





The role of competition policy in promoting economic recovery



Please cite this publication as:

OECD (2020), The role of competition policy in promoting economic recovery, www.oecd.org/daf/competition/the-role-of-competition-policy-in-promoting-economic-recovery-2020.pdf

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the OECD or of the governments of its member countries or those of the European Union.

This document and any map included herein are without prejudice to the status or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city, or area.

© OECD 2020

Foreword

This paper explores the interaction between the governmental policies adopted to face the COVID-19 emergency and competition policy. As the COVID-19 crisis develops and moves through different stages, governments, policymakers and regulators, including competition authorities, face different challenges in order to support a swift and robust recovery.

In most jurisdictions, the state has been playing a role in minimising the direct hit from the crisis and can be expected to continue to play a role in the shaping of the economic recovery. In this context, the question therefore arises: how can competition policy and competition authorities contribute to a faster and more sustained economic recovery?

The paper concludes that competition policy and competition authorities have a very relevant role to play to ensure a robust economic bounce-back and recovery in the long-term.

Competition advocacy by competition authorities can be expected to play a more relevant role in the near future, helping policy makers make full and well-informed policy choices, accounting for competition distortions from state interventions, and designing support measures. Strong competition enforcement will also be important, and competition authorities will have to carefully prioritise in order to help ensure the drive for economic recovery.

This paper was written by Ruben Maximiano and by Cristina Volpin of the OECD Competition Division and benefitted from comments by António Gomes, Antonio Capobianco, Sabine Zigelski and Federica Maiorano, all from the OECD Competition Division. It was prepared as a background note to discussions on the role of competition policy in promoting economic recovery at the December 2020 session of the OECD Competition Committee, http://www.oecd.org/daf/competition/role-of-competition-policy-in-promoting-economic-recovery.htm.

Table of contents

| Executive Summary | 7 |
|---|----------|
| 1 Introduction | 9 |
| 2 Insights from previous crises | 11 |
| Suspension of antitrust laws holds back recovery | 11 |
| Lax merger control in times of crisis does not improve long-term resilience | 11 |
| Anti-competitive policies can hinder economic recovery | 12 |
| Crises may strengthen the case for pro-competitive structural reforms | 12 |
| Market forces left alone may not always lead to an efficient allocation of resources State support should include exit incentives and strategies | 13 14 |
| 3 Competition advocacy for recovery | 15 |
| The benefits of competition are key to recovery and resilience | 15 |
| Competition authorities' advocacy role | 16 |
| The role of competition advocacy in the design of state support | 17 |
| Competition principles for an economic analysis of state support | 18 |
| Remedies for mitigating competition distortions | 21 |
| Design of exit strategies from state support | 22 |
| The case of recapitalisation of firms by the State | 23 |
| Competition as a cornerstone of industrial policy for recovery | 25 |
| Opportunities for competition assessment of laws and regulations | 26 |
| Ensuring that regulatory reform to tackle the crisis is pro-competitive | 27 |
| Tackling existing regulations for regulatory reform | 27 |
| The relevance of ensuring a competitive public procurement | 28 |
| 4 Competition enforcement for recovery | 30 |
| Prioritisation choices | 30 |
| Co-operation agreements and crisis cartels | 32 |
| Abuses of dominance | 34 |
| Merger control | 36 |

| | ۱ | |
|--|---|--|
| | | |

| 5 Conclusions | 39 |
|---------------|----|
| Endnotes | 40 |
| References | 43 |

Executive Summary

The COVID-19 pandemic and the lockdown measures adopted by Governments have triggered and led to a major economic downturn across many sectors, exceeding by far the negative impact of the 2008 global financial crisis.

Governments adopted unprecedented measures to contain the effects of the recession in the emergency phase and now stimulate the economic recovery. These range from fiscal policies, monetary policies, trade policies to industrial policies, and include tax relief, wage subsidies, grants, preferential loans, loan guarantees and State equity.

Competition authorities can play a fundamental role in assisting governments in the recovery phase, contributing to a faster and more sustained economic recovery.

The beneficial effects of competition have long been demonstrated at both the macro and micro-economic levels, to optimise the use of resources, drive economic growth, boost productivity and lead to better prices, greater choice, higher quality of goods and services and more innovation. Competition can also help foster resilience of markets by offering alternative value chains and business models and help ensure more stable distribution of essential goods.

Insights from previous crises show clearly that competition can play an important role in economic recovery.

The range of powers of competition agencies, namely enforcement and advocacy powers, are relevant in the different phases of the crisis.

Government interventions may fail to account for unintended consequences on markets. A good decision-making process requires that all costs are fully taken into account, including those that relate to loss of competition. Competition authorities may be well placed to provide advocacy advice in the design of measures to ensure that they are pro-competitive or to minimise competition distortions. Competition principles should inform the design of industrial policy measures to "build back better".

In their advocacy role, competition authorities can also propose pro-competitive structural reforms with opinions and recommendations to governments and advocate for competitive tender processes for capacity and stockpiling of essential goods and for infrastructure needs in the recovery phase.

Further, competition authorities can support the economic recovery by redirecting enforcement resources towards strategic markets and industries considered important for the recovery process. Sectors that may take priority include, for instance, those that have been strongly implicated in the response to the crisis (such as pharmaceutical or e-commerce) or those that can generate positive spill-over on social welfare (such as labour markets).

Finally, competition authorities can use their enforcement powers to sanction anticompetitive infringements and regulate mergers that may exacerbate the consequences of the crisis or hold back the economic recovery. Enforcement activity may, in particular, need to involve a stronger focus on long-term dynamic effects.

THE ROLE OF COMPETITION POLICY IN PROMOTING ECONOMIC RECOVERY © OECD 2020

Competition law and policy should therefore not be seen as a 'political luxury good' that economies can do without in times of crisis but instead as a fundamental staple of economic recovery.

1 Introduction

The COVID-19 pandemic and related containment measures have led to an unprecedented economic shock. The OECD estimates that the direct impact of the containment measures amounts to 20-30% of GDP in G7 countries (OECD, 2020[1]).¹

Some sectors have been particularly affected by the containment measures and will take longer to recover. Sectors like tourism, transportation (including aviation)², retail, entertainment and food services have experienced the strongest impact of the pandemic.³

The impact on the real side of the economy, namely on demand, output and employment is much greater than that of the global financial crisis.⁴ Firms struggled to survive as their business revenues and corporate cash flows and working capital decreased rapidly with the confinement measures.

Significant liquidity issues raised the risk of a corporate solvency crisis. According to an OECD policy brief from May 2020, without any state intervention, 38% of the firms surveyed – in a cross-sector sample of almost one million firms operating in 16 European countries – would run out of liquidity in three months of lockdown measures (OECD, 2020[2]).

The corporate solvency crisis risked a massive loss of labour and business relationships, know-how and investments that could have a long lasting effect and hamper economic recovery. Firms depend on relationships with different stakeholders such as workers, suppliers, customers, governments, and creditors. These take time and are costly to build and maintain. Many of these relationships require specific investments that involve the creation of knowledge and reputation. These relationships and the knowledge ingrained in them constitute important intangible assets, or organisational capital, for firms (Didier et al., 2020[3]). The loss of these relationships through insolvencies from a temporary shock such as the one created by the Covid-19 pandemic would require these to be redeveloped, which would take time and be costly, thereby hindering the economic recovery.

All these elements taken together prompted unprecedented government actions. Several governments tailored targeted measures to prevent a wave of insolvencies of fundamentally viable companies

Governments are taking a variety of measures to support firms in difficulties, including tax relief, wage subsidies, grants, preferential loans and loan guarantees⁵. Governments are also taking equity stakes in distressed firms. This has occurred, for instance, in airline carriers in Italy, Germany and the Nordic countries, or firms in the French automotive industry. More than USD 11.7 trillion of relief packages (nearly 12% of world GDP) with fiscal support, credit or equity injections have been so far introduced across the world.⁶ In August 2020, support to airlines alone had amounted to approximately USD 160 billion (OECD, 2020_[4]).

The challenges faced by governments, policymakers and regulators, including competition authorities will differ along the two main phases of the pandemic: the emergency phase and the recovery phase. Each stage will require different strategies and approaches and present distinct challenges. In the first phase of the crisis, the focus is on issuing immediate measures to avoid the liquidity crisis becoming a solvency one of enormous proportions (emergency phase). In the recovery phase, the focus is on building back the economies in a speedy and sustainable manner (recovery phase).

Both phases will require multi-dimensional policy responses: from fiscal policies, monetary policies, trade policies to industrial policies. In the face of a pandemic of an unprecedented scale, the option of leaving it up to market forces to restore economic stability has not been considered an appropriate solution. Countries are implementing anti-recession packages to minimise the medium to long term damage to the economy. In most jurisdictions, the state has been playing a role in minimising the direct hit from the crisis and can be expected to continue to play a role in shaping the recovery.

Competition authorities can be key stakeholders in contributing to an adequate policy response in the face of the Covid-19 pandemic, both through the enforcement of competition rules, as well as through advocacy for competition.

Reducing competition and competition enforcement in a crisis can entail heavy costs. The main consideration should be whether the benefits of reducing competition enforcement could be higher than those costs and whether the same objectives could be attained with less restrictive or anti-competitive alternative policies.

The scale of government interventions in the economy in the face of the Covid-19 crisis strengthens the need for effective competition advocacy. The measures adopted by Governments around the world impact on how markets function, domestically and internationally. The unprecedented extent of Government intervention in the economy can lead to market distortions. This calls for increased advocacy from competition authorities, aimed at minimising market distortions, and ensuring markets work well and that competition can play a key role as a driver of the economic recovery.

The role of competition as a key driver of productivity and economic growth means that industrial policy aimed at economic recovery should incorporate competition considerations. Competition authorities can thus assist in identifying the reform priorities and ensuring competition is one of the cornerstones of a swift economic recovery.

Competition authorities need to continue to vigorously enforce competition law. If anything, competition law enforcement may be even more relevant in times of crises. A likely consequence of the crisis will be an increased level of concentration in markets. Some firms will undergo financial distress and exit the market, whilst others will merge or be subject to attempted acquisitions.

Competition law and policy should therefore not to be seen as a 'political luxury good' that economies can do without in times of crisis (Crane, 2010_[5]) but instead as a fundamental staple of economic recovery. Policymakers should consider competition as a fundamental constituent of economic productivity and that doing without it or sacrificing it will have long-lasting costs on social welfare.

This paper is intended to contribute to the discussion on the ways in which competition policy and competition authorities may contribute to a faster and more sustained economic recovery. It will address this question by looking to apply not only the traditional antitrust tools, but also the broader set of policy instruments and principles that competition authorities typically have access to.

It is organised as follows: Section 2 describes the lessons that can be learnt from previous economic crisis; Section 3 discusses the role for competition advocacy by competition authorities, in the context of state measures, industrial policy, pro-competitive reforms and public procurement; Section 4 describes the role of enforcement in economic recovery, from cartel and co-operation agreements, to abuse of dominance and mergers; Section 5 concludes.

2 Insights from previous crises

Suspension of antitrust laws holds back recovery

Some studies have shown that the suspension of some key provisions of antitrust laws may have prolonged the US Great Depression (Crane, $2010_{[5]}$). As a result, claims have been made that the depression may have lasted seven years longer than otherwise (Waller, $2004_{[6]}$; Cole and Ohanian, $2004_{[7]}$)).

In the early 30s, the National Industrial Recovery Act (NIRA) was passed by the Roosevelt administration. The goal of the NIRA was to limit competition and restrict production in the expectation that it would keep prices at a reasonable level, sustain higher wages, stimulate consumer spending thus fostering business investment (Waller, $2004_{[6]}$; Cole and Ohanian, $2004_{[7]}$).

Industrial and trade associations were allowed to establish industry-wide minimum wage rates and other working conditions. Industries that abided by such codes would then be exempt from cartel prohibitions. This led to widespread collusion.⁷ Industries took advantage of the exemption to regulate prices and output, turning formerly competitive industries into cartels.

The NIRA policy continued to have consequences even after it was considered unconstitutional by the Supreme Court in 1935. Industries continued to follow the informal guidance set out in the codes and enforcement by the Department of Justice (DOJ) remained limited until 1938 (Waller, 2004_[6]).

Wholesale prices in 1935 were estimated to be 24% higher than they would have been and remained 14% higher still in 1939. Collusive pricing as a result of NIRA contributed to inflation, at a time when output was substantially below trend resulting in an impact similar to a supply shock (Romer, 1999_[8]). Real output remained 25% below trend (Cole and Ohanian, 2004_[7]), (Taylor, 2002_[9])⁸ and the policy may have reduced consumption and investment by approximately 14% compared to a competitive scenario.

The suspension of the antitrust rules under the NIRA policy can thus be said to have held back economic recovery following the US Great Depression. The permissive approach to cartels in the US during 1933 to 1939 was considered as the main cause of the weaker economic recovery during that period (Cole and Ohanian, 2004_[7]), (Weinstein, 1982_[10]).

Another example of the negative consequences from undue relaxation of competition enforcement is the Hawaiian airline market case in the aftermath of the 9/11 tragedy. A temporary exemption from the application of competition law was granted to allow for capacity rationalisation, through an agreement to co-ordinate capacity between two Hawaiian airlines. This led to price increases during and for two years after the end of the immunity period, see Kamita (2010[11]) quoted by Rose (2020[12]).

Lax merger control in times of crisis does not improve long-term resilience

The Global Financial Crisis led to massive state support for the banking industry and consolidation to high levels in certain markets and jurisdictions (Independent Commission on Banking, 2011[13]). Some of the

THE ROLE OF COMPETITION POLICY IN PROMOTING ECONOMIC RECOVERY © OECD 2020

findings from this period were that, for markets to work well, competition was considered to be part of the solution, including through a reduction in switching costs, together with a better and more solid regulatory framework. Competition can also contribute to financial stability.

In 2009, during the global financial crisis, the Lloyd's and Halifax Bank of Scotland (HBOS) merger in the UK is an often–mentioned example of the risks entailed by waiving the application of merger control rules. The Office of Fair Trading (OFT) considered that the merger raised competition concerns and referred it to the Competition Commission. A new public interest consideration test relating to the 'stability of the UK financial system' was however introduced by the Secretary of State. This new test was introduced based on fears of collapse of HBOS, which was, at the time, the UK's biggest mortgage lender and a big provider of current account services. The test enabled the government to allow the merger.⁹

However, the Lloyd's and HBOS merger is seen as not having accomplished its role of achieving financial stability. A subsequent bail-out by the government was required, leading to severe losses in the share value of Lloyd's. More importantly, the merger was seen to harm competition, by irreversibly creating a powerful player facing fewer rivals (Vickers, 2008, p. 9[14]; Lyons, 2009, p. 39[15]; Stephan, 2011[16]).

Similarly, the big banks mergers of the late 90s and 2000's in Japan yielded limited efficiencies and in general did not improve the financial soundness of the banks involved (Harada and Ito, 2011[17]). In a crisis that led to a constant erosion of capital by losses from nonperforming loans (NPLs) and declining stock prices, mergers of very large banks were seen as a way to enhance capital by taking advantage of operational synergies and scale economies. Whilst some mergers were genuinely seeking to achieve scale economies, others were simply giving priority to getting bigger. In general, empirical evidence suggests that these mergers failed to achieve the intended scale economies and did not reduce the probability of failure

Anti-competitive policies can hinder economic recovery

During the economic crisis of the 1990s, Japan followed policies that contributed to restrict competition in some industries, with regulatory and import barriers as well as price controls, with wide-spread cartelisation (Porter and Sakakibara, 2004_[18]). The targeted sectors were mainly those in which Japan was not successful internationally.

The depression in Japan in the 1990s highlights the importance of competition for productivity (Kehoe and Prescott, 2007_[19]). In those sectors where domestic competition in Japan was strong, the Japanese firms were successful on the international level showing the importance of competition to exit a crisis (Hayashi and Prescott, 2002_[20]; Porter and Sakakibara, 2004_[21]). Government policies that restricted competition together with other policies with a negative impact on total factor productivity (Kehoe and Prescott, 2007_[19]), were major factors in prolonging the recession in Japan (Fingleton in (UK House of Commons, 2009_[22]))¹⁰.

Crises may strengthen the case for pro-competitive structural reforms

Many regulations are introduced in times of economic disruptions and crisis to deal with short-term issues, but leave a long term legacy. This strengthens the case for the role of competition advocacy to ensure that regulations adopted in times of crisis are pro-competitive or developed with the least negative impact on competition.

A cited example is the regulation of the aviation industry in the US in the 1930s during the Great Depression. Following the introduction of aircraft that allowed for the expansion of commercial passenger air service, following claims from the airline industry of protection from "the destructive competition", the

US Congress enacted regulation in 1938. This regulated entry, price and routes (Borenstein and Rose, 2014_[23]). The industry only moved to a more market-based industry with the Airline Deregulation Act of 1978. The latter eliminated price and entry regulation of the domestic airline industry, delivering benefits to consumers.

In general, pro-competitive reforms can contribute to an economy's resilience to economic shocks. The reforms implemented in Australia in the 1990s contributed to higher productivity and growth, but also to the economy's resilience to the Asia financial crisis of 1997-98. As the Australian Treasury noted: "(...) the ability of the Australian economy to adjust to the reduced export demand and lower commodity prices brought on by the Asian crisis illustrates the benefits of an economy made more responsive, flexible and resilient through microeconomic and regulatory reforms and a sound macroeconomic policy framework." cited in (Corden, 2009[24]).

Following the Great Financial Crisis of 2008-2009, and in the context of an international financial assistance programme in 2010, Greece agreed to a comprehensive policy package aiming to restore fiscal sustainability and promoting sustainable growth.

Several wide-ranging initiatives were taken to reduce the barriers to competition created by product market regulation. These ranged across the main sectors of the economy, including the manufacturing, retail trade, wholesale trade, tourism and construction services sectors. The sectors were chosen for their contribution to help Greece recover from the crisis, because of their significant impact on employment or valued added on the economy.

The pro-competitive reforms were undertaken with the assistance of the OECD in co-operation with the Greek competition authority (HCC). Three competition assessment projects were undertaken in 2013, 2014 and 2016, following the methodology set out in the OECD Competition Assessment Toolkit (OECD, 2019_[25]). The joint OECD-HCC projects resulted in more than 700 recommendations, the vast majority of them implemented by the Greek government. Economic benefits were estimated to amount to around EUR 5.2 billion, or about 2.5% GDP (OECD, 2014_[26]).

Market forces left alone may not always lead to an efficient allocation of resources

Economic recovery can be much slower when the zombie firms¹¹ are maintained operational. Zombie firms are less productive, more leveraged and not able to invest. Misdirected government support or additional bank lending to avoid write-offs which could impair banking institutions, can prevent the exit of these firms.

The significant presence of zombie firms also contributed to Japan's "lost decade" in the 1990s. Research by (Ricardo Caballero et al., 2006_[27]) shows that banks, not willing to recognise losses, given the implications on their regulatory capital limits, extended credit to these otherwise insolvent firms.

A similar story is also found following the global financial crisis. Research by (Fabiano Schivardi et al., $2017_{[28]}$) shows – on a basis of a bank-firm relationship database in Italy in the period 2008-2013 - that under-capitalised banks misdirected credit in a manner that contributed to the survival rate of zombie firms and to the bankruptcy of otherwise healthy firms.

Market forces may not guarantee that finance will necessarily flow to viable and efficient firms facing temporary financial difficulties. Well-designed state support may therefore be important in such instances.

Box 1. Beware the Zombies

Recent studies have shown that even before the current pandemic many advanced economies have already shown a significant increase in zombie firms from around 4% in the mid-1980s to 15% in 2017 of listed firms, according to the Bank for International Settlements (Banerjee and Hofmann, 2020_[29]).

Zombie firms have been considered as a potentially important reason for Japan's "lost decade" in the 1990s, when banks, not willing to recognise losses, extended credit to these otherwise insolvent firms (Ricardo Caballero et al., 2006_[27])According to these authors this may be explained by banks renewing loans to avoid having to write-off loans which would have had implications on their regulatory capital limits. More Recent literature reviewed by (Banerjee and Hofmann, 2020_[29]) has found a similar story following the global financial crisis (Storz et al., 2017_[30]) and (Schivardi, Sette and Tabellini, 2017_[31]). (Ricardo Caballero et al., 2006_[27]) show that the presence of zombies in the 1990s depressed profits, productivity and investment. Investment was between 4% and 36% lower in the 1990s than if the share of zombie firms had remained at historical averages. These findings have been confirm for more countries and a longer period by (Banerjee and Hofmann, 2018_[32]).

Bankruptcy rules may play a role, since laws that inhibit corporate restructuring are associated with a greater prevalence of such zombie firms (Andrews and Petroulakis, 2017_[33]) highlight the role of bankruptcy laws. Competition authorities may therefore wish to consider advocating for bankruptcy rules that allow for such corporate restructuring.

State support should include exit incentives and strategies

In February 2009, the US Congress passed a Recovery Plan aimed to create new jobs and save existing ones, spur economic activity and invest in long-term growth. The Troubled Assets and Relief Programme (TARP) had a USD 787 billion envelope, of which USD 275 billion available for federal contracts, grants and loans. The Treasury invested USD 80 billion in the auto industry. USD 245 billion were invested to recapitalise banks and other financial institutions, of which a total of USD 275 billion was repaid.

The TARP is an example of a programme promoting financial stability and economic growth as the rationale for the state intervention. In the auto industry, General Motors received USD 51 billion or 80% of the amount disbursed under the automotive industry financing program, with US Treasury owning 60.8% of shares. The arm's-length approach to this state ownership was implemented by the state not exercising voting rights on day-to-day business matters (in any case limited for preferred stocks) and not instructing the appointed board members on how to vote. The bailout of GM imposed strenuous conditions for restructuring on the companies in exchange for government support.

The Treasury's publicly stated goal was to exit TARP investments "as quickly as possible", while maximising returns, promoting financial stability and minimising market disruption. The TARP legislation required the government to maximise returns on the sales of equities, but had in-built flexibility, as it did not specify the price, process or timing. The exit from the automotive sector was done via the public trading of General Motors' stock through an initial public offering and a debt repayment.

3 Competition advocacy for recovery

Competition authorities can play an important role in the multi-dimensional policy responses to the Covid-19 pandemic. Their expertise in how markets function and the key role of competition in ensuring conditions for economic growth and recovery make them privileged stakeholders in a wider policy context.

The range of powers of competition agencies, namely enforcement and advocacy powers, are relevant in the different phases of the crisis. Their experience in using economic analysis, tools and evidence in assessing anti-competitive effects and analysing potential efficiencies can be put to good use when promoting the conditions for recovery.

There is no "one size fits all" recipe for competition authorities to participate in the process of recovery. The specific institutional context, which varies significantly across jurisdictions, influences the scope for competition advocacy.

The benefits of competition are key to recovery and resilience

A significant array of empirical evidence shows that competition delivers many benefits at both macro and micro-economic levels. At the macro-economic level competition promotes the optimal use of scarce economic resources, drives economic growth, boosts firms' productivity and production levels, multiplies business opportunities and can help reduce inequality and create more and better jobs (OECD, 2014[34]).

At the micro level, competition leads to better prices, greater choice and higher quality of goods and services. Competition also accelerates the adoption of new technologies and encourages innovation. This works as a virtuous circle, since a competitive and innovative firms will spur its competitors to compete and innovate. It is this mechanism that then leads to the macro economic benefits boost of growth, benefits that accumulate over time, increasing prosperity in the long run.

When the variety of innovation is not protected, consumers are more exposed and more severely affected by demand or supply shocks. This is particularly relevant in a pandemic and post-pandemic world. Using the example of the US market for medical ventilators during the Covid-19 pandemic, Scott Morton (2020_[35]) underlines the importance of competition as a key driver of quality, choice and innovation and, in particular, in preserving the variety of innovation.

Competition can help ensure more stable distribution of essential goods. Even when disruption occurs, in competitive supply chains, these may be corrected by competitors' entry. Moss and Alexander (2020_[36]) have argued that competition can help ensure that food systems (including agricultural inputs, processing, manufacturing, and distribution) are more resilient. The authors state that, while shocks such as extreme weather conditions, diseases and conflict regularly affect food supply chains, those economies where competition is vigorous are less likely to suffer disruptions.

Competition authorities' advocacy role

Government interventions may fail to account for unintended consequences on markets (e.g. by leading to harmful consolidation or market distortions). Competition authorities are well placed to provide advocacy advice in the design of measures to ensure that they are pro-competitive, especially in the long run. This may be particularly relevant in the case of bailouts, equity assistance programmes and exit strategies from governmental measures. Ensuring that the role of the state is competitive neutral and that firms are able to operate in a level playing field is paramount for a successful implementation of state support measures.

Further, policy responses to the Covid-19 crisis might be less effective, the less competitive markets and economies are (Padilla, 2020_[37]). Governments should keep in mind that fiscal policy is a more effective tool to increase aggregate demand when product markets are more competitive.

A good decision-making process requires that all costs are fully taken into account, including those that relate to loss of competition. Lack of full awareness of the benefits of competition may mean that policymakers do not intend to harm competition, their actions may result from lack of awareness of the full costs and of possible less anti-competitive alternatives that could be put on the table and would minimise the long-term costs of their decision-making.

Especially in a post-crisis context, competition authorities should advocate for regulatory reforms that are pro-competitive and can contribute to increased economic growth. Crises can be an opportunity for pro-competitive reforms. Reducing barriers to competition in existing and proposed legislation and regulation, whilst preserving the desired government objectives, can contribute to economic recovery.

Competition advocacy is also key to ensure that competition enforcement continues to be a relevant tool for well-functioning markets. In periods of economic distress, a narrative that often emerges is that relaxing competition enforcement, with a lenient approach to cartels and to merger control, could allow businesses to better cope with the effects of the crisis.

Relaxing competition rules will lead to a reduction in the disciplining effect of firm rivalry and the mechanism of selection between efficient and inefficient firms. Rents from market power will come to the detriment of economic growth and consumers. Experience from prior crises shows that suspending or relaxing the enforcement of competition law would delay recovery as well as the resumption of growth trends before the crisis.

Raising awareness as to the benefits of competition and communicating those benefits to policymakers is thus paramount in times of crisis. Specifically, the welfare effects of lax competition enforcement or policy involve difficult trade-offs between elements and variables that may not easily be compared or forecast.

Several aspects may bias the policy decisions in the context of Covid-19. On the one hand, the short-run costs and benefits are tangible. They accrue to specifically identifiable stakeholders and can be traced directly to a certain political action. On the other hand, the long-term costs and benefits, even when they are more significant, are less visible, less immediate and not so easily linked to the specific decision. This context may bias political incentives towards an approach that disregards policy consequences for market structures (e.g. more favourable to allowing rescue mergers).

Competition advocacy gains an added relevance to counterbalance misinformation stemming from rent seeking and lobbying activity. The huge amount of state support being deployed may lead to opportunistic behaviours by firms. For instance, firms may lobby to influence the regulatory framework so as to protect or increase their market power (Tirole, 2020_[38]).

The role of competition advocacy in the design of state support

The scale of the Covid-19 crisis called for an unprecedented government response. State interventions can increase social welfare, in particular in an economic shock and downturn as the one created by the Covid-19 crisis. This is particularly important in the Covid-19 crisis, in face of the severe disruption of supply chains and the disconnection between demand and supply. The measures adopted can have an impact on competition in the market. Whilst state support measures can reduce market power (e.g. by fostering entry into a market), they may also create market power and distort competition.

Competition is a key dimension to be considered in policy decision making. The design of Government interventions in times of crisis requires a complex assessment of the potential costs and benefits of alternative policy measures. If not carefully crafted, state support can distort competition and harm market efficiency in a variety of ways.

State support can disrupt the dynamics of market entry and exit of firms. State intervention that prevents the takeover, restructuring, or the exit of less efficient firms from the market, distorts the competitive process. The exit of firms and their replacement by entry and expansion of other firms in the market is an important driver of efficiency, productivity and growth.

Selective state intervention can un-level the playing field and soften competition. Competitors of firms that benefit from state support may be prevented from capturing the return on their investment, hindering incentives to invest. State support could also allow a firm to engage in predation, leading competitors to exit the market.

State support may also lead to protectionism and distortions of international trade. State support can provide undue advantages to less efficient domestic firms *vis-à-vis* their more efficient foreign rivals. Other countries may respond in an attempt to re-establish a level playing field by also providing subsidies or other type of support to their domestic industry. This can lead to a race for state support, which may cause significant distortions in both domestic and international markets.

The efficiency of state support measures may be hindered by lobbying from private interest groups. Private interested groups have been shown to be able to influence policymakers in their favour in both developed as well as in developing economies. Rent-seeking may affect the nature and destination of subsidies. Evidence has shown that, as a result, sector-or-firm specific public policy is in general tilted in favour of declining industries (OECD, 2010_[39]). Several econometric studies analysing subsidies to private firms, found that "political processes driven by the desire for politicians to gain favourable press coverage may lead to spending decisions that incur costs that are out of proportion to the resulting benefits" (Dewatripont and Seabright, 2006_[40]).

In light of all these potential distortionary effects of selective state support measures, competition considerations should be taken into account in the decision making process. This would allow for better decisions as to whether a particular state support measure being planned is warranted or not, as there would be a more significant evaluation of all the benefits and costs.

State aid targeted to a selected firm can have an impact on the firm's strategic decisions regarding entry, exit, output and input decisions. This impact and its extent is important to consider when analysing competition distortions deriving from selective state support.

The extent of state support and the market circumstances (e.g. growing, mature or declining market) are relevant for the potential impact of such measures on competition. The type of competition in the market will also lead to different responses from competitors, which may be more or less aggressive, or even more or less accommodating – competitive dynamics in the market is thus an important dimension to consider.

The advocacy role of competition authorities is thus paramount for bringing a competition perspective into the design of state support. Currently, few jurisdictions foresee enforcement powers for competition authorities regarding state aid. Indeed, only the EU has the power to exert a strict control over state aid 12. However, most competition authorities have advocacy powers to provide advice to governments on what competition impacts can be expected from a given support measure, and on how to minimise the competition concerns identified.

Competition principles for an economic analysis of state support

To ensure well targeted and effective measures, a number of conditions need to be analysed to help define *which* firms are eligible for the aid, but also *how* that support can be used. Selectivity in some form is often necessary given that not all firms are affected by the market failure to the same degree. Furthermore, state support should be as targeted as possible to address specific consequences of the supply/demand shock from the pandemic.

The extensive experience of the EU in this area¹³ provides key takeaways on the principles that competition agencies may take into account when advocating for competition regarding state aid, including the move from a more formalistic to a more effects based approach over the years (Neven and Verouden, 2008_[41]) (in particular with the Action Plan in 2005 (COM(2005) 107 final)).

In assessing state aid, the European Commission undertakes a "balancing test" taking into account a set of economic principles. This involves the identification of the (i) objective of the aid (what is the market failure it is meant to address), (ii) ensuring that the policy measure is well targeted, the most appropriate instrument to achieve that goal (incentive effect) and proportional ¹⁴, and then (iii) a balancing of the positive impact of the measure and the expected competition distortions. In order for the European Commission to obtain the information needed to undertake this assessment, there is a notification template which sets out the information to be provided.

The urgency of state support in the context of the current Covid-19 pandemic may hinder the ability to develop an extensive and thorough analysis and may require adaptations that allow for a more timely assessment. However, even with streamlined assessment, in order to ensure that competition distortions are accounted for, the economic principles above should be considered. A good example of such a framework adapted to the current Covid-19 crisis is the EU Temporary Framework (Box 2).

Box 2. Example of Guidance – The EU Temporary Framework

An example of guidance on criteria to ensure competitive neutrality and a level playing field in the context of state support measures adapted to the Covid-19 crisis is the Temporary Framework to the of the coronavirus support economy in the context outbreak (https://ec.europa.eu/competition/state_aid/what_is_new/covid_19.html) put in place by the European Commission 19 March 2020. This has since been adapted and prolonged until 30 June 2021 for most measures and until 30 September 2021 for the recapitalisation measures (last amendment was on 13 October 2020).

This framework enables Member States to use the State aid rules to support the economy in the context of the COVID-19 outbreak, to ensure that sufficient liquidity remains available to businesses of all types, and to preserve the continuity of economic activity during and after the crisis. It establishes the temporary nature of the state support and has conditions to increase their effectiveness and ensure they incentivise economic activity. The framework only applies to viable firms, using the "cut-off" date of 31 December 2019 to determine eligibility – firms in difficulties before the crisis – before that date-are not eligible. Neither are those that would be able to get credit in the marketplace at affordable terms. The maximum amount of loans, subordinated debt (more expensive and smaller amounts) are directly linked to the size of company up to a maximum of 800k – depending on whether it is a SMEs or larger company. This is linked to the scale of their economic activity by reference to their wage bill or turnover, for example. The last amendment of October introduced a new measure to enable Member States to support companies facing significant turnover losses by contributing to part of their uncovered fixed costs.

To ensure the proportionality of aid it must not go beyond the minimum level needed to ensure only the viability of the beneficiary, and it cannot exceed its capital position as of 31 December 2019.

Source: (European Commission, 2020[42])

State support is more likely to cause competitive harm when it is granted without a clearly established market failure or disproportionately exceeds the extent needed to correct it. In such instances, the beneficiary of the support can divert resources to strengthen its position in the market, with potentially distortionary effects on competition.

There may also be other, better, more cost-effective ways of reducing or eliminating the market failure identified (e.g. a tax or a regulatory solution). The instrument used may also make a difference, as some instruments may be more appropriate than others to remedy certain market failures, i.e. the form of support should address the specific nature of market failure in question.

Poorly designed and overly generous support by governments can keep unviable firms active, preventing an efficient allocation of resources (Andrews, Adalet McGowan and Millot, 2017_[43]). Financial viability is thus an important criteria regarding the target of state support. It is thus important that receivers of state aid submit evidence that they were not experiencing financial distress prior to the Covid-19 pandemic. The financial viability should be analysed not only by considering whether the firm was viable (solvent) before the crisis, but also in the future. There are, however, added difficulties in applying this approach, namely because the crisis may lead to change in consumer preferences, production technologies, value chains and business models in certain sectors.

State interventions should not necessarily be designed to preserve market structures that existed before COVID-19, but rather to promote competitive structures and growth in the long-term, which may mean allowing for reallocation of resources and letting some firms exit the market.¹⁵ State support should be

directed to viable firms, however governments may decide otherwise for important policy reasons, e.g. systemic reasons. In such cases, governments should consider imposing conditions, with a view to improve competitive conditions on the markets in which those companies are active and to ensure their return to viability.

The analysis of the proportionality of state support should be carried out through a counterfactual analysis. Generally, this compares the current scenario with the scenario where Covid-19 had not occurred. The additional losses incurred vis-à-vis the counterfactual should constitute the basis for the aid. In this assessment, information to be requested from potential recipients of the support could include a description of the losses of the requesting firm compared to the counterfactual scenario, a detailed explanation as to how such losses were calculated and the causal link between the pandemic, the losses and the state support being requested.

The outlook of the sector in question should thus be a factor taken into consideration when determining what the best policy measure, from a competition perspective, might be. Whilst selective state support measures may be appropriate for sectors where the crisis will likely only have a temporary negative effect, for sectors where the crisis will have long-term effects such support is "more problematic" (Fumagalli, Motta and Peitz, 2020_[44]). Such an approach would artificially preserve an industry or sector that is declining or outdated. In such cases, state interventions could rather focus on measures aimed at scaling down and restructuring (Motta and Peitz, 2020_[45]).

The size of the recipient firm can be used as a first indicator of the potential distortion to competition. A useful measure of size is market share. Size in terms of turnover and/or employment can alternatively be used as a proxy.

The phase of the crisis in which state aid is necessary may also contribute to the determination of the counterfactual. State aid in the initial phase of the crisis is likely more linked to difficulties due to lockdowns. Further down the line, it may become less clear whether firm difficulties are related to Covid-19 or to permanent changes to markets brought about by changes in demand, for instance.

In the latter instance, in order to facilitate that adjustment towards long-term viability of the firm, the European Commission requests a restructuring plan for this sort of support¹⁶. This plan should provide for adequate measures, such as asset sales or capacity reductions, to ensure that the competition distortions caused by the support are kept to the minimum.

Box 3. A case example of counterfactual analysis: European Commission approval of an aid scheme to compensate Slovenian airlines for damages caused by closure of airspace (2010)

In the case European Commission decision in SA. 32163 in an aid scheme to compensate Slovenian airlines for damages caused by closure of airspace that followed after the eruption of volcano Eyjafjallajokull (hereinafter the "volcano") in Iceland, in April 2010. According to the decision this event led to the cancellation of more than 100,000 flights (within the EU, to/from the EU and overflying the EU) with around 10 million of passengers being unable to travel and to the grounding of the Slovenian airlines for a few days.

The Commission considered the actual damage suffered by a company as a consequence of the volcano eruption "should be the difference in turnover and costs between what actually occurred and what should have happened (the counterfactual scenario). To produce an accurate evaluation of the damage caused, the indicator retained must (i) include the revenue and cost items likely to be affected by the air traffic interruption; and (ii) if it includes cost items unlikely to be affected then these should not vary under the counterfactual scenario compared to the actual one (and should not thus be considered for compensation)". The companies provided profit and loss statements for a period considered as a counterfactual (the prior year) and using the average of monthly value-added compared that period with the days during which the airlines were not able to operate.

Source: SA.32163 – 2010/N - Slovenia – Rectification of consequences of the damage caused to air carriers and airports by earthquake activity in Iceland and the resulting volcano ash in April 2010.

The competition authority can also advocate for a claw-back mechanism to be included in the support measure, so that any support that is verified to be disproportionate at a later date may be returned to the state entity providing the support. This is particularly relevant in markets where there is a great degree of uncertainty at the time the support measure is being proposed and designed. However, given the potential effects and incentives that too much aid can provide (leading to exit of more efficient competitors from the market, or not leading the recipient to optimise its behaviour), this mechanism should not be seen as a way to circumvent the need for an accurate estimation upfront in the design of the measure.

Remedies for mitigating competition distortions

In applicable circumstances where the balancing of the competition distortions effects outweigh the positive effects of the support measure, the competition authority may advocate for the recipients to offer compensatory measures directly linked to the expected distortion and to its elimination.

Similarly to what competition authorities do in their antitrust enforcement and merger practice, the remedies may be structural in nature (e.g. requiring a divestiture of assets) or behavioural remedies, such as price limitations (intended to prevent the beneficiary to engage in exclusionary behaviour, e.g. by pursuing a predatory strategy)¹⁷. These are used to seek to reduce barriers to entry and market power. An example is provided in Box 4.

Box 4. Case example: the recapitalisation of Lufthansa during the Covid-19 crisis

On 26 June 2020, the European Commission approved German plans to contribute EUR 6 billion to the recapitalisation of Deutsche Lufthansa AG (DLH), the parent company of Lufthansa Group, in a measure approved under the State aid Temporary Framework (Decision SA.57153 COVID-19 - Aid to Lufthansa). This would lead to a 20% share of the DLH share capital and was part of a larger support package that also includes a state guarantee on a EUR 3 billion loan that Germany plans to grant to DLH, as individual aid under a German scheme, also approved by the Commission decision of 22 March 2020.

The approval of the state aid measure was subject to a number of commitments aimed at preserving effective competition, as Lufthansa was found to hold significant market power on some relevant markets on which it operates. Before the coronavirus outbreak, its hub airports of Munich and Frankfurt were congested, meaning that landing and take-off slots were in short supply. The measures included the divestment of up to 24 slots/day at Frankfurt and Munich hub airports and of related additional assets to allow competing carriers to establish a base of up to four aircraft at each of these airports. These measures were aimed at enabling the viable entry or expansion of activities by other airlines at these airports to the benefit of consumers and effective competition.

Germany also committed to work out a credible exit strategy within 12 months after the aid is granted, unless the State's intervention is reduced below the level of 25% of equity by then. If six years after receiving the recapitalisation aid the exit of the State does not occur, a restructuring plan for DLH will be needed. Until the State has exited in full, DLH is subject to bans on dividends and share buybacks. There are also limitations on the remuneration of management (including ban on bonus payments) until at least 75% of the recapitalisation is redeemed, DLH is in prevented from acquiring a stake of more than 10% in competitors or other operators in the same line of business.

Source: European Commission Decision in SA.57153 COVID-19 – Aid to Lufthansa, https://ec.europa.eu/rapid/pressReleasesAction.do?reference=IP/20/1179

Design of exit strategies from state support

Once the economic situation is stable, governments will need to exit the support measures taken during the crisis. Government support can create dependency and should be exited as soon as conditions allow for governments to obtain value for money for taxpayers and conditions for competition are ensured. At the same time, an adequate design for the exit process will be fundamental not put at risk the economic recovery by withdrawing too quickly and at once from support measures (OECD, 2009[46]).

Exit strategies need to be built in the design phase of the public support measure from the outset (e.g. "sunset clauses") and the competition authority may provide support to policymakers by ensuring that a number of elements are taken into account.

The main elements that are relevant for competition advocacy regarding exit strategies centre on necessity, clarity and withdrawal as soon as the conditions for state support are no longer in place. First, the public interest of the measure should be clearly set out and explained with sufficient detail and transparency, to allow for monitoring the continued relevance at regular intervals. Second, once the reasons that justify state support are no longer present, the support should be withdrawn. This may include incentives to exit by introducing a penalty element.

Any privatisations resulting from the exit of recapitalisations should be undertaken by open, transparent and non-discriminatory processes and it should be ensured that any structural competition problems (e.g. excessive market power) are removed prior to the privatisation (OECD, 2010, p. 23[47]).

The case of recapitalisation of firms by the State

One of the forms of state support that have been observed during the current crisis are measures of recapitalisation that take the form of partial or full state ownership, which leads to an increased state ownership or control of firms. This may be done through various types of financial interventions, such as equity buy-outs, debt-equity swaps, equity injections, the granting of state loans eventually converted into equity, and uncompensated expropriations (OECD, 2020_[48]).

Box 5. Recapitalisation rules – the example of the EU

In May 2020 the EU amended the Temporary Framework of State Aid measures (for more details see Box 2) to set out the conditions under which Member States may provide equity and/or hybrid capital ("Recapitalisation Measures") as well as subordinated debt to non-financial firms that face serious economic difficulties as a result of the pandemic. Given the potential for competition distortions, to benefit from this framework the recapitalisations are subject to a number of restrictive conditions.

First, the framework only applies to viable firms, using the "cut-off" date of 31 December 2019 to determine eligibility – firms in difficulties before the crisis – before that date - are not eligible. Second, the beneficiary must prove that, in the absence of the support, it would go out of business or would face serious difficulties to maintain its operations (e.g. by reference to the beneficiary's debt-to-equity ratio). Third, it must also be in the "common interest" which whilst not defined precisely makes reference to avoiding social hardship and market failure from significant loss of employment, the exit of an innovative company or systemically important one and disruption to an important service". Lastly, the beneficiary must not be able to attract financing on the market at affordable terms.

In addition, in order to benefit from such recapitalisation measures, beneficiaries must be able to present an exit strategy. Therefore, all beneficiaries that have benefited from recapitalisation that is greater than 25% of their equity at the time of the intervention, must demonstrate that they have an exit strategy from the State participation. The exit strategy must include a plan for the continuation of its activity, an explanation of the use to which State funding will be put, a payment schedule for the remuneration and the redemption of the State investment. If, six years after the recapitalisation has taken place, the level of State participation exceeds more than 15% of the beneficiary's equity, a restructuring plan in accordance with the Rescue and Restructuring Guidelines must be notified to the Commission for approval.

Source: EU Temporary Framework to support the economy in the context of the coronavirus outbreak. https://ec.europa.eu/competition/state-aid/what-is-new/covid-19.html

Cheaper financing may allow the firm to deploy more aggressive commercial strategies, with risks to the level playing field. As a result, the framework of the EU provides for more requirements than those for only liquidity support measures. Also, the orderly exit should be determined at the outset of the measure, as support should be temporary and fully repaid as soon as conditions allow, that is shortly after recovery of the sector.

Equity acquired should be assessed at the market valuation after the onset of the crisis but before the state aid is known (which would affect the market valuation) (Motta and Peitz, 2020_[45]). Further, the longer the participation of the state in the aided firm the more the dilution of the shareholders should be.

Evidence shows that countries that have high governance standards on SOEs may be better prepared to address the implications of recapitalisations. OECD research has identified a correlation between ownership, governance and performance. In countries where the governance of SOEs is strong, as measured by the OECD PMR indicators, SOEs do not seem to perform worse than private firms (OECD, 2020_[48]).

Competition authorities may consider proposing to policymakers the strengthening of corporate governance of firms recapitalised during the crisis. These should follow best practices contained in the OECD Guidelines on Corporate Governance of State-Owned Enterprises are followed (see Box 6), to ensure competition distortions are minimised, as well as guaranteeing competitive neutrality and a level playing field.

Box 6. OECD Guidelines on Corporate Governance of State-Owned Enterprises

The OECD Guidelines on Corporate Governance of State-Owned Enterprises (Guidelines) are recommendations to governments on how to ensure that SOEs operate efficiently, transparently and in an accountable manner.

The Guidelines are the internationally agreed standard for how governments should exercise the state ownership functions to avoid the pitfalls of both passive ownership and excessive state intervention. Good governance of SOEs and ensuring that SOEs operate in a sound competitive and regulatory environment is essential for efficient markets and economic growth.

To ensure a level playing field and competition, the legal and regulatory framework should apply equally to SOEs as to their privately owned competitors (chapter 3). Thus, SOEs should not be exempt from the application of any law that applies to private firms, in particular company law, competition law and bankruptcy law. Also, they should not benefit from more favourable conditions than their private competitors, such as access to finance at preferential rates, inputs at lower prices, better public procurement conditions, more favourable access to technology, tax exemptions, or more advantageous tax regimes.

Also relevant in the context of recapitalisation processes the Guidelines reference the importance for boards of the SOEs to have the authority, competencies and objectivity to carry out their functions of strategic guidance and monitoring of management autonomously. This means that public authorities should not interfere with the management of these firms and should leave their boards and managers free to set their strategic commercial direction and react to market signals.

Sources: OECD (2015), OECD Guidelines on Corporate Governance of State-Owned Enterprises, 2015 Edition, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264244160-en.

OECD (2018), Ownership and Governance of State-Owned Enterprises: A Compendium of National Practices.

OECD (2020), Implementing the OECD Guidelines on Corporate Governance of State-Owned Enterprises: Review of Recent Developments, OECD Publishing, Paris, https://doi.org/10.1787/4caa0c3b-en.

Box 7. Some key takeaways for competition advocacy in the design of state support measures

The following are possible proposals that competition authorities may consider when discussing the design of state support measures with decision makers:

- Screen and prioritise those state interventions that might merit competition advocacy. Elements
 to consider might include the amount of aid, market concentration, market power of the potential
 beneficiary or the existence of significant barriers to entry.
- Identify the specific market failure in need of correction, and the extent to which the measure is likely to correct it.
- Advocate for the collection of evidence showing that businesses receiving support were not in financial trouble prior to the Covid-19 pandemic.
- Discuss, identify and/or propose less competitively distortive alternatives that still allow the policymaker to achieve the same goal.
- Advocate for the inclusion of claw-back mechanisms to ensure ex-post that support is proportionate.
- When state support implies competition distortions, consider advocating for conditions, such as
 divesting some activities or committing to refrain from using the support measure to engage in
 exclusionary behaviour.
- Advocate for the inclusion of exit strategies, in order not to perpetuate state support beyond the necessary.
- Propose transparency of support and the availability of ex-post assessment mechanisms to limit circumstances where such support has no economic justification.

Competition as a cornerstone of industrial policy for recovery

Industrial policy is a broad term that can encompass a wide range of policies from regulation, measures aimed at restructuring declining industries or developing new ones, employment policies, as well as competition policy. For the purposes of the discussion developed in this paper, a distinction is drawn between industrial policy and emergency state support.

Industrial policy is not confined to addressing market failures, but can be a key tool in "market shaping". Recovery packages can help economies to *build back better*. Thus recovery policies aimed at should provide incentives to "trigger investment and behavioural changes that will reduce the likelihood of future shocks and increase society's resilience to them when they do occur" (OECD, 2020[49]).

Regarding industrial policy more broadly, competition advocacy can play a role in the preparation for the economic recovery to ensure future prosperity and resilience. Competition is a well-established driver of growth and productivity (OECD, 2014_[34]). There is evidence to suggest that industrial policies are more successful when they are implemented in markets with some competition (Aghion et al., 2015_[50]).

Competition should be one of the cornerstones of carefully designed industrial policy measures. Measures aimed at fostering competition in the market, for example, through the reduction of regulatory barriers to entry, which may be imbedded into wider industrial policy agendas.

All industrial policy decisions to address the economic recovery should respect competitive neutrality. Many measures will be adopted to respond to calls to "build back better", in order to use the crisis to shape the future and align it with desired government goals, such as environmental goals, employment,

inclusiveness or other social goals. In these cases, the adopted measures should be competitively neutral and not focus on specific firms. In providing advice to governments, competition authorities should thus advocate that any market shaping that leads to competitive markets will allow to continue to reap the benefits of competition.

The principles for optimal industrial policy design include competitive neutrality. These can be summarised as (i) identifying the market failure to design the proper policy, (ii) using independent high-level experts to select projects and recipients of public funds, (iii) adopting a competitively neutral policy, (iv) define clear objectives, (v) undertaking *ex-post* evaluations with "sunset clauses" to stop the policy if applicable and (vi) involving private sector investors (Tirole, 2020_[38]).

Competition advocacy should thus inform policymakers on principles of competitive neutrality and caution against industrial policy measures that pick winners (Tirole, 2020_[38]). Industrial policy that picks a specific firm as the champion of a given sector risks introducing important competition distortions and inefficiencies that may hinder the economic recovery. The process of choosing winners is prone to several problems, including capture, protectionism and information asymmetry (Tirole, 2020_[38])¹⁸.

Competition advocacy should aim at avoiding protectionism to linger in the aftermath of the Covid-19 crisis. When advocating for competitive neutrality of state interventions and industrial policy, competition authorities should inform on the costs of insulating domestic firms from international competition (Porter, 1990_[51]).

Informing on the benefits of competitive neutrality should also focus on demystifying entrenched misconceptions regarding national champions (OECD, 2009_[52]). An oft-cited argument for national champions is that competition can lead to the duplication of efforts and prevent national firms from achieving economies of scale. However, the competitive dynamics is key for ensuring incentives to develop better products or services and more efficient production processes. This dynamic improvement is spurred by both domestic and international rivalry.

Opportunities for competition assessment of laws and regulations

Crises can be an opportunity for pro-competitive reforms. As governments seek to kick-start growth, they may be more receptive to pro-competitive reforms that can contribute to increased economic growth.

Competition authorities may advocate for regulatory reforms that harness the benefits of competition. Evidence from the telecoms markets, for example, shows that the entry of a fourth mobile telecom operator in France with an attribution of a 4G licence in 2011 led to a significant decrease in prices in France. They went from being 15% higher than in the US to being 25% lower.¹⁹

The OECD recommends that governments identify existing or proposed public policies that unduly restrict competition and revise them by adopting more pro-competitive alternatives. The Competition Assessment Toolkit contains methodologies that support governments to identify and remove unnecessary regulatory barriers to competition. Governments should avoid restricting market forces more than necessary to achieve their policy goals and should consider whether policies less restrictive to competition are available. Assessing alternative policy options is key, so as to enable the choice least likely to distort competition that can still achieve the desired government objectives (OECD, 2019_[25]).

This methodology has inspired various jurisdictions to review existing or proposed legislation and regulation. The OECD has undertaken a number of projects around the world with recommendations to amend or repeal harmful regulations. For example, following the sovereign debt crisis in Europe from 2009 onwards, the OECD partnered with the Greek Competition Authority to review laws and regulations in a number of important sectors for the economy, such as tourism, food processing, construction services and retail trade.²⁰ The overall objective was to help the country improve its economic performance, create new

jobs and recover from the crisis, namely by improving the business environment, lowering costs for existing businesses and reducing barriers to entry.

Ensuring that regulatory reform to tackle the crisis is pro-competitive

Rules and regulations put in place to solve short term issues may have long term implications. Policymakers have legitimate and important policy reasons (such as safety and health) for introducing laws, rules and regulations.

Competition authorities can use their advocacy powers during legislative processes to ensure that any competition distortions are duly balanced against the short-term benefits from any such legislative objectives (see Box 8). These advocacy opportunities would also promote the identification of alternative rules that can be less restrictive of competition.

During the peak of the health crisis and the lockdown periods there may also have been calls for exemptions from competition rules for certain sectors. In the UK, for example, there was a temporary 3-month exemption for the Dairy Produce sector from the competition rules (from May 1 2020 to August 2 2020).²¹ In this example, there was a built-in "sunset clause" so that the exemption expired automatically. However, where this is not built-in to the design of the regulatory framework of exemption, competition authorities may wish to advocate for its removal at the earliest opportunity.

Box 8. The Italian Competition Authority and the economic Relaunch Decree

In July 2020, the Italian Competition Authority ("AGCM") contributed to the discussion concerning the package of measures to relaunch the economy, by issuing a formal opinion to the Decree on "Urgent measures regarding health, support for jobs and the economy, as well as social policies related to the COVID-19 epidemiological emergency" ("Relaunch Decree") discussed in the Chamber of Deputies.

The underlying argument made in the various aspects on which the opinion focused was to ensure that any adverse impact on competition in the short term be considered. The AGCM advocated for an exit strategy in order not to compromise long term prospects of the economy. An example, was in relation to the proposal to postpone tenders and concessions, where the AGCM invited the legislator undertake a careful balance between the short-term benefits and the possible long-term costs of such a measure.

Source: https://en.agcm.it/en/media/press-releases/2020/7/S3940

Tackling existing regulations for regulatory reform

In markets where competition concerns were strengthened as a result of the crisis, competition authorities may advocate for the competitive assessment of rules and regulations in order to decrease costs of entry and expansion. Pro-competitive regulation aimed at reducing barriers to entry and expansion can mitigate competition concerns and make markets more competitive in the medium to long-run. For instance, in the aviation section, the ITF has recommended that "where carriers exit markets, governments should take measures to facilitate competition in the recovery, such as reserving relinquished slots for new entrants at slot-constrained airports" (ITF, 2020_[53]).

Finally, given the role of competition as a key driver of productivity and growth, pro-competitive regulation can be part of a wider tool-box for economic recovery. It might therefore be a timely moment as it may coincide with government and legislative agendas. This can be done by selecting sectors on which the Competition authority has significant prior experience, either from having undertaken market studies in the past (see Box 9Box) or from competition enforcement. These have the advantage that the competition

authority may have the "off-the shelf" ability to provide speedy input to government and legislature (OECD, 2018_[54]).

Box 9. COFECE recommends a package of reforms for recovery

In October 2020 COFECE issued a document with 12 proposals to promote competition in a number of markets considered of relevance for the national economy (including energy, transport and financial sector) based on their wide impact across the economy. It also included sectors related to consumer goods whose price impacts family income such as medicines, passenger transport.

The proposals were based on market studies and opinions previously undertaken by COFECE.

An example of one of the proposals is to facilitate entry of generic medicines in Mexico, with COFECE suggesting a number of measures to be taken. This was based on a market study undertaken in 2017. One of the recommendations is that doctors should be obliged to write the generic denomination of the medicine in the prescription so as to promote demand for generics.

Source: https://www.cofece.mx/wp-content/uploads/2020/10/reactivacion.pdf.

The relevance of ensuring a competitive public procurement

Public spending and infrastructure investment will be a key driver of the recovery (Hepburn et al., 2020_[55]). In this context, competitive tendering processes and procurement are fundamental to ensure that public money is well spent.

Competitive tendering enables public entities to obtain the most adequate goods, services and works at the optimal price versus quality ratio (i.e. value for money). In a 2018 report, the OECD estimated that competitive tenders by the Mexican Institute of Social Security (Instituto Mexicano del Seguro Social, IMSS) resulted in a price approximately 12% lower than the price achieved through direct awards or tenders restricted to few suppliers (OECD, 2018_[56]).

Following the crisis, governments may decide to promote the production and stockpiling of essential goods. Given that private firms may have little incentives to build up capacity and reserves to prepare for events analogous to this pandemic, there may be a need for governments to promote the stockpiling of emergency supplies. This is true in particular for goods that may be characterised as essential, such as those in the health sector (e.g. pharma and medical equipment). In such cases, governments might decide to procure such reserve capacities from the private sector.

Competition authorities may advocate for competitive tender processes for emergency stockpiling. This will help ensure that any such allocation of reserve capacities does not un-level the playing field between firms by ensuring these are done at market-prices (Motta and Peitz, 2020_[57]).

Resorting to direct awards even in case of emergency should be used only when certain conditions are met (OECD, 2020_[58]). This includes where there is only one supplier with capacity to deliver or, where a number of potential suppliers exist, time constraints do not allow for competitive tenders or fast-track simplified competitive procedures to be run.

Competition authorities should further strengthen their co-operation and advocacy with other public entities, in particular public procurement bodies. The recently created US Department of Justice's Procurement Collusion Strike Force is an example of this type of co-operation, which contributes to protect critical supply chains and procurement processes from bid-rigging during the Covid-19 crisis (Box 10).

Box 10. The activity of the Department of Justice's Procurement Collusion Strike Force in response to the Covid-19 pandemic

In November 2019, the US Department of Justice launched the Procurement Collusion Strike Force (PCSF), an interagency partnership to combat competition infringements in government procurement, grant and programme funding.

During the first months of the Covid-19 pandemic, the PCSF has developed and delivered pandemic-focused training to address the heightened collusion risks in light of exigent procurement by government agencies. Among other things, it has developed training for the contract management workforce at the Federal Emergency Management Agency (FEMA), and the Center for Disease Control and Prevention (CDC) to protect these critical supply chains and procurement processes from collusion and fraud.

The PCSF has also co-operated with other public bodies on fighting Covid-19 related fraud and collusion patterns. In the coming months, PCSF expects to continue to investigate aggressively cases of price fixing, bid rigging, and market allocation that target public purchasers, especially as Covid-19 collusion schemes surface. PCSF intends to actively pursue new leads and open additional investigations using the full range of criminal and civil tools available to the federal government, including the authority to pursue treble damages, to hold accountable corporations and individuals that undermine competition in government spending.

Source: https://www.justice.gov/atr/blog/justice-department-s-procurement-collusion-strike-force-caps-successful-inaugural-year

4 Competition enforcement for recovery

Global markets experienced severe shocks to supply and demand with significant disruptions to value chains. Many markets observed price hikes and businesses sought to co-operate to overcome those disruptions, establishing agreements along the value chain.

The initial supply and demand mismatch for a number of essential products has led to allegations of exploitative pricing. Many competition authorities sent out warnings that they would take action where necessary (OECD, 2020_[59]). Distinguishing legitimate from illegitimate pricing practices, as well as how best to deal with the latter, has created substantial challenges for competition authorities. Some competition authorities may have competence over exploitative abuse of dominance, while others do not. These are difficult cases that take time to build. Agencies have considered alternatives such as consumer protection or price gouging rules.

Many competition authorities restated that the scrutiny of cartels and anticompetitive practices remained a priority. However, specific types of co-operation between competitors could fall within categories of lawful and pro-competitive collaboration (OECD, $2020_{[60]}$; OECD, $2020_{[61]}$). The response by competition authorities was early on co-ordinated within networks like the ICN and ECN (ICN, $2020_{[62]}$)²². Certain co-operation agreements between competitors were either expressly allowed or their investigation was deprioritised (OECD, 2020, p. $4_{[61]}$). Such is the case of agreements to allow the functioning of supply and distribution chains, to provide an essential service ("co-operation as a response" type), or agreements to provide an innovative response to the crisis, such as joint investments in R&D projects for the development of vaccines and medicines ("innovative co-operation" type).

A likely consequence of the crisis will be an increased level of concentration in markets. Some firms will undergo financial distress and exit the market, whilst others will merge or be subject to attempted acquisitions. However, mergers can irrevocably change the structure of the market, in particular if there are important barriers to entry, with long-term implications.

Finally, competition authorities are well equipped to fully consider the market circumstances of the current economic crisis. This means that enforcement can take into account the market failures and other market conditions that are specific to the current economic crisis.

Prioritisation choices

One important way in which competition authorities can support the economic recovery is to redirect enforcement resources towards strategic markets and industries that they consider to be at the centre of the recovery process. While these may vary from country to country, there are a few areas that may deserve closer monitoring to ensure that the consequences of the crisis are not exacerbated and that productivity and growth are boosted.

A first category of sectors on which competition authorities may want to focus are those that have been strongly implicated in the response to the crisis (for instance, due to surge in demand or disruptions in the supply chains) and that have a track record of cartelisation or other anticompetitive behaviour or a history of consolidation. Alexander (2020_[63]) mentions the following with reference to the US: hospitals; pharmaceuticals; health insurance; medical devices and equipment manufacturing; agriculture and digital platforms.

Sectors where co-operation between competitors arose as a response to the crisis should be made the target of stricter scrutiny as soon as circumstances change. When competition authorities have recognised a need to allow or deprioritise enforcement against co-operation between competitors to quickly provide a response to severe disruptions in the supply chain, these sectors should be prioritised (Rose, 2020, p. $6_{[12]}$).

Digital markets may also merit prioritisation. Digital platforms have been among the few winners from the crisis. The total spending online in the US, for instance, was up 76% year on year last May (Adobe Analytics, $2020_{[64]}$). As a result, the market power of some of these firms, which already raised competition concerns in certain markets, may continue to expand and warrant scrutiny by competition authorities. The Italian competition authority, for instance, prioritised enforcement in e-commerce and digital services, as the lockdown measures led to their remarkable growth in a country traditionally characterised by low trust in online payments.²³

Industries that have the potential to generate positive spill-over on social welfare and assuage the exacerbation of poverty and inequality could also be prioritised. For instance, the Spanish competition authority reviewed its priorities to cater for the changed social needs and make its action more effective. Among other things, it strengthened efforts in specific sectors considered sensitive, such as "Sanitary products, financial sector or funerary services".²⁴ Another example may be in competition in labour markets (OECD, 2020_[65]), in a moment where employment rates are sharply dropping and the labour share of income is at historical lows (OECD, 2020_[66]). This sector was prioritised, among others, by the Peruvian²⁵ and the US agencies, which considered that the pandemic could create opportunities for employers to engage in anticompetitive conduct in labour markets. The US DoJ and FTC published a joint statement announcing that

they will protect competition for workers on the frontlines of the Coronavirus Disease 2019 (COVID-19) response in the United States by enforcing the antitrust laws against those who seek to exploit the pandemic to engage in anticompetitive conduct in labor markets(...) Examples of such conduct include agreements to suppress or eliminate competition with respect to compensation, benefits, hours worked, and other terms of employment, as well as the hiring, soliciting, recruiting, or retention of workers.²⁶

Prioritisation could include sectors related to sustainability and green transition, innovation and technological advancement. This may depend on a given economy's priorities. As an example, the Italian competition authority recently concluded an investigation against an abuse of dominance in the waste management of plastic products sectors, in alignment with the government's objective of the transition to a green economy²⁷.

Further sectors that could be prioritised might relate to infrastructure markets, including telecommunications, energy and transportation. These are sectors with economy-wide knock-on effects that can therefore also be, in certain jurisdictions, drivers of the economic recovery. Other approaches to prioritisation may seek alignment with other societal goals, focusing on sectors that may have a profound impact on specific categories of vulnerable consumers or segments of the population that may have suffered more severely from the impact of the crisis, such as women or ethnic minorities²⁸.

Co-operation agreements and crisis cartels

Co-operation between private firms has been seen as one of the ways to provide quick solutions to the demand and supply shocks triggered by the Covid-19 crisis. Although the best way to address problems of scarcity and excess capacity are typically competitive forces, negative consequences may impact the economy and all economic actors in the meantime (Jenny, 2020_[67]).

Competition authorities have made it clear that they will be watchful that co-operation does not spill over into hard-core restrictions, such as price fixing cartels. They also clearly stated that any co-operation involving co-ordination or discussion on future prices, costs and wages was unlikely to be lawful or justified by pro-competitive effects (OECD, 2020[61]).

Competition authorities maintaining vigorous competition law enforcement does not mean that their analysis will abstract from current market conditions. In applying the traditional analytical framework of competition law enforcement, agencies take due account of the difficult market circumstances arising from the economy in the pandemic, and consider potential efficiencies that such agreements may generate.

Many competition authorities have identified analogous common key criteria of lawful co-operation between competitors during Covid-19 (OECD, 2020_[61]). These included, in particular: i) the necessity and indispensability of the co-operation agreement to address a specific market disruption due to the Covid-19 crisis; ii) a positive impact of the co-operation on consumers; and iii) a strict time limit.

While this guidance has been valuable in the midst of the crisis, similar criteria may also be important for the purposes of driving the economic recovery.

Competition authorities need to remain watchful of unwanted spill-overs from allowed crisis co-operation. Anticompetitive concerns arising from ramifications of co-operation agreements seem to have been limited so far, but it is too early to say. The closer the co-operation, the higher the risk of its abuse by competitors, including when the circumstances that justified the co-operation will not be present anymore (Alexander, 2020_[63]; Rose, 2020, p. 6_[12]).

An increase in calls for crisis cartels to reduce overcapacity can be expected. Such claims were made in the aftermath of the global financial crisis, for example in the context of the Irish beef processing sector. In that context, the European Commission has indicated that, in exceptional circumstances, such arrangements, whilst by object infringing its anti-competitive agreement provision, may be accepted if they are indispensable to achieve pro-competitive benefits. ²⁹

Acceptance of crisis cartels should met with scepticism and caution (OECD, 2011[68]). Only when a number of very strict conditions are met can such claims be considered. The first condition is that the procompetitive benefits (efficiency gains) outweigh the harm to competition. The second condition is one of indispensability of the agreement to achieve the benefits, in particular whether market forces cannot remove the long-term and structural excess overcapacity. There must also not be any other less anti-competitive means to achieve that same efficiency, namely, for example, a merger that would involve a smaller share of the market than that of the industrial restructuring agreement. Thirdly, the parties to the agreement would have to demonstrate that consumers receive a fair share of the benefits, and that these outweigh the harm caused by the restriction to competition. The greater the reduction in competition, the greater the efficiencies need to be.

Exchange of information between competitors during the crisis should be kept to the strict minimum necessary to reach the desired objective, both in terms of scope and duration (OECD, 2010_[69]). An example in the Covid-19 crisis has been that of the German Bundeskartellamt, which granted an exemption to co-operation in the automotive industry, but limited the scope of the information exchanged to the data indispensable for restructuring the industry for approximately one year Box 11.

Box 11. The exemption of co-operation to overcome the crisis of the German automotive industry

On 9 June 2020, the Bundeskartellamt announced the granting of an exemption from the application of competition law for a co-operation agreement between different automotive manufacturers to enable the restructuring of the sector due to the Covid-19 pandemic.

The German Association of the Automotive Industry (VDA) submitted to the Bundeskartellamt a proposal for a framework scheme to restart the automotive production and restructuring suppliers and a best practice guidance to deal with limited supply. The scheme included the setting up of stakeholder groups to exchange information to those purposes and the Bundeskartellamt was asked to define the lawful boundaries of the collaboration.

The Bundeskartellamt applied in practice the key common criteria identified by the ICN Steering Group Statement (2020_[62]). First, it underlined that the scope of the information exchanged would be limited to data "indispensable for restructuring" (indispensability criterion). Second, the Bundeskartellamt also noted the importance to avoid economic harm deriving from delaying the restart of production processes for suppliers and manufacturers (consumer welfare criterion). Third, it imposed a time limit to the restructuring process, where a first stakeholder meeting would take place before the end of 2020 and would finish before the end of 2021.

Importantly, the participation to the scheme and abidance to the best practice guidance is optional for the industry players and the non-adhering players cannot be put at a disadvantage. Further, any exchange of data would be subject to confidentiality and limited to a restricted number of people within the participating companies, who are excluded from purchasing negotiations with suppliers. Data is exchanged in aggregate form, particularly when relating to unit volume and price.

Sources: Bundeskartellamt, Crisis management measures in the automotive industry - Bundeskartellamt supports the German Association of the Automotive Industry (VDA) in developing framework conditions under competition law aspects, 9 June 2020, https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2020/09 06 2020 VDA.html.

Parr, Germany exempts cooperation in automotive industry due to COVID-19, 9 June 2020, https://app.parr-global.com/intelligence/view/prime-3050669.

To deal with the uncertainty of structural changes to markets post-crisis, competition agencies may opt for limiting the timeframe of the exemption and monitor the situation on a regular basis. This approach has been adopted by the UK competition authority in the Atlantic Joint Business Agreement concerning UK-US air routes, given that "The CMA cannot be confident that its assessment of competition concerns, and any remedies that might address them, would adequately reflect the post-pandemic state of competition in the longer term".³²

Box 12. Interim measures in the Atlantic Joint Business Agreement

On 11 October 2018, the UK Competition and Markets Authority (CMA) launched a competition investigation into the Atlantic Joint Business Agreement (AJBA), to determine whether the agreement is restrictive of competition under the Chapter I prohibition of the Competition Act 1998 and Article 101 of the Treaty on the Functioning of the European Union.

The agreement signed by five airlines (American Airlines, Aer Lingus, British Airways, Iberia, and Finnair) is aimed at limiting competition on air routes between the UK and the US. The CMA identified potential concerns on routes between London and Boston, Chicago, Dallas, Miami and Philadelphia. Commitments including the release of slots and other measures were offered by the parties for up to 10 years.

Given the difficulties to predict the impact of the crisis on the transatlantic aviation sector, however, the CMA decided to reject the long-term commitments. It decided instead to keep its investigation open and impose interim measures to extent the status quo (i.e. previous commitments regime negotiated with the European Commission) until March 2024. The CMA reserves the right to complete its investigation and implement longer-term remedies before that date "once the sector is in recovery".

Source: Press release, CMA acts to protect competition on UK-US airline routes, 17 September 2020, https://www.gov.uk/government/news/cma-acts-to-protect-competition-on-uk-us-airline-routes.

The tools for cartel detection need to continue to be bolstered to face the added risk of cartels in times of crisis and following on from the crisis in the recovery phase. Given the economic damage ensuing from cartels, tools for cartel deterrence and detection are key to ensure competitive markets. Among these, resources could be invested, for instance, in tools like leniency and whistleblowing to strengthen their effectiveness. Whilst many jurisdictions already have leniency whistleblowing programmes are still not so widespread and are good complementary way of obtaining information from insiders.³³

Abuses of dominance

Increased market concentration is among the most problematic consequences of the current pandemic from a competition policy perspective. With reduced possibilities of entry and lesser viable firms due to a reduction in demand, healthy companies will make the most of this opportunity to gain market shares.

Some already dominant companies, particularly digital platforms, have been thriving in the crisis. The total spending online in the US, for instance, was up 76% year on year last May (Adobe Analytics, 2020_[64]). This may make it more important for competition authorities to monitor these markets to ensure that they do not abuse their dominance not only during the crisis but in its aftermath.

Competition authorities will need to ensure that coping strategies adopted by companies to resist the severe shocks in supply and demand will not degenerate in strategies to exploit consumers. The most problematic situation is that of price increases, which may typically occur because of the scarcity of the input or increased demand. In the past few months, there has been a significant expectation that competition authorities would mitigate this phenomenon, either by tackling exploitative pricing abuses, in the jurisdictions where this is possible, or by resorting to price gouging or restrictive trading practices mechanisms.

In countries where competition law prohibits excessive prices, there are typically two types of challenges: determining that the company in question has sufficient market power (e.g. dominance); and demonstrating

that there has been an abuse (OECD, 2011_[70]). Whilst not easy in normal times, these may prove even more challenging in the crisis. On the one hand, the crisis can lead to the creation of temporary market power (windfall market power) that can be difficult to demonstrate with traditional analytical tools. On the other hand, determining whether a price is excessive may be very complex (OECD, 2018_[71]). For instance, a difference in prices before and after the onset of the crisis may well be justified by an increase in costs or the evolution of supply and demand, and may provide the market signal needed to incentivise market entry and efficient supply adjustment.

Competition authorities should thus consider whether running an abuse of dominance case is necessary, proportionate and effective (OECD, 2020_[59]). A cost-benefit analysis should take into account the length and level of complexity of these cases, which also take up considerable resources.

Competition authorities need to be alert to exclusionary abuses and also move fast where appropriate. In times of crisis many firms may exit, leading to increased market power for those that remain in the market. Others may become financially weaker. Those firms with deep pockets can take advantage of the fragility of competitors and there is a heightened risk of exclusionary behaviours, such as predatory pricing and other exclusionary strategies. This may require more use of interim measures in markets that are changing rapidly due the crisis, to avoid irreparable harm to competition.

Interim measures could be a way to intervene rapidly and avoid undermining the effectiveness of the final decision. This may be appropriate when the objective is to cure a sudden or temporary price increase. In particular, in a time of crisis, before the competition decision is taken, the market structure might have completely changed and competitors may have been driven out of the market.

Box 13. Price regulation in the crisis

An alternative to running an exploitative abuse of dominance case may be price regulation. This policy response by government, however, is only suitable when there is no prospect that the market will correct itself in the short term. In the long-run and to the purposes of facilitating the economic recovery, price regulation risks reducing the incentives to increase production, delaying the entry of new companies or the reorientation of production, which would lead to an expansion of supply and a reduction in prices over time (Bulow and Klemperer, 2012_[72]).

Price controls should only be adopted on an extraordinary basis, being limited to essential products affected by the crisis and its duration should be limited in time, only as long as is strictly necessary.

Ideally, price regulation should be combined with other measures that seek to resolve the cause of the problem and not just the symptom (for example, subsidising production). If price controls are introduced in a context of excess demand, rationing may still be unavoidable. For example, in the United Kingdom, at the beginning of the health crisis, consumers bought stocks of toilet paper, emptying supermarket shelves. The supermarkets themselves then had to ration the number of rolls of paper that each consumer could buy.

Price controls may also lead to an even greater scarcity of supply in countries that adopt price controls when different countries or regions within a country apply different measures. In the absence of other safeguards, goods may end up being redirected from regions with price controls, where prices are lower, to countries or regions with market prices, where prices are higher, leading to further shortage of supply.

Source: (Bulow and Klemperer, 2012_[72]) and Exploitative pricing in the time of COVID-19, OECD 2020

Merger control

Whilst recessions are only temporary, mergers have structural long-term implications. Public policy needs to look into the future, considering the medium and long-run and not focus only on short-term conditions and effects. It is therefore important to look at the fundamentals of the industry and the firms that may be attempting to merge. Mergers can allow adjustments of the market structure to a new competitive equilibrium in the short-term, but should anti-competitive effects result, this will leave long-term effects. What might seem like a fast solution may have long term costs. A slower process of adjustment but without market consolidation can allow consumers to enjoy the benefits of competition towards the new equilibrium. Furthermore, "there is no guarantee that the mergers would select the most efficient firms to stay" (Fumagalli, Motta and Peitz, 2020_[44]).

Relaxing merger control in sectors where the crisis has only a temporary negative effect might create irreversible losses of competition (Fumagalli, Motta and Peitz, 2020_[44]). Alleged short-term benefits from lax merger control often do not materialise, since anti-competitive mergers reduce firms' incentives to increase output (and employment). This therefore means that whilst consumers are burdened with less competitive prices for years resulting from anti-competitive mergers, the alleged short-term benefits may not even be realised (Box 14). Furthermore, less competitive markets may hinder a swift and sustainable recovery.

Strict enforcement of merger control in the context of a crisis may be even more relevant if the merger creates or strengthens a firm that may then become systemic (Shapiro, 2009_[73]). Once the firm becomes

systemic, it may more eligible to obtain state support, in light of its systemic nature, which may risk further distorting competition.

Box 14. Short-term vs long-term considerations in merger control

In the context of the 2008 financial crisis, the acquisition of HBOS by Lloyds TSB was cleared by the UK Secretary of State on public interest grounds relating to the stability of the UK banking sector, notwithstanding that the UK Office of Fair Trading was of the view that the transaction would have resulted in a substantial lessening of competition in a number of relevant markets. The financial stability consideration was introduced as amendment of the UK Enterprise Act specifically to allow for the legal basis in order to allow the approval of this transaction.

The short term problem of preventing the insolvency of HBOS had the long-term consequence of highly concentrated banking services, for instance creating a duopoly in the SME banking in Scotland. Should the economic crisis of 2008 mean that the market would only have been able to sustain two market players, then the decision would not have had long-term anti-competitive effects. This not being the case, there was long term sacrifice of consumers for short-term political reprieve. The latter could have been attained via the use of less anti-competitive alternatives such as state aid support or temporary government take-over (Zenger 2012), or conditionality.

The merger's contribution to financial stability was short-lived as the new entity had to be bailed out again in 2009. Furthermore, as pointed out by the European Commission in the assessment of this latter bailout under the EU state aid framework (N428/2009 – Restructuring of Lloyds Banking Group), the merger created distortions of competition by allowing the merged entity to significantly increase its market shares and by eliminating a competitor on certain segments of the market, which were already concentrated. To secure approval of the aid, Lloyds/HBOS committed to take certain structural measures in the UK retail market to remedy this distortion of competition.

Source: Zenger 2012

A firm that has valuable assets may be able to restructure, reorganise and implement a new strategy, if it remains independent, and eventually to emerge as an effective competitor. Recent research together with increasing concerns over growing concentration and mark-ups suggest that, if anything, there may have been a too permissive approach to merger control (OECD, 2018_[74]).

Consolidation may be more likely in times of crisis, as a result of liquidity constraints of some market players. The uncertainty surrounding the pandemic may increase creditors' reluctance to lend to firms, including to start-up firms. The imperfect knowledge that creditors have on the firm's ability to recover and ability to repay loans may exacerbate the difficulties many firms will face to obtain financing. Those with deeper pockets will be better placed to acquire other entities. Many of these may be firms with market power.

Relaxation of legal standards in merger control should therefore be avoided. In particular, at a moment where a number of market face risks of increased concentration and more allegations of the failing firm defence may be put forward, these should continue to need to meet rigorous criteria. The acquisition of firms that struggle in the recovery phase may come at the cost of weakening competition in the market on a permanent basis, leading to significant static and dynamic inefficiencies. This may be of particular concern in industries with a high degree of concentration and with significant barriers to entry (Fumagalli, Motta and Peitz, 2020[44]) and OECD Merger Control in the Time of Covid-19.³⁴

Box 15. Failing Firm claims revival in times of crisis

As activity resumes and the full economic effects of the outbreak ripple through the economy one can expect that there will be more firms in difficulties and more claims for failing firm defence in the context of merger control.

There is general consensus that a FFD should only be accepted when three cumulative conditions are met:

- (i) absent the merger, the failing firm would exit the market in the near future as a result of its financial difficulties;
- (ii) there is no feasible alternative transaction or reorganisation that is less anti-competitive than the proposed merger; and
- (iii) absent the merger, the assets of the failing firm would inevitably exit the market.

Since the market share and the assets of the target would be entirely acquired by one competitor (i.e. the acquirer), the fulfilment of these high requirements appears necessary to exclude that a less restrictive option is available. The failing firm doctrine is case specific and relates to non-transitory financial difficulties that would force the company out of the market in the near future.

Source: Merger Control in the Time of Covid-19, OECD 2020; OECD (2009) The Failing Firm Defence http://www.oecd.org/daf/competition/mergers/45810821.pdf.

In the context of genuine and demonstrable failing firm defences, competition authorities should look for expedited reviews procedures. This is not without risks since faster investigations risk overlooking anticompetitive effects that may not be immediately evident and that would have required further investigation or analysis. Agencies may wish to undertake a preliminary analysis of whether the failing firm criteria are met, as well as the possible or likely magnitude of the consumer welfare effects. If the latter are likely low, expediting the procedure may be worthwhile considering.

Box 16. Expediting merger procedures in times of crisis

The Example of a European Case in the Global Financial Crisis - BNP Paribas/Fortis

In this banking case, the transaction was cleared within 25 working days after notification, even though it raised a competition concerns and required a remedy.

The case concerned the acquisition of the Belgian and Luxembourg subsidiaries of Fortis Holding by BNP Paribas, France's largest bank. The Commission expressed concerns over the issuing of credit cards in Belgium and in Luxembourg, where the merged entity would have become the largest market player. To address these concerns, BNP offered to divest entirely its Belgian credit card business.

Source: https://ec.europa.eu/competition/mergers/cases/decisions/m5384_20081203_20212_en.pdf

5 Conclusions

Competition law and policy should not to be seen as a 'political luxury good' that economies can do without in times of crisis. Competition is a fundamental staple of economic recovery as clearly shown from insights from previous economic crises.

There is an unprecedented level of government interventions to mitigate a deep recession caused by the Covid-19 pandemic. Competition advocacy has rarely been more important and can help for better policy decision making as government interventions may fail to account for unintended consequences on markets. A good decision-making process requires that all costs are fully taken into account, including those that relate to loss of competition.

Competition authorities can contribute with their unique skill sets, by advocating and informing governments and regulators on the benefits of competition.

Competition authorities should participate in the process of assessing the costs to competition of any state support measure. Whenever resources allow, competition authorities should assist in the design of the government measures and provide advice to minimise potential competition distortions. Competition principles should also inform the design of industrial policy measures to "build back better".

In their advocacy function, competition authorities can also propose pro-competitive structural reforms. Authorities may issue opinions and recommendations to government on legislation and regulation. They may also advocate for competitive tender processes for capacity and stockpiling of essential goods, as well as for infrastructure needs in the recovery phase.

Competition authorities can support the economic recovery by redirecting enforcement resources towards strategic markets and industries considered important for the recovery process. Sectors that may take priority could include, for instance, those that have been strongly implicated in the response to the crisis or those that can generate positive spill-over on social welfare.

Competition authorities need to prioritise carefully to ensure that their enforcement actions are contributing to the drive for economic recovery. They should take due consideration of economic conditions in markets, but apply competition rules strictly to ensure well-functioning markets in the long-term.

In this way, competition authorities can provide an important contribution to the speed and sustainability of the economic recovery.

Endnotes

- ¹ According to this report "extending the same approach to other economies suggests that the impact effect of business closures could result in reductions of 15% or more in the level of output throughout the advanced economies and major emerging-market economies after the full implementation of confinement measures. In the median economy, output would decline by one-quarter".
- ² According to IATA passenger air transport measured as revenue passenger kilometre was down 75% in August year-on-year (cited in (OECD, 2020_[4])
- ³ https://www.mckinsey.com/industries/public-and-social-sector/our-insights/us-small-business-recovery-after-the-covid-19-crisis
- ⁴ The World Bank forecast the global economy to shrink this year by 5.2%, see Global Economic Prospects Report, June 2020, https://www.worldbank.org/en/news/press-release/2020/06/08/covid-19-to-plunge-global-economy-into-worst-recession-since-world-war-ii/.
- ⁵ See, for information on specific countries, the OECD Covid-19 Country Policy Tracker available at: https://www.oecd.org/coronavirus/country-policy-tracker/
- ⁶ IMF Fiscal Monitor, October 2020.
- ⁷ Citing Ellis Hawley, the New Deal and the Problem of Monopoly (1966), Spencer Weber Wallace reports that the "Secretary of the Interior and head of the Public Works Administration during the NRA period, complained that between June of 1935 and March of 1936, his agency received identical bids on government projects 257 times".
- ⁸ Waller (2004_[6]) offers the example of the Interior Department that received identical bids from steel firms on 257 occasions between June 1935 and March 1936, and these bids were 50% higher than foreign steel prices.
- ⁹ For more information on the introduction of the financial stability test, see (OECD, 2017, p. 25_[75]).
- ¹⁰ Kehoe and Prescott's conclusions refer to a compilation of studies of twelve great depressions (Canada, France, Germany, the United Kingdom, and the United States in the interwar period; Argentina, Brazil, Mexico, and Chile in the 1980s; New Zealand and Switzerland of the early 1970s; and another great depression in Argentina that began in 1998. They also refer to three recessions —in Italy in the interwar period and those in Finland and Japan in the 1990s.
- ¹¹ Low productivity firms that would typically be forced to exit or to restructure in a competitive market (Andrews, Adalet McGowan and Millot, 2017_[43]).
- ¹² State aid is defined as an advantage in any form whatsoever conferred on a selective basis to undertakings by national public authorities https://ec.europa.eu/competition/state_aid/overview/index_en.html
- ¹³ The EU system of state aid control provides a unique example of a comprehensive state aid control system. Unlike the WTO, for example, EU State Aid control covers, not only goods sector, but also services. All forms of state aid which are subject to an ex-ante notification obligation must be approved by the Commission before they are implemented. In practice the Commission does not undertake a detailed analysis of the positive and negative effects in every state aid case nearly 95% of State aid measures in

- the EU (EU State Aid Scoreboard 2019) covered by block exemptions that provide for automatic compatibility of certain aid measures if the conditions for exemption are fulfilled.
- ¹⁴ Meaning that the objective cannot be achieved with less state support and there are no less distortive measures available to achieve the same goal.
- ¹⁵ OECD (2020), The Role of Competition Policy in Promoting Economic Recovery Note by Italy, DAF/COMP/WD(2020)78.
- ¹⁶ Communication from the Commission, Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty, 2014/C 249/01, paras 45 et seq. at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0731(01)&from=GA
- ¹⁷ However, care in applying these should be exercised since there is some evidence that price leadership bans that were adopted by the European Commission as part of behavioural remedies it applied in a number of cases related to aid to banks in the Netherlands under its State Aid control on many of the mortgage providers led the Dutch mortgage market to a collusive price leadership equilibrium (Dijkstra and Schinkel, 2019_[84]).
- ¹⁸ Tirole, 2020_[37] mentions "a mix of hubris, capture, protectionism and just very poor information" leads to many previous bad experiences in the "picking of winners".
- ¹⁹ Thomas Philippon in the book the Great Reversal How America Gave Up on Free Markets (2019).
- ²⁰ The other sectors covered by the projects were building materials, wholesale trade, manufacturing, ecommerce and media. More information is available at http://www.oecd.org/daf/competition/greece-competition-assessment-project.htm.
- ²¹ The Competition Act 1998 (Dairy Produce) (Coronavirus) (Public Policy Exclusion) Order 2020.
- ²² (Alexander, 2020_[63]; Schinkel and D'Ailly, 2020_[76]) warned against the risk that the focus of these announcements on what is permissible rather than prohibited may be mistakenly interpreted as a more lenient approach towards cartel. While the message given by competition authorities was clear, competition authorities should define without ambiguity the boundaries of allowed co-operation between competitors and other competitively relevant conduct and transactions (Alexander, 2020_[63]).
- ²³ OECD (2020), The Role of Competition Policy in Promoting Economic Recovery Note by Italy, DAF/COMP/WD(2020)78.
- ²⁴ OECD (2020), The Role of Competition Policy in Promoting Economic Recovery Note by Spain, https://one.oecd.org/document/DAF/COMP/WD(2020)81/en/pdf, p. 4.
- ²⁵ Indecopi, Informational Guidelines about Anticompetitive Agreements among Companies in Labor Markets, June 2020, https://www.indecopi.gob.pe/documents/51771/4753518/Informational+Guidelines+-+Anticompetitive+Agreements+in+Labor+Markets/
- ²⁶ Press Release, Justice Department and Federal Trade Commission Jointly Issue Statement on COVID-19 and Competition in U.S. Labor Markets, 13 April 2020, https://www.justice.gov/opa/pr/justice-department-and-federal-trade-commission-jointly-issue-statement-covid-19-and.
- ²⁷ OECD (2020), The Role of Competition Policy in Promoting Economic Recovery Note by Italy, DAF/COMP/WD(2020)78; Case n. A531 RICICLO IMBALLAGGI PRIMARI/CONDOTTE ABUSIVE COREPLA, final decision available at: https://www.agcm.it/dotcmsdoc/allegatinews/A531_chiusura%20istrutt%20+%20sanzione.pdf. See also press release of 10 November 2020, available at: https://www.agcm.it/media/comunicati-stampa/2020/11/A531.

- United Nations, Policy Brief: The Impact of COVID-19 on Women, 9 April 2020, https://www.un.org/sexualviolenceinconflict/wp-content/uploads/2020/06/report/policy-brief-the-impact-of-covid-19-on-women-en-1.pdf; UN Women, COVID-19 and its economic toll on women: The story behind the numbers, 16 September 2020, https://www.unwomen.org/en/news/stories/2020/9/feature-covid-19-economic-impacts-on-women; Kim Parker, Juliana Menasce Horowitz and Anna Brown, About Half of Lower-Income Americans Report Household Job or Wage Loss Due to COVID-19, Pew Research Center, 21 April 2020, https://www.pewsocialtrends.org/2020/04/21/about-half-of-lower-income-americans-report-household-job-or-wage-loss-due-to-covid-19/; Mark Hugo Lopez, Lee Rainie and Abby Budiman, Financial and health impacts of COVID-19 vary widely by race and ethnicity, Pew Research Center, 5 May 2020, https://www.pewresearch.org/fact-tank/2020/05/05/financial-and-health-impacts-of-covid-19-vary-widely-by-race-and-ethnicity/.
- ²⁹ OECD (2011), Crisis Cartels Note by the European Union, http://www.oecd.org/daf/competition/cartels/48948847.pdf, p. 110.
- ³⁰ E.g. it removes only inefficient capacity from the industry or allows those players that stay in the market to compete to win market share previously held by those that exited)
- ³¹ This "type of overcapacity market failure, though rare, could occur in particular situations of stable, transparent and symmetric market structures and where giving up capacity is costly for the firms". Such long-term overcapacity problems could arise in industries in decline due to, for example, technological changes in the market, or in industries where firms have been substantially overinvesting for a significant amount of time.
- ³² Press release, CMA acts to protect competition on UK-US airline routes, 17 September 2020, https://www.gov.uk/government/news/cma-acts-to-protect-competition-on-uk-us-airline-routes.
- ³³ A number of jurisdictions have already introduced such systems in the last few years, such as Canada, the European Commission, Germany, Spain and the UK, amongst others (OECD, 2019[109])
- 34 http://www.oecd.org/competition/Merger-control-in-the-time-of-COVID-19.pdf

References

| Adobe Analytics (2020), <i>Digital Economy Index</i> , https://www.adobe.com/experience-cloud/digital-insights/digital-economy-index.html (accessed on 25 November 2020). | [64] |
|---|------|
| Aghion, P. et al. (2015), "Industrial Policy and Competition", <i>American Economic Journal: Macroeconomics</i> , Vol. 7/4, pp. 1-32, http://dx.doi.org/10.1257/mac.20120103 . | [50] |
| Ahlqvist, V., A. Claici and S. Tizik (2020), "How to Estimate the COVID-19 Damages?", <i>European State Aid Law Quarterly</i> , Vol. 19/2, pp. 150-160, http://dx.doi.org/10.21552/estal/2020/2/6 . | [81] |
| Alexander, L. (2020), Designing an Effective Pandemic Response that Minimizes Lasting Harm to Competition - American Antitrust Institute, American Antitrust Institute, https://www.antitrustinstitute.org/work-product/designing-an-effective-pandemic-response-that-minimizes-lasting-harm-to-competition/ (accessed on 14 November 2020). | [63] |
| Andrews, D., M. Adalet McGowan and V. Millot (2017), "Confronting the zombies : Policies for productivity revival", <i>OECD Economic Policy Papers</i> , No. 21, OECD Publishing, Paris, https://dx.doi.org/10.1787/f14fd801-en . | [43] |
| Andrews, D. and F. Petroulakis (2017), "Breaking the Shackles: Zombie Firms, Weak Banks and Depressed Restructuring in Europe", OECD Economics Department Working Papers, No. 1433, OECD Publishing, Paris, https://dx.doi.org/10.1787/0815ce0c-en . | [33] |
| Banerjee, R. and B. Hofmann (2020), Corporate zombies: Anatomy and life cycle, http://www.bis.org (accessed on 22 November 2020). | [29] |
| Banerjee, R. and B. Hofmann (2018), <i>The rise of zombie firms: causes and consequences 1.</i> | [32] |
| Barrero, J. and N. Bloom (2020), <i>Economic Uncertainty and the Recovery</i> , http://www.policyuncertainty.com/twitter_uncert.html (accessed on 22 November 2020). | [82] |
| Bernanke, B. (2009), Essays on the Great Depression, Princeton University Press. | [89] |

| Borenstein, S. and N. Rose (2014), 2 How Airline Markets Work or Do They? Regulatory Reform in the Airline Industry, University of Chicago Press. | [23] |
|---|-------|
| Bourlès, R. et al. (2013), "Do Product Market Regulations In Upstream Sectors Curb Productivity Growth? Panel Data Evidence For Oecd Countries", <i>Review of Economics and Statistics</i> , Vol. 95/5, pp. 1750-1768, http://dx.doi.org/10.1162/rest_a_00338 . | [94] |
| Boyer, M. (n.d.), Competition, Open Social Democracy, and the COVID-19 Pandemic, https://www.concurrences.com/en/review/issues/no-2-2020/on-topic/competition-law-and-health- (accessed on 22 November 2020). | [86] |
| Bulow, J. and P. Klemperer (2012), "Regulated prices, rent seeking, and consumer surplus", <i>Journal of Political Economy</i> , Vol. 120/1, pp. 160-186, http://dx.doi.org/10.1086/665416 . | [72] |
| Caballero, R., T. Hoshi and A. Kashyap (2006), "Zombie Lending and Depressed Restructuring in Japan", <i>SSRN Electronic Journal</i> , http://dx.doi.org/10.2139/ssrn.889727 . | [83] |
| Caffarra, Crawford and Valetti (2020), "'How tech rolls': Potential competition and 'reverse' killer acquisitions VOX, CEPR Policy Portal", https://voxeu.org/content/how-tech-rolls-potential-competition-and-reverse-killer-acquisitions (accessed on 22 November 2020). | [95] |
| Cole, H. and L. Ohanian (2004), "New deal policies and the persistence of the Great Depression: A general equilibrium analysis", <i>Journal of Political Economy</i> , Vol. 112/4, pp. 779-816, http://dx.doi.org/10.1086/421169 . | [7] |
| Corden, S. (2009), Australia's National Competition Policy: Possible Implications for Mexico *. | [24] |
| Crane, D. (2010), "Did We Avoid Historical Failures of Antitrust Enforcement During the 2008-2009 Financial Crisis?", <i>Antitrust Law Journal</i> , Vol. 77/1, pp. 219-228. | [5] |
| Dewatripont, M. and P. Seabright (2006), Wasteful Public Spending and State Aid Control TSE, https://www.tse-fr.eu/articles/wasteful-public-spending-and-state-aid-control (accessed on 22 November 2020). | [40] |
| Didier, T. et al. (2020), "Hibernation: Keeping firms afloat during the COVID-19 crisis", VOX CEPR Policy, https://voxeu.org/article/keeping-firms-afloat-during-covid-19-crisis (accessed on 22 November 2020). | [3] |
| Dijkstra, M. and M. Schinkel (2019), "State-Aided Price Coordination in the Dutch Mortgage Market", SSRN Electronic Journal, http://dx.doi.org/10.2139/ssrn.3338875 . | [84] |
| DYCK, A., A. MORSE and L. ZINGALES (2010), "Who Blows the Whistle on Corporate Fraud?", <i>The Journal of Finance</i> , Vol. 65/6, pp. 2213-2253, http://dx.doi.org/10.1111/j.1540-6361.2010.01614.x | [106] |

| Egert, B. and I. Wanner (2016), "Regulations in services sectors and their impact on downstream industries: The OECD 2013 Regimpact Indicator", OECD Economics Department Working Papers, No. 1303, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jlwz7kz39q8-en . | [93] |
|---|------|
| European Commission (2020), "COMMUNICATION FROM THE COMMISSION TEMPORARY FRAMEWORK FOR STATE AID MEASURES TO SUPPORT THE ECONOMY IN THE CURRENT COVID-19 OUTBREAK (CONSOLIDATED VERSION) 1. THE COVID-19 OUTBREAK, ITS IMPACT ON THE ECONOMY AND THE NEED FOR TEMPORARY MEASURES The COVID-19 outbreak and its impact on the economy". | [42] |
| Fabiano Schivardi, B. et al. (2017), Credit Misallocation During the European Financial Crisis Credit Misallocation During the European Financial Crisis *. | [28] |
| Federico, G. et al. (2019), NBER WORKING PAPER SERIES ANTITRUST AND INNOVATION: WELCOMING AND PROTECTING DISRUPTION Antitrust and Innovation: Welcoming and Protecting Disruption Antitrust and Innovation: Welcoming and Protecting Disruption *, http://www.nber.org/papers/w26005.ack (accessed on 23 November 2020). | [99] |
| Fumagalli, C., M. Motta and M. Peitz (2020), Which Role for State Aid and Merger Control During and After the Covid Crisis?, http://www.crctr224.de (accessed on 22 November 2020). | [44] |
| Harada, K. and T. Ito (2011), "Did Mergers Help Japanese Mega-Banks Avoid Failure? Analysis of the Distance to Default of Banks", <i>Journal of the Japanese and International Economies</i> , Vol. 25/1, pp. 1-22, http://dx.doi.org/10.3386/w14518 . | [17] |
| Hayashi, F. and E. Prescott (2002), "The 1990s in Japan: A Lost Decade", <i>Review of Economic Dynamics</i> , Vol. 5/1, pp. 206-235, http://dx.doi.org/10.1006/redy.2001.0149 . | [20] |
| Hepburn, C. et al. (2020), "Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?", <i>Oxford Review of Economic Policy</i> , Vol. 36/Supplement_1, pp. S359-S381, http://dx.doi.org/10.1093/oxrep/graa015 . | [55] |
| ICN (2020), International Competition Network Steering Group Statement: Competition during and after the COVID-19 Pandemic, https://www.internationalcompetitionnetwork.org/wp-content/uploads/2020/04/SG-Covid19Statement-April2020.pdf (accessed on 14 November 2020). | [62] |
| Independent Commission on Banking (2011), , https://webarchive.nationalarchives.gov.uk/20120827143059/http://bankingcommission.independent.gov.uk/ (accessed on 28 November 2020). | [13] |
| ITF (2020), "Covid-19 Transport Brief - Restoring air connectivity under policies to mitigate climate change". | [53] |
| Jenny, F. (2020), "Competition law and health crisis", <i>Concurrences</i> , Vol. 2, https://www.concurrences.com/en/review/issues/no-2-2020/on-topic/competition-law-and-health-crisis-en (accessed on 26 November 2020). | [67] |

| Kamita, R. (2010), "Analyzing the effects of temporary antitrust immunity: The Aloha-Hawaiian immunity agreement", <i>Journal of Law and Economics</i> , Vol. 53/2, pp. 239-261, http://dx.doi.org/10.1086/600081 . | [11] |
|---|-------|
| Kehoe, T. and E. Prescott (2007), "Great Depressions of the Twentieth Century", in Great Depression in the Twentieth Century, http://www.greatdepressionsbook.com . (accessed on 19 November 2020). | [19] |
| Kirkpatrick, D. and J. Bradley (2020), "U.K. Paid \$20 Million for New Coronavirus Tests. They Didn't Work The New York Times", <i>The New York Times</i> , https://www.nytimes.com/2020/04/16/world/europe/coronavirus-antibody-test-uk.html?smid=tw-share (accessed on 21 November 2020). | [79] |
| Laprévote, F. (2014), "Abandon All Hope, ye Who Enter Here? Efficiencies in European Merger Control: A Few Lessons from Recent Decisional Practice - Antitrust Writing Awards 2015", http://awa2015.concurrences.com/articles-awards/academic-articles-awards/article/abandon-all-hope-ye-who-enter-here-efficiencies-in-european-merger-control-a (accessed on 23 November 2020). | [98] |
| Lyons, B. (2009), "Competition Policy, Bailouts, and the Economic Crisis", <i>Competition Policy International</i> , Vol. 5/2, pp. 25-48, https://core.ac.uk/download/pdf/2775042.pdf (accessed on 12 November 2020). | [15] |
| Mazzucato, M. (2020), "Avoiding a Climate Lockdown", <i>Project Syndicate</i> , https://www.project-syndicate.org/commentary/radical-green-overhaul-to-avoid-climate-lockdown-by-mariana-mazzucato-2020-09 (accessed on 27 November 2020). | [111] |
| Mazzucato, M., R. Kattel and J. Ryan-Collins (2020), "Challenge-Driven Innovation Policy: Towards a New Policy Toolkit", <i>Journal of Industry, Competition and Trade</i> , Vol. 20/2, pp. 421-437, http://dx.doi.org/10.1007/s10842-019-00329-w . | [88] |
| Moss, D. and L. Alexander (2020), "When COVID-19 is the Symptom and Not the Disease: Consolidation, Competition, and Breakdowns in Food Supply Chains", American Antitrust Institute, https://www.antitrustinstitute.org/work-product/when-covid-19-is-the-symptom-and-not-the-disease-consolidation-competition-and-breakdowns-in-food-supply-chains/ (accessed on 22 November 2020). | [36] |
| Motta, M. and M. Peitz (2020), "EU recovery fund: An opportunity for change", VOX CEPR Policy Portal, https://voxeu.org/article/eu-recovery-fund-opportunity-change (accessed on 20 November 2020). | [57] |
| Motta, M. and M. Peitz (2020), <i>State Aid Policies in Response to the COVID-19 Shock:</i> Observations and Guiding Principles, Springer, http://dx.doi.org/10.1007/s10272-020-0902-4 . | [45] |
| Neven, D. and V. Verouden (2008), Towards a more refined economic approach in State aid control Towards a More Refined Economic Approach in State Aid Control. | [41] |

| OECD (2020), Building Back Better: A Sustainable, Resilient Recovery after Covid-19 - OECD, https://read.oecd-ilibrary.org/view/?ref=133_133639-s08q2ridhf&title=Building-back-betterA-sustainable-resilient-recovery-after-Covid-19 (accessed on 30 November 2020). | [49] |
|---|-------|
| OECD (2020), Competition in Labour Markets, https://www.oecd.org/daf/competition/competition-in-labour-markets-2020.pdf (accessed on 25 November 2020). | [65] |
| OECD (2020), Co-operation between competitors in the time of COVID-19, https://www.oecd.org/competition/Co-operation-between-competitors-in-the-time-of-COVID-19.pdf (accessed on 14 November 2020). | [61] |
| OECD (2020), "Corporate sector vulnerabilities during the Covid-19 outbreak: Assessment and policy responses", http://www.oecd.org/coronavirus/policy-responses/corporate-sector-vulnerabilities-during-the-covid-19-outbreak-a6e670ea/ (accessed on 22 November 2020). | [2] |
| OECD (2020), "COVID-19 and the aviation industry - OECD", https://read.oecd-ilibrary.org/view/?ref=137_137248-fyhl0sbu89&title=COVID-19-and-the-aviation-industry (accessed on 24 November 2020). | [4] |
| OECD (2020), COVID-19: Competition and emergency procurement, https://www.oecd.org/competition/COVID-19-competition-and-emergency-procurement.pdf (accessed on 20 November 2020). | [58] |
| OECD (2020), <i>Education at a Glance 2020: OECD Indicators</i> , OECD Publishing, Paris, https://dx.doi.org/10.1787/69096873-en . | [105] |
| OECD (2020), Evaluating the initial impact of COVID-19 containment measures on economic activity, https://www.oecd.org/coronavirus/policy-responses/evaluating-the-initial-impact-of-covid-19-containment-measures-on-economic-activity-b1f6b68b/ (accessed on 22 November 2020). | [1] |
| OECD (2020), Exploitative pricing in the time of COVID-19, https://www.oecd.org/daf/competition/Exploitative-pricing-in-the-time-of-COVID-19.pdf (accessed on 20 November 2020). | [59] |
| OECD (2020), Merger Control in Dynamic Markets. | [100] |
| OECD (2020), OECD competition policy responses to COVID-19, https://read.oecd-ilibrary.org/view/?ref=130_130807-eqxgniyo7u&title=OECD-competition-policy-responses-to-COVID-19 (accessed on 14 November 2020). | [60] |
| OECD (2020), OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis, OECD Publishing, Paris, https://dx.doi.org/10.1787/1686c758-en . | [66] |
| OECD (2020), Public procurement and infrastructure governance: Initial policy responses to the coronavirus (Covid-19) crisis, http://www.oecd.org/coronavirus/policy-responses/public-procurement-and-infrastructure-governance-initial-policy-responses-to-the-coronavirus-covid-19-crisis-c0ab0a96/ (accessed on 21 November 2020). | [78] |

| OECD (2020), "Start-ups, Killer Acquisitions". | [96] |
|--|-------|
| OECD (2020), The 2018 edition of the OECD PMR indicators and database: Methodological improvements and policy insights en OECD OCDE, https://www.oecd.org/fr/publications/the-2018-edition-of-the-oecd-pmr-indicators-and-database-methodological-improvements-and-policy-insights-2cfb622f-en.htm (accessed on 25 November 2020). | [103] |
| OECD (2020), "The COVID-19 crisis and state ownership in the economy: Issues and policy considerations", https://www.oecd.org/coronavirus/policy-responses/the-covid-19-crisis-and-state-ownership-in-the-economy-issues-and-policy-considerations-ce417c46/ (accessed on 22 November 2020). | [48] |
| OECD (2019), Competition Assessment Toolkit, https://www.oecd.org/competition/assessment-toolkit.htm (accessed on 30 November 2020). | [25] |
| OECD (2019), "COMPETITION COMMITTEE Review of the Recommendation of the Council concerning Effective Action against Hard Core Cartels [OECD/LEGAL/0294] Report by the Secretariat". | [109] |
| OECD (2019), OECD Employment Outlook 2019: The Future of Work, OECD Publishing, Paris, https://dx.doi.org/10.1787/9ee00155-en . | [108] |
| OECD (2018), Excessive Pricing in Pharmaceuticals - OECD, http://www.oecd.org/daf/competition/excessive-pricing-in-pharmaceuticals.htm (accessed on 1 December 2020). | [71] |
| OECD (2018), Fighting Bid Rigging in IMSS Procurement: Impact of OECD Recommendations, http://www.oecd.org/daf/competition/IMSS-procurement-impact-oecd-oecd-oecd-oecd-oecd-oecd-oecd-oecd | [56] |
| OECD (2018), "Industrial Policy and the Promotion of Domestic Industry - Latin American and Caribbean Competition Forum", http://www.oecd.org/competition/latinamerica/programmeanddocuments.htm.http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/GF (accessed on 23 November 2020). | [97] |
| OECD (2018), "Market concentration", http://www.oecd.org/daf/competition/market-concentration.htm (accessed on 1 December 2020). | [74] |
| OECD (2018), OECD Market Studies Guide for Competition Authorities 2018, http://www.oecd.org/daf/competition/market-studies-guide-for-competition-authorities.htm (accessed on 30 November 2020). | [54] |
| OECD (2017), OECD COMPETITION ASSESSMENT TOOLKIT. | [104] |
| OECD (2017), Preventing Policy Capture: Integrity in Public Decision Making, OECD Public Governance Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264065239-en . | [110] |
| OECD (2014), Factsheet on how competition policy affects macro-economic outcomes, http://oe.cd/J3 (accessed on 30 November 2020). | [34] |

[96]

| OECD (2014), OECD Competition Assessment Reviews: Greece, OECD Competition Assessment Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264206090-en . | [26] |
|---|-------|
| OECD (2011), Crisis Cartels, http://www.oecd.org/daf/competition/cartels/48948847.pdf . | [68] |
| OECD (2011), Excessive Prices, https://www.oecd.org/competition/abuse/49604207.pdf . | [70] |
| OECD (2010), Competition, State Aids and Subsidies 2010, http://www.oecd.org/daf/competition/sectors/48070736.pdf (accessed on 22 November 2020). | [39] |
| OECD (2010), Exit Strategies, http://www.oecd.org/competition (accessed on 27 November 2020). | [47] |
| OECD (2010), Information Exchanges Between Competitors under Competition Law, http://www.oecd.org/competition/cartels/48379006.pdf . | [69] |
| OECD (2009), COMPETITION POLICY, INDUSTRIAL POLICY AND NATIONAL CHAMPIONS, http://www.oecd.org/daf/competition/44548025.pdf (accessed on 1 December 2020). | [52] |
| OECD (2009), <i>The Financial Crisis Reform and Exit Strategies</i> , OECD, http://www.sourceoecd.org/finance/9789264073012www.sourceoecd.org/governance/9789264073012 (accessed on 30 November 2020). | [46] |
| OECD (n.d.), . | [80] |
| OECD (n.d.), Equity injections and unforeseen state ownership of enterprises during the COVID-19 crisis, https://www.oecd.org/coronavirus/policy-responses/equity-injections-and-unforeseen-state-ownership-of-enterprises-during-the-covid-19-crisis-3bdb26f0/ (accessed on 22 November 2020). | [85] |
| OECD (n.d.), Indicators of Product Market Regulation - OECD, http://www.oecd.org/economy/reform/indicators-of-product-market-regulation/ (accessed on 24 November 2020). | [102] |
| OECD, N. (2017), Co-operation between Competition Agencies and Regulators in the Financial Sector, https://one.oecd.org/document/DAF/COMP/WP2/WD(2017)22/en/pdf (accessed on 12 November 2020). | [75] |
| OFT (2007), The deterrent effect of competition enforcement by the OFT A report prepared for the OFT by Deloitte. | [91] |
| Padilla, J. (2020), "A Keynesian antitrust response to the COVID-19 crisis", <i>Journal of Antitrust Enforcement</i> , Vol. 8/2, pp. 302-304, http://dx.doi.org/10.1093/jaenfo/jnaa024 . | [37] |
| Porter, M. (1990), The Competitive Advantage of Nations Harvard Business Review. | [51] |

| Porter, M. and M. Sakakibara (2004), "Competition in Japan", <i>Journal of Economic Perspectives</i> , Vol. 18/1, pp. 27-50, https://pubs.aeaweb.org/doi/pdfplus/10.1257/089533004773563421 (accessed on 27 November 2020). | [21] |
|--|------|
| Porter, M. and M. Sakakibara (2004), Competition in Japan. | [18] |
| Ricardo Caballero, B. et al. (2006), "Zombie Lending and Depressed Restructuring in Japan", <i>American Economic Review</i> , Vol. 98/5, pp. 1943-1977, http://dx.doi.org/10.1257/aer.98.5.1943 . | [27] |
| Romer, C. (1999), "Why Did Prices Rise in the 1930s?", <i>The Journal of Economic History</i> , Vol. 59/1, pp. 167-199, http://dx.doi.org/10.1017/s0022050700022336 . | [8] |
| Rose, N. (2020), "Will Competition Be Another COVID-19 Casualty?", <i>The Hamilton Project</i> 15, https://www.hamiltonproject.org/papers/will_competition_be_another_covid_19_casualty . | [12] |
| Schinkel, M. and A. D'Ailly (2020), "Corona Crisis Cartels: Sense and Sensibility", Amsterdam Center for Law & Economics Working Paper No. 2020-03, https://ssrn.com/abstract=3623154 (accessed on 14 November 2020). | [76] |
| Schivardi, F., E. Sette and G. Tabellini (2017), "Credit misallocation during the European financial crisis", https://www.bis.org/publ/work669.htm (accessed on 22 November 2020). | [31] |
| Scott Morton, F. (2020), "Innovation incentives in a pandemic", <i>Journal of Antitrust Enforcement</i> , Vol. 8/2, pp. 309-312, http://dx.doi.org/10.1093/jaenfo/jnaa017 . | [35] |
| Seldeslachts, J., J. Clougherty and P. Barros (2009), "Settle for now but block for tomorrow: The deterrence effects of merger policy tools", <i>Journal of Law and Economics</i> , Vol. 52/3, pp. 607-634, http://dx.doi.org/10.1086/596038 . | [92] |
| Shapiro, C. (2018), "Antitrust in a time of populism ☆", <i>International Journal of Industrial Organization</i> , Vol. 61, pp. 714-748, http://dx.doi.org/10.1016/j.ijindorg.2018.01.001 . | [90] |
| Shapiro, C. (2009), "Competition Policy in Distressed Industries", ABA Antitrust Symposium: Competition as Public Policy, https://www.justice.gov/atr/speech/competition-policy-distressed-industries . | [73] |
| Shelanski, H. (2010), "Enforcing Competition during an Economic Crisis", <i>Antitrust Law Journal</i> , Vol. 77/1, pp. 229-245, https://www.jstor.org/stable/23075595 (accessed on 21 November 2020). | [77] |
| Stephan, A. (2011), "Did Lloyds/HBOS Mark the Failure of an Enduring Economics Based System of Merger Regulation?", <i>Northern Ireland Legal Quarterly</i> , http://dx.doi.org/10.2139/ssrn.1931007 . | [16] |
| Stiglitz, J., J. Lin and C. Monga (2013), "The Rejuvenation of Industrial Policy", World Bank Policy Research Working Paper 6628, http://dx.doi.org/10.1596/1813-9450-6628 . | [87] |

| Storz, M. et al. (2017), "Working Paper Series Do we want these two to tango? On zombie firms and stressed banks in Europe", http://dx.doi.org/10.2866/020370 . | [30] |
|--|-------|
| Taylor, J. (2002), "The output effects of government sponsored cartels during the New Deal", <i>Journal of Industrial Economics</i> , Vol. 50/1, pp. 1-10, http://dx.doi.org/10.1111/1467-6451.00164 . | [9] |
| Tirole, J. (2020), Competition and the Industrial Challenge for the Digital Age *. | [38] |
| UK CMA (2014), Market investigation references, http://www.oft.gov.uk/Business/Legal/Enterprise/publications.htm (accessed on 25 November 2020). | [112] |
| UK House of Commons (2009), House of Commons - Regulatory Reform Committee - Written Evidence, https://publications.parliament.uk/pa/cm200809/cmselect/cmdereg/329/329we12.htm (accessed on 28 November 2020). | [22] |
| Vickers, J. (2008), "The Financial Crisis and Competition Policy: Some Economics", Global Competition Policy, Vol. 1, https://www.competitionpolicyinternational.com/assets/0d358061e11f2708ad9d6263 4c6c40ad/Vickers-Dec-08_1_pdf (accessed on 12 November 2020). | [14] |
| Volpin, C. (2020), "Sustainability as a Quality Dimension of Competition: Protecting Our Future (Selves)", https://www.competitionpolicyinternational.com/sustainability-as-a-quality-dimension-of-competition-protecting-our-future-selves/ (accessed on 23 November 2020). | [101] |
| Waller, S. (2004), "The Antitrust Legacy of Thurman Arnold", <i>St. John's Law Review</i> , Vol. 78/3, pp. 569-613, https://ssrn.com/abstract=648203 . | [6] |
| Weinstein, M. (1982), "Recovery and Redistribution Under the Nira. By Michael M. Weinstein. Amsterdam, North-Holland Publishing Company, 1980. Pp. xv + 171. \$36.50.", Business History Review, Vol. 56/3, pp. 453-454, http://dx.doi.org/10.2307/3114653 . | [10] |
| Yeoh, P. (2014), "Whistleblowing: motivations, corporate self-regulation, and the law", International Journal of Law and Management, Vol. 56/6, pp. 459-474, http://dx.doi.org/10.1108/ijlma-06-2013-0027. | [107] |

www.oecd.org/competition

