



COMPETITION AND  
PURCHASING POWER  
IN TIMES OF  
**INFLATION**

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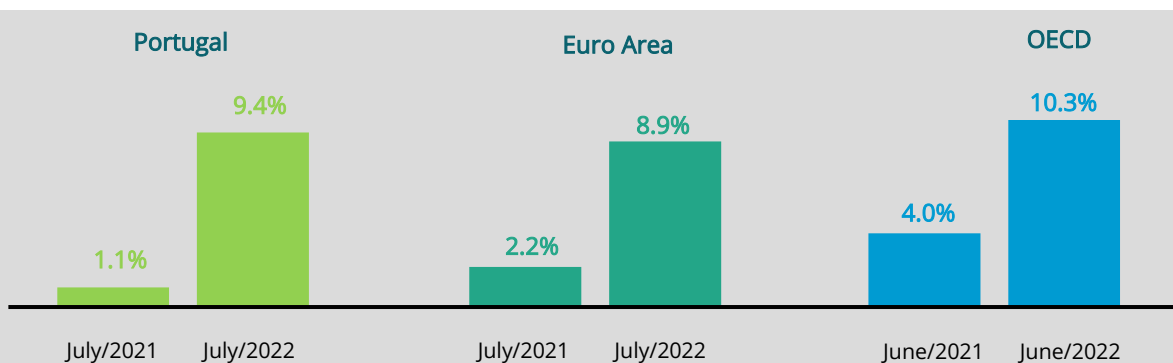
## COMPETITION AND PURCHASING POWER IN TIMES OF INFLATION

### I. Worldwide surge in inflation

Following the Covid-19 pandemic and lockdown measures, the world economy is currently facing considerable inflation, causing concerns with a reduction in the real disposable income of households.

Annual inflation in Portugal is estimated to be 9.4% in July 2022 (up from 1.1% in July 2021). Portugal follows the same trend as the euro area annual inflation (8.9% in July 2022 and 2.2% in July 2021).<sup>1</sup> Likewise, the year-on-year inflation in the OECD was 10.3% in June 2022.<sup>2</sup>

The worldwide increase in inflation is related to the reopening of the economy following pandemic lockdown measures. While demand increased, there have been supply shortages and bottlenecks of commodities and intermediate goods. More recently, the conflict in Ukraine, the economic sanctions against Russia and the pandemic lockdown measures in China have further disrupted global supply chains.<sup>3</sup>



A large part of the increase in inflation reflects the **surge in energy prices**. Furthermore, the prices of food, non-energy industrial goods and services have also contributed to the upward trend of inflation since autumn 2021.<sup>4</sup>

### II. The role of competition in times of inflation

**Competition policy does not aim to address surging inflation** in the short-term nor market power is likely to be the key driver of the current inflationary trend.

Market power is about price levels, leading to higher prices, and not necessarily a short run trend of rising prices across different sectors in the economy.

Despite this, **both inflation and the lack of competition lead to higher prices** and a more competitive economy may influence macroeconomic policies and inflation dynamics.

<sup>1</sup> Flash Estimate – July 2022 “[Euro area annual inflation up to 8.9%](#)”, Eurostat, 86/2022.

<sup>2</sup> OECD Data on Inflation CPI, available [here](#).

<sup>3</sup> Cf. [Economic Bulletin - June 2022](#), Banco de Portugal; [Economic Bulletin - May 2022](#), Banco de Portugal; and [Economic Bulletin Issue 4, 2022](#), European Central Bank.

<sup>4</sup> [Euro area annual inflation rate and its main components – June 2021 to June 2022](#), ECB.

There has been an intense policy and academic debate on concentration and increasing markups and profits<sup>5</sup>, given the increasing average industry concentration<sup>6</sup> in the last decades, particularly in the U.S.<sup>7</sup> Diez et al. (2019) found that rising markups could weaken investment, deter innovation, reduce labor income shares, and make it more difficult for monetary policy to stabilize output.<sup>8</sup>

It is, however, important to clarify that the trend on increasing concentration has been longstanding, while the surge in inflation is more recent. Rather, supply chain disruptions following the Covid-19 pandemic, the conflict in Ukraine and the sanctions on Russia have been pointed as the likely culprits of the ongoing inflationary trend.

**In times of crisis, competitive markets and strong enforcement of competition law have an essential role to play.** Competition is key to keep prices low for consumers.

More competition in product markets leads to lower prices via a downward pressure on profit margins and on costs. This relationship implies that competition can reduce prices and contribute to restrain inflation.<sup>9</sup> More competitive markets *"not only boost an economy's sustainable output path, but also reduce the vulnerability of the price level to swings in capacity pressures"*.<sup>10</sup>

**Furthermore, firms in industries with higher search and switching costs are more likely to benefit from inflation in the form of larger mark-ups.** In general, buyers will endure a higher burden of the cost increase, via higher prices, in markets where buyers are price insensitive.

Using firm-level data from 57 industries in the US, Gwin and Taylor (2004)<sup>11</sup> found that firms in industries with relatively high search costs, were more likely to benefit from inflation in the form of larger mark-ups.

**A more competitive economy also tends to adjust more swiftly to unanticipated shocks.**<sup>12</sup>

More competition pushes firms to change their prices more frequently as a response to competition pressure and/or changes to underlying factors, which in turn can reduce the

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<sup>5</sup> Gábor Koltay and Szabolcs Lorincz, Competition Policy Brief: Industry concentration and competition policy, Issue 2021/02, November 2021.

<sup>6</sup> We note, however, that the pattern varies across industries.

<sup>7</sup> See, e.g., De Loecker, J., J. Eeckhout, and G. Unger (2020), "The Rise of Market Power and the Macroeconomic Implications", Quarterly Journal of Economics, 135(2), 561-644.

<sup>8</sup> Diez F., R. Duval, W. Chen, C. Jones, and C. Villegas-Sánchez (2019), "The rise of corporate market power and its macroeconomic effects", IMF World Economic Outlook, April 2019, Chapter 2.

<sup>9</sup> Duca, J. V., & Van Hoose Jr, D. D. (2000). "Has greater competition restrained US inflation?". *Southern Economic Journal*, 66(3), 729-741; Cavelaars, P. (2003) "Does competition enhancement have permanent inflation effects?" *KYKLOS* 56(1): 69-94; Przybyla, M., & Roma, M. (2005). Does product market competition reduce inflation? Evidence from EU countries and sectors. CESIFO Working Paper No. 3690. Przybyla and Roma (2005) focuses on the period 1980-2001 and on a panel of EU countries.

<sup>10</sup> Duca and VanHouse (2000).

<sup>11</sup> Gwin, C. R. and Taylor, B. A. (2004) "The Role of Search Costs in Determining the Relationship between Inflation and Profit Margins" *Journal of Money, Credit and Banking* 36(1): 139-149.

<sup>12</sup> Genakos and Pagliero, "Competition and Pass-Through: Evidence from Isolated Markets" *American Economic Journal: Applied Economics* (Forthcoming).

time that inflation takes to return to the level prior to the shocks that triggered it, in the first place.<sup>13</sup>

The empirical evidence points to a non-linear relationship between competition and the rate of cost pass-through<sup>14</sup>, i.e., how firms pass cost shocks (e.g., taxes, exchange rates or input prices) through to prices. Competition has, in certain circumstances, been associated with higher levels of cost pass-through, which can foster a swifter adjustment to shocks. The extent to which economy-wide cost increases are passed on to downstream firms and to consumers depends on factors such as the price sensitivity of supply and demand, the shape of the supply and demand curves and on the degree of competition in the markets involved in the price transmission mechanism.<sup>15</sup>

**Competition policy can contribute to reach a more sustainable economic recovery at a lower economic cost.** Competition forces firms to compete more fiercely with one another, benefiting consumers via lower prices, better quality, and more variety.

The role of competition has been acknowledged, for example, in the **1971 OECD Council recommendation concerning action against inflation**.

In its recommendation, the OECD set out several immediate and long-term steps that adherent countries should follow in terms of competition policy, recognizing the: *"importance of competition policy for achieving optimum economic growth, long-term price stability and for encouraging more rational consumer behaviour"*.<sup>16</sup>

Thus, **reforms that enhance competition in labor and product markets might reduce the degree of price stickiness and help stimulus or stabilization policies to be more effective.** This is particularly relevant in Europe, where many studies have shown that prices tend to be sticky and stickier than in the US.<sup>17</sup>

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<sup>13</sup> Eurosystem (2006) "Competition, productivity and prices in the euro area services sector", Task Force of the Monetary Policy Committee of the European System of Central banks.

<sup>14</sup> Genakos and Pagliero (Forthcoming).

<sup>15</sup> See Bulow, J., and P. Pfleiderer (1983). "A Note on the Effect of Cost Changes on Prices", *Journal of Political Economy*, Vol. 91, No. 1, pp. 182-185; Weyl, E. G., and M. Fabinger (2013): "Pass-Through as an Economic Tool: Principles of Incidence under Imperfect Competition", *Journal of Political Economy*, Vol. 121, No. 3, pp. 528-583; Adachi, T. (2020). "Hong and Li meet Weyl and Fabinger: Modeling vertical structure by the conduct parameter approach". *Economics Letters*, 186, 108732. For a review of the economics of cost pass-through, see also RBB (2014) "Cost pass-through: theory, measurement, and potential policy implications" prepared for the Office of Fair Trading.

<sup>16</sup> OECD, *Recommendation of the Council concerning Action against Inflation in the Field of Competition Policy*, OECD/LEGAL/0097.

<sup>17</sup> See, e.g., Alvarez, Luis J., et al. "Sticky prices in the euro area: a summary of new micro-evidence." *Journal of the European Economic Association* 4.2-3 (2006): 575-584; and Eurosystem (2006) "Competition, productivity and prices in the euro area services sector", Task Force of the Monetary Policy Committee of the European System of Central banks.

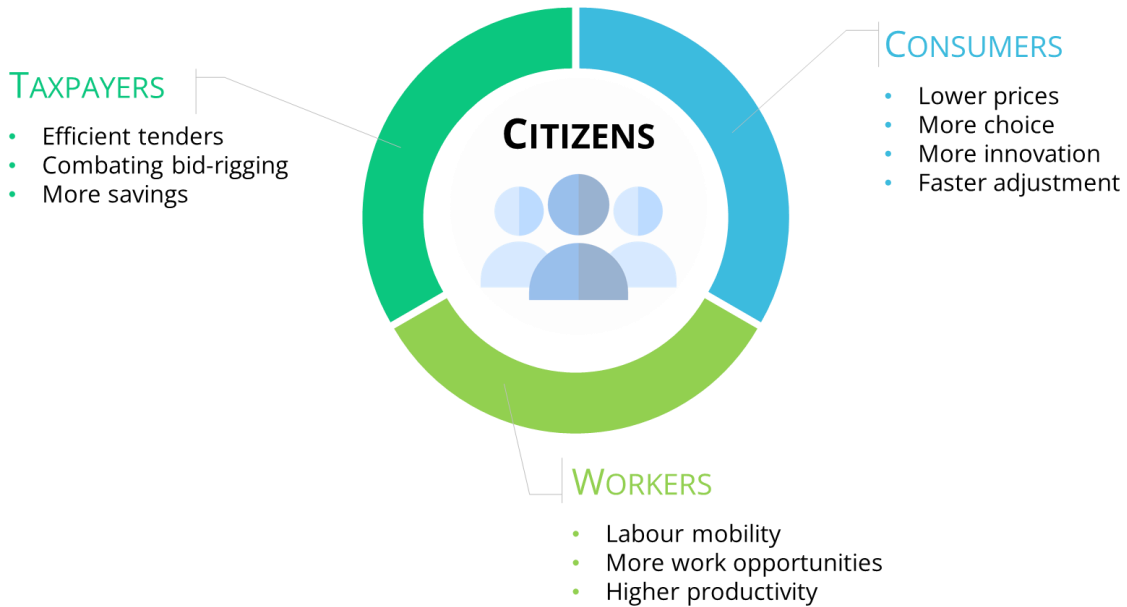
### III. Competition can be invaluable to maintain the purchasing power

Competition can have an important role in protecting purchasing power in times of inflation. Current macroeconomic conditions can put a strain on **households: as taxpayers, as consumers, as workers**. In a 360-degree view on purchasing power of households, competition can mitigate the impact of inflation in all these dimensions and strengthen the path towards a sustainable economic recovery.

This competitive discipline can also bring benefits to firms as consumers of goods and services. Competition may induce input price reductions in the economy and generate savings across the whole value of chain.

## 360° Approach

### How competition can maintain the purchasing power of households



CONSUMERS	WORKERS	TAXPAYERS
<p>COMPETITION MAY REDUCE PRICES AND SOFTEN INFLATION</p>	<p>COMPETITION PROMOTES LABOR MOBILITY AND OPPORTUNITIES FOR WORKERS</p>	<p>COMPETITION INCREASES THE EFFICIENCY OF PUBLIC SPENDING</p>
<ul style="list-style-type: none"> <li>• More competition in product markets leads to lower prices via a downward pressure on profit margins and costs.</li> <li>• Competition is a driver of innovation. Both in terms of new production processes, (with lower costs or higher productivity) and new and better products.</li> <li>• Competition widens choice for consumers.</li> </ul>	<ul style="list-style-type: none"> <li>• Competition improves the quality of worker-employer matches, which increases labor productivity.</li> <li>• Competition is instrumental in ensuring open and competitive labor markets.</li> <li>• It is key to ensure workers are not deprived of the opportunities to change jobs if they wish so.</li> </ul>	<ul style="list-style-type: none"> <li>• Public procurement represents 9.7% of GDP and 20.1% of the government expenditures.</li> <li>• Bid rigging may carry significant overcharges for public expenditures. As such, competition avoids waste of public money and promotes taxpayers' welfare.</li> <li>• Fighting bid rigging and advocating for efficient and participated public tenders can deliver value for money.</li> </ul>

## AdC's advocacy initiatives

### *I. In promoting competition in public procurement*

To promote competition in public procurement, the AdC has put in place initiatives **to raise awareness among procurers to the benefits of competition and the costs and signs of collusion in public tenders**. In those sessions, the AdC raises awareness of procurers to the high costs of collusion, to the main signs of collusion to which they should be aware of, as well as to the best practices in the design of tenders, with a view to promoting competition and efficiency.

In 2021 and 2022, the AdC's **outreach initiative "Combating Bid-Rigging in Public Procurement"**<sup>18</sup> focused on the target investment areas foreseen in the economic recovery strategy plan, namely health and infrastructures.

Furthermore, the AdC issued several **recommendations to promote competition and efficiency in public procurement**.<sup>19</sup> The general principles underlined in those recommendations are set out in AdC (2021) [The role of competition in implementing the economic recovery strategy](#).

### *II. In promoting labour mobility and opportunities for workers*

The AdC has been active in promoting the **reduction of unnecessary restrictions to accessing self-regulated professions in Portugal**, so as to promote a competitive environment and a more efficient allocation of resources, fostering competitiveness and economic resiliency. The economic recovery strategy plan foresees a reform to reduce restrictions to access self-regulated professions.

Following a set of OECD recommendations that resulted from a joint AdC/OECD Project, the AdC issued its [Action Plan for legislative and regulatory reform](#) (2018). These recommendations and legislative proposals were reiterated in AdC (2021) [The role of competition in implementing the economic recovery strategy](#).

In September 2021, the AdC published **an issues paper and a best practice guide on anti-competitive agreements in labour markets**, aimed at raising awareness to no-poach and wage-fixing agreements and promote compliance, to strengthen enforcement of competition law in labour markets.<sup>20</sup>

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<sup>18</sup> AdC (2015), [Best practices guidelines for fighting bid-rigging in public procurement](#) (in Portuguese).

<sup>19</sup> Such as in AdC (2021) [Best practices for awarding public road passenger transport service contracts](#); AdC (2020) [Best practices for awarding outdoor advertising concession rights](#) (in Portuguese); and AdC (2018) [Technological Innovation and Competition in the Financial Sector in Portugal](#).

<sup>20</sup> AdC (2021), [Labor market agreements and competition policy](#) and AdC (2021) [Best Practices: In preventing Anticompetitive Agreements in Labor Markets](#).

#### IV. Competition advocacy: the opportunity to remove barriers to entry

**Competition in prices, quality and innovation can be promoted by tackling unnecessary barriers to entry and expansion**, as well as by reducing switching and search costs.

Lower barriers to entry and expansion can induce factor mobility, a faster entry of firms in the market and a more swiftly response to supply shortages.<sup>21</sup> Reducing switching and search costs helps firms and consumers find suitable alternatives to products affected by negative supply shocks.

Openness and competition can also spur productivity by allowing lower input costs and encouraging innovation.

In the last few years, **the AdC issued several recommendations to promote competition across many sectors of the economy**, aimed at removing unnecessary barriers to entry and expansion and lowering search and switching costs, in particular:

- To business models based on digital technologies (e.g., FinTech)<sup>22</sup>;
- In the road, rail, maritime and port sectors<sup>23</sup>;
- In the electronic communications<sup>24</sup>; and
- In energy and electric mobility<sup>25</sup>.

In the report sent to the Portuguese Government in April 2021 with a set of competition principles to be considered in the implementation of Resilience and Recovery Plan<sup>26</sup>, the AdC highlighted the opportunity to implement these recommendations and unleash the economy's full potential.

As we face a double challenge of recovering the economy and dealing with an inflationary trend, there are now even stronger grounds to argue in favor of reforms to reduce barriers to entry and expansion.

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<sup>21</sup> E.g., Foster, L., Haltiwanger, J. and Krizan, C.J. (2006). "Market Selection, Reallocation, and Restructuring in the U.S. Retail Trade Sector in the 1990s." *Review of Economics and Statistics*, 88(4): 748–58; Bloom, N., Draca, M. and Van Reenen, J (2016), "Trade Induced Technical Change? The Impact of Chinese Imports on Innovation, IT and Productivity." *Rev Econ Stud* 83 (1): 87-117; and Correa & Ornaghi. (2014). "Competition & Innovation: Evidence from U.S. Patent and Productivity Data". *The Journal of Industrial Economics*.

<sup>22</sup> AdC (2018), [Technological Innovation and Competition in the Financial Sector in Portugal](#) (two-pager available [here](#)), and AdC (2021), [Monitoring Recommendations for the Financial System, two-pager in English and report in Portuguese](#).

<sup>23</sup> AdC (2018) [Action Plan for legislative and regulatory reform](#); AdC (2018) [Report on competition in the Portuguese port sector](#), report in Portuguese; AdC (2018), [Recommendation in the Scope of the Liberalization of Passenger Rail Transport Services](#), in Portuguese.

<sup>24</sup> AdC (2020), [Report on loyalty policies in telecommunication services](#).

<sup>25</sup> *Vide*, e.g., AdC (2022), [AdC's comments to the Public Consultation 109 on the proposed development and investment plans for the gas distribution networks for the period 2023-2027](#), in Portuguese; AdC (2020), [Comments on the proposal for an Electricity Distribution Network Development and Investment Plan for the period 2021-2025](#), in Portuguese; AdC (2018), [Analysis of the road liquid fuels sector in mainland Portugal](#), in Portuguese; AdC (2017), [The bottled liquefied petroleum gas industry in Portugal](#), in Portuguese; AdC (2017), [Sector Inquiry on the supply of natural gas to industrial consumers](#), in Portuguese.

<sup>26</sup> AdC (2021) [The role of competition in implementing the economic recovery strategy](#).



## V. Competition enforcement in times of inflation

**The enforcement of competition rules by the AdC, through merger control and antitrust, also contributes to keeping markets open and competitive.** A strong competition enforcement is key in avoiding mergers that would harm competition and in deterring firms' behavior that could otherwise make inflation worse.

Combating cartels in public procurement is also key to avoid waste of public funds and overspending in times of inflation. This also allows for saving resources that can be channeled to better uses, such as public measures aimed at promoting the economic recovery.

The AdC has been active in pursuing cartels vis-à-vis public entities. Recently, the AdC sanctioned a bid-rigging cartel in surveillance and security in public tenders.<sup>27</sup> In addition, the AdC sanctioned a set of hospitals and their association for concerted behavior in contracting hospital services in a Portuguese public health sub-system.<sup>28</sup>

### Competition and price announcements in times of inflation

**Temporary supply chain disruptions or any form of public price announcement should not be used to disguise a concerted practice.**

As explained in the European Commission's Guidelines on Horizontal Agreements, firms can make genuine public announcements, for instance, through a newspaper, provided such announcements do not involve invitations to collude<sup>29</sup>. However, situations in which such announcements involve invitations to collude may, depending on the specific circumstances, be considered anticompetitive.

The European Commission says further that:

*"(...) the possibility of finding a concerted practice cannot be excluded, for example in a situation where such an announcement was followed by public announcements by other competitors, not least because strategic responses of competitors to each other's public announcements (which, to take one instance, might involve readjustments of their own earlier announcements to announcements made by competitors) could prove to be a strategy for reaching a common understanding about the terms of coordination."<sup>30</sup>*

In times of inflation, the AdC reiterates that each firm must set its prices and strategies in the market in an autonomous manner (*vis-à-vis* their competitors in the market)<sup>31</sup>.

<sup>27</sup> AdC (2022). "[AdC sanctions bid-rigging cartel in the security sector](#)".

<sup>28</sup> AdC (2022). "[AdC sanctions hospitals and respective association for concerted behaviour](#)".

<sup>29</sup> Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, paragraph 63, footnote 10.

<sup>30</sup> Idem, paragraph 63.

<sup>31</sup> Price announcements made by price leaders or business associations are more likely to raise competition concerns. With this regard, see AdC's "[Best practices guidelines to business associations](#)" (in Portuguese).

## VI. Prudence on setting price controls

Governments are more likely to implement price controls when inflation rises.<sup>32</sup> This, however, may bring risks to competition.

The price cap may act as a focal point for collusion if set too high in relation to the costs of production of the firms and the price level which would prevail in a competitive situation.

On the other hand, imposing a cap at an artificially low level, which does not allow firms to recoup their costs, may encourage the exit of firms, particularly smaller ones. It may also weaken incentives for competitors to enter and expand in the market.

Price controls distort price signals in the market and may unintendedly lead to supply shortages and value chain disruptions.

In the design of measures aimed at controlling price levels, it is also key to avoid the public disclosure of information, such as, reference prices or costs, that may foster the conditions for collusion. The disclosure of such information does not provide any direct information to consumers that could lower search costs and may help companies in reaching a collusive equilibrium.

Price controls have also been pointed as not having a significant impact on inflation. The effects of price controls on aggregate inflation are temporary, in nature. Moreover, firms may seek to circumvent price controls by introducing new product varieties at higher prices.<sup>33</sup>

In a recent survey of 43 academic economists conducted by the University of Chicago's Booth School of Business,<sup>34</sup> 58% disagreed that said that price controls as deployed in the 1970s could successfully reduce U.S. inflation over the next 12 months. Others said the policy might bring down inflation in the short-term but would lead to supply shortages or other problems.

**It is, thus, important to assess the likely risks of a price cap in terms of impact on competition and assess alternative policies that may achieve the same objective.**

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<sup>32</sup> Cavelaars. (2003) "Does Competition Enhancement Have Permanent Inflation Effects?". *Kyklos*.

<sup>33</sup> Aparicio, D & Cavallo, A. (2021) "Targeted Price Controls on Supermarket Products". *The Review of Economics and Statistics* 2021; 103 (1): 60–71.

<sup>34</sup> <https://www.igmchicago.org/surveys/inflation-market-power-and-price-controls/>.

## COMPETITION AND PURCHASING POWER IN TIMES OF INFLATION

### KEY MESSAGES

1. Competition policy does not aim to address surging inflation in the short-term nor market power is likely to be the key driver of the current inflationary trend.
2. However, a more competitive economy may influence macroeconomic policies and inflation dynamics.
3. In a 360 degrees approach, competition can be invaluable in protecting households' purchasing power - as taxpayers, as consumers, as workers - as well as firms, enhancing its competitiveness.
4. Competition is key to:
  - keep prices low for consumers via a downward pressure on profit margins and costs.
  - avoid mergers that would harm competition and in deterring firms' behavior that could otherwise make inflation worse.
5. A more competitive economy tends to adjust more swiftly to unanticipated shocks.
6. Competition can contribute to reach a sustainable economic recovery at a lower economic cost.
7. Combating cartels in public procurement is key to avoid waste of public funds and overspending. The AdC has been active in pursuing cartels vis-à-vis public entities.
8. In 2021 and 2022, the AdC's initiative "Combating Bid-Rigging in Public Procurement" focused on the target investment areas of the economic recovery strategy plan.
9. Furthermore, the AdC issued several recommendations to promote competition and efficiency in public procurement.
10. Reforms that enhance competition in labor and product markets might reduce the degree of price stickiness and help stimulus or stabilization policies to be more effective.
11. The AdC issued recommendations across many sectors of the economy, to remove unnecessary barriers to entry and expansion and lowering search and switching costs (FinTech, road, rail, maritime and port sectors, electronic communications, energy and electric mobility).
12. The double challenge of recovery and inflation strengthens the case for these recommendations, that may be crucial to unleash the economy's full potential.
13. Temporary supply chain disruptions or any form of public price announcement should not be used to disguise a cartel.
14. In times of inflation, the AdC reiterates that each firm must set its prices and strategies in the market autonomously (*vis-à-vis* their competitors), avoiding public price announcements that involve invitations to collude.
15. Governments are more likely to implement price controls when inflation rises, but these may bring risks to competition. It is important to assess these risks in terms of impact on competition and assess alternative policies that may achieve the same objective.