirements (e.g. the authorities have discretion to review transactions that do not exceed the prescribed thresholds). In a number of countries, national authorities can review transactions for a considerable period of time after their completion. The range of scores reflects the empirical distribution of the time limit set for reviewing a transaction in the sample.

Length of the review process: We assign lower scores to jurisdictions that apply a relatively short timeline for conducting investment screening processes.\textsuperscript{51} Indeed, short timelines reduce uncertainty by offering investors a quick decision on the acceptability of their investment projects or the possible necessary adjustments. We account for the fact that in some jurisdictions, the review process takes place in two phases (first, an initial assessment and second, in-depth examinations subject to conditions or opposition to the transaction). The range of scores reflects the

\textsuperscript{51}Some jurisdictions express timelines in working days. For the sake of consistency, working days have been converted into calendar days by applying a factor of 7/5. All timelines are maxima according to the provisions of national legislation. Additional procedural steps are not factored in (e.g. additional time during which mitigation arrangements are negotiated).
### IV. Screening procedure

#### IV.A Mandatory pre-approval, notification requirements and standstill provisions

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes, for a subset of transactions or investors</td>
<td>0.50</td>
</tr>
<tr>
<td>Yes, for all transactions raising national interest/national security concerns</td>
<td>1.0</td>
</tr>
</tbody>
</table>

#### IV.B Ex-officio screening

<table>
<thead>
<tr>
<th>Ex-officio screening</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes, for transactions requiring prior-authorisation</td>
<td>0.5</td>
</tr>
<tr>
<td>Yes, inc. for transactions that do not require prior-authorisation</td>
<td>1</td>
</tr>
</tbody>
</table>

#### IV.B.1 Ex-officio screening powers

<table>
<thead>
<tr>
<th>Screening power</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes, for transactions requiring prior-authorisation</td>
<td>0.5</td>
</tr>
<tr>
<td>Yes, inc. for transactions that do not require prior-authorisation</td>
<td>1</td>
</tr>
</tbody>
</table>

#### IV.B.2 A transaction can be screened up to several years after its completion

<table>
<thead>
<tr>
<th>Screened time after completion</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Yes, up to 5 years after completion</td>
<td>0.5</td>
</tr>
<tr>
<td>Yes, up to 10 years after completion</td>
<td>0.75</td>
</tr>
<tr>
<td>Yes (no time limit)</td>
<td>1</td>
</tr>
</tbody>
</table>

#### III.C Length of the review process

<table>
<thead>
<tr>
<th>Review process length</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 month</td>
<td>0.25</td>
</tr>
<tr>
<td>From 30 to 45 working days</td>
<td>0.5</td>
</tr>
<tr>
<td>From 2 to 3 months</td>
<td>0.75</td>
</tr>
<tr>
<td>More than 6 months</td>
<td>1</td>
</tr>
</tbody>
</table>

#### IV.C.1 Maximum length of the standard procedure

<table>
<thead>
<tr>
<th>Standard procedure length</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 months</td>
<td>0.25</td>
</tr>
<tr>
<td>From 2 to 4 months</td>
<td>0.5</td>
</tr>
<tr>
<td>From 4 to 6 months</td>
<td>0.75</td>
</tr>
<tr>
<td>More than 6 months</td>
<td>1</td>
</tr>
</tbody>
</table>

#### IV.C.2 Maximum length of the procedure (inc. complex cases)

<table>
<thead>
<tr>
<th>Complex procedure length</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 months</td>
<td>0.25</td>
</tr>
<tr>
<td>From 2 to 4 months</td>
<td>0.5</td>
</tr>
<tr>
<td>From 4 to 6 months</td>
<td>0.75</td>
</tr>
<tr>
<td>More than 6 months</td>
<td>1</td>
</tr>
</tbody>
</table>

#### IV.C.3 Existence of a fast-track or simplified procedure

<table>
<thead>
<tr>
<th>Simplified procedure</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
</tr>
</tbody>
</table>

Total IV  

\[
0.33 \times A + 0.33 \times B + 0.33 \times C \leq 1
\]

Table D4: Scoring grid- IV. Screening procedure

empirical distribution of the sample, with 0.25, 0.5 and 0.75 corresponding to, respectively, the first quartile, median and third quartile of the distribution. We assign lower scores to jurisdictions
offering a fast-track procedure for unproblematic transactions.

D.3.5 Enforcement and sanctions

Depending on the design of national ISMs, national authorities may prohibit a transaction entirely or authorise it under certain conditions (mitigation measures).

Invalidity of legal transactions implemented without approval: In jurisdictions where completion of a transaction prior to clearance is prohibited, breach of this obligation results in the transaction being void (for example in the US, the UK and Australia). In some jurisdictions, if a transaction is completed without prior approval, and subsequently investigated under FDI rules, the relevant authorities may require the deal to be unwound. We assign higher scores to jurisdictions applying such provisions.

Authority to impose conditions on transactions and mitigation measures: To address identified national security risks, national authorities may negotiate or impose conditions or obligations to transaction parties. Such conditions aim at removing circumstances that trigger security concerns that would otherwise lead the authorities to deny authorisation. Some ISMs merely refer to their existence and possibility, whereas greater regulatory detail is provided in other countries (e.g. France, Norway and the USA). We assign higher scores to jurisdictions excluding the possibility of such arrangements. Indeed, in the absence of mitigation agreements, prospective investors cannot adjust their projects to avoid the outright rejection of the planned investment, resulting in stricter regimes.

Sanctions in the event of non-compliance with the filing or pre-authorisation obligations: A number of jurisdictions have introduced criminal liability for intentional or grossly negligent violations of filing obligations. We assign higher scores to jurisdictions imposing monetary sanctions and criminal sanctions, such as imprisonment.

Right of appeal: While some countries grant access to an administrative or judicial review in the event of a rejection of the transaction, other jurisdictions exclude such a possibility. We assign lower scores to jurisdictions granting investors the right to appeal against screening decisions. Scores are scaled up when the scope for appeal is relatively narrow (e.g. when the possibility of appeal is specified for a subset of transactions or decisions). We assign higher scores to countries
that categorically exclude final decisions taken by the authorities under acquisition- and owner-
ship related mechanisms from judicial review.

## V. Enforcement and sanctions

<table>
<thead>
<tr>
<th><strong>V.A</strong></th>
<th>Invalidity of legal transactions implemented without approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>V.B</strong></th>
<th>Mitigation measures to address the authorities’ objections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>V.C</strong></th>
<th>Sanctions in the event of non-compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(0.5 \times C.1 + 0.5 \times C.2)</td>
</tr>
<tr>
<td></td>
<td>up to 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>V.C.1</strong></th>
<th>Fines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0.5</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>V.C.2</strong></th>
<th>Imprisonment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0.5</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>V.D</strong></th>
<th>Right of appeal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Yes for a subset of transactions or decisions</td>
<td>0.5</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
</tr>
</tbody>
</table>

Total V \(0.25 \times A + 0.25 \times B + 0.25 \times C + 0.25 \times D\) up to 1

Table D5: Scoring grid- V. Enforcement and sanctions
D.4 Robustness check: alternative weighting schemes

D.4.1 Aggregation method for each item

Results are sensitive to the weighting scheme. In most cases, equal weights are used when aggregating the various items of each dimension. In some instances, over-weighting specific items is warranted to better reflect the restrictiveness of national ISMs. For instance, over-weighting the items recording the existence of monetary and shareholding thresholds (Figure D1, right-hand side) results in a different ranking than the alternative (left-hand side), with Canada ranking highest, which is more consistent with the provisions of national legislation.

Figure D1: Robustness check: using alternative weighting schemes for Dimension III (thresholds triggering a review)

D.4.2 Aggregating the five dimensions of the index into a single score

Using an equal weighting for each dimension has the advantage of being simple and consistent with other FDI restrictiveness indicators (e.g. the OECD’s RRI). As a robustness check, alternative weighting schemes are provided below (Figure D2). Correlations are high for the indexes calculated using various weighting schemes, reflecting the fact that more restrictive countries are generally more restrictive across the board.
Note: The ISM restrictiveness index is computed as $\sum_{i=1}^{k=5} w_i \cdot \text{Dimension}_i$. When all weights are equal, $w_1 = \frac{1}{5} \forall i$. The alternative weighting scheme corresponds to $w_1 = w_2 = w_3 = \frac{1}{4}$ and $w_4 = w_5 = \frac{1}{8}$.

Figure D2: Robustness check: using alternative weighting schemes for aggregating the dimensions of the index.
References


Commission, E. (2022a). Guidance to the Member States concerning FDI from Russia and Belarus in view of the military aggression against Ukraine and the restrictive measures laid down in recent Council Regulations on sanctions.


