

EUROPEAN TRADE FINANCE

WINTER 2023

Leading
dispute
resolution
worldwide...

...into the
next century

GOVERNANCE AT A TURNING
POINT. CHRISTINE LAGARDE
DISCUSSES THE PRIORITIES
FOR POLICYMAKERS

ASHLEIGH BROCCHERI
LOOKS AT ICC LEADING
DISPUTE RESOLUTION
WORLDWIDE

FILIPPO DI MAURO
AND MARCO MATANI
CONSIDER EUROPEAN
COMPETITIVENESS

A EUROPEAN PERSPECTIVE ON TRADE FINANCE

Foreword

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elcome to the Winter edition of ETF, a *World Commerce Review* supplement. This publication has been prepared in response to readership demand for an overview of trade finance from a European perspective.

In these turbulent and unique times issues such as geopolitical tensions, macroeconomic volatility, trade digitalisation, sustainability and shifting supply chains will be examined in forthcoming editions, with the most respected authors providing the reader with the most comprehensive information available.

Our brief is to provide all the data necessary for the readership to make their own informed decisions. All editorials are independent, and content is unaffected by advertising or other commercial considerations. Authors are not endorsing any commercial or other content within the publication. ■

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Leading dispute resolution worldwide

Ashleigh Brocchieri discusses how the ICC International Court of Arbitration has developed dispute resolution and prevention techniques for business for 100 years

1 923. The Hollywood sign is erected in Los Angeles, the first ball is thrown in Yankee Stadium in New York, and on 19 January 1923 in Paris, France the International Court of Arbitration® of the International Chamber of Commerce was founded. As the Hollywood sign is to film and the Yankee Stadium is to baseball, the ICC Court is as relevant to the business community today as it was 100 years ago.

World peace through world trade

The International Chamber of Commerce was created in 1919, in the aftermath of the devastation of the first world war. It was the brainchild of a group of entrepreneurs, known as the Merchants of Peace, including the then French Minister of Commerce Etienne Clémentel.

Armed with the belief that nations with strong economic ties do not go to war, the Merchants set out to foster world peace. They believed that to achieve peace, it is the private sector, rather than governments, who are best placed to set global standards and guidelines for commerce.

Just four years later, in 1923, the ICC Court was founded. The aim of the ICC Court then was, and today remains, to provide access to justice and the rule of law to everyone, every day, everywhere.

Who is the ICC Court?

The ICC Court is not the traditional court you would imagine watching courtroom dramas. The ICC Court does not itself settle disputes, but it exercises supervisory authority to monitor the proceedings of disputes in application of the ICC Rules of Arbitration, independent of any national court or other political involvement.

The ICC Court monitors the entire procedure, from the filing of the request for arbitration, through the constitution of the arbitral tribunal, the financial aspect of the arbitration, to the scrutiny of the award and beyond to assist parties in complying with formalities for the enforcement of the award.

The ICC Court is led by a President, who serves on a once renewable three-year term. The President, along with 17 Vice Presidents and 195 members from 121 countries around the world, make up the ICC Court. The ICC Court is supported by the Secretariat of the ICC Court, led by its Secretary General, to ensure the efficient administration of ICC arbitration.

The Secretariat comprises 12 case management teams, each dealing with a different geographical region or jurisdiction, and a 13th floating case management team to support the 12 aforementioned teams. The ICC Court and

With Court members from 121 countries, the ICC Court can leverage its experience in almost all jurisdictions around the globe to give its users an unparalleled service

Secretariat of the ICC Court are made up of qualified lawyers with expertise in international arbitration and dispute resolution and professional support personnel.

The Court takes all administrative decisions necessary during the arbitration, whilst the Secretariat is the parties' day-to-day point of contact for any assistance required during the arbitration or for any explanation as to the functioning of the ICC Rules.

The first cases

The first arbitrators were not the legal professionals we see today. They were experts in the subject matter of the dispute, engineers, businesspeople or members of local chambers of commerce originating from many jurisdictions already. The disputes very often concerned the quality of goods sold, including rubber, oil and other commodities, with the arbitrator being required to examine the goods in person.

The awards rendered were also very short, being just a few pages in length. The cases changed very rapidly in terms of legal and factual complexity. In the 1930s cases involving agency and licencing, for example, began to appear.

Today, arbitrations vary greatly from case to case but in general are much more complex than 100 years ago. Transactions involving multiple parties, multiple contractual documents, multiple external stakeholders from the private or public sectors including States, across multiple jurisdictions and with differing business models lead to more complex disputes. The ICC Court has filed over 28,000 cases.

Today, approximately one-third of ICC arbitrations involve multiple parties or contracts. In 2022, only 20% of ICC arbitrations concerned the sale and purchase of goods. 24% of cases involved the construction and engineering sector and 21% concerned the energy sector.

Evolution of the ICC Rules

The ICC Rules provide a framework within which parties can resolve their disputes. As the way the world conducts business has evolved, as have the ICC Rules to ensure they are primed to deal with new and challenging issues. There have been 14 versions of the ICC Rules, with the most recent being published in 2021.

As noted in the foreword to the 1998 version of the ICC Rules, which sentiment remains relevant today, *“The changes made are designed to reduce delays and ambiguities and to fill certain gaps, taking into account the evolution of arbitration practice. The basic features of the ICC Arbitration system have not been altered, however, notably its universality and flexibility, as well as the central role played by the International Court of Arbitration in the administration of arbitral cases.”*

The first version of the Rules, published in 1922, comprised three sections. The first section contained Conciliation Rules. The second and third sections contained the Arbitration Rules. This showed the importance of amicable dispute procedures from the outset. As Emmanuel Jolivet, ICC and ICC Court General Counsel observed *“by providing flexible and comprehensive rules covering the whole range of dispute resolution mechanisms ICC has been a pioneer in the dispute resolution field for a century.”*

Conciliation remained at the forefront of the ICC Rules until 1988, when the arbitration rules became their own document. That is not to say the emphasis on amicable dispute resolution waivered. Quite the opposite, in 1972 ICC established the ICC International Centre for ADR, a dedicated department focussing on amicable dispute resolution.

In addition to dealing with the administration of mediation and appointment of mediators, the Centre now also offers services in Expertise, Dispute Boards and Docdex, a bespoke dispute resolution tool for documentary instruments such as letters of credit.

The first version of the Rules, published in 1922, did not contain what is now the hallmark of ICC Arbitration: scrutiny of awards. However, it did not take the founders long to appreciate the benefit users would gain from this and as early as 1923 commentary noted that draft awards should be submitted to the ICC Court for examination.

In these early days, the examination was limited to the form of the award. It was 10 years later, in 1933, that the scrutiny of awards extended to drawing an arbitrator's attention to points of substance of awards – while never fettering the arbitrator's liberty of decision making.

Through the scrutiny process, the ICC Court ensures that the draft award has clear reasoning and that it addresses parties' claims and defences, as well as considering any requirements of laws of the place of arbitration, when practicable. All with the ultimate goal of ensuring the enforceability of the award.

In response to parties' desire for an efficient procedure to allow emergency measures outside of national courts, in 2012 the ICC Rules introduced Emergency Arbitration. The procedure offers the possibility of obtaining emergency relief, in the form of an order, for parties unable to await the constitution of the arbitral tribunal.

The ICC Rules have not only evolved to cater for complex disputes, in 2017, ICC introduced the Expedited Procedure Provisions ("EPP"). Intended for disputes where the amount in contention is under US\$ 2,000,000, increased to US\$ 3,000,000 in the 2021 Rules, EPP offers a simplified procedure at a reduced cost where the final award may be rendered within six months from the case management conference.

In these cases, the arbitral tribunal, after consultation with the parties, may decide the dispute on documents only or limit the parties' written submissions and witness evidence.

The 2017 Rules introduced the possibility for the Court to communicate reasons for certain decisions. With the aim of fostering transparency, another wish from users, any party may request that the ICC Court communicate its decisions on its prima facie jurisdiction, consolidation, arbitrator challenges or replacement of arbitrators.

Servicing our users over 100 years

ICC's role as service provider has underpinned its user offerings over the past 100 years. As the ICC Court's global reach has expanded, as has its range of services.

Inaugurated and headquartered in Paris, the ICC Court now operates from offices in five regions. ICC opened its first overseas office in Hong Kong in 2008. This was followed by an office in New York in 2014, Sao Paulo and Singapore in 2018 and Abu Dhabi in 2021. Being present in all time zones affords ICC the unique position of having a truly global reach, with a regional presence.

The ICC Court continuously strives to keep up to the demands of parties. At the time of publishing the 1988 Rules of Arbitration, the Court would meet in principle once a month. Now the Court meets at a minimum once a week, in English and French, with additional sessions in Spanish, Portuguese and German. 299 Court sessions were held in 2022.

With Court members from 121 countries, the ICC Court can leverage its experience in almost all jurisdictions around the globe to give its users an unparalleled service.

The world since 1923 has changed drastically and no more so than the way global business can leverage technology. In October 2022, ICC launched ICC Court Connect, a pioneering digital case management platform to connect parties, arbitral tribunals and the ICC Secretariat.

ICC Case Connect enables parties, via their business and/or legal representatives, to streamline communication and file-sharing and provides a convenient platform to view their current or closed ICC Case Connect arbitrations.

In June 2023, ICC announced its intention to develop the next version of its digital case management platform. As articulated by Francesca Hill, Head of Operations for ICC Dispute Resolution Services, this *“will enable ICC to continuously improve our range and delivery of digitally-enabled dispute resolution services for the future.”*

ICC as a global leader

According to the Queen Mary University of London Survey on International Arbitration, ICC is the world’s most preferred and/or used arbitral institution by global stakeholders. ICC’s Dispute Resolution Services offering to the international business community is not limited to the administration of their arbitration proceedings.

Created in 1920, the ICC Constitution and Commission on Arbitration, now known as the Commission of Arbitration and ADR, is the ICC ‘legislative’ body. It drives thought leadership by studying international dispute resolution and producing reports and guidelines on legal and procedural aspects of dispute resolution.

The commission’s membership consists of delegates appointed by national committees, ICC local representative bodies, as well as ICC court members and counts over 1,300 members from more than 100 countries comprising lawyers, in-house counsel, arbitrators, mediators, law professors and experts in various dispute resolution fields.

The ICC Commission furthers the belief of the Merchants that it is the private sector who are best placed to set global standards and guidelines for commerce. In this way, ICC and business can work together to shape the future of dispute avoidance and resolution.

ICC's work in the dispute resolution field is supplemented by the Institute of World Business Law, a think-tank engaged in academic studies and training. By way of example, Eduardo Silva Romero, Chair of the Institute explained *"having noticed the decline of investment treaty arbitration, the Institute formed a working group with UNIDROIT in order to create a model investment contract which could – to the extent possible – replace the network of investment treaty protections. More generally, the Institute has always been at the avant-garde of the legal ideas and tools in international business law."*

ICC remains a voice on behalf of business in the international sphere. In 1927, ICC helped broker the Geneva Convention on the Execution of Foreign Awards. In 1953, ICC drafted a Preliminary Draft Convention on the Enforcement of International Arbitral Awards. This document ultimately inspired the 1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, one of the key instruments in international arbitration.

Outside of dispute resolution, in 2016, ICC was granted Permanent Observer status at the United Nations General Assembly. ICC remains the only business organisation to have been granted such status, which gives business a direct voice in the UN.

To further the goal of enabling access to justice to all; in 2021 ICC made ICC arbitral awards available, free of charge, to the global legal community via Jus Mundi. The ICC Dispute Resolution Library is also accessible via Jus Mundi platform, allowing members of the legal community to utilise over 7,500 documents including ICC Dispute Resolution Bulletin, ICC Commission on Arbitration and ADR Reports.

ICC has also been at the forefront of supporting diversity in arbitration. In 2022, ICC was awarded the Equal Representation in Arbitration Pledge Award for its pioneering work for building LGBTQIA network within the global legal community and for the ICC Task Force on Disability Inclusion and International Arbitration.

The future of ICC Dispute Resolution and Prevention

On 19 January 2023, 100 years since its inauguration, the ICC Court published its ICC Centenary Declaration on Dispute Prevention and Resolution. This is ICC's pledge to the business world to continue to enable access to justice and the rule of law by providing innovative and trusted dispute prevention and resolution services to everyone, every day, everywhere.

Among the pledges, ICC commits to accessible, affordable, predictable and efficient dispute prevention and resolution services, improving transparency and leading the transformation of dispute prevention and resolution.

It is impossible to foresee what dispute resolution will resemble in 100 years' time, as the Merchants would have been unable to imagine it as it is today. However, ICC remains committed to working with business in whatever challenges the world may face tomorrow.

As Claudia Salomon, the ICC Court's President expressed: *"As business relationships and disputes evolve in an ever-changing world, ICC's track record of innovation places us in the perfect position to lead the world of dispute resolution and prevention into the future."* ■

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Governance at a turning point

International governance has brought indisputable benefits, but mistrust has grown. Christine Lagarde calls for policymakers to focus on citizens' priorities whilst being courageous and accountable

Good governance is a crucial issue in these uncertain and challenging times. Two aspects of good governance are the protection of liberties and the need for integration. In my view, these aspects also apply to governance in a broader sense, particularly regarding individuals and governments. And they are especially important for supranational governance, as there is often a tension between the need for closer integration – which is likely to advance prosperity – and the wish for greater protection of liberties.

In fact, it's this tension that leads to rules-based systems and institutions emerging as countries work together voluntarily to forge supranational governance structures. And as international cooperation becomes stronger and more complex, supranational governance must also be strengthened to support it.

But in recent decades we have also seen an imbalance emerge between the authority delegated to supranational governance and its legitimacy in the eyes of citizens. That is partly because supranational governance, by promoting the expansion of economic integration, has also contributed to weakening its own legitimacy.

Today this lack of legitimacy brings us to a turning point where we must either deepen supranational governance or accept its decline. However, I am confident that we can find a way forward by meeting three essential conditions.

First, by aligning governance with, and focusing it on, people's priorities. This is what I will call the function.

Next, by using the right forms of governance to effectively respond to people's concerns. I will refer to this as the form.

And finally, by striving to fulfil that function and serve the public, with what I will describe as courageous and accountable leadership.

The development of global governance

When countries have objectives that they cannot achieve on their own, or face challenges that go beyond their individual capabilities, they are motivated to cooperate internationally. This leads them to voluntarily accept some limits to their autonomy.

Mistrust has materialised as protectionism, withdrawal, retreat and populist tendencies, eroding the foundations of supranational governance, leading to political movements seeking to regain control, and to our world fragmenting into competing blocs

It could, for example, involve reciprocal market access to promote international trade or a concerted ban on certain products or practices in order to protect the global commons.

But the more countries cooperate internationally, the greater the associated risks. Countries are exposed to unfair competition from trading partners, to spillover effects from other countries' financial markets and to non-compliance with agreements on protecting the global commons, such as treaties on the environment.

That is why supranational governance is needed to mitigate these risks and achieve fair outcomes for all involved. In this sense, governance resides in setting the 'rules of the game' in advance and then ensuring that they are fairly adhered to.

This type of governance can take different forms, ranging from creating international institutions to setting global rules and establishing standardisation bodies, or even more informal standards. But crucially, governments agree to this governance, submitting to certain constraints in return for a better response to a need they are unable to meet on their own.

However, there is an inherent correlation between the complexity of interactions among governments - particularly in terms of economic integration - and the authority that needs to be delegated to supranational governance to ensure that outcomes remain fair.

When international cooperation efforts remain fairly straightforward, the authority granted to global governance is often limited. After the Second World War, for example, the Bretton Woods agreements were signed globally, while the common market was set up in Europe.

However, these governance arrangements focused mainly on promoting a stable environment for trade in intermediate goods. This reflected the limited scope of economic integration at that time, characterised by capital controls, fixed exchange rates, and high tariff and non-tariff barriers for services.

As interactions become more complex, however, there is a need for that governance to deepen. Look at the EU, for example. To promote economic growth, the countries decided in the late 1980s to transform the common market into a single market, covering capital and services. But a single market is inherently riskier.

It exposes people to greater risks from harmful products or to unfair sales practices in jurisdictions that are less well-regulated, as well as to anti-competitive behaviours such as subsidies. And the risks of financial spillovers increase, too.

So the powers of competition authorities and financial regulators had to be strengthened. That's why in Europe we delegated authority for competition and external trade to the European Commission. Much later, and at the cost of suffering the consequences of not having it in place at the time of the financial crisis, we did the same thing for banking supervision. And we of course also launched a common currency to prevent the Single Market from being undermined by competitive devaluations.

Research has shown that the capacity of supranational governance to issue guidelines and interpret standards increased by around 50% over this period¹. This triggered a self-fulfilling process, whereby greater economic integration led to deeper governance, which then led to greater economic integration – that is what we know as globalisation.

There have been multiple benefits: across a sample of 147 countries, a one-point increase in globalisation measures was associated with a 0.3% increase in the growth rate in those countries over five years, with lower- and middle-income countries benefiting even more².

Hundreds of millions of people in emerging markets have been lifted out of poverty. Europe has benefited from globalisation too. Between 2000 and 2017, jobs related to exports to the rest of the world increased by two-thirds to 36 million³.

Tensions inherent to global governance

But at the time we were not fully aware of the tension inherent in this process. Michael Zürn, an expert on international relations understood it clearly, however, and he developed a conceptual framework in which the growing powers of global governance lead to a lack of legitimacy, followed by a descent into conflict⁴.

All forms of governance need legitimacy. In other words, people need to feel that authority is being exercised wisely. But supranational governance cannot draw its legitimacy from the same sources as national authorities, such as elections or referendums. In practice, it must obtain its legitimacy through expertise and impartiality.

Expertise can confer legitimacy provided that supranational bodies are seen not only as competent, but also as uniquely able to build a framework for sustainable prosperity by virtue of having a supranational perspective that national governments lack.

Similarly, impartiality can confer legitimacy if supranational governance is seen as a way of ensuring that all parties respect the rules of the game and of adjudicating decisions fairly among all members, strong or weak – something that national governments cannot do either.

In this way, there may be long periods in which supranational governance is perceived as legitimate. After the Second World War, for example, public support for supranational governance was very strong, fuelled by the painful memories of the costs of non-cooperation.

A survey conducted in 1952 asked: *"In general, are you for or against efforts to unify Western Europe?"* The results revealed that 82% of West Germans embraced the idea, as did 78% of British respondents and 63% in France⁵.

But compared with sources of democratic legitimacy, expertise and impartiality are rather fragile, as they can be weakened by major crises or shifts in power dynamics. By enabling deeper economic integration, supranational governance increases the likelihood of that weakness – as we have seen over the past 15 years.

First, we witnessed the great financial crisis, followed by the euro crisis, both of which led to volatile crossborder capital flows. These episodes undermined faith in the idea that free markets regulated by supranational bodies were essential for sustained prosperity. This mistrust was famously summed up in the declaration by UK government minister Michael Gove that people *"have had enough of experts."*

These crises caused the credit bubble that had fuelled growth in the early 2000s to burst, revealing the growing inequalities created by globalisation. Over the past 50 years the income gap between OECD countries has risen to unprecedented levels⁶, exposing the limitations of resorting to debt to mask such disparities. This realisation was a further blow to the notion of legitimacy founded on expertise.

Global governance has also been a victim of its own success: the impressive increase in wealth and the growth in the international influence of emerging countries. These new powers, especially China, have legitimately demanded fair representation, becoming less inclined to submit to the governance of others.

This has led to the impartial nature of global governance being questioned on two fronts. On the one hand, emerging powers considered that global bodies overly favoured the interests of their main stakeholders and were too resistant to change.

On the other hand, the former powers considered that the newer powers had no intention of playing fair. They therefore considered the rules, institutions and standards of global governance to be inadequate.

And as the global economy expanded, climate change was accelerating behind the scenes, with various international agreements barely making a dent in global carbon emissions. This suggests that even in areas of clear common interest, supranational governance was falling short.

So supranational governance is under threat from all sides, as various groups seek to bend it to their own interests. This is a sign of our times: fragmentation of the global order, gridlock in many international fora, the emergence of populist parties and groups of states coming together to forge new agreements better suited to their interests.

Is there a way of countering this trend?

It is vital that we strive to do so, because global governance is a necessary condition for maintaining international cooperation. We will not be able to preserve its many benefits if we let all that we have achieved go into retreat.

But global governance has to address its legitimacy deficit. And since it cannot draw on democratic legitimacy, the only way of restoring it is to tackle the challenges – such as economic insecurity, climate insecurity and geopolitical tensions – to which it has partly contributed, and that have undermined its claims to expertise and impartiality.

To do this, let me describe three possible ways of responding: function, form and leadership.

Three conditions for strengthening global governance

Function

Let's start with the function of global governance. In order to thrive, global governance must offer solutions in the areas in which people feel most at risk today. If it doesn't, the logical response would be to erect new barriers and reverse international cooperation.

In Europe, we have already seen this process unfold. For example, when the global financial crisis and the euro crisis exposed vulnerabilities in the banking sector, some wanted to dial back on integration. But we instead collectively responded by making the EU responsible for banking supervision and by addressing the issues that had come to light.

Similarly, when Europe found itself facing another external shock in the form of a pandemic, we reacted by putting in place the European recovery plan and recovery fund (NextGenerationEU). These helped to avert the threat that the virus would have a deeply unequal impact on European economies – especially those most dependent on tourism – which could have caused a new rift in our Union.

In both cases, rather than reversing economic and financial integration, we strengthened our governance to make integration more secure. We made sure that the competences of the EU matched what Europeans expect of it. In doing so, we clearly bolstered the legitimacy of the EU. Today, support for the euro and for the EU stands at 79% and 65% respectively⁷.

Can this be done with today's challenges? The good news is that many of the issues citizens feel most insecure about are precisely the ones where they want stronger European governance.

Around two-thirds of Europeans are convinced that the European Union represents a bastion of stability in a world in crisis. Almost nine in ten Europeans agree that tackling climate change can help improve their health and well-being, and the same proportion expresses support for the environmental objectives of the European Green Deal⁸.

Citizens realise that, although some of these problems result partly from a more globalised world, the answer does not lie in turning in on ourselves, but in taking action at a level that best allows us to deal with the issues effectively. And this means deepening integration.

In the future, it will be crucial to harness this spirit of collaboration to confront new challenges in areas of common interest such as security, defence, climate or mass migration.

Form

After function comes form. The form should mould itself to the function, creating the conditions for supranational governance to deliver on the issues prioritised by citizens. This means great care should be taken when choosing an appropriate governance method.

We can build multilateral governance using either decentralised rules or centralised institutions. Although the first approach might appear to be the more attractive option owing to easy acceptance and because it keeps power at national level, it actually makes it more difficult to achieve governance objectives.

This is because rules are subject to a trade-off between credibility and flexibility. They are either rigid in order to be credible or vary according to circumstances in order to be flexible. But it is almost impossible to create a rule that successfully reconciles the two. All too often, attempts to find middle ground end up achieving neither.

Take the exchange rate mechanism as an example. It was created in the 1970s to stabilise exchange rates between European countries, initially operating according to strict rules that allowed a maximum fluctuation of 2.25% from the central rates. This system was severely tested in the 1980s, however, by increased capital flows and speculation. And it had to be made more flexible as a result.

But the system had to be relaxed to such an extent that it lost all credibility as a reference point for exchange rates, with fluctuation margins reaching 15% in 1993. This failure clearly showed the benefits of taking an institutional approach to European monetary integration, which then led to the adoption of the euro.

These benefits stemmed from the fact that institutions are not faced with that trade-off. When they have a clearly defined mandate and deliver on it, they become more credible. And when they have operational independence, they can be flexible and adapt to changing circumstances as they arise.

Let me illustrate this with the example of the ECB. Since it was created, the ECB has faced unforeseen challenges as it has carried out its mandate. But the Treaty combines our price stability mandate with discretion over the tools we can use to fulfil that mandate.

This enabled us to use unconventional policy tools during the financial crisis, the recession and the pandemic to ensure that inflation remained in line with our target. Managing these complex situations would have been difficult if we had strictly adhered to fixed rules or had been limited to using conventional tools.

However, I am not naive as to the difficulties in moving from a rules-based to an institutional approach. I recognise that creating or changing institutions requires considerable political capital. This poses a challenge in specific political circumstances or situations where progress has stalled.

But that cannot be used to justify inaction, because political courage can sometimes prevail over resignation and because there are other forms of governance, such as informal institutions, that can help us address the global challenges we are facing.

Let me take climate finance as an example. Numerous initiatives have emerged in this area under the aegis of the G20, providing a powerful channel for collective action in the wake of the crisis. Initiatives such as the Task Force on Climate-related Financial Disclosures have been set up, creating a framework encouraging companies to disclose information on the climate change-related financial risks in their economic and financial activities.

Similarly, the Glasgow Financial Alliance for Net Zero, a global coalition of leading financial institutions, has committed to accelerating the decarbonisation of the economy. And the Network for Greening the Financial System, a coalition of central banks keen to align their actions with the pressing need to tackle climate change, circulates scenarios and analyses among all its members.

Although these are voluntary actions, their widespread adoption by thousands of organisations can create powerful incentives to address the challenges we face, bringing benefits such as speed, efficiency and adaptability.

It is crucial that such initiatives are led by players with a genuine concern for the common good, because if they are not, other entities motivated by profit gains or market share could quickly fill the void, sometimes with less clear motives.

Leadership

The third and final condition that I would like to mention is leadership. Even if we give governance the right function and implement it in the right form, this does not mean that the outcome will be the right one. Institutions need courageous and accountable leadership in order to take the right decisions.

Faced with complex and uncertain global challenges, the “*courage to act*”⁹, as Ben Bernanke said, is essential. Leaders must show an unwavering determination to use all of the tools available to them, in line with their mandate, to achieve their goals.

This is a truth I have experienced throughout my entire career: as Finance Minister in France, as IMF Managing Director, and now at the helm of the ECB. Crises are insidious and unpredictable in nature, and every crisis is different. There is no textbook setting out the perfect approach to take. But time is always in short supply and risks inevitably have to be taken, while the outcome is inherently uncertain.

More recently, we faced an unprecedented crisis with the pandemic. These were extraordinary times, and the creation of the €1.85 trillion pandemic emergency purchase programme (PEPP) to shield the economy from the impact of the pandemic was an extraordinary response. But it was necessary to combat the deflation we could have seen if we had not acted.

Effective leaders must therefore give their institutions the resources they need to act, all the while being accountable for their actions. When taking decisions that break with precedent, leaders must always keep in mind that they will have to account for those decisions. This keeps them within the limits of their mandate and focused on the public interest, and it prevents them from being tempted to go too far.

We saw this again in the case of the PEPP, as we meticulously prepared for the implementation of the programme with this in mind. We strictly complied with the requirements and safeguards considered necessary by the Court of Justice of the European Union in its judgments on our past actions, thereby ensuring that our measures were fully compatible with the Treaty.

So, in striving for effective leadership, courage and accountability must go hand in hand.

Conclusion

International cooperation is a powerful force that has shaped our recent history. It has brought indisputable benefits, propelling the world towards unprecedented development, creating wealth, providing access to scientific and technical progress in an increasing number of countries and building multilateral institutions that have defined the post-war era.

But it would be a mistake to disregard the challenges that have arisen on this path. Inequalities, unresolved global crises and the loss of institutions' legitimacy have sown doubt in the minds of our fellow citizens.

This mistrust has materialised as protectionism, withdrawal, retreat and populist tendencies, eroding the foundations of supranational governance, leading to political movements seeking to regain control, and to our world fragmenting into competing blocs.

Today, the supranational governance that underpins international cooperation is at a critical turning point: either it is strengthened or it goes into decline. The choice is between a world that seeks to reconcile differences and create prosperity for all, or retreat into a world without cooperation, perhaps even one of confrontation.

I do, however, see a way forward. If supranational governance can be aligned with and focused on citizens' priorities, take the most effective form to achieve those priorities, and be led with courage while being held accountable, then it will be able to rise to the challenge it is facing.

But we should also remember that all supranational governance structures have emerged from an era shaped by the devastating consequences of a failure to cooperate and open conflicts between countries, while deep-rooted fears were taking hold.

In these decisive moments, I am inspired by the legacy of an eminent member of the Académie française and a pioneer in the fight for women's rights, Simone Veil. She chose to have her ceremonial sword engraved with the number 78651, representing her deportation to Auschwitz, alongside Europe's motto: *"United in diversity."*

Let us not forget our past. Let's work together for a fairer, more sustainable and more prosperous world. The choice before us must be guided by a shared vision of unity, cooperation and mutual respect, which our future generations deserve. ■

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Money and payments: a 'black ships' moment?

Jon Cunliffe recalls Facebook's announcement in 2019 that it was launching a digital currency, and discusses the three areas where this galvanised more urgent action by authorities

It is difficult to overstate the importance of the announcement by Facebook in June 2019 that it intended to launch a multicurrency stablecoin, a new digital currency called Libra for general crossborder payment use. Indeed, one commentator has likened the impact of the Libra announcement on central banks to the sudden arrival off Tokyo harbour in 1853 of the 'black ships of evil appearance' - a modern, irresistible US fleet – that led quickly to the collapse of a centuries-old ruling system and to the opening up of Japan¹.

For the previous decade, central banks and financial regulators had been watching, with a wary eye, the development of cryptoasset markets, using new technologies, outside the conventional financial system. Many, like the Bank of England, had dipped a toe into the experimental water, running small experiments with these new technologies with the aim of understanding them and their possible use cases better. Some financial firms had gone further, exploring and investing in limited use cases within wholesale financial services.

And regulators, increasingly fretful about the cocktail of risks in unregulated cryptoasset markets – risks ranging from illicit finance to consumer harms and, potentially, to financial stability – had been debating whether and how to bring 'crypto' activities within regulation.

But the Libra announcement and the potential appearance of a new form of money, using new technology and moving between countries on new rails outside the current system, galvanised central banks and regulators into much more urgent action on a number of fronts.

I want to talk about three of those fronts: the G20 roadmap to improve crossborder payments; the Bank of England's exploration of the Digital Pound, a central bank digital currency; and the regulation in the UK of systemic payment systems using 'digital settlement assets' like stablecoins.

I will talk about the first wearing my hat as Chair of the Bank for International Settlements' Committee on Payments and Market Infrastructures (CPMI) and co-chair of the Financial Stability Board's Cross-Border Payments Coordination Group (CPC), and about the second and third wearing my Bank of England hat. I will of course be giving up both hats next week when my Bank of England term finishes, so this is really my parting shot.

But to be able to make sure that forms of money, and the means of transferring it, can evolve, without putting that essential confidence at risk, central banks, as the Libra moment reminded us, need to look to the future and prepare for it

Crossborder payments

The Libra project raised significant regulatory and financial stability concerns, leading to swift statements from both the G7 and G20 that *“no global stablecoin project should begin operation until the legal, regulatory and oversight challenges and risks... are adequately addressed”*².

But the project, and the benefits it claimed it could deliver, also shone a light on the cost, speed, reliability and availability of crossborder payment systems – a long-neglected corner of the international financial system.

Central banks, finance ministries and regulatory authorities realised quickly that they could not simply focus on the risks that new players and new technologies might bring; they needed also to understand and, if possible, address the shortcomings in the existing, less risky systems that created such opportunities for new technologies and new players.

And shortcomings there certainly were. In contrast to the improvements in domestic payment systems that were increasingly being seen in many jurisdictions, crossborder payments were slow, expensive and unreliable. Removing frictions in wholesale, retail and remittance payments across borders could both yield substantive economic benefits and improve access for millions to the international financial system³.

So in February 2020, G20 Finance Ministers and Central Bank Governors tasked the FSB, CPMI and others to develop a roadmap to enhance global crossborder payments⁴.

Work by FSB and CPMI revealed that this was not a simple problem, amenable to one or two quick solutions, but rather a complex set of interlocking frictions, both in the public and private sector, exacerbated by weak competition.

Moreover, while there were common themes, there was also substantial variation by payment types and by region and jurisdiction. The CPMI produced a comprehensive list of the necessary action areas, the so-called 'building blocks', covering infrastructure, data, regulation and competition, and these formed the basis of the FSB's roadmap of actions adopted by G20 leaders in the autumn of 2020⁵.

So, three years on, as I pass the CPMI baton on to Fabio Panetta, the incoming governor of the Bank of Italy, it is fair to ask: *"How are we doing, and what are the priorities for the future?"*

We have built a strong, detailed, analytical foundation for the work. From 2021 to 2023, the CPMI and FSB produced a number of reports, analysing the key frictions and the actions for the public and private sector, in partnership, that are necessary to alleviate them. We have set out best practice where it exists and practical guidance on how to make changes in key areas.

Equally important, the G20 Leaders adopted in 2021 quantitative targets for improvement by 2027⁶. These cover speed, cost, access and transparency for wholesale, retail and remittance payments.

As we all know, 'what gets measured, gets done'. So, equally importantly, we have established the mechanisms and the data collection that will enable us to measure progress towards the targets. The first annual monitoring report against the targets was delivered to G20 Finance Ministers and Central Bank Governors in Marrakesh two weeks ago⁷.

While the data are not perfect and there are important gaps we need to address, we are now able not only to measure how far we have to go but also to identify more precisely the areas for action that are likely to yield the greatest improvement.

We have started to see some concrete improvements. Since 2020, some countries have expanded access to their payments infrastructure to a wider range of financial institutions, or expanded their operating hours. Payment systems in more than 100 jurisdictions are already actively using the ISO 20022 messaging standard, which can carry far more information and so reduce payment failures.

CPMI and the private sector have now developed harmonised data requirements for these crossborder payment messages, which will prevent fragmentation⁸. Finally, a number of projects in Asia are showing the real benefits that can be achieved by interlinking fast payment systems⁹.

However, as the monitoring report shows, we are significantly short of the targets for 2027. In general, on the main targets, we are between half and two thirds of the way there. That is not surprising perhaps, given we are halfway through the roadmap period. But, though achievable, given the timescales for investment and other action, it is a challenging distance to travel in four years.

So, in short, we have built a strong foundation for the work, including quantitative targets for 2027 and the machinery to monitor progress. We are starting to see some real improvements. But there is a long way to go, and it will need continued investment by the public and private sectors in infrastructure and data and regulatory changes.

As I said at the outset, both the frictions and the actions necessary to achieve them vary considerably by payment type and by region. But there are some common priority areas on which we will need to focus on the next phase of the work.

First, we need to see further upgrades to central bank and private sector payment systems. More than a dozen countries are developing and upgrading their real-time gross settlement (RTGS) systems over the next five years, for instance by expanding access or extending operating hours.

As an individual crossborder payment will often involve systems operated by both public and private sector institutions, the CPMI has launched a joint public-private sector taskforce to coordinate plans for the necessary improvements and ensure they coalesce around best practices¹⁰.

Second, we need to implement the data standards for crossborder ISO 20022 payment messages and develop harmonised standards for application programming interfaces (APIs).

Third, we should facilitate and promote interlinking of fast payment systems. There are a range of technological solutions available or in prospect¹¹. But the governance and oversight of interlinking arrangements can be a greater challenge than the technology.

CPMI is working on a report to the G20 next year on these governance and oversight issues that could serve as a useful reference for payment system owners and overseers, and it published an interim report for comment last week¹².

Fourth, we should pursue more effective, coordinated regulatory frameworks for crossborder payments, and remove unnecessary regulatory frictions. A key priority on regulation in the near-term will be for the Financial Action Task Force (FATF), in the first half of next year, to update their recommendation (which was originally developed 20 years ago) on detecting and preventing misuse of wire transfers by terrorists and other criminals.

A more granular recommendation, which takes into account new data standards and technology, will enable more consistent implementation across jurisdictions and enhance both the efficiency and the effectiveness of AML/CFT checks.

In addition to FATF's work here, there are a range of other frictions arising from the regulation of banks and non-banks, and a second public-private taskforce is focused on identifying actions to address these¹³.

Fifth, we should support authorities beyond the G20 in addressing crossborder payment frictions. This month's progress report shows that the biggest frictions, not surprisingly, are in lower income regions such as Sub-Saharan Africa, and addressing these could bring transformative economic benefits. The IMF and World Bank are developing their programmes of technical assistance to support authorities in these countries.

And finally, we need to enhance competition and innovation. Currently, in most jurisdictions, only banks have access to domestic payment systems and central banks' RTGS systems – leading to weak competition, especially as the number of active correspondent banks worldwide fell by approximately 30% between 2011 and 2022.

Even where non-bank payment service providers can have direct access to payment systems, existing legal or regulatory barriers, or the high costs of direct access, prevent them from doing so. The CPMI has set out a framework of best practices to enable countries to review the access arrangements of their key payment systems¹⁴.

It is perhaps this lack of access to payment rails operated by incumbents, and the need to use settlement assets provided by incumbents, that has helped to stimulate the exploration by potential challengers, like the Libra project, of new rails and new settlement assets using new technologies.

The Libra project, of course, after much work and much modification, fell by the wayside last year. The stumbling blocks appear to have been regulatory rather than technical.

However, though perhaps more muted, interest in using new technologies to develop new forms of settlement asset and new payment rails for use in the real economy – outside the world of cryptoasset markets – has not gone away¹⁵. The recent launch of the PayPal/Paxos stablecoin arrangement is one example.

These new technologies purport to offer improvements in speed, cost and reliability, all of which would make them attractive for crossborder use, and exploring their potential has therefore been included in the G20's roadmap.

However, these technologies also purport to offer new 'functionality' for money and payments that may make them competitive for domestic use – even in advanced jurisdictions that have developed sophisticated payment systems.

Technological advances have throughout history led to changes in the forms of money we use because they have made money easier and more convenient to use. The shift from physical cash to electronic payments that we have seen over the past decade has not occurred because people have lost confidence in cash¹⁶. Rather, it has happened because it has become more convenient and because physical cash cannot be used for internet commerce.

And small reductions in frictions and small increases in functionality matter, as the shift towards using mobile phones rather than cards at point-of-sale demonstrates¹⁷.

The technologies that are loosely grouped under the broad heading of 'tokenisation' – cryptography, distributed ledger, atomic settlement, blockchain, fractionalisation and programmability – enable new ways of representing money that allow for greater automation of the transfer of money and the deeper integration of that transfer – the payment – into other processes.

While these technologies have been pioneered in cryptoasset markets, they could significantly transform everyday payments in the real economy, as I will discuss later.

One cannot of course say with certainty that it will be possible to deploy such technologies at scale for general use in the economy or that users will value and adopt the new functionalities. But it would be very unwise in my view to bet, as some seem to do, that we have reached the end of developments in payments and money – especially given the increasing and rapid digitalisation and automation of the processes of everyday life.

And this brings me to the other two areas of action that were accelerated by the announcement of the Libra project four years ago – the exploration of central bank digital currencies and the regulation of private sector firms that propose to use those technologies to create new forms of money like stablecoins and new payment systems for general use in the economy.

The Digital Pound

First, I will say a little about where we are in the UK on the possibility of introducing a retail CBDC, the ‘Digital Pound’.

In February this year, the Bank of England and HM Treasury issued a consultation paper on the design of a Digital Pound¹⁸. The consultation paper did not propose the introduction of the Digital Pound. No decision has been taken to do that in the UK.

Rather, the paper concluded that current trends and technological advances in payments – the trends I have been discussing – made it likely that a Digital Pound would be needed by the end of the decade. The paper set out and invited comments on the detailed model of the Digital Pound we proposed to explore and test in the next stage of our work, prior to a decision in two to three years’ time on whether or not to implement it.

We envisage the Digital Pound as a partnership with the private sector – a so-called ‘platform model’. The Bank would provide the Digital Pound and the central infrastructure, including the ‘core ledger’. Private sector firms – which could be banks or approved non-bank firms – would provide the interface between the Bank’s central infrastructure and users by offering wallets and payment services.

These private companies would be able to integrate and programme the Digital Pound, as the settlement asset, into the services they would offer to wallet holders.

The consultation paper offered two main motivations for the possible future introduction of the Digital Pound. The first is the most relevant to central banks. It concerns the role played by state money issued by the central bank to the general public in anchoring confidence in money and in supporting the singleness of money - the interchangeability of all monies, public and private, that circulate in the economy on demand and at par value.

The only form of state money available to the public at present – physical cash – is declining in use and usability. And as the Libra announcement highlighted, new, non-bank players could potentially exploit technological advance to offer new forms of money and new payment systems and services.

Against this backdrop, my view is that it is likely to be necessary to issue central bank money in digital form to support confidence in money, particularly in stress, and to ensure the singleness of money.

The second motivation concerns competition and innovation. While relevant to central banks, it is more a motivation for governments. Digital marketplaces, as we have learned, have a tendency to concentration as, of course, do payment systems¹⁹.

This can be a barrier to competition and innovation, with the risk of new entrants wanting to offer new payment services being tied to particular private issuers of digital money and their payment systems. This may be a particular concern if 'big tech' firms enter more deeply into payments and money.

Competition and innovation may therefore be enhanced by providing a public alternative, a public digital money platform that allows private firms to offer services exploiting the new functionalities I have mentioned.

The Bank of England and HM Treasury consultation paper has stimulated a strong response, with over 50,000 completed responses. The responses fall into two broad categories. The majority express general, high-level concerns about three broad issues – privacy, programmability and the decline of cash.

The second, smaller category of responses comprises detailed comments on the proposed platform model and some other key design features, including the limits that have been proposed at least for the Digital Pound's introductory period.

We expect to publish a detailed response to the consultation in the coming months addressing both types of response. I do not want to anticipate that, but it is possible to make a few key observations on the consultation.

On the first category of response, the consultation document made clear that, under the proposed model, neither the government nor the Bank of England would see individuals' data. Rather, private sector payment firms would be the interface with the user, handling user information in the way banks do today.

Users would have at least the same, if not greater, protection of their privacy that they enjoy today when they make electronic payments. We also made a commitment that neither government nor the Bank would programme the

Digital Pound or constrain the uses to which it could be put. It would be for private sector firms to develop and offer, for user consent, payment services involving greater programmability.

As regards cash, the Government recently legislated to ensure the availability of physical cash to those who prefer to use it and the Bank has made clear that it will provide physical cash as long as there is any demand for it.

The responses to the consultation illustrate the importance of these key issues. It is clear that public confidence in our approach will be essential, if a future decision were taken to introduce the Digital Pound. During the design phase, we will develop the strongest possible protections in these areas, and the government has committed to introducing primary legislation before launching a Digital Pound²⁰.

On the second category of response, there is general support for the model of the Digital Pound we propose to explore and test further. There are, however, differing views on some key aspects, particularly the limits that we propose would apply, at least initially, to prevent rapid, destabilising changes to the banking system that could have financial stability implications.

Some question the need for limits, while banks in particular are concerned about the impact of CBDC on their deposit bases and on financial stability. And on use cases, while merchants, fintechs and payment services firms appear supportive of the possibilities, others, particularly banks, are more sceptical that attractive use cases will be developed for a retail Digital Pound.

We are still in the process of the detailed analysis of all of the responses and, as I say, we aim to respond comprehensively in the coming months. But I would observe, if only a little tongue in cheek, that criticisms of the Digital Pound have ranged from concerns that it would be adopted at a scale and pace that would disintermediate

the banking system and threaten financial stability, to, at the same time, concerns that there would be no use for it and it would be a 'solution looking for a problem'.

Not surprisingly, as an institution charged with maintaining financial stability, we take the first point very seriously. Modelled estimates suggest that even with a very high level of take-up, the impact over time on the banking system should be manageable²¹.

But these can only be estimates. We cannot know in advance the behavioural response of users to a Digital Pound, ie. the scale and speed of take-up by households and firms. That is why we have proposed that, initially at any rate, were we to introduce a Digital Pound, there would need to be limits on holdings.

During the next phase of development, and in advance of any decision on whether to introduce a Digital Pound, we would seek to refine, in the light of available evidence, our estimates of possible take-up and the consequent calibration of limits.

The second concern perhaps risks missing the point. I am reminded a little of Henry Ford, who is reported to have said that had he asked people what innovation they wanted, they would have asked for faster horses. Were we to decide to introduce the Digital Pound, the objective would not be to target some particular failing or identifiable use case not available in current payment systems.

Rather, it would be to create a public sector platform using public sector money that private payment services firms could use to exploit the greater functionality in money and payments that technology may now offer in an increasingly digitalised world.

Experimentation by a variety of private sector firms on a platform developed by the Bank of England and Bank for International Settlements' Innovation Hub provides some initial support for the view that with a relatively small range of technical features, a Digital Pound could support a very wide range of payments use cases²².

While it might be possible to deliver some of the use cases through specific programming of existing payment systems using commercial bank money, there are clearly material advantages in a general-purpose platform and digital settlement asset that can be used and configured relatively simply, consistently and cheaply for a broad range of uses cases.

In the next phase of the work, we will work more intensively with the private sector to explore possible use cases for a Digital Pound and the technological design necessary to create the best platform for innovation. At the same time, we and HM Treasury will consult more widely to stimulate a national conversation on the Digital Pound.

Stablecoins

Similarly, it would be possible for the private sector to use these new technologies to create infrastructures and issue private money for general use in the economy. Indeed, that is precisely what the Libra project proposed – initially as a multi-currency basket stablecoin and subsequently as a dollar stablecoin²³.

This brings me to the third front on which the Libra project galvanised action – the development of international standards and domestic regulatory frameworks for stablecoins. To be clear, although stablecoins, whose value is linked to a fiat currency, have developed as the settlement asset and store of value in cryptoasset markets, the motivations behind these regulatory initiatives should not be seen primarily as an attempt to regulate the Wild West of highly speculative crypto markets.

I should say at this point that there is in my view a strong case for regulation of those markets, to protect investors, ensure market integrity and prevent their use for illicit finance. Indeed, in the UK, regulation has recently been extended to cover the marketing of cryptoassets, to ensure promotions are clear, fair and not misleading to retail investors²⁴.

And HM Treasury have consulted on the other key elements of a comprehensive cryptoasset regulatory regime, including regulation of the exchanges that provide the access to crypto markets – often, as we saw in the case of FTX, bundled with a range of other services and activities²⁵.

However, the regulatory initiatives that followed the Libra announcement have been directed primarily not at cryptoasset markets but rather stablecoins that could be used as a means of payment in the real economy, both for crossborder and domestic use.

Thus in 2022, CPMI-IOSCO, the international standard setting body for payment systems and market infrastructure, issued guidance on the application to stablecoins of the international standards for systemic payment systems²⁶. In much the same way, the FSB issued High-Level Recommendations on ‘global stablecoins’ in 2023²⁷.

Both effectively set standards for some of the unique features of payment systems using stablecoins, including not just the mechanism for the transfer of coins but also the need for the coinholder to have a clear claim on the issuer and the requirement for the issuer to be able to repay that claim, when requested, in fiat money at par value by the end of the day.

International standards of course are only effective if implemented by jurisdictions in legislation and regulation. Many jurisdictions, not least the United States, are currently wrestling with the question of how to extend their regulatory regimes to stablecoins and to cryptoassets more generally.

A number of jurisdictions, however, have legislated to bring stablecoins used for payments within the regulatory framework²⁸. In the UK, the Financial Services and Markets Act passed by Parliament earlier this year gave the Bank of England power to regulate systemic payment systems using 'digital settlement assets' (including stablecoins).

The Act therefore extends the Bank of England's existing powers to regulate conventional systemic payment systems. The Financial Conduct Authority (FCA) will regulate the issuance and custody of stablecoins for conduct and market integrity purposes.

The Bank expects very soon to issue a Discussion Paper setting out its proposed regulatory regime for systemic retail payment systems using stablecoins²⁹. I am not able to set out the proposed regime in detail today. But I would like to explain how we have approached the key issues and how we see this new regulatory regime fitting in alongside other regulatory regimes to avoid regulatory arbitrage.

First, and perhaps most obviously, is the question of why? Do we really need new forms of money issued by new players moving on new payment rails?

This is essentially the same question as I discussed earlier in the context of the Digital Pound. And much of the answer is the same. While it is not certain that these technologies will actually deliver the innovation and competition in payment services some have claimed, we do not want to prevent such innovation, provided – and this is a very, very important 'provided' – the risks can be managed to the same degree as equivalent risks are managed both for existing systemic payment systems and for the commercial bank money they use as a settlement asset.

There may well be some players who attempt to operate outside regulation. But setting out clearly the regulatory framework will enable those players who wish to innovate sustainably and responsibly to build the necessary management of risks into their business models and technology.

Second, I have said that our approach is to ensure that risks are managed to the same degree as equivalent risks are managed for existing payment systems and for the private, commercial bank money they transfer. This is an important elaboration of the fundamental principle of 'same risk, same regulation'.

It may not be possible, for technological or other reasons, to apply the current regulation for systemic payment systems and banks to systemic payment systems using stablecoins. It will, for example, be impossible to provide collective insurance akin to bank deposit protection, initially at any rate, as unlike for banks there is no broader industry among which to share the costs of a payout.

In order therefore to achieve the necessary level of protection of the coin holders' claim, and so protection against run risk, there will need to be more robust requirements in other areas, especially, but not only, in the requirements for the backing assets.

In that respect, the Financial Policy Committee of the Bank of England judged in 2022 that, to manage systemic risks, the backing assets should be high quality and liquid – either deposits at the Bank of England or very highly liquid securities³⁰. The lack of deposit protection also has implications for the nature and enforceability of the coin holders' claim³¹.

Third, we will require a legal entity that can be identified as the payment system operator and held responsible for the end-to-end management of risks. Stablecoin payment systems can be structured in many different ways,

including arrangements where the issuance of the coin, the transfer of the coin and the storage of the coin (the wallets) are performed by separate entities.

It is not clear that use of public, permissionless transfer mechanisms, at least with current technology, would be consistent with this requirement. But our regime will be designed to be flexible and accommodate different structures insofar as that can be achieved with the necessary management of risks.

Fourth, as with the Digital Pound, we cannot know in advance the speed and scale of adoption of such new forms of money and payments. We need therefore to be alive to possible financial stability risks from rapid transitions that could impact the stability of the banking system. For the Digital Pound, we have proposed limits, initially at any rate, to manage the risk, and it would make sense to take a similar approach to stablecoins.

Finally, we will aim to ensure clarity on regulatory boundaries and the business models that fit within them. The proposed regulatory regime is a payment system regime intended to enable innovation in payments. It is intended for business models focussed on generating revenues from payment services.

Business models that are focused on earning revenues from maturity and liquidity transformation – the return on the assets backing the liquid, money-like claims they issue – pose risks that are more appropriately regulated within the banking regime.

Likewise, business models that use stablecoins to represent claims on investment products, and which do not guarantee redemption at par, are not suitable for use in payment systems and need to be regulated under an investment regime.

Innovation using new technologies is not confined to new entrants. Banks, whose business model depends in part on issuing liquid liabilities (bank deposits) for payments use, may well want to use new technologies to tokenise and transfer bank deposits³².

This would fall under the existing banking regime rather than the proposed regime for payment systems using stablecoins. There are a number of issues concerning the issuance and transfer of bank deposits in tokenised form that will need to be considered by bank regulators and banks themselves, including whether such tokens should be permitted to circulate freely like digital banknotes³³. But the underlying nature of the claim, deposit protection and management of risks should be regulated in the banking regime.

Banks may also want to issue stablecoins under the proposed new regime. In that case however, our view is that they should be issued out of a separate, bankruptcy remote, legal entity with different branding, to avoid confusion among consumers and so avoid contagion in a stress between different forms of money.

Conclusion

I am often asked, “*what do central banks do?*” or, a more penetrating question – usually from schoolchildren: “*what is the Bank of England for?*” Rather than give them the long list of Bank of England functions – monetary policy, financial stability, bank regulation, payment system regulation, provision of cash etc – I give a much simpler answer.

Central banks are responsible for ensuring that that most foundational element of the economy and society, that is called money, ‘works’. That people can use it every day with confidence – confidence in its value, confidence in its creditworthiness, its authenticity, its usability – and confidence that it will be accepted everywhere at the same value whatever form it takes.

And while we may not be the originators of technological innovation in money and payments, we do I think have a responsibility to ensure that beneficial innovation that will improve the usability and functionality of money can not only happen but can happen without putting confidence in money at risk.

One cannot know now whether the appearance of Libra off the shore of conventional money and payments was truly a 'black ships' moment. I certainly hope that the 'wake up' call for crossborder payments is not forgotten and that we deliver the long overdue improvements the G20 has set as the target.

Likewise, while I think that on current trends, the Digital Pound in the form we have proposed is likely to be needed by the end of the decade, the picture may look very different in two to three years' time when a decision is due to be taken.

And stablecoins and their associated technological innovations may never cross over at any scale from the highly speculative world of cryptoasset trading to the real economy.

But to be able to make sure that forms of money, and the means of transferring it, can evolve, without putting that essential confidence at risk, central banks, as the Libra moment reminded us, need to look to the future and prepare for it. Thank you for giving me the opportunity for this parting shot! ■

Jon Cunliffe is Deputy Governor for Financial Stability at the Bank of England

Endnotes

1. I am indebted to Gillian Tett of the Financial Times for this striking historical parallel.
2. [Investigating the impact of global stablecoins \(bis.org\)](#), G7 Working Group on Stablecoins, October 2019: [Communiqué: G20 Finance Ministers and Central Bank Governors, October 14, 2020 \(utoronto.ca\)](#)
3. The global average cost for sending remittances was 6.79% in Q1 2020 – within Sub-Saharan Africa, the average cost was 8.9%. And for crossborder business-to-business payments, six out of ten of these required some kind of manual intervention, each one taking at least 15 to 20 minutes, according to a 2015 study by Traxpay. Moreover, given the scale of crossborder payment flows, improvements could provide significant benefits to the world economy - one estimate from Boston Consulting Group put the total value of crossborder payments globally at almost \$150 trillion in 2017.
4. [G20 Finance Ministers & Central Bank Governors Meeting \(bundesfinanzministerium.de\)](#)
5. [Enhancing Cross-border Payments - Stage 1 report to the G20 - Financial Stability Board \(fsb.org\)](#), [Enhancing cross-border payments: building blocks of a global roadmap \(bis.org\)](#), [Enhancing Cross-border Payments: Stage 3 roadmap - Financial Stability Board \(fsb.org\)](#)
6. [Targets for addressing the four challenges of crossborder payments: Final report - Financial Stability Board \(fsb.org\)](#)
7. [Annual Progress Report on Meeting the Targets for Cross-Border Payments: 2023 Report on Key Performance Indicators - Financial Stability Board \(fsb.org\)](#)
8. [Harmonised ISO 20022 data requirements for enhancing crossborder payments – final report \(bis.org\)](#)
9. The link between Thailand and Singapore launched in 2021 has, according to the Bank of Thailand, reduced the costs of crossborder payments from \$12-\$30 to \$5, and speed has increased from two days to two seconds.
10. [Press release: Bank for International Settlements' Committee on Payments and Market Infrastructures invites market stakeholders to join crossborder payments interoperability and extension task force \(bis.org\)](#)
11. Project Nexus between the BIS Innovation Hub Singapore Centre and ASEAN central banks is exploring interlinking fast payment systems on a multilateral basis, so that a payment system in one country could reach all the other countries in the network via a single connection.

12. [Linking fast payment systems across borders: considerations for governance and oversight \(bis.org\)](#)
13. [FSB invites senior representatives from firms and industry associations to join crossborder payment taskforce - Financial Stability Board](#)
14. [Improving access to payment systems for crossborder payments: best practices for self-assessments \(bis.org\)](#)
15. Card companies are also increasingly integrating stablecoins into their networks – eg. Visa announced in September 2023 that it will now also use the Solana blockchain, in addition to its use of Ethereum, to enable merchants to receive stablecoins such as Circle’s USD Coin when they accept card payments.
16. Indeed, as part of our work on CBDC, the Bank commissioned focus group research on people’s attitudes to money and payments. We found that, while understanding of the difference between publicly and privately issued forms of money was generally low, there was a strong consensus around the importance and safety of physical currency. See Annex 3, [The digital pound: a new form of money for households and businesses? Consultation Paper \(bankofengland.co.uk\)](#).
17. 30% of UK adults were registered for mobile payment apps like Apple Pay or Google Pay in 2022. Use of contactless card payments itself took off in 2013-14 after they started to be accepted on London buses and trains (offering a small but meaningful improvement in convenience over the existing ‘Oyster’ charge-cards), and they now account for 37% of all payments in the UK.
18. [The digital pound: A new form of money for households and businesses? | Bank of England.](#)
19. [Unlocking digital competition: Report from the Digital Competition Expert Panel \(publishing.service.gov.uk\)](#).
20. [Deposited paper DEP2023-0393 - Deposited papers - UK Parliament.](#)
21. [New forms of digital money | Bank of England.](#)
22. Project Rosalind, completed in June 2023, focused on the API which connects a central bank’s CBDC ledger with the private sector providers of wallets and other services. With a set of simple and standardised API functionalities, public and private sector collaborators developed more than 30 use cases. For example: (i) enhancing online shopping by reserving a buyer’s funds at time of purchase and automatically releasing this to the seller only once physical delivery of goods is

confirmed, potentially enabling greater competition in online retail as consumers might be more confident to shop online with a merchant or platform they haven't heard of; (ii) allowing commuters to purchase train tickets and be refunded immediately and automatically if the train arrives late, rather than separately completing a form and the train company separately instructing the refund; (iii) developing voice-authenticated payments using a smart speaker, and (iv) paying for car-parking by the minute through a stream of 'micro-payments' rather than paying for a block of time that the driver doesn't use all of. [Project Rosalind: building API prototypes for retail CBDC ecosystem innovation](#) (bis.org).

23. The Libra Association's first White Paper in June 2019 proposed a stablecoin backed by a multi-currency basket. In April 2020, a second White Paper made a number of changes to the initial proposal, including proposing a series of stablecoins each backed by a single fiat currency (though the concept of a multi-currency stablecoin was still present as a "digital composite of some of the single currency stablecoins available on the Libra network"). The Libra Association rebranded as the Diem Association in December 2020. In May 2021, it moved its primary operations from Switzerland to the US, focusing on the dollar stablecoin.

24. An FCA-led registration regime for anti-money laundering and counter-terrorist financing has also been in place since January 2020 for firms providing certain cryptoasset services in the UK.

25. [Future financial services regulatory regime for cryptoassets](#) - GOV.UK (www.gov.uk).

26. [Application of the Principles for Financial Market Infrastructures to stablecoin arrangements](#) (bis.org).

27. [High-level Recommendations for the Regulation, Supervision and Oversight of Global Stablecoin Arrangements: Final report](#) - Financial Stability Board (fsb.org).

28. The EU's Markets in Crypto-Asset Regulation (MiCA) came into force in June. And earlier this year, the Monetary Authority of Singapore announced the features of a new regulatory framework for stablecoins regulated in Singapore.

29. The Bank is considering the risks and benefits of innovations in wholesale settlement, including the use of stablecoins for wholesale purposes, and will set out its views in due course.

30. [Financial Stability in Focus: Cryptoassets and decentralised finance](#) | Bank of England.

31. For example, whether the coinholder has a claim on the issuer as with banks, or whether the backing assets are held in a bankruptcy-remote custody arrangement for the benefit of coinholders.

32. A form of privately issued electronic money, 'e-money', already circulates, and may continue to circulate, in the UK under regulation and larger-scale e-money issuers are occupying a growing share of the market in the UK, in direct competition with commercial banks. E-money issuers are presently regulated by the FCA for prudential and conduct purposes under a specific regulatory regime. The FPC has previously [noted](#) that this regime would not meet its expectations if e-money were to be used for payments at systemic scale. And HM Treasury has [said](#) the current e-money regime is likely to be revised to ensure requirements keep pace with the ongoing evolution of the sector.

33. For example, were banks to issue deposit tokens that could circulate freely (like digital banknotes issued by private banks), holders would have a transferable claim on the issuing bank where, in payment transactions that involve a transfer of the token between individuals, the recipient becomes a customer of the issuing bank. This would raise some difficult issues, such as around how a bank would maintain a single customer view of those who hold its liabilities in order to facilitate a rapid deposit insurance payout were the bank to fail, and around how banks would satisfy 'know your customer' requirements to prevent money laundering and terrorist financing.

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Economic warfare: lessons from two World Wars

Present-day sanctions have their origins in economic warfare in the two World Wars. Mark Harrison reviews that experience and the lessons we can learn

What may sanctions be expected to achieve? This question is currently fraught for two reasons. One is the proliferation of sanctions since Russia launched a full-scale war against Ukraine in 2022. With 13,000 sanctions in place against Russia alone (Atlantic Council 2023), sanctions and countersanctions are now everywhere.

Another reason is that the war continues and shows no sign of coming to an end. There is uncertainty over whether sanctions might have avoided the war, whether they can now sufficiently punish Russia for its aggression, or if they can contribute to Russia's defeat.

While some have drawn attention to the costs to the West of imposing sanctions (Hinz and Crozet 2016, Schropp *et al* 2022, Mei *et al* 2022) and the scope for Russia to mitigate or even shrug off the consequences (Oegg and Elliott 2008, Nigmatulina 2022, Cecchetti and Berner 2022), others have argued that Western sanctions were becoming increasingly effective (Bergeljik 2012) and may now have severe consequences for Russia (Ongena 2022, Simola 2022).

Recent historical writing has noted that present-day sanctions have their origins in economic warfare in the two World Wars, reflected in the setup of the interwar League of Nations and postwar United Nations (Dehne 2019, Mulder 2022). In a recent paper (Harrison 2023), I review that experience, asking what economic warfare was expected to achieve and whether these expectations were matched by results.

To begin, two clarifications are useful. One is that the purposes of economic warfare then were narrower than those of sanctions now. According to Giumelli (2011), sanctions aim to constrain, coerce, or signal.

In the two World Wars, economic warfare had one purpose: to weaken the adversary's fighting power by constraining the supply of war (Vickers 1943). It was not expected to signal or incentivise any course of action except surrender. Thus economic warfare concerns 'constraining' sanctions, which are a relatively small subset of today's sanctions.

In peacetime, constraining sanctions cannot be relied on to act alone; they must be combined with deterrence. In wartime, economic warfare does not win battles, but it helps to decide who will win them when they are fought

The other thing is that the experience considered by the literature is much narrower than it should be. Most of it is the experience of Germany in two World Wars. For that reason, Stephen Broadberry and I are currently engaged in a parallel project to bring together research on economic warfare from a wider sample of periods and conflicts.

Lesson 1. Modern economies were tough targets

Both wars saw horrifying attrition on the battlefield. Leaders on each side looked for ways to win a quick victory and stop the slaughter. At the start of the 20th century, as the world became increasingly globalised and interdependent, influential observers (Angel 1912, Bloch 1899) argued that modern industrial economies were vulnerable to naval blockade.

They thought a blockade could stop essential imports of food and materials, causing unemployment, famine, and collapse. They imagined the threat of blockade as powerful enough to prevent war.

This view became popular (and has never gone away). However, two World Wars proved it to be wishful thinking. While global trade was thoroughly disrupted, and civilian welfare declined, both wars saw sustained economic mobilisation on both sides.

Contrary to Bloch's expectation, it was the less modernised, more agrarian economies that saw the worst food shortages. Countries that dropped out early did so because they were defeated on the battlefield, not because their economies collapsed.

Those who expected the supply of war to collapse in the face of a sudden trade shock had the wrong model of economic interdependence. They imagined it as a chain of fragile links: disruption at any point would cause the entire chain to fail.

In fact, the modern economy was a resilient network. Firms and households could adjust to sudden shortages by economising and substitution. As a result, no shock to supply had the catastrophic effect that seemed likely at first sight.

Lesson 2. Economic warfare took time

In the two World Wars, it was anticipated that economic action would be fast – implicitly, fast enough to deter or pre-empt military action. In the outcome, the pace of economic action was frustratingly slow.

The first reason was that action against the adversary's economy turned civilian property and lives into targets. This flew in the face of international norms that protected civilian interests and the rights of neutral countries to trade with both sides. To erode the leaders' scruples and fears took time.

This was not the only obstacle. Another constraint was the available means. In WWI, Germany took nearly three years to build its fleet of operational submarines. Almost half of all Allied and neutral shipping losses were inflicted as late as 1917.

WWII was widely expected to begin with devastating air attacks on cities, but the blows traded in the war's first three years were puny by comparison with what was to come. Three-quarters of Allied bombs on Germany's economic targets fell in the war's last year. Thus, economic warfare was slow to unfold.

Finally, the impact of economic warfare was delayed by the adversary's adaptation. Trade could be diverted through neutral neighbours. The war effort could be protected by cutting back on less-pressing civilian uses of fuel, textiles, and metal goods. Substitutes could be found for many foods and materials previously thought of as irreplaceable.

Faced with sudden shortages, both producers and consumers made extraordinary efforts to make do with less. No commodity was truly essential at the margin (Olson 1963, Harrison 2022). As a result, the immediate effect on fighting power of any attack on supply was always less than anticipated, and often zero.

Lesson 3. Economic warfare was powerful – eventually

When attacking the economy had no immediate effects on the battlefield, bored observers and analysts tended to withdraw attention, concluding that there was nothing to see. After 1940, Hitler decided to scale down Germany's air attack on Britain's cities on these grounds (Overy 1977: 47).

Like others, he lost sight of a key point: economic warfare took time and required patience. Its effects were slow but cumulative. Eventually, adaptation encountered limits. Once the limits were reached, economic warfare sped up and became fast.

The limits were found in the civilian sphere. The goal of economic warfare was to deny resources to the adversary's war effort. The adversary's countermove was to protect the war effort by shifting the costs of adaptation onto civilians.

In the short run, as a result, it was civilian resources and reserves that were gradually depleted by economic warfare. Somewhere there was a constraint on civilian cooperation. When the constraint was reached, the damage done by economic warfare would rebound into the war effort.

In the case of Germany, both World Wars gradually depleted civilian resources by restricting consumption and nutrition. WWI saw many hunger deaths. In WWII, Germany fed itself at the expense of the occupied territories, but there were still food shortages and, from 1944, signs of raised mortality.

For WWII there are numerous estimates of the effects of bombing on German war production and fighting power (US Strategic Bombing Survey 1945, British Bombing Survey Unit 1998; see also Overy 1983, Tooze 2006). Many are self-serving and few are well identified.

The most evidence-led estimates were made by the British Bombing Survey Unit (1998); they relied on a mix of direct calculations and differences in differences. While sample sizes were small and robustness tests lacking, they suggested that the period in which German war production was fully protected from the effects of relatively light bombing lasted through the second quarter of 1943.

From mid-1943, protection became partial (heavier bombing began to depress total output, while war production fell by less). The final collapse of war production was brought about by an overwhelming air campaign against German transportation from the third quarter of 1944.

Lesson 4. The threat of economic warfare was also powerful

If economic warfare proved to be powerful ex post, then it should also be powerful ex ante. Embedded in the League of Nations was the belief that a credible threat of blockade could deter aggression (Dehne 2019, Mulder 2022). Recall that sanctions can constrain (as in economic warfare), coerce, or signal. A threat does not constrain; it coerces and/or signals.

How did that work out? In the interwar period, the threat of blockade worked to deter smaller powers from making war on their neighbours. The story of the great powers is different (Mulder 2022). The expectation of blockade did not deter Germany from starting WWI, or Germany, Italy, or Japan from starting WWII.

The Axis Powers did not neglect the likelihood of blockade. Rather, they directed and timed their aggression to preempt it. They planned to conquer territories that would guarantee the war supplies they needed, leaving them self-sufficient. Thus, the threat of economic warfare became an accelerant of aggression, not a deterrent.

If the threat of sanctions was a powerful signal, the problem was that the signal received was not the signal sent. The signal sent was: *"Economically we are strong, and you are weak. Comply, or we will starve you."* The signal received was: *"Our enemies are strong economically but weak militarily. Strike them now."*

Conclusion

In both World Wars, economic warfare was at centre stage, not on the sidelines. It helped to decide what battles were fought and who would win them.

In both wars, economic warfare was unavoidable. It was a phase of attrition (O'Brien 2015), not an alternative to it. In wartime, economic and military actions were complements, not substitutes. In peacetime, without war readiness, attempts to constrain the adversary by economic sanctions invited violent escalation.

This is not an argument against sanctions. In peacetime, constraining sanctions cannot be relied on to act alone; they must be combined with deterrence. In wartime, economic warfare does not win battles, but it helps to decide who will win them when they are fought. ■

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The new economics of industrial policy

Industrial policy is at the heart of modern economic policy. Réka Juhász, Nathaniel Lane and Dani Rodrik assess the latest research and consider how to do industrial policy well

Industrial policy is at the heart of the current economic discourse, propelled by major legislative acts from the Biden administration. This column presents an analysis of the 'New Economics of Industrial Policy', synthesising emerging literature to understand these complex policies. It highlights the broader objectives of modern industrial policy, extending beyond traditional sectoral support. Key findings suggest a generally positive impact of these policies, with nuances in implementation and efficacy. For a full efficiency evaluation of industrial policy, future theoretical work, informed by careful empirical work on a case-by-case basis, is called for.

The rise of 'Bidenomics' and its signature economic legislations, such as the Infrastructure Investment and Jobs Act (IIJA), Creating Helpful Incentives to Produce Semiconductors Act (CHIPS), and Inflation Reduction Act (IRA), has thrust industrial policy to the fore of economic policy discussions.

With similar packages emerging across the OECD and beyond, there is renewed interest in understanding the workings of industrial policy. What exactly is an industrial policy? How do we measure it? And how do we evaluate it? An emerging literature in economics, which we call the New Economics of Industrial Policy, is making sense of this landscape with new tools and insights.

In a recent paper (Juhász *et al* 2023), we attempt to clarify the discussion around these complex policies and synthesise the emerging literature. New work has made important methodological headway in understanding the basics of policy practice and in evaluating the efficacy of policies. The emerging picture, generally, paints a more positive view of industrial policy – but also highlights important nuances.

What is industrial policy?

We define industrial policies as those government policies that explicitly target the transformation of the structure of economic activity in pursuit of some public goal. Importantly, these policies are selective; they target some activities, but not others.

Moreover, they are intentional in the sense that changing the structure of the economy is what they want to do. As such, industrial policy can be many things – our definition includes the targeted sectoral policies with which they are typically associated (eg. support for steel, automobiles, shipbuilding, or semiconductors), but it also includes support for other targeted forms of intervention, such as R&D or exporting.

Industrial policy is not that different from many other domains of public policy choice [...] where the justifications for government intervention are well-established

Likewise, the goals of industrial policy may be broad. While historically, these policies were primarily aimed at facilitating structural transformation and industrialization in particular, today, goals include climate goals, the creation of 'good jobs', supply chain resiliency, national security, and more.

What is the rationale for intervention?

The economic rationale for industrial policy falls into three main categories:

1. market failures such as positive externalities which imply that the market will not provide enough of a positive activity (for example, modern manufacturing, green energy, good jobs);
2. coordination failures whereby a desirable activity may only be individually profitable if everyone else is also producing; and
3. the provision of activity-specific public inputs which are public goods (for example, the charging infrastructure needed for the uptake of electric vehicles).

The controversy surrounding industrial policy is often less about theoretical rationales – which are broad – and more about practicalities. Sceptics worry that the cure will be worse than the disease. There are two broad concerns:

1. information problems which prevent even a well-intentioned government from picking the correct activities to target; and
2. political capture, which implies that even if the government knows which activities to target, self-interested actors will divert the government away from those that create benefits to society at large.

Both reasons create doubt about whether governments can ‘pick winners’.

We acknowledge these challenges, yet argue that the ultimate test of the effectiveness is not whether governments can ‘pick winners’ but whether they are able to ‘let losers go’. Although cutting losers ex post may be difficult, it is far less demanding than governmental omniscience in selecting winners ex ante.

In this sense, we would argue that industrial policy is not that different from many other domains of public policy choice (education policies, stabilization policies, etc.) where the justifications for government intervention are well-established (human capital externalities, Keynesian ‘rigidities’) but what works is not obvious. Yet, unlike industrial policy, debates in these arenas typically focus on *how* to do policy well, not *whether* policy should be attempted.

While economists turned away from the study of industrial policy, the world kept using them. In fact, industrial policies are ubiquitous – and growing. Recent work measuring industrial policy using innovative methods (De Pippo et al. 2022, Juhász *et al* 2022, Criscuolo *et al* 2022) consistently finds that industrial policies in Western economies are widespread.

For all these reasons, rather than trying to persuade policymakers to avoid them, economists should study them in order to inform the question of how to do industrial policy better. The New Economics of Industrial Policy is doing just that.

Evaluating industrial policies

Indeed, the need for careful work is pressing and evaluating industrial policy requires confronting some fundamental empirical issues. For instance, consider two types of governments: a rent-seeking one beholden to special interests and a technocratic one intervening to correct market failures. Rodrik (2012) shows that with observational data alone, one cannot distinguish the two types of governments.

These issues, and those documented by Rodrik and Rodriguez (2001) and Lane (2020), highlight the myriad of ways observational data alone can be uninformative about policy efficacy.

In addition, the canonical empirical exercise whereby the researcher is able to extract the orthogonal, 'accidental' component of an industrial policy for evaluation may not fully resolve empirical problems either.

The sceptic of industrial policy may argue that an evaluation of the random allocation of industrial policy misses all the practical (informational and political capture) challenges associated with implementing industrial policy in the real world. Optimists see ways to still recover useful quantities from the endogenously placed policy.

New, well-identified work deals with the tension between the search for exogenous variation and real-world relevance by isolating different layers of treatment. One layer, which we call the 'economic mechanism' evaluates the question of whether the justification for industrial policy is valid, ie. is the market failure for the targeted activity large?

For example, Juhász (2018) evaluates the infant industry argument in 19th-century France using the disruption to trade resulting from a blockade against Britain. Although the paper does not address contemporary policy, the paper demonstrates that the infant industry can be a powerful economic mechanism in the real world.

A second layer involves evaluating a narrow version of the efficacy question: Did the firms/industries/sectors promoted by policymakers respond in the intended direction? Recent work has been informative on this margin as well.

The credibility revolution has finally arrived in research on industrial policy

We review the findings from papers that use reduced-form research designs to evaluate three types of industrial policy: infant industry, public R&D, and place-based industrial policy. First, three recent papers (Juhász 2018, Hanlon 2020, Lane 2022) evaluate episodes that mimic cases of textbook infant industry in technological follower countries. Each paper finds some support that infant industry promotion led to increased activity in the targeted sector, though to different degrees.

Lane's (2022) study of the heavy and chemicals industry drive in 20th-century South Korea produces the clearest example of a country drastically shifting its comparative advantage using industrial policy tools.

Second, two new papers provide a fairly positive take on the scope for large-scale public R&D efforts to have large local and, more speculatively, aggregate effects (Gross and Sampat 2023, Kantor and Whaley 2023). These papers study canonical episodes of 'moonshots' in the US and show, that during times of national crisis, the US government was able to choose technologies, places and firms that delivered the desired outcomes. Moreover, while this was not the main intention of the policies, the papers also find evidence of long-lasting positive (mostly local) effects.

Third, a great deal of new work finds that place-based industrial policies (PBIPs) often lead to outcomes consistent with the intentions of policymakers in both lagging and declining regions. Historical natural experiments point to the potential for local manufacturing activity to spur local structural transformation and income gains that last generations (Mitrunen 2021, Garin and Rothbaum 2022).

Work on European PBIPs for economically distressed regions (Criscuolo *et al* 2019, Cingano *et al* 2022) suggests that PBIPs can help with manufacturing job growth (in reality, dampening the decline). Similarly, policies targeted at lagging regions also find positive, and often long-lasting effects through the creation of self-sustaining agglomerations (La Point and Sakabe 2021, Incoronato and Lattanzio 2023, Cerrato 2023).

Learning from the East Asian miracle

New work on industrial policy also moves the debate forward on the controversy over the role of industrial strategy and the East Asian economic miracle. The Asian miracle constitutes not only one of the most important episodes of modern economic development, but it remains the focal point of debates surrounding the efficacy and desirability of industrial policy.

A string of new studies, starting with Lane (2022), turns to South Korea's Heavy-Chemical Industry Drive (HCI). These studies find that policy promoted the growth and export development of targeted industries, both in the short and long run (Lane 2022), with considerable long-run welfare gains (Choi and Levchenko 2022), though possibly at the cost of increasing misallocation in the economy (Kim *et al* 2022).

Quantitative work by Ernest Liu (2019) provides a useful guide for policymakers confronting the challenge of picking which industries to target, in an economy where market imperfections occur across linked sectors. Liu provides off-the-shelf sufficient statistics for optimal targeting, and his framework shows that, in certain settings, subsidizing upstream sectors minimizes policy mistakes.

Liu shows that actual policies used in China and South Korea's HCI correspond to his statistics, suggesting that the informational problems of policymakers may not be insurmountable.

New empirical work, led by Aghion *et al* (2015), has only begun to scratch the surface of China's more recent industrial policy. Bai *et al* (2022) explores the impact of Chinese quid-pro-quo style FDI and study spillovers from foreign joint ventures to domestic firms. Relative to unrestricted FDI, they estimate that the quid-pro-quo FDI improved the quality of affiliated domestic models and raised their sales.

Deep work on Chinese shipbuilding by Kalouptsidi (2018) and Barwick *et al* (2019) point to the importance of policy design. Barwick *et al* (2019) shows how not all policy levers were efficacious: while production subsidies and investment subsidies may have been useful, entry subsidies led to inefficiencies in the shipbuilding sector.

Conclusions

After years on the periphery in economics, industrial policy is now the subject of an emerging strand of research. Although nascent, the New Economics of Industrial Policy is providing a more productive assessment of industrial policy – one potentially up to the task of informing questions about how to do industrial policy well.

This work unpacks diverse industrial policy episodes uncovering how success hinges on critical design details and economic context. While much of this new work utilises state-of-the-art reduced-form methods, we conclude by noting that these methods fall short of providing a full efficiency evaluation of industrial policy, which requires a model. Future work should move to tackling these challenges, informed by careful empirical work on a case-by-case basis. ■

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A theory of trade policy transitions

Renee Bowen, Lawrence Broz and Peter Rosendorff explore the major transitions in US trade policy since the Civil War, and demonstrate that shocks like the Civil War and the Great Depression pave the way for trade policy transitions

The history of US trade policy has featured two major political parties taking opposing stands on trade. Transitions between protectionism and reciprocal free trade are rare because they require fundamental realignments in party politics, global economic conditions, and the status quo. This column explores the major transitions in US trade policy since the Civil War. Shocks like the Civil War, the Great Depression, World War II, and now the rise of China disrupt party structures, the availability of transfers, and global conditions, and pave the way for trade policy transitions.

In 2018, the US unilaterally imposed tariffs of between 10% and 50% on imports from several countries and across a variety of goods (Fajgelbaum *et al* 2019). This marked a significant departure from the previous 75 years of trade policymaking, which had relied on a rules-based, multilateral system of reciprocity to obtain persistently low tariffs.

This return to protectionism is echoed in the current Biden administration, where the tariffs on China remain in place, the WTO remains hamstrung, and there is an explicit move to industrial policy in the US, with the surge of subsidies for favoured industries.

Both political parties appear to have converged on a policy shift towards protectionism, in contrast to most of the history of US trade policy (Irwin 2017), where the Democratic or Republican parties have stood in opposition to the tariff. In a recent paper, we explore this bipartisan retreat from reciprocal trade liberalisation, as well as other major transitions in US trade policy since the Civil War (Bowen *et al* 2023).

Unlike the standard view, which is elegantly captured in the 'Protection for Sale' model by Grossman and Helpman (1994), we incorporate domestic bargaining between political parties, transfers, and reciprocity. This model of political bargaining between two parties supplements a standard two-good, two-factor, two-country trade model, and offers a foundation for understanding 160 years of US trade policy.

It has as its primitives the status quo domestic tariff and transfer levels, the interests of the agenda-setting party, and economic conditions abroad (the foreign tariff and the size of the foreign export sector). Political conditions determine the identity and interests of the agenda setter, and any offer the agenda setter makes to the rival political party must be no worse (for either party) than that available under the status quo tariffs and transfers.

While this status quo bias leads to long periods of policy stability, significant political and economic shifts can be large enough to fundamentally change trade policy outcomes.

The rise of China means that import-competing firms, and workers in those firms, see their welfare decline. Greater and greater transfers are required to maintain the free trade consensus

The history of US trade policy has featured two major political parties taking opposite stands on trade, one party representing the globalists and the other, the protectionists. At times the Republican Party is protectionist; at other, globalist. The same is true of the Democratic Party.

Figure 1 plots an index of party control with red and blue bars (Lee 2016), and the evolution of average tariffs on dutiable imports in the US in green from 1859 to 2021. The index of party control is the average of the Democratic Party's share of the total national popular vote for president and House and Senate seats.

We subtract 50 from the average to differentiate Republican Party majorities (red bars below the zero line) from Democratic Party majorities (blue bars above the zero line).

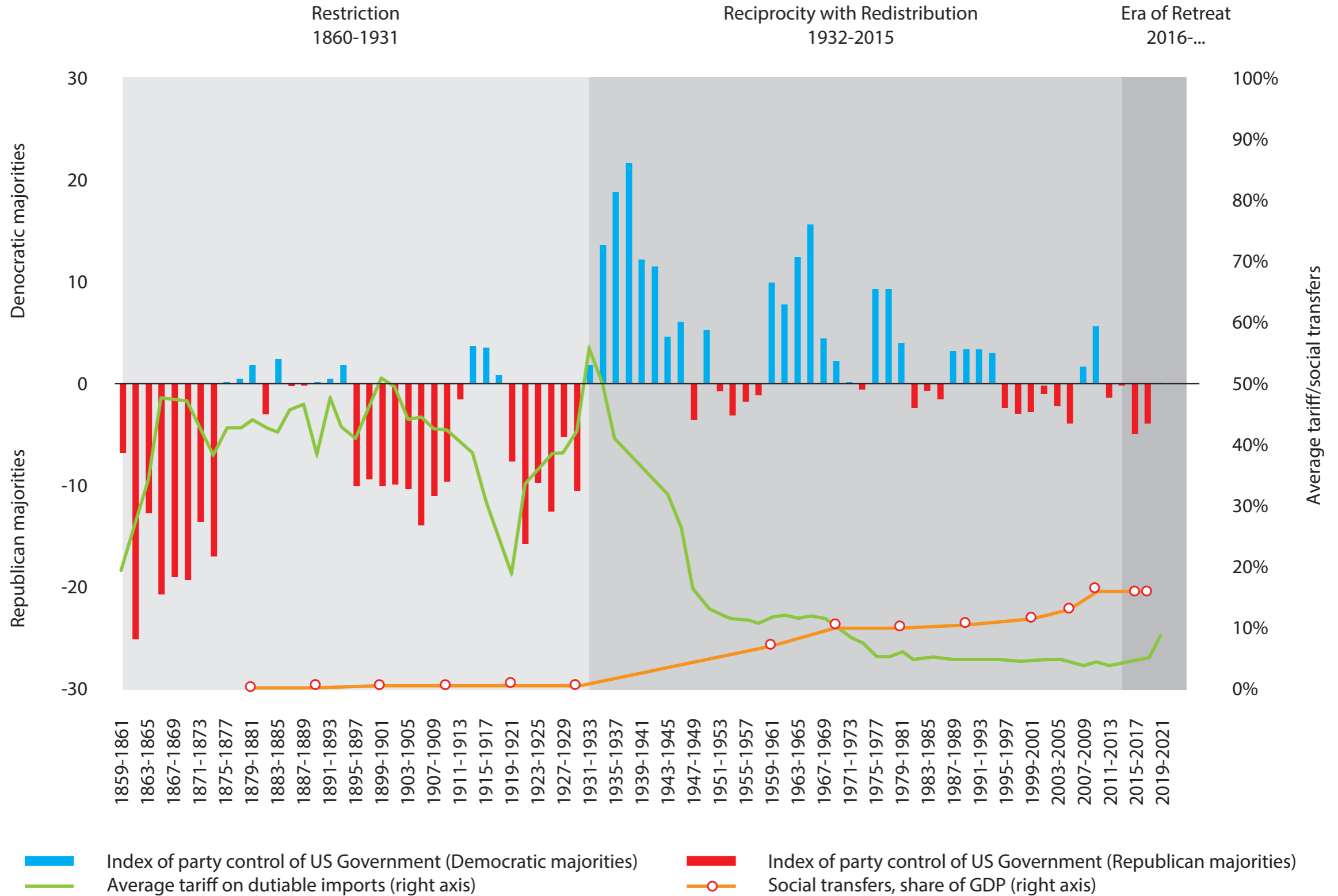
Three distinct eras of trade policy are evident in Figure 1. From the end of the Civil War to the Great Crash of 1929, US trade policy was characterised by relatively high tariffs; like Irwin (2020), we describe this as the 'Era of Restriction'.

As the red bars in this first era indicate, the Republican Party, representing the import-competing North, held agenda-setting authority. Prior to the Civil War, the tariff was low, and was not a major source of revenue; postbellum, the protectionist northern Republicans proposed a higher tariff, which was agreed to by the southern and western Democrats motivated by sharing in the tariff revenues.

Consistent with our model, political bargaining across parties with divergent interests, given a status quo of low foreign tariffs and protectionism at home, resulted in unilateral protectionism. The usual terms-of-trade arguments led to a desire for high tariffs for both globalists and protectionists. Without the need to incentivise trading partners to lower tariffs (because they are already low), unilateral protection results.

Figure 1. US party majorities, average tariffs, and social transfers, 1859–2021

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After the stock market crash of 1929 and the onset of the Great Depression, the Democratic Party swept the 1932 election and became the dominant party, as evidenced by the blue bars in Figure 1 through this period. The Democrats continue to represent export-oriented agriculture while the Republican Party still represents import-competing industries.

By this time, foreign tariffs had risen dramatically in response to the Smoot-Hawley Tariff Act of 1930. When foreign tariffs are high, both parties benefit from a shift to reciprocal free trade, as long as transfers to the losers from liberalisation are large enough. Figure 1 shows a dramatic drop in the average tariff during the period we label the 'Era of Reciprocity with Redistribution'.

Also evident in Figure 1 is the orange line with markers, showing the rise of social transfers from effectively zero to almost 20% of GDP in this period. A striking feature of the US political economy in the 20th century is the emergence of a transformative social safety net and government investment in public assistance.

Unemployment insurance, social security, a health insurance system, a public education system, and trade-related programmes such as Trade Adjustment Assistance all become part of the 'Reciprocity with Redistribution' era.

Reciprocal free trade emerges and persists when the adversely affected can be compensated; but there is no guarantee that sufficient transfers are available in a political equilibrium, especially in a globalised world. The social compact is contingent.

While Democratic Party dominance in government declines towards the end of the 20th century, and the Democrats become less committed to the liberalisation enterprise, conditions for a switch back to protectionism did not

emerge. When the status quo is free trade with transfers, and as long as the transfers reach a minimum threshold, neither party would propose a shift back to protectionism.

Even though Democratic commitment to free trade wanes towards the end of this period (and Republican protectionism has yet to take full effect) there is no political bargain available to either party to reverse the reciprocal liberalisation of the era. Export interests prefer to fund social transfers to the degree that keeps the import-competitors relatively indifferent to a return to protectionism.

This all changes in the first two decades of this century. Since China's accession to the WTO in 2001, its economy has grown at an annualised rate of more than 6% per year. The US share of the world's capital stock has declined precipitously, from above 80% at the end of World War II to less than 15% currently, while China's share has risen to exceed that of the US.

As China became relatively capital abundant, its exports of manufactured goods caused major dislocations for US manufacturers. At this time the status quo policy is free trade with transfers, and, as predicted by the theory, this can only be sustained if the transfers are large enough.

The rise of China means that import-competing firms, and workers in those firms, see their welfare decline. Greater and greater transfers are required to maintain the free trade consensus.

Figure 1 shows that transfers stagnated in this period. The Republican Party, which takes over as agenda setter in 2016, proposes a unilateral tariff – which protects declining workers and industries and reduces the transfers the globalists must pay to sustain openness. In the post-2016 'Era of Retreat', stagnating transfers are associated with bipartisan agreement to raise tariffs, a consensus that continues to the current day.

Transitions between protectionism and reciprocal free trade are rare in US history because they require fundamental realignments in party politics, global economic conditions, and the status quo. Shocks like the Civil War, the Great Depression, WWII, and the rise of China disrupt party structures, the availability of transfers, and global conditions, thereby paving the way for trade-policy transitions.

An important question for future research is whether it will be possible to expand transfers to the extent necessary to restore the bargain of reciprocal free trade. ■

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Talking about competitiveness in Europe: productivity not protection

The European Commission put EU competitiveness at the top of the agenda. Filippo di Mauro and Marco Matani argue that productivity, financial soundness, and quality orientation are the most important factors

Ursula von der Leyen has put competitiveness in Europe at the top of the economic agenda with her latest State of the Union address. And rightly so. Gaining competitiveness means making better use of the resources and ultimately increasing the productivity of the overall economic system.

On this, the record for Europe is dismal and action is urgently needed. Latest CompNet data show that total factor productivity (TFP) in Europe has been stagnant over the last two decades with negative blips both during the 2009 global financial crisis (GFC) and most recently during COVID in 2020.

Why was it so? Out of the many reasons, in this column we focus on the external factors to conclude that China was not the problem, but more likely some other, very internal ones, including the strong negative impact during crises times of within-EU global value chain (GVC) operations, amid an overall productivity sluggishness. Among the overall competitiveness drivers, we identify productivity and innovation content as key.

The role of EU global value chains

To do so, we examine how the TFP of European firms is affected by their external environment, particularly via the conduit of the GVCs to which they are connected.

Drawing from Bertelsman *et al* (2008) as well as Chiacchio *et al* (2018), we disentangle productivity transmission inside GVCs stretching within EU borders, within two phases. In a first phase, an external productivity shock (eg. an invention on the positive side or a sudden supply disruption on the negative side) has an immediate impact on the frontier (ie. most productive) firms, which are directly connected via trade flows to the respective GVC.

In a second phase, after a learning process, productivity gains trickle down from the national frontier to other national firms through domestic production networks.

To measure such impacts, we link CompNet data on firms' productivity with their respective trade linkages as reported by the OECD Inter-Country Input-Output (ICIO) tables. The productivity of each country and macro-sector is the employment-weighted average of laggard, frontier, and average firms (firms in the bottom 20%, top 20%, and intermediate deciles, respectively, of the productivity distribution of each country and macro-sector).

There are critical factors internal to the EU which could be better activated to enhance firms' productivity and ultimately foster their global competitiveness

Hence, we aim to capture the following contributions to the TFP growth rates of each country and macro-sector each year:

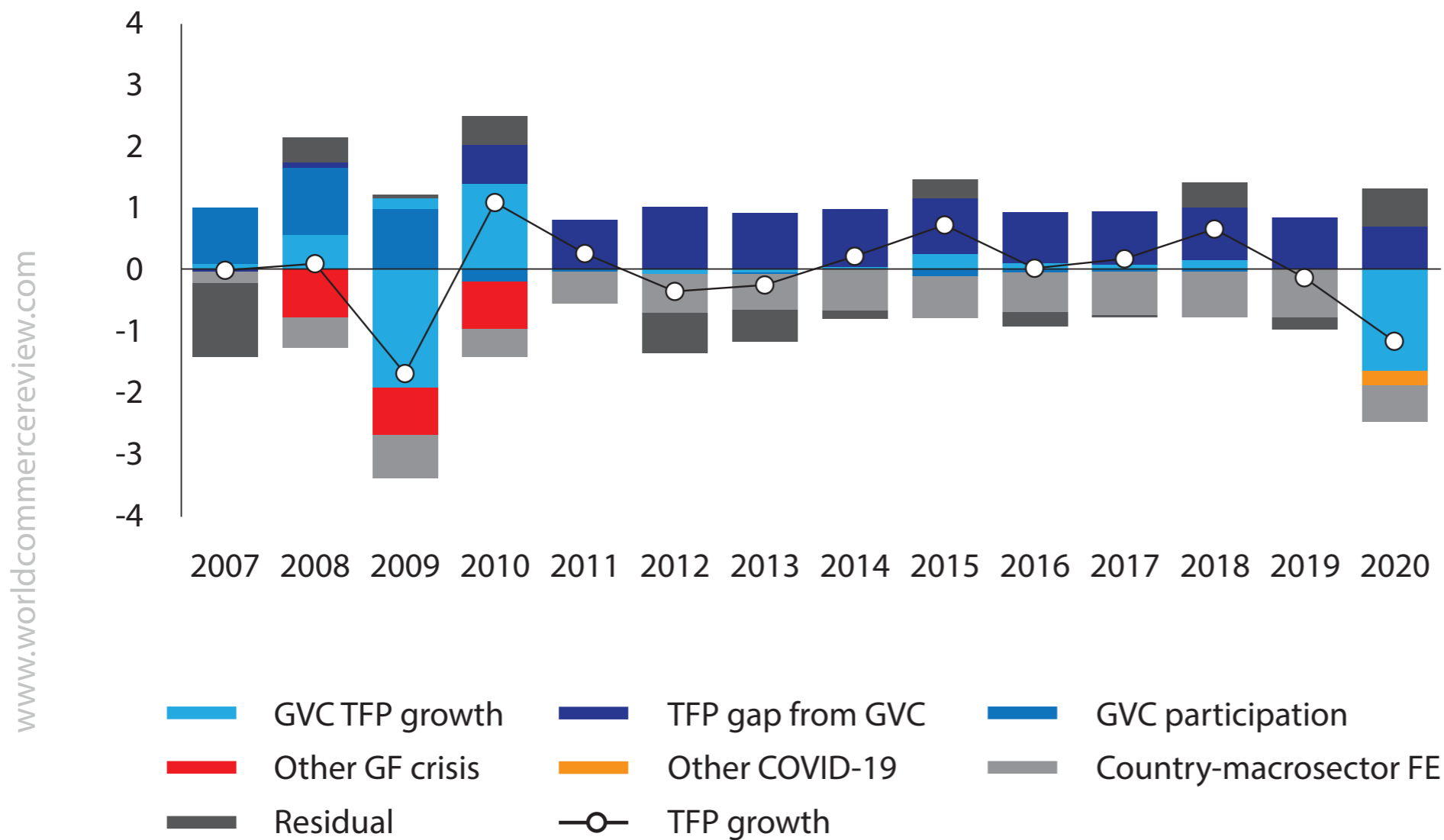
- The transmission of TFP rates of change from the respective GVC frontier (ie. from the average TFP growth rate across foreign countries and macro-sectors that import from the given country and macro-sector).
- The 'catch-up' effect – whether being more distant from the GVC frontier (in terms of a labour productivity gap) benefits TFP growth of national firms.
- Overall GVC participation (increases in percentage points of exports over output from one year to the other).
- Separately, other COVID and GFC shocks.
- Time-invariant features of each country and macro sector.
- Time-varying unexplained factors affecting TFP growth (on top of systemic COVID and GFC shocks).

The results (see Figure 1) are as follows¹.

1. As expected, the TFP growth of the EU GVC counterparts (the dashed blue histogram) has a rather strong impact on the TFP of the economy as it directly affects the frontiers firms connected to them.

2. What is notable is that such impacts become very strongly negative at the time of crisis (see the large negative histogram in 2009 and 2020)². This is reminiscent of evidence of an additional burden from COVID on European

Figure 1. Contributions to EU TFP growth rates within EU global value chains



Note: Figures are yearly averages across countries and macro-sectors weighted by real value added. Results for export linkages between BE, CH, CZ, DE, DK, ES, FI, FR, HR, HU, IT, LT, LV, MT, NL, PL, PT, RO, SI, SK, and SE. Unbalanced sample over 2005-2020. The latest available year is 2018 for DE, and 2019 for LV and NL.
 Source: CompNet 9th Vintage (jd_inp_prod_industry2d_20e_weighted) and OECD ICIO.

firms in GVCs (Lebastard *et al* 2023), and its sources – which may trace back to elements such as inventory management (Lafrogne-Joussier *et al* 2022), prevalence of arm’s-length rather than intra-group transactions (Altomonte *et al* 2012), or risk misperception (Baldwin and Freeman 2022) – deserve further investigation.

3. The most positive contribution to aggregate TFP growth, however, comes from the productivity gap of the various countries and macro-sectors with respect to their respective within-EU GVC counterparts. The intuition is that when this gap is large, there is possibly a Balassa-Samuelson kind of ‘catching-up effect,’ which could be activated.

4. On the other hand, and paradoxically given the current debate, the residual, which would include the China effect together with the remaining time-varying omitted factors, has a small and often actually positive contribution to the TFP growth.

Overall, it would seem therefore that the shock that is internal to EU GVCs (ie. European firms trading with other European firms) may be more relevant in explaining TFP growth fragility amidst crises and generalised sluggishness (the always negative ‘country-macro-sector FE’) than any residual Chinese one.

Drivers of external competitiveness

The 2023 State of the Union speech neatly advocated for true and fair competition. It also stated that European companies recognise global competition being good for business and a pivot to create and protect good jobs in Europe.

In this context, ‘predatory’ practices benefitting competitors and marginalising European firms on foreign markets have been stigmatised. An anti-subsidy investigation into electric vehicles coming from China was also announced.

Nurturing a vibrant competitive environment requires policymakers to identify those aspects that are most relevant for sound firm performance (di Mauro and Forster 2008, Karadeloglou *et al* 2015). Building on previous work by Amador *et al* (2022) and Lourenço *et al* (2022), and in collaboration with a team at the Portuguese Gabinete de Estratégia e Estudos (GEE), we built a novel micro-aggregated composite indicator using CompNet data.

Our version of the Enterprise Competitiveness Indicator (ECI) considers five dimensions of performance – returns, costs, productivity, risks, and quality orientation (CompNet 2023: 29-34) – for the average firm in each country. When putting it to work, the ECI seems to offer insights into the drivers of EU firms' demeanour on global markets (Figure 2).

Our results suggest that productivity, financial soundness (risk), and quality orientation correlate with higher EU countries' export market shares more often than profitability (return) and, even more strongly, production costs. Also exchanges rates appear scarcely related to trade developments (see Grazioli *et al* 2016 for further on this).

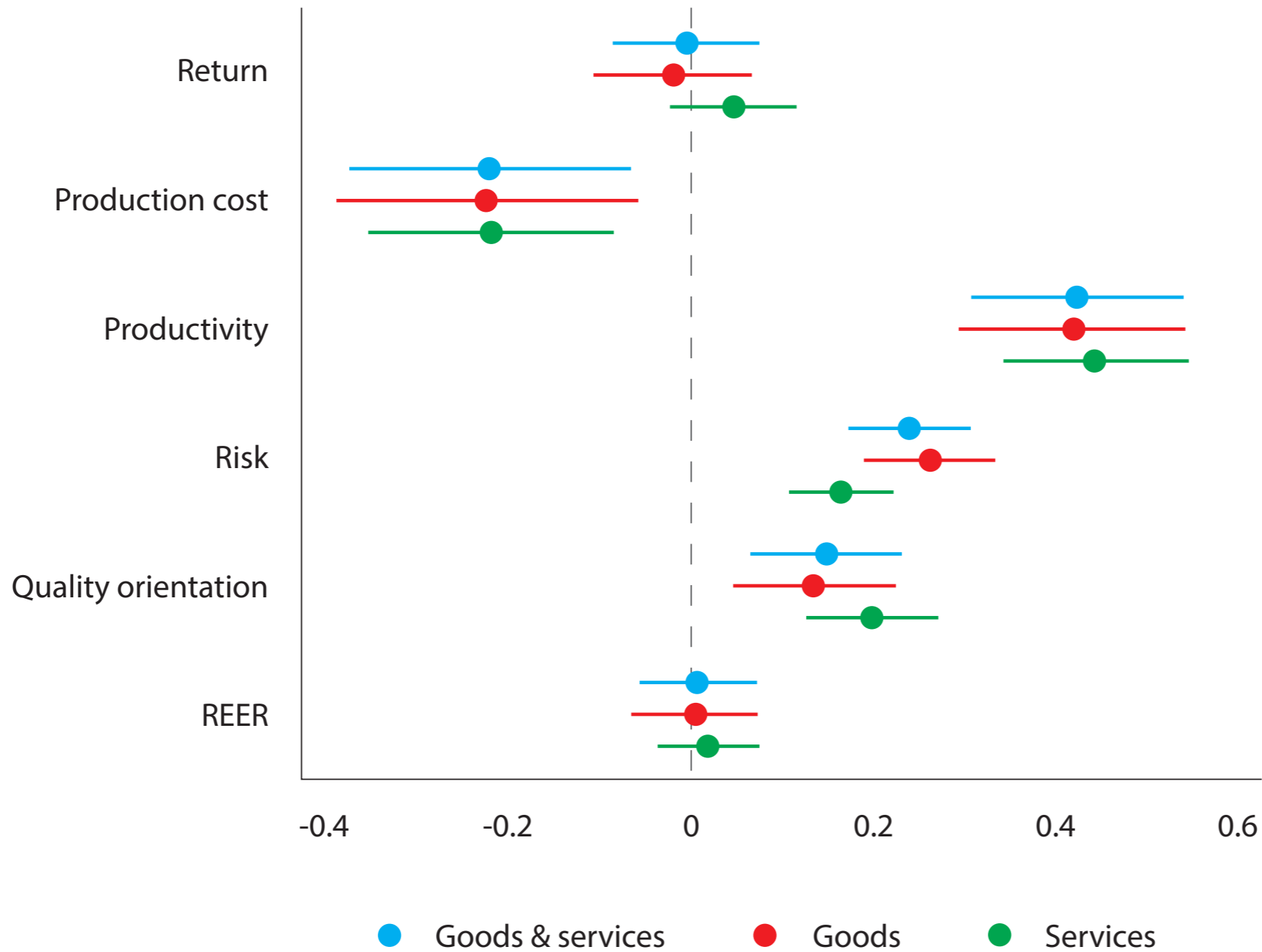
Intuitively, this correlational evidence may point to European exporters being specialised in more downstream, higher value-added stages of value chains (eg. Bontadini *et al* 2021). If so, curbing artificial low prices would speak only less directly to the competitiveness of EU firms, while other factors appear more in tune with navigating international competition on those markets where the EU comparative advantages are stronger.

Conclusions

That competitiveness is now at the top of the EU economic agenda is welcome. But it is important to choose appropriately the channels one needs to tackle to improve it.

Figure 2. ECI by dimension, REER, and export market shares

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Note: Coefficients from regressing market shares on ECI dimensions (pooled, each computed like in CompNet, 2023 pages 29-34) and Eurostat real effective exchange rates (REERs) with year fixed effects. REERs are the nominal effective exchange rates (NEERs) for 42 trading partners deflated by consumer price indices (CPIs). Results for BE, CZ, DE, DK, ES, FI, FR, HR, HU, IT, LT, LV, MT, NL, PL, PT, RO, SI, SK, and SE. The latest available years are 2019 for LV and NL, and 2018 for DE.
 Source: CompNet 9th Vintage (unconditional_mac_sector_20e_weighted) and Eurostat

In this column, we have provided evidence that there are critical factors internal to the EU which could be better activated to enhance firms' productivity and ultimately foster their global competitiveness.

First, the GVCs operating within Europe itself have a rather strong impact on the aggregate productivity of Europe, as they directly affect the frontier firms connected to them. The robustness and resilience of these GVCs should be enhanced³.

The still rather large gaps existing between frontier and laggard firms maintain a strong momentum for 'catching-up' forces, which is also positive for the aggregate productivity of Europe.

In comparison, the impact on the latter of GVCs outside of Europe (including therefore China) is shown to be somewhat limited and at any rate mostly positive.

When we look at the determinants of export market shares of EU firms, we show that productivity, financial soundness (risk), and quality orientation are the most important factors. Rather than, for instance, imposing across-the-board controls on imports, those are the things to concentrate on and most likely what it will take to maintain and enhance the EU's competitive edge. ■

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Endnotes

1. Results are robust to utilising import linkages and to controlling for growth rates of exports toward major non-European partners (CN, IN, JP, KR, MX, RU, TR, US). These results are available upon request to the authors.
2. Note that 2021 OECD ICIO data are available only up to 2018. We assume that the structure of EU GVCs did not change between 2018 and 2020. Since COVID reasonably twisted firms away from their ideal portfolio of trade partners, we may underestimate the magnitude of the GVC TFP shock in 2020.
3. See Miroudot (2020) for a discussion of the distinction between resilience and robustness in GVCs.

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Improving the contestability of e-commerce in two jurisdictions



Improving competition in digital markets is a priority for the governments in both the United States and Europe. Fiona Scott Morton considers how Amazon's alleged conduct controls prices on rival marketplaces

Executive summary

Antitrust cases against Amazon in the United States reveal that the e-commerce giant has developed algorithms that mimic price protection contracts called MFNs (from most-favoured nations, a term borrowed from international trade), despite the company saying publicly that it ended the contracts themselves some years ago.

MFNs are well known in antitrust enforcement for their anticompetitive effects: higher prices and less entry. The complaints describe how Amazon demotes merchants from its coveted Buy Box if Amazon finds a lower price on a rival e-commerce site, creating an incentive for merchants to set higher prices on rival sites.

The European Union, the Digital Markets Act bans such contracts. This would be a good remedy for the US as well as it would restore competition with minimal harmful side effects. The US complaints describe a different scheme that penalises brands if Amazon must reduce its retail prices to match a rival retailer. The EU may have to pursue this conduct under Article 102 of the Treaty on the Functioning of the European Union that prohibits abuse of dominance.

Both the US Federal Trade Commission (FTC) and the European Commission have found that Amazon's policy of tying its own logistics service to Amazon Prime status raises entry barriers to rivals. The European Union remedy redesigns the Buy Box and allows rival logistics services access to consumers.

This remedy provides a useful benchmark to consider in designing remedies for the FTC and for California, which is also pursuing an antitrust case against Amazon. In general, both the US and the EU gain from the enforcement actions of the other.

1 Introduction

Improving competition in digital markets is a priority for the governments in both the United States and Europe. In the European Union, this can be seen in the Digital Services Act, the Data Act, and most importantly, the Digital Markets Act. In the US, the desire for more competition can be seen in the Biden Administration's appointments of leaders of the antitrust agencies who have brought several antitrust cases against digital platforms.

Amazon is one of the big-tech companies that receives regular criticism from politicians and the media. In the US, several antitrust cases against Amazon are currently in litigation, including those brought by the state of California (filed September 2022; Superior Court of the State of California, 2022) and the Federal Trade Commission and 17 states (filed September 2023; FTC, 2023).

These cases may have a bearing on enforcement against Amazon in Europe, where regulators have also been busy: an antitrust case brought against Amazon by the European Commission was resolved with commitments in December 2022 and commitments were also accepted in 2023 by the United Kingdom Competition and Markets Authority¹.

In addition, the European Commission has designated Amazon's e-commerce business as a core platform service², meaning it will have to comply with the EU Digital Markets Act (Regulation (EU) 2022/1925) beginning in March 2024.

The conduct described in the US complaints against Amazon harms competition between online stores and among the merchants who sell via them. The first harm is the suppression of price competition between e-commerce platforms.

The second harm occurs when Amazon's market power reduces competition in the logistics that merchants use to support their e-commerce sales. If they are available, independent logistics firms lower the cost of entry of rival e-commerce platforms and thereby increase competition. The evidence in this context unearthed in the US investigations is highly relevant to successful enforcement in the EU.

Meanwhile, Amazon's commitments to the European Commission, and DMA provisions that apply to Amazon's core platform services, should increase contestability and fairness in e-commerce markets. As this Policy Brief details, the combination of these policies can be effective in giving merchants more choices and lowering barriers to entry to Amazon's competitors.

The US lags behind Europe in competition enforcement of e-commerce and US authorities can learn from European solutions

The US lags behind Europe in competition enforcement of e-commerce, and so US authorities can learn from such European solutions. Likewise EU regulators can learn from US antitrust enforcement. Regulators on both sides of the Atlantic can build on the enforcement activities of each other. More robust solutions will create more contestability and fairness for consumers and businesses.

2 Stifling price competition

2.1 How Amazon's alleged conduct controls prices on rival marketplaces

The California and FTC complaints both accuse Amazon of operating what are effectively 'platform MFNs' (most-favoured nation commitments, a term borrowed from international trade) for third-party marketplace sellers and the brand representatives.

Platform MFNs are requirements that third-party sellers on a platform, in this case a marketplace, set prices for the same good on competing marketplaces that are at least as high as those found on the platform requiring the MFN.

The MFN thus controls prices on the seller's own website and on competing marketplaces. These contracts end price competition between marketplaces because all prices for the good are the same. Furthermore, a merchant selling on a marketplace with lower fees cannot pass those lower fees through to consumers in the form of lower prices, without – under the terms of the MFN – also lowering the price of the good on the primary platform, in this case Amazon, which has higher fees.

Therefore, a lower-priced entrant platform has no way to attract customers with lower prices if it wants to sell the products of merchants covered by the Amazon platform MFN. For this reason, platform MFNs also limit competition between marketplaces (Baker and Scott Morton, 2018).

A large economics literature³ confirms these intuitions: sellers will choose to set high prices on all competing sites to match those on a large platform with an MFN. This harms competition in goods. Second, the competing marketplace now has no reason to lower its fees, since it cannot gain more business that way. This harms competition between the marketplaces themselves and deters entry of more efficient marketplaces.

This economic logic is well-known among enforcers. MFN contracts have therefore been a frequent target of enforcement efforts in many industries. In 2013 Germany and the UK opened investigations into Amazon's MFN contracts, which caused the company to abandon them in Europe (Bundeskartellamt, 2013).

In 2019, at the instigation of Senator Richard Blumenthal (not the FTC), Amazon voluntarily ended its MFN contracts in the United States. Observers might well think, therefore, that the anticompetitive effects of these contracts are gone.

2.2 *De-jure versus de-facto MFNs*

However, the US lawsuits set out the steps Amazon took to purposefully recreate the effects of the MFN contracts after it ended them formally. Both the California and FTC complaints describe the replacement tactics Amazon has used to control off-platform prices through the Amazon Standards for Brands policy (ASB), the Marketplace Fair Pricing Policy, the Seller Code of Conduct and Select Competitor – Featured Offer Disqualification (SC-FOD) (Superior Court of the State of California, 2022 (hereafter 'Cal Comp') paragraph 125; FTC, 2023 (hereafter FTC), paragraphs 276, 297).

If a seller's prices are lower on a rival site (FTC ¶ 277), Amazon downgrades the listing of the good, and removes it from eligibility for the 'Buy Box' or 'featured offer' (FTC ¶ 84) (the Buy Box is the familiar box on the top right of the Amazon product page; it shows one seller that Amazon has chosen and, by virtue of the design of the box, is made more prominent than any other seller).

Given Amazon's huge consumer base, and the fact that 98 percent of purchases occur through users choosing the seller in the Buy Box (FTC ¶ 85), an excluded merchant is likely to lose significant sales with this downgrade.

Furthermore, the California and FTC complaints are detailed in their evidence that Amazon's managers were aware of the purpose of the programmes. For example, SC-FOD was designed to enforce the contractual MFN's "expectations and policies," which "had not changed" (FTC ¶ 276). The FTC complaint states:

"At one time, Amazon designated only the very largest online stores as 'Select Competitors' for purposes of SC-FOD. After dropping the price parity clause from its Business Solutions Agreement, Amazon exponentially expanded its classification of 'Select Competitors.'[...] According to a senior Amazon executive, Amazon expanded the designation of Select Competitors] to make "the punitive aspect" of SC-FOD "more effective"" (FTC ¶ 280).

Both complaints explain that Amazon's Standards for Brands, or ASB programme, contractually requires certain third-party sellers to "ensure that their products' prices on other online stores are as high or higher than their prices on Amazon at least 95% of the time" and imposes additional restrictions on sellers' inventory and Amazon Prime membership⁴ so they effectively cannot sell anywhere but on Amazon (FTC ¶¶ 291-2; Cal Comp ¶¶ 145-8).

As with the SC-FOD programme, Amazon was clear about why it penalised ASB sellers who did not meet the programme's requirements: "Amazon told those punished ASB sellers that they were being sanctioned because 'customers considering your products could have easily found your products cheaper at another major retailer, and may have chosen to shop elsewhere'" (FTC ¶ 297).

These statements should raise concerns in all jurisdictions that Amazon's contractual MFNs were only a small part of the competition problem.

2.3 How Amazon's alleged conduct controls prices on rival retail sites

The California complaint describes behaviour that also creates an effective MFN in Amazon's retail operation. Amazon's retail business differs from the marketplace business because Amazon itself buys goods at wholesale prices, owns those goods, and then sells them via its own website at prices it chooses. A marketplace, by contrast, hosts independent merchants that control what they sell and how it is delivered, and set their own prices.

As described in the complaint, brands that sell wholesale to Amazon fare even worse than re-sellers because of another MFN-like scheme. Amazon requires brands to agree to a contract called a Minimum Margin Agreement (Cal Comp ¶¶175-204). Amazon uses an algorithm to reduce its retail prices if it finds a lower price for the same product on a rival website, such as Walmart.com.

But the brand Amazon buys from wholesale remains responsible for maintaining Amazon's profit margin. The brand must therefore make up the difference between the price initially set by Amazon, and the lower price that Amazon has matched. This is true even though the brand itself does not choose the retail price in either setting; the online stores have that responsibility.

The result of this scheme is that whenever Walmart.com, for example, has a sale on a certain product or brand, Amazon matches the sale price, and its profit margin may fall below its target level. If so, Amazon requires the brand to compensate it for the new low price.

Naturally, this penalty causes the brand to want to sell to Walmart.com at a high enough wholesale price so that Amazon's retail price will always be lower than Walmart's. In general, a brand does not want to offer discounts to Walmart because that might encourage a sale that would cause the brand to suffer if Walmart.com decides to lower prices for any reason, eg. to attract consumers to its store.

The brand might even withdraw from Walmart.com altogether if such sales cause it to owe large sums to Amazon. Internal Amazon documents acknowledge the “*punitive aspect*” of this scheme (FTC ¶ 282). The anticompetitive impact of this programme is the same as an MFN in its ability to raise prices at rival stores.

2.4 What remedies would restore vigorous price competition?

Assuming that the allegations about MFNs described in the preceding subsections are proved, agencies or courts will need to impose remedies to restore the lost competition. The simplest remedy is to ban MFNs entirely: wide MFNs (which cover prices in rival e-commerce stores), narrow MFNs (which cover prices on the website of the brand itself) and any conduct that creates the same incentives as an MFN. The EU has already banned MFNs in Article 5(3) of the Digital Markets Act.

To explain the impact of an MFN ban on the strategies of all parties, it is useful to consider two questions. First, for the MFN to be triggered, a rival must offer a lower price.

Why is a rival e-commerce store setting a retail price lower than Amazon’s price?

1. The rival store has lower costs of operation than Amazon;
2. The rival platform bought the good from its manufacturer for a lower price; or
3. The rival platform has a different strategy or weaker market position than Amazon and lower prices are the best way to attract consumers.

These answers are standard manifestations of competition that benefits consumers. If prices are lower on a rival e-commerce site for any of these reasons, consumers gain, and the law should not permit Amazon to implement contracts or policies that suppress that competition.

If Amazon wishes to retain customers after this MFN is banned, it can bring down its fees or raise its value. Likewise, Amazon can bargain for a lower price from the manufacturer, or possibly cut its costs by making its own-label version of the product.

The second question when assessing the potential impact of an MFN ban has to do with re-sellers:

Why is a third-party reseller setting a price on Amazon that is higher than on other platforms?

4. It thinks Amazon shoppers are inattentive and not price-responsive and is exploiting them with a high price; or
5. Its costs are lower on rival platforms because those platforms' fees are lower.

A reseller is not violating competition laws if it chooses to set different prices in different distribution channels for reasons such as differences in cost or demand. But, of course, this conduct hurts Amazon shoppers and Amazon's brand. A remedy that restores the lost competition in fees (5) should ideally allow Amazon to protect its own consumers from any possible exploitation in (4).

Handily, Amazon has already built the tool needed to combat the possible exploitation in (4): the Buy Box. When third-party sellers list on Amazon, the firm's algorithm evaluates their offers and puts the one that meets its criteria into the Buy Box (see the annex for an illustration). Consumers with ranking bias and default bias tend to purchase

Annex: The Buy Box

Buy Box

€195.48

FREE delivery Monday, 4 December. Details

Or fastest delivery Saturday, 3 December. Order within 15 hrs 10 mins. Details

Arrives before Saint Nicholas.

Deliver to Hoozer - 66105-1050

IN STOCK

Quantity: 1

Add to Basket

Buy Now

Ships from Amazon.com

Sold by Amazon.com

Return: Returnable until Jan 1, 2024

Payment: See payment

Add gift options

Add to List

New 10 from €195 & FREE Delivery

Other Sellers on Amazon

€199.42 & FREE Delivery	Add to basket
€208.99 & FREE Delivery	Add to basket

Other offers for the same product

the option in the Buy Box, meaning that the winning seller typically obtains 98 percent of sales (according to the FTC complaint).

If Amazon's algorithm weights high prices negatively, a third-party seller engaging in the exploitation in (4) would be expected to sell very little because it is not in the Buy Box and, if any diligent consumers search the listing, they will find an exploitative price – which will limit sales.

The design of the Buy Box means it can be used legitimately by Amazon to defend consumers on Amazon Marketplace from exploitation by high-priced sellers. Thus, it duplicates the pro-competitive impact of the MFN without the anticompetitive element and can be used to replace it when the MFN is banned. Because the Buy Box is only for prices on the Amazon platform, it does not duplicate the restraint on horizontal competition that characterises an MFN.

Now consider the case of a product sold by only one reseller on Amazon, and which that re-seller is pricing in an exploitative manner. The Buy Box cannot fix this problem. However, Amazon has the incentive and ability to recruit another reseller to its platform. Entry will be attractive for the new seller because undercutting the incumbent's exploitative price still allows for a healthy margin.

Thus, both Amazon and rival third-party sellers have an incentive to defeat the conduct described in (4), while Amazon has the information to identify the opportunity and the ability to facilitate entry of lower-priced rivals.

If there is only one original seller of the product, such as the brand itself, there is also nothing for the Buy Box to leverage. But Amazon has procompetitive tools to combat this strategy. For example, the brand's listing on the search-results page could truthfully explain to the customer what the brand's regular list price is and could

recommend substitute products on Amazon that are not overpriced – all without removing the ability to buy the brand in the normal way.

An Amazon premium here could occur because the cost of selling is higher on Amazon. If the brand finds the costs of selling on Amazon to be higher than on other platforms, either because of advertising that is effectively required, or high fees charged by the platform, it may build those costs into the price it charges.

This is a normal feature of competition. Customers will evaluate the benefits of the Amazon platform (OneClick purchasing, fast delivery, saved addresses) and compare them to the price difference. If the latter outweighs the former, the customer will leave Amazon to buy the brand for a lower price elsewhere.

A reasonable concern is that a ban on MFNs will lead to inefficient free-riding (showrooming). This occurs when sellers use the dominant platform to display their product and attract buyers, but then encourage those buyers to purchase off the platform, thereby avoiding the platform's fees. This can reduce below the optimal level the incentive to build and invest in a platform.

However, a consumer who sees a product on Amazon and searches for the seller's page to buy it at a lower price is giving up all the services of Amazon: saved payment, saved addresses and quick delivery times. Amazon itself touts the superiority of its services and the stickiness it creates with time- and attention-strapped consumers.

The government complaints contain quotations from managers at the company that acknowledge high switching costs for consumers (FTC ¶ 182). For these reasons, free-riding may be minimal.

3 Stifling entry of competitors

3.1 The link between shopping and fulfilment

Additional allegedly illegal conduct described by the FTC relates to the tying of fulfilment by Amazon (FBA) membership to participation in Prime (and therefore sales, as noted above). Formerly, merchants could use their own fulfilment and delivery services within the Prime programme (called SFP, or seller-fulfilled Prime) (FTC ¶ 400).

The merchants that participated in SFP could have their listings qualify for Prime, and therefore the Buy Box, but also could send out those items using a logistics provider of their choice, rather than using Amazon.

This is important because such a merchant can then also fulfil sales from rival e-commerce platforms with the same logistics infrastructure they use for Amazon sales. This promotes the entry of rival e-commerce marketplaces because, by virtue of hosting the same sellers on their platforms, their delivery quality and cost is similar to Amazon's.

When Amazon banned SFP or made it difficult⁵, most Amazon merchants turned to FBA, which does not have this beneficial effect on rival marketplaces.

The FTC's complaint emphasises this impact on competition, namely that the decline in availability of independent fulfilment and logistics services at scale reduced entry and growth of rival e-commerce stores. When SFP reduced multihoming across e-commerce marketplaces, that reduced competition between marketplaces (FTC ¶ 405).

Amazon executives appreciated the value of the lessened competition, according to the FTC complaint. An Amazon executive stated that the mere prospect of increased competition for fulfilment services *"keeps me up at night"* (FTC ¶ 391).

Another executive *“explained to his colleagues that he had an ‘oh crap’ moment when he realized that this was ‘fundamentally weakening [Amazon’s] competitive advantage in the US as sellers are now incented [sic] to run their own warehouses and enable other marketplaces with inventory that in FBA would only be available to our customers”* (FTC ¶ 31).

3.2 Fairness concerns

The FTC complaint tracks the concerns expressed by the European Commission about the way in which the design of the Buy Box effectively required sellers to participate in Prime and therefore to use FBA. However, that similarity masks an interesting element to the European case. The Italian competition authority started its investigation⁶ because local rival logistics operators wanted to be included by Amazon on an equal basis to Amazon’s logistics.

The conflict with Amazon arose because of the possibility that rival logistics providers have slower delivery times. The open question is whether Amazon treats rival logistics providers as consumer prefer (by performance) or in a way that favours Amazon’s logistics services.

The European Commission case also demonstrates a view that the treatment of merchants was unfair in that Amazon’s own products were ranked higher than equivalent rivals and the Buy Box incentives were extremely sharp.

In other words, if a merchant did not get into the Buy Box (which required buying FBA), their sales dropped almost to zero, while their Amazon ranking may only have been very slightly lower than the winner’s rank.

Such a strong response becomes unfair to sellers if there is any bias or imprecision in the ranking. This concern for fairness is conceptually distinct from the competition, but is a feature of European antitrust enforcement.

However, the fairness element is not central to the argument of illegality in either case. Since a merchant will not use a logistics service that causes exclusion from the Buy Box, the Amazon policy linking FBA, Prime and the Buy Box has an exclusionary impact on rival logistics providers.

These policies prevent merchants from multihoming (offering their goods on multiple marketplaces), which in turn creates an unnecessary barrier to entry of rival marketplaces. The link to competition is fundamental.

And importantly, while the quality of current rivals may be poor, that does not invalidate this theory of harm. Under different rules logistics providers would have different incentives to invest. If a rival could serve merchants within the Amazon Prime programme, it would have the incentive to invest to improve its quality so that merchants would select it, and this would generate competition in logistics.

If the Amazon algorithm is, in fact, downgrading products that consumers prefer, this lowers the quality of the service and should cause consumers to switch to a rival store. If rival stores can more easily enter because rival logistics are available, then competition between merchants will improve.

If the Amazon algorithm only ranks products according to attributes valued by consumers – with no bias or distortion – competition among those merchants will intensify and consumers will benefit.

3.3 Remedies to protect competition in fulfilment

A simple remedy to apply in the United States would be the restoration of the Amazon SFP programme, which was shown to be technically feasible and popular with merchants (see section 4.1). Merchants would always be free to choose Amazon's fulfilment service. It is likely Amazon would want to establish quality standards for rival delivery services to qualify for Prime, in order to maintain the reputation of the Amazon brand for quality and reliability.

Information reported in both the EU and US has shown that Amazon previously tracked such performance. Maintaining quality standards to ensure consumers have a good user experience is a perfectly procompetitive policy, provided the standards are transparent and are applied fairly. If so, a delivery service with a proven quality can be used by merchants in SFP, and their listings will be treated equivalently to those delivered by Amazon.

The European Commission has taken two approaches to a remedy. The prohibition decision was resolved with commitments that Amazon implemented in 2022 (Amazon, 2022):

To address the Buy Box concern, Amazon proposed to commit to:

- *treat all sellers equally when ranking the offers for the purposes of the selection of the Buy Box winner;*
- *display a second competing offer to the Buy Box winner if there is a second offer from a different seller that is sufficiently differentiated from the first one on price and/or delivery. Both offers will display the same descriptive information and provide the same purchasing experience.*

To address the Prime concerns Amazon proposed to commit to:

- *set non-discriminatory conditions and criteria for the qualification of marketplace sellers and offers to Prime;*
- *allow Prime sellers to freely choose any carrier for their logistics and delivery services and negotiate terms directly with the carrier of their choice;*
- *not use any information obtained through Prime about the terms and performance of third-party carriers, for its own logistics services."*

Notice that the Buy Box rule in these commitments will be a less-effective replacement for an explicit MFN – as argued above – because it cannot steer users to less-expensive option as forcefully. The results of this combination of commitment and DMA ban will need to be studied to evaluate if the former weakens the latter.

4 The role of the DMA in promoting competition in ecommerce

4.1 DMA rules

One might think that Europe is ahead of the US in banning MFNs because Amazon gave up its MFN contracts in Europe in 2013 (Bundeskartellamt, 2013). But the US litigation evidence raises the possibility that the company effectively replicated the prohibition on sellers discounting off the Amazon platform by other means – and this could have been true in Europe as well.

It is therefore unclear whether the outcomes (prices and entry) Europe has experienced in the last ten years reflect competition effectively free of MFNs or not.

The European Digital Markets Act (Article 5(3)) again bans MFNs for the core platform services designated by the European Commission. Amazon's retail business is a CPS and therefore must comply with Article 5(3) by March 2024. If the processes and algorithms described above are being used in Amazon's European operations today, these will surely be viewed as violating the DMA and would have to be changed.

The DMA also explicitly permits disintermediation of the platform in Article 5(4). It says that gatekeepers, or the hard-to-avoid digital giants covered by the DMA:

“... shall allow business users, free of charge, to communicate and promote offers, including under different conditions, to end users acquired via its core platform service or through other channels, and to conclude contracts with those end users, regardless of whether, for that purpose, they use the core platform services of the gatekeeper.”

Juxtaposing this wording with text from Amazon's Seller Code of Conduct in the US is informative⁷:

"Circumventing the Sales Process: You may not attempt to circumvent the Amazon sales process or divert Amazon customers to another website. This means that you may not provide links or messages that prompt users to visit any external website or complete a transaction elsewhere."

Article 6(5) of the DMA requires gatekeepers to not rank their own services and products more favourably than those of third parties. This rule backs up, or duplicates, one of the Buy Box commitments and might affect Amazon's house brands and retail products relative to the products of third-party sellers on Amazon Marketplace.

It also likely applies to Amazon's Prime fulfilment and delivery service (FBA). FBA should not automatically be ranked favourably relative to services of third-party sellers, but rather the ranking conditions should be *"transparent, fair and non-discriminatory."*

Amazon itself has the ability to measure how well SFP serves customers; it found that over 95 percent of the time, SFP met the delivery requirements set by Amazon (FTC ¶ 401). Under this rule, it would seem that a product delivered by a rival service that is as fast and reliable will cause the product to be ranked equivalently to one being delivered by Amazon Prime, all else being equal.

Importantly, in addition to Articles 5(3) and 5(4), the DMA also contains an anti-circumvention rule in Article 13. If Amazon devised methods to effectively replace the platform MFN contracts, they could be considered circumvention of 5(3) and 5(4).

Such an interpretation is supported by statements in the FTC complaint against Amazon such as *“replacement of a contractual price parity term with an expansion of SC-FOD would appear to be] not only trivial but a trick and an attempt to garner goodwill with policymakers amid increasing competition concerns”* (FTC ¶ 15).

4.2 The effectiveness of the DMA

The Commission defined Amazon’s core platform service to be its marketplace services, not its retail services. Therefore, the de-facto MFN that operates through the retail channel, the Minimum Margin Agreement, may not be governed by the DMA.

The EU competition authority may want to bring an antitrust case against Amazon’s retail MFN under Article 102 of the Treaty on the Functioning of the EU (prohibiting abuse of dominance). In this way the antitrust law would complement the DMA and fill an enforcement gap. This package of enforcement outcomes such as price and quality in the EU e-commerce marketplace.

Rival e-commerce sites that do not require costly advertising and/or have lower participation fees will enable merchants to set lower prices there and attract consumers with those lower prices⁸. Because of the prohibition on MFNs, those merchants will not be penalised by Amazon for the price differential.

In a setting of unfettered competition we may see consumers leave Amazon in pursuit of lower prices, or we may see consumers choose to pay more for the quality they are accustomed to and stay with Amazon. Either outcome is a manifestation of competition. Business users will be free to set the prices they want on each distribution channel they use, and end users will therefore have more choice and lower prices.

DMA Article 13 prohibiting circumvention will play an important role in enforcement of the other Articles needed to create competition in e-commerce. Because it is clearly straightforward to create algorithms and policies that mimic the effect of a contractual MFN, enforcers will need to develop processes or tests to monitor compliance under DMA Article 5(3), or the ban on MFNs will achieve almost nothing.

Successful enforcement will advance the DMA's contestability and fairness goals. The ban on MFNs increases contestability both on the platform and between platforms. Safeguarding merchants' freedom to contract differently across distribution channels and the equitable ranking of offers enhances fairness between different business users, as well as between business users and the platform's offerings.

5 Conclusions and policy recommendations

Soon there will be evidence of the effectiveness of the newly-mandated choice architecture of the Buy Box and its algorithm. Enforcers, merchants and Amazon will be able to measure the performance of third-party fulfilment and delivery, which will be very helpful to policy development. The changes should cause products without Prime shipping and lower prices to appear higher in the organic ranking, which could reduce the influence of Prime.

However, advertised products may fill the search results page so that shoppers do not see these highly-ranked inexpensive products. Such a poor user experience might cause consumers to shop elsewhere, and if the MFN provision (DMA Article 5(3)) is enforced, competitors to which consumers can switch will enter.

Even better, switching consumers can use their rights under DMA Article 6(9) to choose to port their personal data, including addresses, recurring purchases and methods of payment, to their new accounts with rivals.

Enforcers in the US should pursue a simple ban on platform MFNs because it will likely pre-serve competition between platforms with minimal negative impact. An effective remedy would also be to ban conduct and contracts similar to MFNs in Amazon's retail business, such as the Minimum Margin contracts.

If all those contracts – and the establishment of any similar programme that achieves the same anticompetitive ends – are prohibited, price competition will be able to flourish online. Given the policies Amazon seems to have adopted to replace MFNs in practice, both elements of the remedy are crucial.

In Europe, the main enforcement challenge seems to be possibility of de-facto MFNs enforced through carefully designed algorithms. Amazon's March 2024 compliance report to the European Commission may need to include information describing whether Amazon tracks the prices of its sellers on other platforms, and if it does, what actions Amazon takes after it finds sellers charging less outside Amazon's marketplace.

The answers to these questions are critical to demonstrate the gatekeeper is in compliance with the DMA. The Commission may find the information revealed in the US litigation to be helpful as it interprets Amazon's compliance reports, as well as in any Article 102 litigation.

The case of Amazon illustrates that different parts of the DMA can work together to create a whole that is greater than the list of those parts. Eliminating MFNs allows for lower prices on rival sites, while a consumer's ability to port her data allows for easy switching to those sites. Unbiased rankings allow the best choices to rise to the top of the search results page, including choices fulfilled by a rival logistics provider. That rival logistics provider in turn can support entry in e-commerce. And the entrant can attract customers with a differentiated strategy which cannot be blocked by incumbents using MFN-equivalent policies or practices. The addition of the Buy Box redesign adds to the force of this combination.

Making sure this cluster of policies is effective at increasing contestability and fairness will require measurement of outcomes as well as inputs. What choices appear in the Buy Box and how do consumers respond to different design choices in the shopping environment? Measurement of the performance of all parties providing fulfilment and logistics will likewise be critical to policy evaluation.

The more effective these European Commission enforcement changes are – the MFN enforcement, portability of data, the Buy Box design and the increased shipping options – the more likely it is that they will be exported to other jurisdictions facing similar problems, whether from Amazon or another local dominant e-commerce platform.

In the United States, third-party sellers and brands will want California and the FTC to demand the European solutions if they are shown to be successful. Litigation in the US moves so slowly that there will be plenty of time to evaluate the outcomes of the existing EU antitrust commitments and the DMA before any US remedy would need to be chosen.

Moreover, a judge would likely find it attractive to choose a remedy that reduces the possibility of negative unanticipated outcomes in the marketplace. A solution that has been tried in Europe and has succeeded there is much less risky to impose on US consumers.

Additionally, Amazon cannot argue that such a remedy is costly or difficult from an engineering point of view because the company will already have built and deployed it in Europe. But this cheerful picture depends on the effectiveness and success of the new European enforcement package. ■

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Endnotes

1. See European Commission press release of 22 December 2022, '[Antitrust: Commission accepts commitments by Amazon barring it from using marketplace seller data, and ensuring equal access to Buy Box and Prime](#)'. The UK CMA has already agreed commitments (CMA, 2023). In addition, the Italian Competition Authority levied a substantial fine of more than €1 billion; see press release of 9 December 2021, '[A528 - Italian Competition Authority: Amazon fined over € 1,128 billion for abusing its dominant position](#)'.
2. See European Commission press release of 6 September 2023, '[Digital Markets Act: Commission designates six gatekeepers](#)'.
3. See for example Cooper (1986), Salop (1986), Scott Morton (1997), Moshary (2015) and Baker and Chevalier (2013).
4. Amazon Prime is a paid subscription service that gives certain premium benefits to customers, including faster delivery of goods and access to music and other services.
5. FTC ¶ 408. Amazon wanted to minimise any potential backlash from SFP sellers, so in 2019 Amazon let sellers already in SFP remain, while blocking new enrolment. Critically, Amazon communicated to those sellers who were already in SFP that it expected them to fulfil orders themselves, rather than using independent fulfilment providers. Amazon's internal analyses showed that sellers using independent fulfilment services met Amazon's stringent SFP standards more often than sellers fulfilling orders themselves. For example, in the last quarter before Amazon suspended enrolment, SFP sellers using independent fulfilment providers satisfied Amazon's delivery requirement 98.4 percent of the time (compared to 96 percent for all SFP sellers), and satisfied Amazon's shipping requirement 99.8 percent of the time (compared to 96.8 percent for all SFP sellers).
6. See footnote 1.
7. See https://m.media-amazon.com/images/G/65/rainier/help/Selling_Policies_and_Seller_Code_of_Conduct_SG_new_version_clean_PDF.pdf.
8. FTC ¶ 236. The FTC complaint quotes one Amazon executive as acknowledging that the advertising costs are "likely to be passed down to the customer and result in higher prices for customers"; Amazon founder Jeff Bezos is quoted as

instructing executives to “accept more ‘defects’” (the term for junk advertisements) because the advertising revenue to Amazon is more than the sales it loses from the degradation in search quality and higher prices. See FTC ¶ 5.

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Disclosure: Within the last three years the author has engaged in antitrust consulting for a range of healthcare companies, government plaintiffs and the digital platforms Amazon and Microsoft. The author's Amazon engagement ended more than two years ago and predates the US complaints discussed in this article.

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The real effects of trade financing by export credit agencies

Trade finance subsidies are the predominant tool of industrial policy. Poorya Kabir, Adrien Matray, Karsten Müller and Chenzi Xu discuss the effect of the effective shutdown of EXIM from 2015—2019 on firm outcomes

Exports are often seen as boosting economic growth. But exporting internationally requires upfront financing. Recognising this, around one hundred countries around the world have set up export credit agencies to provide subsidised trade financing to support their country's exporters. Today, such subsidies are the predominant tool of industrial policy around the world, especially in advanced economies (Juhasz *et al* 2022).

The rationale behind subsidising export financing is that international trade is complex and involves substantial frictions. For example, exporters need working capital for the period between the production of a product to its final sale. They also face a risk of non-payment from customers in foreign countries after a product is shipped, and these customers may need credit to finance a purchase.

This demand for financing creates a role for intermediaries in supporting exporters, and shocks to these intermediaries can potentially shape trade patterns over long periods of time (Xu 2022).

However, the same frictions limit the pool of institutions able to provide trade financing. As a result, the private market for trade financing is specialised and concentrated (Niepmann and Schmidt-Eisenlohr 2017), which could result in the under-provision of funds.

The role of export credit agencies

Export credit agencies (ECAs) are private or quasi-governmental institutions that act on behalf of national governments to issue insurance and guarantees for financing to exporters. Depending on their mandate, export credit agencies lend directly to exporters or their customers, or provide credit guarantees or insurance to lower the cost of financing of exporters or their customers.

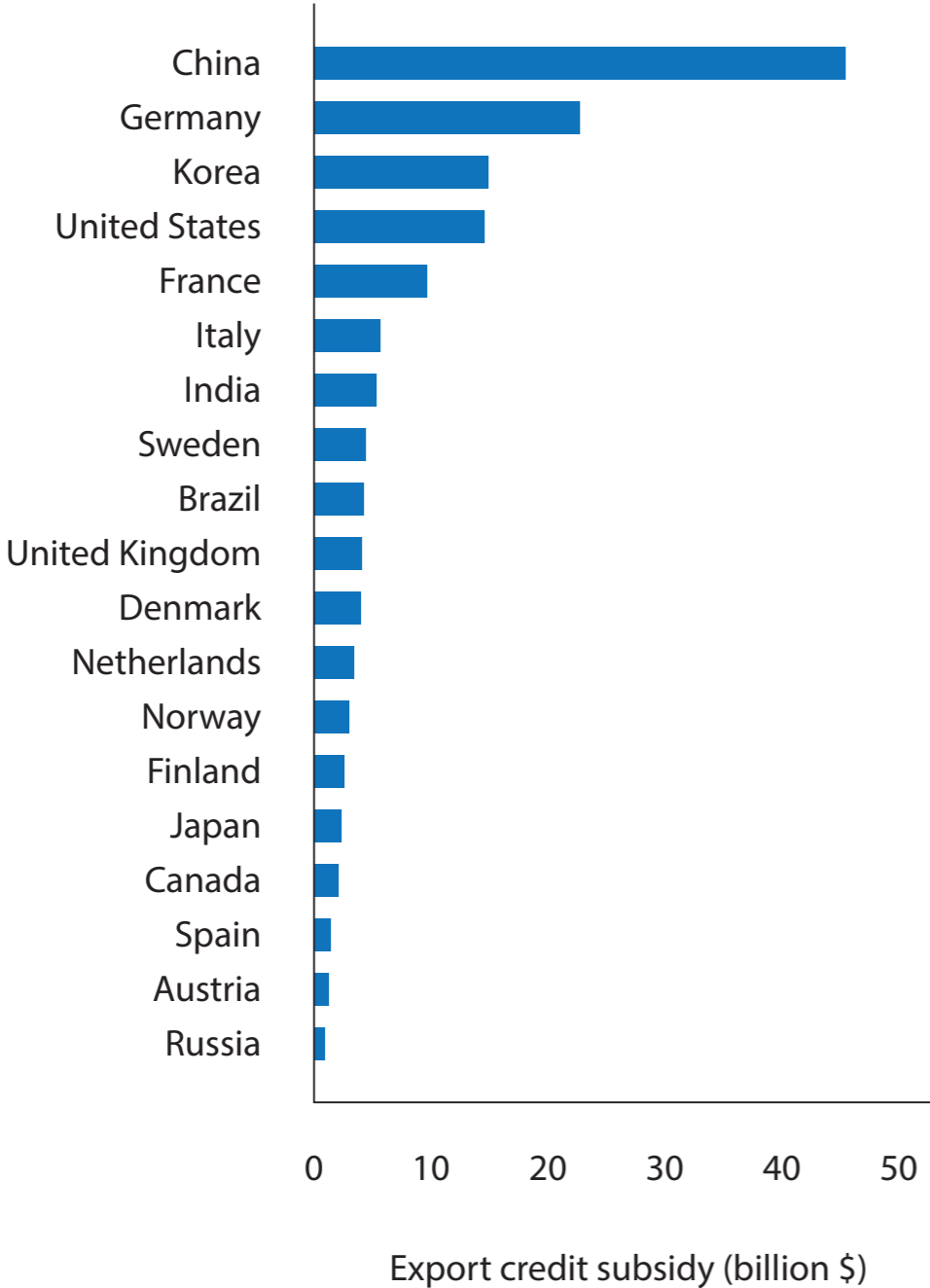
In absolute terms, China, Germany, Korea, and the US spend the most on these programmes. The Scandinavian countries, as well as China and Korea, are among the heaviest users of export credit agency support relative to their exports as we show in panel B of Figure 1.

There is an ongoing debate about whether such institutions should exist. Proponents argue that these agencies boost firm exports by alleviating a private market failure, which in turn can create jobs and promote economic growth.

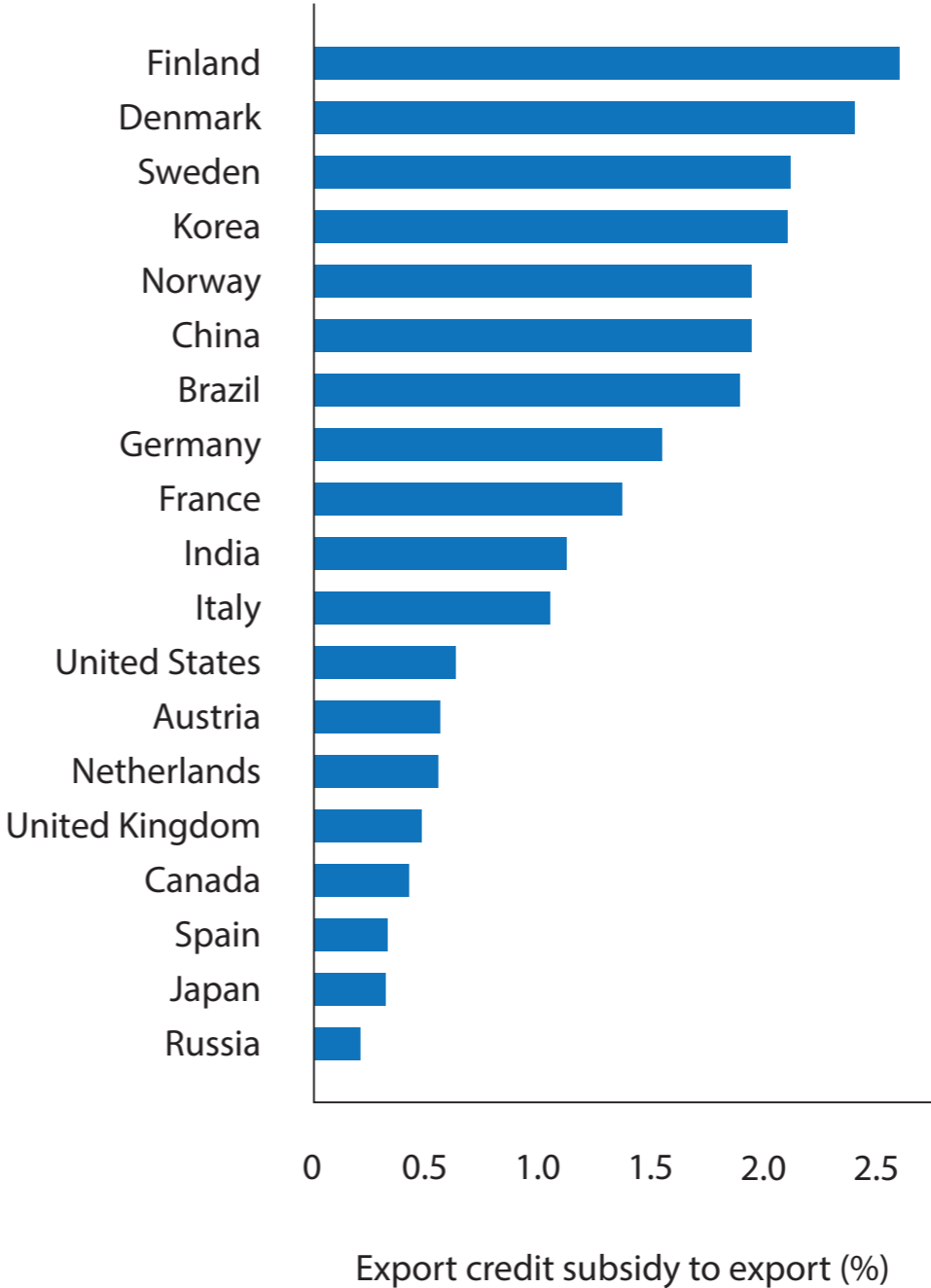
Can governments boost exports by providing targeted trade financing without distorting the allocation of resources? The results in this column, based on the natural experiment of EXIM's lapse of authorisation, suggests that the answer is yes

Figure 1. Export credit subsidies by country

a) Total export credit subsidies



b) Export credit subsidies relative to exports



www.worldcommercereview.com

Source: World Bank 2013

Critics argue that they provide support to firms that would have been able to finance their exports regardless, and therefore have no effect on the beneficiary firms' performance. In this latter view, export credit agencies primarily provide transfers to well-connected firms at the expense of taxpayers, and simply boost beneficiaries' profits.

In addition to this transfer, agencies might also distort the allocation in the economy by shoring up low-productivity firms. This heightened misallocation would then lower aggregate productivity (eg. Hsieh and Klenow 2009, Bau and Matray 2023).

The US experiment

To better understand the role of export credit agencies, we study the temporary shutdown of the Export-Import Bank of the United States (EXIM) between 2015 and 2019, prompted by a lapse in its charter — a first since the agency's inception in 1945 – and lack of quorum on its board of directors.

The shutdown resulted in an 80% drop in the volume of EXIM-supported transactions in 2016 compared to 2014. The volume of export credit support provided by EXIM only returned to pre-shutdown levels after the resumption of full operations in December 2019.

We focus our analysis on publicly traded firms over the period 2010-2019, which were among the largest in the economy and had received over 80% of EXIM support prior to the shutdown. These firms were also the ones most likely to be able to access alternative sources of credit and to be the least constrained following EXIM's shutdown.

In this respect, it is most likely that we find limited real effects for the average firm and potential distortions in the allocation of capital in this sample of firms.

The large effect of EXIM's shutdown

To estimate the effect of EXIM's shutdown, we obtained detailed loan-level data from EXIM for the period 2010 to 2014 and compare firms that previously benefited from EXIM support with firms that did not. This allows us to tease out the effect of EXIM's shutdown on a host of outcomes using a standard difference-in-differences estimator.

The first conclusion of this analysis is that EXIM-dependent firms experienced a substantial drop in their global sales as we show in Figure 2. This large drop can be explained by a reduction in firm exports, which we are able to measure in several ways, including using proprietary data on the universe of firms' maritime export transactions.

The large drop in global sales resulted in a permanent reduction in capital and labour but did not affect firms' average return on assets. The combination of the large drop in global sales, capital, and labour with the lack of an effect on profitability is inconsistent with a view of inefficient 'capture' in which EXIM support is a pure transfer to beneficiary firms that allows them to earn higher profits without having real effects.

The combination of the large drop in global sales, capital, and labour with the lack of an effect on profitability challenges the prevailing scepticism about the efficacy of industrial policy, particularly the criticism that such interventions are mere transfers to large, well-connected firms without tangible economic benefits.

So why did firms not compensate for the loss of access to EXIM funding? We show that the loss in global sales is concentrated on firms with higher financial frictions, and that the drop in exports is larger for maritime exports than for other form of exports.

This sensitivity is consistent with the importance of financing frictions in explaining the effect of the EXIM shutdown since maritime exports, which tend to have longer shipment times and therefore higher working capital

needs (eg. Ahn *et al* 2011, Xu 2022). This underscores the unique role that government-backed agencies like EXIM play in filling gaps left by the private sector, even in advanced financial ecosystems.

Did EXIM foster misallocation of capital and export?

The average negative effects of EXIM's shutdown might be of limited consequence or could even be positive for total output if EXIM initially distorted the competition across US firms in a way that fostered a misallocation of capital.

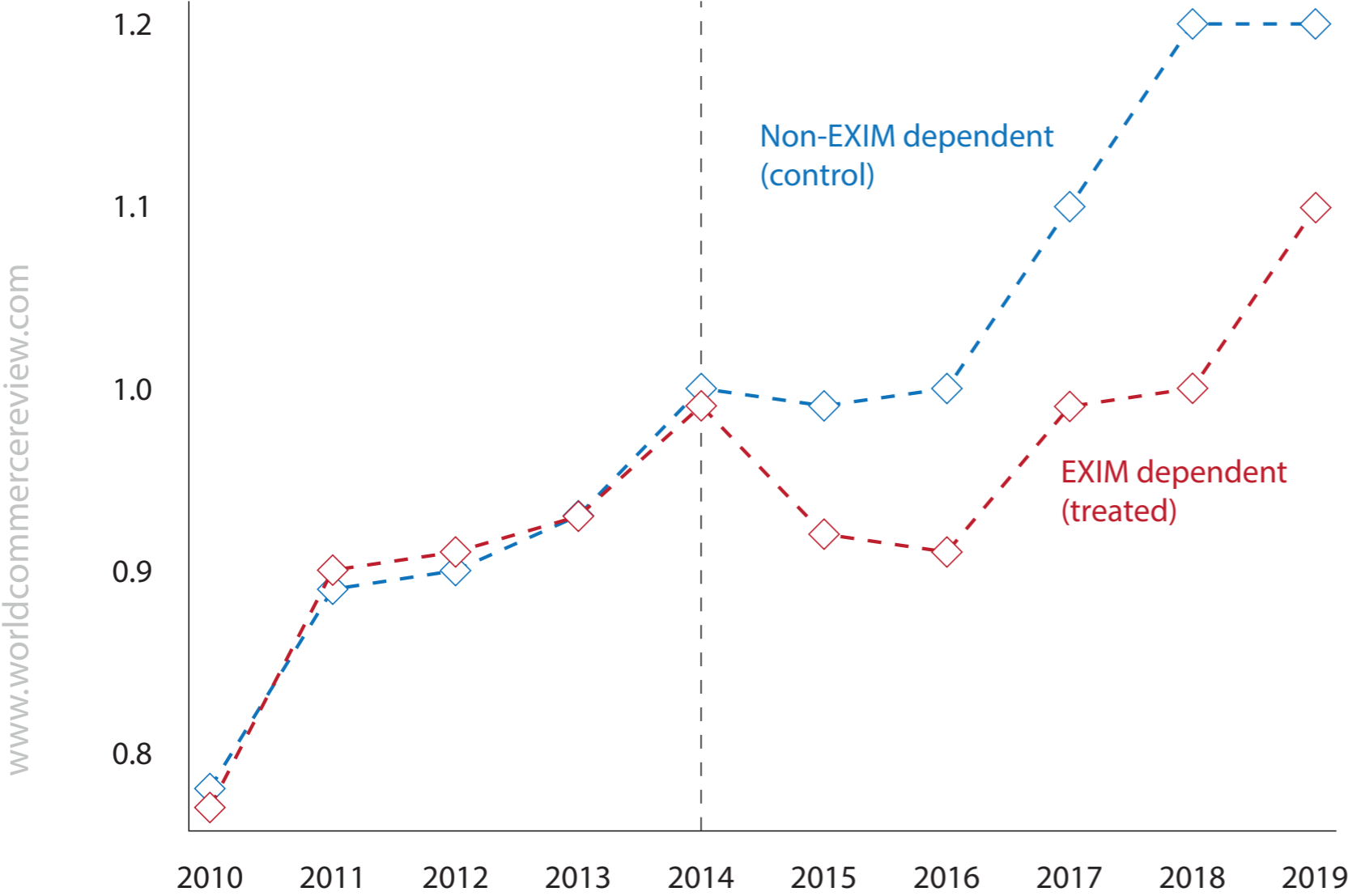
This would happen if beneficiary firms were simply less productive than other firms, which could make exporting infeasible for these unproductive firms without EXIM credit. If this was widespread, shutting down EXIM could increase overall efficiency.

This argument is one of the classic costs attributed to industrial policies, where the policy is wasteful because it only aids the preservation of low-quality firms.

We provide three pieces of evidence inconsistent with this hypothesis. First, we show that the reduction in global sales and capital accumulation induced by EXIM's shutdown is concentrated among firms with high exporting opportunities. In particular, we show that EXIM support is stronger for firms in industries that provide goods experiencing larger export growth in the world market.

Second, we rely on ex-ante differences in firms' marginal revenue products of capital (MRPK) before the shock in order to estimate how misallocation evolves after the reform, in a spirit similar to Bau and Matray (2020, 2023). We find that EXIM's shutdown led to a drop in global sales and capital that is around five times as large for high MRPK firms (firms above their industry's median MRPK) relative to low MRPK firms.

Figure 2. Evolution of global sales



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The result that the capital response is larger for high MRPK firms implies that the reallocation of capital across firms worsened due to EXIM's shutdown, which would suggest that a reduction in export credit subsidies increases (not decreases) misallocation.

Third, using aggregate customs data at the product-destination-year level, we show that the EXIM shutdown also impacted total export activity. Industries with a higher reliance on EXIM support saw a reduction in exports relative to others, implying that the firm-level reduction in exports we document aggregate up to industry level.

Therefore, EXIM support creates new exports rather than just reallocating export market share among US firms in favour of firms supported by EXIM.

Conclusion

Can governments boost exports by providing targeted trade financing without distorting the allocation of resources? The results in this column, based on the natural experiment of EXIM's lapse of authorisation, suggests that the answer is yes.

Although there are a few caveats for interpreting our results, they are broadly inconsistent with a pure rent-seeking explanation. While EXIM-supported firms shrank considerably after the agency's shutdown, this effect was more (not less) pronounced for firms that were plausibly more productive before the shock and had more promising export opportunities.

We also find no evidence that the profitability of firms cut off from subsidies decreased over and above the reduction in firm size, which is inconsistent with these firms pocketing artificially high rates of profits through subsidies beforehand.

The results of our column speak to a renewed debate on the circumstances in which industrial policy can be successful in supporting the domestic economy (eg. Juhasz 2015, 2018, Juhasz *et al* 2023a, 2023b). Of course, our study only relies on a single unusual shock—the virtual shutdown of an export credit agency responsible for providing subsidised trade financing to the country’s exporters.

While this setting enables us to credibly estimate the effect of export credit subsidies on domestic firms, it also limits the generalisability of our findings. We hope future work will shed light on the effects of industrial policies in other settings.

Our study speaks to the renewed debate on the circumstances in which industrial policy can be successful in supporting the domestic economy (eg. Juhasz *et al* 2023a, 2023b). While the results from EXIM’s shutdown period do not conclusively settle the debate, they do provide concrete evidence of the positive impact that well-crafted industrial policies, such as export credit subsidies, can have on both firm-level performance and broader economic outcomes.

It suggests that the maturity of financial markets does not diminish the effectiveness of industrial policy. We hope future work will shed light on the effects of industrial policies in other settings. ■

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