# **Research Note**

# Mapping the Characteristics of Foreign Investment Screening Mechanisms: The New PRISM Dataset<sup>1</sup>

Sarah Bauerle Danzman

Sophie Meunier

Indiana University Bloomington

sbauerle@indiana.edu

Princeton University smeunier@princeton.edu

Forthcoming in International Studies Quarterly

Since the 2008 financial crisis, many advanced industrialized economies, while eager to attract Foreign Direct Investment (FDI), have also implemented or tightened Investment Screening Mechanisms (ISMs), which empower governments to restrict foreign takeovers. ISMs, at the nexus between International Political Economy and International Security, are an understudied phenomenon, though they have recently gained in policy prominence worldwide as a result of emerging technological risks and new threat actors. This research note introduces the Politics and Regulation of Investment Screening Mechanisms dataset (PRISM), a newly coded dataset on ISMs in OECD countries from 2007-2021, examining the evolution of seven key features of investment screening over time. Based on this novel data, we then describe patterns in the evolution of foreign investment screening policies. Next we consider likely applications of the dataset to answer questions about the politics of investment as well as broader questions of economic exchange and institutional design in an age of great power competition – including by providing some initial statistical exercises on the relationship between Chinese FDI and R&D spending on ISM features. Finally we suggest how investment screening fits within the new arsenal of unilateral instruments of economic statecraft currently being developed by liberal democracies.

<sup>&</sup>lt;sup>1</sup> The authors thank Gabriella Couloubaritsis, Julia Braeuner, Catherine Heiger, Britt Rogers, and Isabelle Bennett for excellent research assistance and the Tobias Center for Innovations in International Development for financial support. This project has benefitted from excellent comments and suggestions from symposium participants at the University of Wisconsin-Madison's International Relations Colloquium, the Ostrom Workshop Research Colloquium, the 2021 Annual Meetings of the International Studies Association, The Midwest Political Science Association, and the Tobias Center for Innovation in International Development's COVID-19 and Post-Pandemic Investment and Development Workshop. Data are available for download (and updated semiannually) at https://investmentscreening.princeton.edu/dataset

How does the recent rise of geoeconomic competition change the politics of trade and investment? Long a cornerstone of the post-war order, liberal trade and capital mobility have been challenged in recent years due to the rise of China and its managed economy, populism and unilateralism in the United States, and a growing concern over supply chain fragilities.<sup>2</sup> Many advanced industrial democracies are turning to unilateral instruments of economic statecraft, including industrial policy, restrictions on public procurement, and measures to avoid political coercion through trade and investment.<sup>3</sup> As economic nationalism is making a resurgence all around, governments are increasingly embracing managed trade, though without a prominent commercially-driven demand for protectionism. Instead, politicians have used national security concerns to justify these developments. Unlike previous eras of widely-applied high tariffs and foreign investment limitations, today's restrictive policies seem designed to discriminate between "beneficial" economic exchange and trade and investment that pose national security risks.

The politics of Foreign Direct Investment (FDI) provides an important illustration of this phenomenon. At least since the end of the Cold War, most countries, wealthy or not, have been eager to attract FDI, widely seen as growth promoting and less likely to generate volatility than short-term capital flows (Pandya 2016). Many advanced industrialized economies, however, have recently implemented or expanded Investment Screening Mechanisms (ISMs), which empower governments to restrict foreign mergers and acquisitions (M&A), especially in strategic sectors.

The expansion of investment screening challenges accepted wisdom about the role of state authority in the global economy (Milner 2021), the ways in which governments compete with each other for mobile capital (Mosley 2000, Doshi et al. 2019, Mosley et al. 2020), and the influence of interest groups and electoral politics in shaping orientations toward the global market (Baccini et al. 2018, Kim 2017, Meckling and Hughes 2017). Yet, though part of a growing trend towards the securitization and geopoliticization of economic policy (Farrell and Newman 2019, Roberts et al. 2019, Meunier and Nicolaidis 2019), ISMs are an understudied phenomenon, both in the International Political Economy and International Security literatures, though they have recently gained in policy prominence worldwide as a result of new technological risks and new threat actors. We know little about the politics of their design features, nor about the costs they impose on the various actors involved. This research note begins to fill this gap by introducing the Politics and Regulation of Investment Screening Mechanisms dataset (PRISM) and suggesting ways in which the data can be used for analyzing important questions at the nexus of international political economy and national security.

We first survey briefly the history and definition of investment screening and show how ISMs based on national security grounds have expanded worldwide both in number and in scope in recent years. In Section Two we introduce the PRISM dataset and the seven key features of investment screening we chose to code. Section Three presents four observations on patterns of investment screening politics based on preliminary data analysis. Section Four performs some initial statistical analyses on the relationship between Chinese FDI and R&D spending on ISM features. Finally we suggest how investment screening fits within the new arsenal of unilateral instruments of economic statecraft currently being developed by liberal democracies.

<sup>&</sup>lt;sup>2</sup> See, especially, International Organization 75th anniversary special issue for a series of papers on challenges to the Liberal International Order (Finnemore et al. 2021).

<sup>&</sup>lt;sup>3</sup> For a canonical overview of economic statecraft, see Baldwin (2020). For recent, policy-oriented treatments of rising geoeconomic competition see Blackwell and Harris (2016), Doshi (2021), and Wigell et al. (2019).

#### What are ISMs and what is new about them

States have long regulated which foreign investments are allowed on their territory. Tools of investment control have included substantial state ownership in sensitive assets and sectors, 'golden share' arrangements conferring outsized voting rights to the state in strategic companies, and foreign equity restrictions limiting foreign ownership of domestic firms or banning foreigners outright from sensitive sectors. Most countries drastically reduced these restrictions through the 1980s and 1990s as FDI was liberalized, though lower- and middle-income countries were generally slower to do so (Pandya 2014).

Investment screening is related to but distinct from these kinds of investment restrictions. It is the practice by which governments review inward FDI transactions and deny entry to, or require the divestment of, investments that are deemed unacceptable. ISMs are routinized legal processes of investment screening on the basis of predetermined criteria. Screening mechanisms, which allow "acceptable" transactions while preventing entry of undesirable investors or the sale of specific sensitive assets to foreigners, can be compatible with liberal investment flows. But their ambiguity renders them more susceptible to manipulation for protectionist ends (Lai 2021).

Investment screening is not a new phenomenon. In the post-World War II era, many countries screened inward investment *on economic grounds*, based on whether the reviewed transaction would generate a 'net economic benefit' to the host economy. Such review criteria can easily be used to protect domestic business interests; the OECD FDI regulatory restrictiveness index penalizes states that screen investment for such net benefits (Kalinova, Palerm, and Thomsen 2010). Over time, most states abandoned screening regimes focused on economic benefit tests because these measures were widely seen as overly restrictive and as creating substantial costs and uncertainty to firms who wanted to invest (Taylor 2000, Kalinova et al. 2010). Instead, governments largely welcomed FDI for their related economic benefits such as jobs and technology spillovers and sought to minimize regulatory procedures necessary to establish an investment (Pandya 2014). Yet, the U.S., Canada, and Australia all retained investment screening regimes to varying degrees of use even as their broader investment environments became more liberal. In recent years, investment screening has seen a rapid resurgence. Figure 1 illustrates the sustained increase in ISMs in OECD countries over the past 15 years. Today as much as 60 percent of global FDI flows are potentially subject to national security-related review (OECD 2020, 15)

Figure 1 HERE (caption: Figure 1: OECD ISMs Have Doubled Since 2007)

This recent expansion of investment screening authority is qualitatively different from first generation economic benefits screens. Today, almost all ISMs review transactions *on national security grounds*. National security, and closely related concepts of "essential security " and "public order," is a purposively vague term. Most countries do not define national security in law. Instead, national security and public order determinations are made in reference to a complex and shifting set of governmental priorities. The vagueness of the definition grants national administrations some flexibility to adapt to changing threats and changing technologies. For instance, the vague and expansive scope of "national security" has enabled the US to block proposed transactions not only based on their direct jeopardizing of national defense (as in the 2012 block of the Ralls Corporation's acquisition of four windfarms in Oregon based on the geographical proximity of the

acquisition target to a naval air station<sup>4</sup>) but also on more attenuated risks related to foreign governments gaining access to large amounts of sensitive personal data (as in the 2020 divestment order of ByteDance from TikTok. See Friedman et al. (2022.)).

Importantly, however, a national security framework for evaluating investment transactions differs from economic benefits tests in that governments must demonstrate a potential harm related to national *safety* rather than general *welfare*.<sup>5</sup> For instance, in the European Union (EU), the 2019 Investment Screening Regulation provides member states with an indicative list of factors they may consider when assessing essential security risks, including characteristics of the target entity that create nationals security vulnerabilities and characteristics of the acquirer that increase the likelihood that they are likely to seek to exploit these vulnerabilities.<sup>6</sup> As with international trade law, the OECD's Guidelines for Recipient Country Investment Policies relating to National Security recognizes essential security determinations to be self-judging while emphasizing the importance of rigorous, fact-based, and transparent risk assessment procedures (OECD 2009, Annex Part 3).

The lack of legal specificity of what constitutes an unacceptable risk to national security certainly creates opportunities for special interests to push for protectionist policies cloaked in the language of national security. In the trade realm, the Trump administration's use of Section 232 tariffs on Canadian and EU steel is an often-used example of how governments can use self-judging nationals security exceptions as a "get-out-of-jail-free-card" from their international economic obligations. However, to the extent that parties have legal recourse to ISM determinations, governments must be able to defend decisions to interfere in a transaction on fact-based national security grounds.

Thus, national security tests create a different standard of review for screening and require analysis of different risk factors than do economic screens. How essential security concepts translate into ISM provisions, and the extent to which transaction parties have access to administrative or judicial review of screening determinations, can vary considerably given country-specific national security concerns as well as international commitments and domestic legal frameworks. Ultimately, how narrowly or expansively governments interpret national security in the context of investment screening is an empirical question. As explained further below, the PRISM dataset collects information on ISM coverage, placement of review authority, blocking language, and judicial review to assist scholars in studying the causes and consequences of variations in how governments determine what counts as an unacceptable risk to national security.

FDI screening measures have been paradoxically most developed, and for the longest time, in the neo-liberal, anti-statist United States. The Committee on Foreign Investment in the United States (CFIUS), created in 1975 to oversee the national security implications of FDI, has become the gold standard of ISMs. Its powers to review FDI have further increased with the 2018 bipartisan Foreign Investment Risk Review Modernization Act (FIRRMA). Other recently expanded ISMs are Australia's Foreign Investment Review

<sup>&</sup>lt;sup>4</sup> The White House: Office of the Press Secretary. 2012. Order Signed by the President regarding the Acquisition of Four U.S. Wind Farm Project Companies by Ralls Corporation. https://obamawhitehouse.archives.gov/the-press-office/2012/09/28/order-signed-president-regarding-acquisition-four-us-wind-farm-project-c

<sup>&</sup>lt;sup>5</sup> See Cole v. Young, 351 U.S. 536 (U.S. 1956) for relevant U.S. case law on national security determinations.

<sup>&</sup>lt;sup>6</sup> Regulation (EU) 2019/452 of the European Parliament and of the Council of 19 March 2019 establishing a framework for the screening of foreign direct investments into the Union https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0452&from=EN

Board (FIRB) and Canada's Investment Canada Act (ICA). In Europe, in parallel to the ISMs developed in Germany (since 2004) and France (since 2006), the EU adopted in 2019 its first investment screening framework (Chan and Meunier 2021).

How is this reconstruction of inward investment restrictions compatible with extant IPE theory on the politics of economic integration? While ISMs have proliferated, countries, and localities, have simultaneously engaged in fierce competition to attract investment through a variety of incentives and promotion efforts (Jensen and Malesky 2018; Bauerle Danzman and Slaski 2021). Many countries explicitly prioritize R&D in their incentive strategies, though research demonstrates that these policies often fail to attract high-quality FDI (Wellhausen 2013). Large domestic business groups often support openness, especially toward M&As, to overcome financing constraints (Bauerle Danzman 2019). Governments are most likely to embrace inward FDI during economic downturns for their stimulative effect and employment support (Meunier 2014; Simmons 2014) and less likely to pursue protectionist economic measures during global upheaval (Davis and Pelc 2017). Yet, enhanced investment screening has occurred alongside the 2008 financial crisis and the economic disruption caused by the 2020 global pandemic.

By contrast to the abundant literature on the costs and benefits of hosting FDI, the literature on investment screening is embryonic. Until recently, screening regimes were rare enough that they likely did not substantially alter patterns of investment flow and ownership networks. However, ISMs can generate substantial compliance costs for firms. Some countries, notably the U.S. and Australia, impose filing fees for firms. Firms must also obtain costly legal counsel to navigate review and some ISM review windows can be close to six months. These compliance costs also generate costs to governments in the form of foregone investment. UNCTAD estimates about 15 percent of all cross-border M&A (CBMA) that were canceled between 2008-2012 were withdrawn for regulatory reasons or political opposition. Of that, 12 percent were canceled due to an adverse decision by an ISM (UNCTAD 2013, 97). As ISMs proliferate, the number and size of deals withdrawn due to screening decisions is likely to grow. Therefore, ISMs generate tradeoffs between regulatory priorities and investment maximization that governments must adjudicate.

Because ISMs generate costs, it is tempting to draw on distributional models to make sense of their proliferation. Yet the politics of investment screening are not well explained by traditional IPE models that emphasize factor-based interest groups (Kang 1997; Baltz 2017) or see investment politics as a battle between exporters and importers or larger firms versus small firms or partisan acrimony (Frye and Pinto 2009; Schill 2019). While corporate interests often successfully block other actions of economic statecraft (Gallentucci 2015, Lektzian and Patterson 2015), support for more recent investment screening laws has been largely multi-partisan (Canes-Wrone et al. 2020). Recent academic literature has focused on investment screening as a response to the growing prevalence of Chinese outward investment (Lenihan 2018; Raess 2020), but without addressing why commercial actors with ties to the China market have not successfully blocked such measures. Does the expansion of ISMs reflect a globalization backlash by the economic losers from openness, or is it indicative of changing perceptions of the security risks and benefits of openness?

Current ISM politics demand new explanations, especially since screening measures are likely to exact economic and institutional costs on countries that erect them, but also to generate new insights into the broader phenomenon of the increasing instrumentalization and securitization of international economic exchange. In particular, existing IPE frameworks for explaining economic policy generally assume restrictive regulations are protectionist in intent. While some of the political dynamics of ISMs may be motivated by

protectionism, the growth of such mechanisms largely in the absence of supportive and mobilized industry lobbies suggests that IPE needs better theory about *when* economic regulations are likely to be motivated by national security concerns, *who* gets to define what national security encompasses, and *how* societal groups shape and respond to shifting perceptions of the security risks associated with economic exchange.

# Introducing PRISM

The first step towards new theorizing is better data on the ISMs themselves. We are unaware of any existing public dataset that provides time-series cross-sectional data mapping the content of investment screening regulations across space and time. The OECD's FDI regulatory restrictiveness index has a dimension for "screening and approval requirements" but carves out national security review (Kalinova et al. 2010, 11). UNCTAD's investment policy monitor tracks FDI-related regulations and has identified 237 policy changes related to "approval and admission" from 2010 to January 2021<sup>7</sup> but does not code the details of ISMs. The World Bank tracks investment screening rules passed in the context of COVID, but this dataset has limited content mapping.<sup>8</sup>

We built the first comprehensive dataset on screening laws in all 38 OECD countries from 2007-2021, including qualitative coding across a range of characteristics. Unlike measures of FDI restrictiveness, we do not collapse coded dimensions into an index because screening features elide clear *ex ante* determinations of how much they restrict investment. Our code book is available in appendix, as is a summary table of documented changes to ISMs since 2007.

We begin in 2007, the high watermark of neoliberal economic integration before the 2008 financial crisis, the euro crisis, and the rise of China as a major foreign investor. We focus on OECD countries because they are advanced economies that – as a condition of entry – commit to pursuing broadly liberal economic policies and have transparent investment-related regulations. The dataset does not include China, whose history and political economy of investment regulation in the PRC is fundamentally distinct from those of market-based democracies.<sup>9</sup> Our comprehensive coding of investment screening authorities uses publicly available OECD documents on FDI-related regulations supplemented with a variety of other sources (see codebook).

We recognize that limiting the dataset to OECD countries has downsides. However, we believe this is the best place to start. Given the OECD's reporting requirements of its Freedom of Investment process, Its members have committed to transparency and reporting requirements regarding their investment screening rules. Additionally, most investment screening mechanisms today focus on CBMA, which are far more prevalent in advanced economies. Between 1991 and 2021, OECD-based companies accounted for 85 percent of the value of CBMA (UNCTAD 2022, Annex Table 5). To assess the effects of ISMs, researchers will wish to combine our dataset with information on transactions reviewed and blocked. While governments often keep details of investment review relatively secret, there is more information – at least at aggregated levels of disclosure – about transaction review in OECD countries than in developing economies. In future

<sup>8</sup> https://dataviz.worldbank.org/views/FDI-

<sup>&</sup>lt;sup>7</sup> <u>https://investmentpolicy.unctad.org/investment-policy-monitor</u> accessed 1 February 2021.

<sup>&</sup>lt;u>COVID19/Overview?%3Aembed=y&%3AisGuestRedirectFromVizportal=y&%3Adisplay\_count=n&%3AshowAppB</u> <u>anner=false&%3Aorigin=viz\_share\_link&%3AshowVizHome=n</u> accessed 1 February 2021.

<sup>&</sup>lt;sup>9</sup> All OECD countries have democratic histories, though they are not immune to recent global trends in democratic backsliding.

iterations of the dataset, we will expand to include G20 countries and EU Member States that are not also OECD members.<sup>10</sup>

We code countries as having an investment screening mechanism if (1) a legal mechanism is in place to approve or deny an investment in a host country business, (2) that mechanism has a clear and routinized process through which to exercise its authority. We focus our coding of each mechanism around seven categories, each of which is captured through several measures, which we identify from field work<sup>11</sup> and elite interviews with relevant officials as being especially important for mechanism design:

- 1. Scope sectors and business activities subject to review.
- 2. Thresholds volume and share of stake and transaction to trigger review.
- 3. Foreign Government Control differential treatment of foreign government owned entities.
- 4. Net Benefit Tests review criteria including general economic policy concerns.
- 5. Pre-Approval transactions requiring pre-notification or authorization.
- 6. Monitoring/Enforcement government power to monitor and enforce the rules through fines and other negative sanctions.
- 7. Screening Apparatus which government agencies contribute to review.

We built our dataset to include any type of investment screening mechanism, regardless of rationale. While many screening authorities are scoped around national security, not all are, and some countries empower review boards to evaluate proposed investments on the basis of multiple rationale (such as Mexico).

The resulting dataset is organized as a time series cross section with the country-year as the unit of observation. There is also an event data version of the dataset where each observation is a new investment law or amendment. The dataset begins in 2007 and is current to June 2022. The dataset is available through a request form online and is updated twice yearly. The full list of variables is available in the appendix. For each country, we have publicly available annotated coding information, including the source materials used for coding and a short description of the country's mechanism.<sup>12</sup> The appendix contains an example of such a description. In general, we rely on notifications governments file to the OECD related to changes in their investment screening regulations as well as the actual legislation. We sometimes use qualitative assessments of screening regimes written by well regarded international law firms, but only with respect to legislation that has actually passed. We do not rely on advanced reporting on ISMs that have not yet been promulgated because legal details frequently change between bill "tabling" and passage.

# Preliminary data analysis

As investment screening is rapidly becoming a prominent feature of the global economy, our comprehensive dataset helps to answer basic descriptive questions about what ISM regulations look like, how they compare across different country contexts, and how these mechanisms have changed over time. Below we summarize four key preliminary insights from the dataset.

<sup>&</sup>lt;sup>10</sup> These include Brazil, China, India, Indonesia, Russia, Saudi Arabia, and South Africa.

<sup>&</sup>lt;sup>11</sup> One author engaged in ethnographic work in an OECD member's foreign affairs ministry in a division tasked with investment review and diplomatic outreach efforts regarding ISM development in other countries.

<sup>&</sup>lt;sup>12</sup> Coding was performed with support from several research assistants, with every law coded by at least two coders. In the event of coding disagreements, a PI made the final determination.

#### Observation One - Increased Implementation of National Security-Related Investment Screening

As Figure 1 shows, our data reveals a marked increase in the passage of investment review mechanisms and updates to existing laws in recent years. These new mechanisms are almost universally based on national security. Among newer and updated mechanisms, some continue to have net economic benefits tests, but new screening tools unrelated to national security concerns are rare. While governments have enacted investment review-related measures at an increased rate since the onset of COVID, this represents an acceleration of a trend rather than a major shift.

# Observation Two - Broadening Scope of Sector Coverage

ISMs have increased their scope of coverage over time. First, more countries have adopted cross-sectoral instruments, which provide governments with broad review authority over FDI regardless of sector. While initial national security-related concerns over FDI were narrowly focused on foreign influence in defense contracts, governments have expanded national security concerns to critical physical infrastructure, food security, data security, and dual-use technology. With cross-sectoral screening, which leaves the definition of national security vague, governments do not need to update sectoral lists as views about what sectors may generate risks evolve. Second, some countries screen transactions only in specific sectors, but they have expanded the number of sectors subject to review. Figure 3 charts this change over time while Figure 4 shows a count of sectoral coverage by country. For countries with cross-sectoral systems, only sectors for which there are additional screening requirements are included. For instance, Denmark has authority to review transactions regardless of sector, but as of 2021 has mandatory screening for 11 sectors.

Figure 2 HERE (Caption - Figure 2: Average Number of Sectors Screened over Time)

Figure 3 HERE

# Observation Three - Lower Review Thresholds

ISMs are reviewing increasingly smaller transactions, measured both in terms of absolute valuation and as percentage of deal size. Many governments set screening thresholds at a specific economic interest percentage of an asset, and may also place an additional coverage test related to the size of the investment (with larger investments being covered while small investments are not). The U.S., focusing instead on the concept of "control," reviews each transaction to determine if a foreign person could obtain control through governance rights. We also observe more mechanisms requiring mandatory filing requirements over time.

#### **Observation Four - Some Policy Convergence**

The data map a growing similarity over time among mechanisms passed. Though investment review mechanisms have been marked, even recently, by a general lack of convergence toward a single standard (Pohl and Rosselot 2020, 11), we see evidence that investment review authorities among OECD members are becoming more similar, especially in the wake of COVID. Bureaucrats in many governments had already begun considering enhanced approaches to investment screening prior to 2020. The pandemic gave these policy entrepreneurs an opening to push through "off the shelf" investment screening solutions as a quick

response to the economic and security concerns COVID instantiated. In particular, we find newer ISMs tend to follow the EU's advice for which sectors to cover and tend to have a tiered system in which a subset of critical sectors (usually related to critical infrastructure and critical technology) are reviewable at a lower threshold.

# Applications of the data to answer big contemporary questions

The PRISM dataset helps scholars address important contemporary theoretical and policy puzzles that extend beyond investment screening to broader questions at the intersection of IPE and international security. The dataset's rich information on the timing of ISMs, their differential treatment of sectors, variation in minimum thresholds, and bureaucratic structure presents a host of theoretically interesting institutional variation of interest both as outcome and as explanation. In this section we outline a research agenda on the politics of investment screening and the securitization of investment policy by suggesting a set of interesting and important questions that could be answered using the PRISM dataset. We also illustrate the dataset's usefulness by performing a preliminary statistical analysis linking investment screening measures with Chinese outward investment and with R&D expenditures.

# A research agenda on the politics of investment screening and the securitization of investment policy

First, scholars can use these data to study the comparative politics of investment screening regulation. Indeed, as our data show, there has been considerable variation between states in when and how they have adopted and expanded investment screening measures. Previous scholarship has largely focused on singlecountry cases (e.g. Beltz 2017, Canes-Wrone et al. 2020, Crystal 1998, Kang 1997), instead of explaining cross-country variation. The PRISM dataset opens new possibilities for scholars to systematically explain variation in investment screening practices.

For example, researchers can use PRISM to tie preferences, measured through public opinion surveys and experiments, to sector-specific restrictions. Are voters more likely to support screening in technology-intensive industries than in other activities? Do their preferences vary based on employment, profession, education level, or partisanship? Researchers can also leverage PRISM's event data to investigate when and how national security frames to economic policy become politically salient and how citizens think about the connection between national security and economic policy more broadly.

The PRISM data can also inform studies on the influence of business interests on contemporary economic policy. Have policy-makers introduced and expanded investment screening measures at the request of business or in spite of them? The modest literature that addresses the politics of ISMs finds little, no, or ineffectual pressure from business groups, either as the policy is being negotiated, or after it is implemented (e.g. Bauerle Danzman 2022, Chan and Meunier 2021). Why is this the case? Does it conform to expectations derived from traditional political economy models? What does it tell us more broadly about the role of small and big business in the securitization of economic policy and on government efforts to rein in corporate power?

Relatedly, our PRISM data can also be used to investigate whether investment screening measures are designed as a response to the growing politicization of trade and investment policy in many advanced industrialized democracies. Is there a connection between the tightening of investment screening measures

and political cycles? For instance, do we observe new screening legislation in electoral years? Do investment screening measures map onto existing political cleavages?

As the PRISM dataset is regularly updated, it can be used to analyze how the COVID-19 pandemic has challenged investment openness and redirected the structure of globalization. In particular, scholars could match various phases of the pandemic with the enactment of new investment screening measures - for instance the inclusion of businesses and sectors that produce vaccines or personal protective equipment or the lowering of thresholds for review in order to avoid opportunistic takeovers.

The PRISM data are sufficiently fine-grained to assist scholars in determining the effect of screening on patterns of global investment flows, production networks, firm valuations and R&D activities. The PRISM dataset can also help scholars of comparative regulatory and institutional design. Investment screening provides an opportunity to examine systematically how different legal systems incorporate national security regulations in varying ways and to what effect. Scholars can also use variation in ISM design to examine principal-agent dynamics between the executive and its agencies and how ISM structure affects the propensity to block FDI. These questions are of increasing importance as governments erect new bureaucratic structures to manage trade and investment flows.

Moreover, the explosion of new and reformed ISMs in recent years is an excellent case through which scholars of international diffusion can further examine when and how national regulations proliferate through the international system, when they converge toward a common structure, and when their designs diverge. Because domestic screening regimes have extraterritorial reach by constraining M&As of MNEs headquartered in foreign jurisdictions, the proliferation of ISMs should be understood and studied as an example of policy diffusion. Bourles, Dorsch and Eichenauer have already started to use the PRISM dataset in their study of the diffusion of ISMs, asking whether the proliferation of ISMs in recent years has happened mostly through norm emulation or through economic interdependence (2022). As key economies - namely the United States, the EU, and China – compete to set global regulatory standards around a range of economic activities, modeling ISM proliferation can help scholars test hypotheses about what kinds of economic and political levers translate into the power to shape others' legal environments. Crucially, while a majority of high-income economies have strengthened screening authorities in recent years, they have done so differentially. Modeling regulatory distance as a function of complex economic connects, military alliances, and other forms of interstate influence can help adjudicate debates over when interdependence generates asymmetries that can be weaponized (Farrell and Newman 2019) and when interdependence constrains dominating behavior (Milner 2021).

# Preliminary statistical analyses

To illustrate fruitful ways to leverage these data for hypothesis testing, we offer two initial statistical analyses that begin to evaluate the most prominent emerging explanations for the rise of investment screening: the rise of China as an investor and the relationship between technological innovation and investment control. These exercises are best interpreted as correlations rather than strong statistical tests, but provide a path forward for future scholarship.

# Investment screening and the rise of China as an outward investor

First, a central microfoundation in IPE is that deeper economic ties, often developed through participation in global value chains, entrench pro-globalization interest groups (Kim 2017, Osgood 2018). A subset of the trade literature considers when economic interdependence may generate political conflict (Carnegie 2014), but these logics remain mostly underdeveloped in the FDI literature. Even though the emergence of a new source of foreign investment has historically been regarded by host countries with apprehension and hostility, there is little IPE literature on the politics of reacting to shifts in the geographical composition of inward investments. Yet as the history of investment screening in the US instantiates, each successive institutional innovation in the CFIUS process happened in response to the emergence of a new foreign investors; the OPEP countries in the 1970s, Japan in the 1980s, China in the 2000s. The rise of Chinese foreign investors, reflecting the broader rise of China in geopolitics, has coincided with the proliferation and tightening of ISMs worldwide in recent years, though few of these screening mechanisms are overtly discriminatory towards any particular country.

Indeed, most of the literature on the recent expansion of investment screening focuses on the rise of China as an outward investor (Chan and Meunier 2021, Lenihan 2018, Schill 2019). Investments from China may have prompted increased screening measures in host countries because of the perception that there is something inherently different about the nature of Chinese FDI and therefore it should not be treated politically like any other foreign investment. Chinese investment indeed has unique characteristics that are not shared by investment from South Korea, the Netherlands, or Qatar, for instance. As Meunier (2019) has argued, some of these characteristics include: an emerging economy in need of high technology; a unique political system with state management of the economy, lack of transparency on the nature of investors, and blurring of lines between economic and political objectives; and a non-ally in the security dimension with geopolitical ambitions.

We use PRISM's data on the timing of ISM regulatory reform to consider whether the rise of Chinese outward investment has impacted the expansion of investment screening. While some argue a reliance on Chinese investment may reduce governments' willingness to impose screening regulations for fear of depressing growth-promoting FDI flows (Chan and Meunier 2021), research on the 'liability of foreignness' and the 'costs of doing business abroad' (Zaheer 1995), concerns about competing economic models (Meunier 2014), and norms of reciprocity and retaliation (Chilton et al. 2020) all suggest that economic ties to "competitors" may provoke backlash rather than strengthen pro-globalization coalitions. We run simple logistic regressions in which the presence or absence of an ISM regulatory change is the outcome variable, and measures of Chinese inward FDI stock are the explanatory variables. The unit of analysis is the country-year. FDI data come from the OECD International Direct Investment Statistics. Table 1 presents results, which are robust to year fixed effects and to probit analysis. Countries with more FDI stock from China, measured both by total stock and as a percentage of total inward investment, are statistically significantly more likely to impose new screening regulations. While further analysis is necessary to make stronger causal claims, the data show that increased interconnectedness with Chinese investors does not seem to be empowering a pro-China coalition within OECD countries.

Table 1: Chinese FDI and ISM Law Changes						
	Model 1	Model 2	Model 3	Model 4		

Chinese Inward FDI Stock	0.0004			
	(0.01)			
Chinese Inward FDI Stock/All FDI		0.324		
		(0.02)		
Chinese Outward FDI Stock			0.0002	
			(0.00)	
Chinese Outward FDI Stock/All FDI				0.033
				(0.45)

(p-values)

More scholarship is needed to probe historically why investment screening measures are taken in reaction to new entrants but not others and whether in the contemporary period China is the only driver of ISM proliferation. Indeed, Bauerle Danzman and Meunier have recently shown that even though the new EU-wide investment screening regulation was created in direct reaction to the rise of China as an outward investor, several member states have been implementing investment screening measures motivated by fear of Russia as an investor (2022). Scholars could conduct comparative studies of threat perceptions of foreign investment coming from different countries in order to understand why some investors prompt a tightening of investment screening while others do not. In particular, such studies could examine the perception versus the reality of sources of investment in various countries and analyze whether ISM policies are made in response to actual or perceived percentages of inward FDI, for instance through media content analysis and survey research.

# Investment screening and technological innovation

Second, the relationship between technological innovation and investment screening demands close attention. Rapid technological change has made advances in globally disaggregated value chains possible (Baldwin 2016, Mansfield and Rudra 2021), while also exposed vulnerabilities that accrue when threat actors can access and exfiltrate the proliferating digital information that undergirds contemporary economic activities. The rapid pace of technological discoveries in semiconductors, artificial intelligence, telecom equipment, additive manufacturing, robotics, quantum computing, and other emerging technologies has the potential to transform economic and military capabilities.

Technological advances have created new risks and reshaped the boundaries of national security. The ubiquity of mobile apps, the internet of things, and the constant streaming of content in open, liberal societies have obscured the demarcation between economy and security (Cohen 2020). Private data from activities apparently unrelated to national security, from dating apps to connected cars to video sharing, could potentially be used by foreign investors as leverage against specific individuals, as intelligence gathering, or as

tools of misinformation, which in turn could potentially endanger national security. The connectivity enabled by technological change is also enabling actors with nefarious intentions to gain control of critical infrastructure or critical supplies in ways that were formerly possible only through physical control.

The blurred boundaries between commercial and military technological breakthroughs presents a key challenge to principles of economic openness. Governments in advanced economies are increasingly questioning who should be allowed to own and control foundational emerging technologies, and especially technologies with dual-use applications. As governments are re-embracing industrial policy, particularly around technological innovation, does their willingness to maintain open investment climates change? This line of inquiry has broader implications for the literature on the growing politicization of trade and investment policy and the belief that complex networks of exchange have allowed actors to weaponize interdependence (Farrell and Newman 2019).

As a first attempt to explore the relationship between domestic research and development capabilities and governments' investment screening policies, we use PRISM's sectoral coverage data to examine the connection between country-level expenditures on research and development (R&D) and ISM scope. Here, we use simple OLS regressions to assess the statistical relationship between R&D spending and the number of sectors screened. The R&D data come from the OECD Research and Development Statistics, with country-year as the unit of analysis. Table 2 presents results, which are robust to year fixed effects. Countries with higher levels of domestic R&D spending are statistically significantly more likely to screen a greater number of sectors. When a higher portion of domestic R&D spending is financed from foreign sources, however, this relationship reverses. These results suggest that the ways in which countries' innovation economies are structured interacts with investment regulations in systematic fashion. Notably, recent increases in government-led investments in technological innovation, particularly in semiconductors and other frontier technologies, will likely have spillover effects into the regulation of open economic exchange.

Table 2- R&D and Sectoral Screening Coverage					
	Model 1	Model 2			
Gross Domestic Spending on R&D	0.527				
	(0.00)				
% Gross Domestic Spending on R&D	•	-0.03			
by Rest of World		(0.03)			
	•	(p-values)			

There are many other important questions at the nexus between IPE and International Security that can be addressed while using information in the PRISM dataset. One question of contemporary relevance is whether national security becomes an excuse for open, neo-liberal capitalist democracies to engage in industrial policy or whether they have no other choice to compete in an increasingly unlevel playing field. Scholars can explicitly test these questions by examining whether and how changes to ISMs - including changes to reviewed sectors - relate to changes in governments' R&D strategies and budgetary choices.

Finally, our PRISM data could be used by researchers trying to assess the consequences of the securitization of economic relations. What are some of the negative externalities, both economic and political, imposed by investment screening measures? Can we analyze the direct impact of the passage and implementation of specific screening measures on investment flows? Can we observe how the passage of certain investment screening measures in one country trigger reciprocity or the creation of other defensive trade and investment instruments in other countries? These are all questions that become possible to examine empirically as more states develop investment screening regimes.

# **Conclusion**

Many countries, especially in the wake of the rise of China and pervasive supply chain fragilities revealed by the Covid pandemic, are reassessing the costs and benefits of an open economy. ISMs, designed to enable nimble control over incoming foreign investment while maintaining openness, are therefore a growing policy instrument for countries to navigate the increased porousness between economy and national security. Future policy debates in this sphere include screening of outward investment, multi-jurisdictional review, international cooperation on investment screening, and the capacity for governments to review past transactions long after they were concluded. Governments in many countries are developing a complex toolkit to mitigate the new risks that have arisen from this porousness. ISMs are one essential instrument in this toolkit, but other instruments include export controls; investigations of distorting foreign subsidies; anticoercion measures and; more generally, the rise of industrial policy to support strategic autonomy (especially in semiconductors), to promote reshoring of critical supply chains, to seed emerging technologies and to compensate for the displacement effects of globalization.

Political science needs better data on these policy instruments in order to understand their implications. This research note introduced a new comprehensive dataset of investment screening mechanisms in OECD countries, including qualitative coding across a range of characteristics. Some of the key insights from the data are: 1) new investment review mechanisms and updates to existing laws have increased markedly in recent years; 2) the scope of sectors subject to screening has expanded, either through blanket cross-sectoral review or through the addition of new sectors covered; 3) investment review mechanisms cover increasingly smaller transactions, both in terms of absolute valuation and as a percentage of deal size; and 4) disparate national screening mechanisms have shown increasing convergence over time.

By further exploring the politics of ISMs, scholars can meet the growing need to make sense of the geoeconomic turn in IPE. Investment screening is just one manifestation of a fundamental rethinking of the benefits and costs of economic openness, which demands sustained attention from scholars of International Relations. As great power competition strains the liberal international system, the politics - both international and domestic - of economic integration appear to be shifting in consequential ways. Studying the politics and effects of ISMs can allow scholars to confront the domestic and transnational processes that propel these new possibilities of fracture and disintegration of the global system in a systematic way.

#### **References**

- Baccini, Leonardo, Andreas Dür, Manfred Elsig. 2018. "Intra-Industry Trade, Global Value Chains, and Preferential Tariff Liberalization." *International Studies Quarterly* 62(2): 329–40.
- Baldwin, David. 2020. Economic Statecraft 2nd ed. Princeton University Press.
- Blackwill, Robert D. and Jennifer M. Harris. 2016. War by Other Means: Geoeconomics and Statecraft. The Belknap Press of Harvard University Press.
- Baltz, Matthew J. 2017. "Institutionalizing Neoliberalism: CFIUS and the Governance of Inward Foreign Direct Investment in the United States since 1975." *Review of International Political Economy* 24 (5): 859–80.
- Bauerle Danzman, Sarah. 2019. Merging Interests: When Domestic Firms Shape FDI Policy. Merging Interests: When Domestic Firms Shape FDI Policy.
- Bauerle Danzman, Sarah, and Alexander Slaski. 2021. "Incentivizing Embedded Investment: Evidence from Patterns of Foreign Direct Investment in Latin America." *Review of International Organizations*, October. Bauerle Danzman, Sarah, and Sophie Meunier. 2022. "Naive no More: Foreign Direct Investment Screening in the European Union". Working paper.
- Bourles, Renaud, Michael Dorsch and Vera Eichenauer. 2022. "The Rise of Investment Screening: Norms and Diffusion in International Economic Policy". Paper presented at the 2022 Conference of the Council for European Studies, Lisbon, Portugal, July 2022.
- Canes-Wrone, Brandice, Lauren Mattioli, and Sophie Meunier. 2020. "Foreign Direct Investment Screening and Congressional Backlash Politics in the United States." *British Journal of Politics and International Relations* 22 (4): 666–78.
- Carnegie, Allison. 2014. "States Held Hostage: Political Hold-Up Problems and the Effects of International Institutions." *American Political Science Review* 108 (1): 54–70.
- Chan, Zenobia T, and Sophie Meunier. 2021. "Behind the Screen: Understanding National Support of a Foreign Investment Screening Mechanism in the European Union." *Review of International Organizations*. Cohen, Harlan Grant. 2020. "Nations and Markets." *Journal of International Economic Law* 23 (4): 793–815. https://doi.org/10.1093/jiel/jgaa032.
- Crystal, Jonathan. 1998. "A New Kind of Competition: How American Producers Respond to Incoming Foreign Direct Investment." *International Studies Quarterly* 42(3)513–43.
- Chilton, Adam S, Helen V Milner, and Dustin Tingley. 2020. "Reciprocity and Public Opposition to Foreign Direct Investment." *British Journal of Political Science* 50 (1): 129–53.
- Davis, Christina L., and Krzysztof J. Pelc. 2017. "Cooperation in Hard Times: Self-Restraint of Trade Protection." *Journal of Conflict Resolution* 61 (2): 398–429.
- Doshi, Rush. 2021. The Long Game: China's Grand Strategy to Displace American Order. Oxford University Press.
- Doshi, Rush, Judith G. Kelley, and Beth A. Simmons. 2019. "The Power of Ranking: The Ease of Doing Business Indicator and Global Regulatory Behavior." *International Organization* 73(3): 611–43
- Farrell, Henry, and Abraham L Newman. 2019. "Weaponized Interdependence: How Global Economic Networks Shape State Coercion." *International Security* 44 (1): 42–79.
- Finnemore, Martha, Kenneth Scheve, Kenneth A. Schultz, and Erik Voeten. eds. 2021. *International Organization* 75(2).
- Friedman, Jeremy, Sarah Bauerle Danzman, and David Lane. 2022. "TikTok and National SEcurity: Investment in an Age of Data Sovereignty?" *Harvard Business School Case* N9-722-020.
- Frye, Timothy, and Pablo M. Pinto. 2009. "The Politics of Chinese Investment in the US." In *Investing in the United States*, edited by Karl P Sauvant. Edward Elgar Publishing.
- Jensen, Nathan M, and Edmund J Malesky. 2018. Incentives to Pander: How Politicians Use Corporate Welfare for Political Gain. Cambridge University Press.
- Kalinova, Blanka, Angel Palerm, and Stephen Thomsen. 2010. "OECD's FDI Restrictiveness Index: 2010 Update" OECD Working Papers on International Investment.
- Kang, C.S. Eliot. 1997. "U.S. Politics and Greater Regulation of Inward Foreign Direct Investment." International Organization 51(2): 301-33.

- Kim, In Song. 2017. "Political Cleavages within Industry: Firm-level Lobbying for Trade Liberalization." American Political Science Review 111(1): 1-20.
- Lektzian, David and Dennis Patterson. 2015. "Political Cleavages and Economic Sanctions: The Economic and Political Winners and Losers of Sanctions," *International Studies Quarterly* 59(1): 46–58.
- Lenihan, Ashley Thomas. 2018. Balancing Power without Weapons: State Intervention into Cross-Border Mergers and Acquisitions. Cambridge University Press.
- Li, Xiaoying, and Xiaming Liu. 2005. "Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship." *World Development* 33 (3): 393–407.
- Linsi, Lukas. 2016. "How the Beast Became a Beauty: The Social Construction of the Economic Meaning of Foreign Direct Investment Inflows in Advanced Economies, 1960-2007." London School of Economics and Political Science.
- Meckling, Jonas and Llewelyn Hughes. 2017. "Globalizing Solar: Global Supply Chains and Trade Preferences." *International Studies Quarterly* 61(2): 225–35.
- Meunier, Sophie. 2014. "Beggars Can't Be Choosers: The European Crisis and Chinese Direct Investment in the European Union." *Journal of European Integration* 36 (3): 283–302.
- Milner, Helen V. 2021. "Is Global Capitalism Compatible with Democracy? Inequality, Insecurity, and Interdependence." *International Studies Quarterly*.
- Mosley, Layna. 2000. "Room to Move: International Financial Markets and National Welfare States." *International Organization* 54(4): 737-73.
- Mosley, Layna, Victoria Paniagua, and Erik Wibbels. 2020. "Moving markets? Government bond investors and microeconomic policy changes." *Economics & Politics* 32(2): 197–249.
- OECD. 2020. "Investment Screening in Times of COVID-19 and Beyond." <u>http://www.oecd.org/coronavirus/policy-responses/investment-screening-in-times-of-covid-19-and-beyond-aa60af47/</u>.

- Osgood, Iain. 2018. "Globalizing the Supply Chain: Firm and Industrial Support for US Trade Agreements." International Organization 72(2): 455-84.
- Pandya, Sonal S. 2016. "Political Economy of Foreign Direct Investment: Globalized Production in the Twenty-First Century." *Annual Review of Political Science* 19: 455–75.
- —. 2014. "Democratization and Foreign Direct Investment Liberalization, 1970–2000." International Studies Quarterly 58(3)475–488.
- Pinto, Pablo M. 2013. Partisan Investment in the Global Economy: Why FDI Loves the Left and the Left Loves FDI. Cambridge University Press.
- Pohl, Joachim, and Nicolás Rosselot. 2020. "Acquisition- and Ownership-Related Policies to Safeguard Essential Security Interests – Current and Emerging Trends, Observed Designs, and Policy Practice in 62 Economies (Table of Contents)." *SSRN Electronic Journal*, no. May.
- Raess, Damian. 2020. "The Demand-Side Politics of China's Global Buying Spree: Managers' Attitudes toward Chinese Inward FDI Flows in Comparative Perspective." *Review of International Political Economy*. Roberts, Anthea, Henrique Choer Moraes, and Victor Ferguson. 2019. "Toward a Geoeconomic Order in International Trade and Investment." *Journal of International Economic Law* 122(4): 655–76.
- Schill, Stephan. 2019. "The European Union's Foreign Direct Investment Screening Paradox: Tightening Inward Investment Control to Further External Investment Liberalization." Legal Issues of Economic Integration 46 (2): 105–28.
- Simmons, Beth A. 2014. "Bargaining over BITS, Arbitrating Awards: The Regime for Protection and Promotion of International Investment." *World Politics* 66 (1): 12–46.
- Taylor, Christopher. 2000. "The Impact of Host Country Government Policy on U.S. Multinational Investment Decisions." *World Economy* 23(5):635–48.
- United Nations Conference on Trade and Development. 2013. World Investment Report 2013: Global Value Chains: Investment and Trade for Development. New York, NY: United Nations.
- Wigell, Mikael, Sören Scholvin, and Mika Aaltola. 2019. Geo-Economics and Power Politics in the 21st Century: The Revival of Economic Statecraft Routledge.

Wellhausen, Rachel. L. 2013. "Innovation in Tow: R&D FDI and Investment Incentives," *Business and Politics* 15(4):467–91.