

SIMPLIFIED QUANTIFICATION OF THE CONSUMER SAVINGS FROM THE 2022 TEMPORARY MARKET OPENING IN THE COVID-19 RAPID SELF-TEST RETAIL DISTRIBUTION IN HUNGARY¹

HUNGARIAN COMPETITION AUTHORITY

28.11.2024

1. This document and its annex present the simplified quantification of the consumer savings resulting from the government's measure to liberalise the retail sale of Covid-19 antigen rapid self-tests in Hungary.
2. The measure in question was proposed by the Hungarian Competition Authority (Gazdasági Versenyhivatal, GVH) following its accelerated sector inquiry into the prices of Covid-19 rapid self-tests. After the market opening, for most of 2022–2023, rapid self-tests were available to consumers in Hungary not only in pharmacies and specialised medical device stores, but also in drugstores and other similar outlets (such as certain supermarkets and petrol stations), leading to a significant price decrease.
3. **Direct consumer savings from this price decrease were found to be around HUF 2.3–4.9 billion, i.e. the amount of direct consumer benefits generated by the market opening.**² This amount is comparable to the expected consumer benefit from some of the recent major competition enforcement cases of the GVH, showing that competition advocacy by the GVH can be as important as its competition enforcement. If the retail of rapid self-tests had always been liberalised, the corresponding consumer benefit would have been even higher, around HUF 6–12.5 billion.
4. This quantification was made by adapting the general framework for *ex-ante* impact assessments of the GVH, which follows international best practices and relies on easy-to-use methods to arrive at approximate results which are not exaggerated. This method does not capture the indirect and dynamic benefits, such as – in this particular case – health gain or fewer days in sick leave. For this and similar reasons, the actual consumer (and social) benefits exceed the results presented here.
5. Usually, the application of this method to activities other than classical competition law enforcement faces practical obstacles, but in this case a simplified quantification was possible to be performed. Given the uncertainties, several versions of the calculation were carried out, all relying on conservative assumptions on the intensity of self-test use and the share of the reported price decrease caused by market opening.
6. These results highlight the benefits of new market entry and stronger competition, the losses of restricting competition, as well as the importance of competition advocacy and pro-competitive government measures in pursuing consumer welfare.
7. The calculation is detailed by the annex.

¹ This document and its annex may be freely quoted and cited provided that the source is acknowledged. (Simplified quantification of the consumer savings from the 2022 temporary market opening in the Covid-19 rapid self-test retail distribution in Hungary, Hungarian Competition Authority, 28.11.2024.)

This document is the English version of the original Hungarian version (A lakossági Covid19 gyorsesztesztek kiskereskedelmének 2022-es átmeneti piacnyitásából származó jóléti haszon mértékéről, Gazdasági Versenyhivatal, 2024.11.28.). Only the Hungarian version is authentic.

² 2024 value. Around EUR 6–13 million or USD 6–14 million, calculated at the average exchange rate of the Hungarian National Bank in 2024.

ANNEX
METHOD OF QUANTIFICATION

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1 Introduction

1. This annex details the simplified quantification of the consumer savings resulting from the government's measure to liberalise the retail sale of Covid-19 antigen rapid self-tests (rapid self-tests) in Hungary. After the market opening, consumers could buy rapid self-tests not only in pharmacies and specialised medical device stores, but also in drugstores and other similar outlets (such as certain supermarkets and petrol stations).¹ Consumers had this opportunity from 9 February 2022 until the end of 2023, except for roughly October 2022.²
2. The measure in question was proposed by the Hungarian Competition Authority (Gazdasági Versenyhivatal, GVH), based on its accelerated sector inquiry into the prices of Covid-19 rapid self-tests.³ The GVH hoped that there might be a potentially significant price decrease after the proposal was implemented, not only because it would increase the number of market players, but also because the GVH believed that new and different entrants would be able to purchase self-tests from alternative sources and through a shorter and more efficient supply chain. Indeed, one of the findings of the accelerated sector inquiry was that the supply chains of pharmacies and specialised medical device stores for rapid self-testing involved many intermediaries, which was inefficient, driving up costs and consumer prices.
3. While direct consumer benefits from sector inquiries may be too abstract to be quantified, the notion of consumer benefits generated by concrete (and implemented) advocacy proposals or the measures that implement them are clear and straightforward.

2 Methodological framework

4. The calculation applies the framework of the simplified quantification method for *ex-ante* impact assessments. *Ex-ante* impact assessments, used by the GVH as well as other competition authorities and recommended by the OECD,⁴ are based on the premise that more vigorous competition generally results in lower equilibrium prices. Therefore, the undue restriction of competition would mean higher prices for consumers, which would cause them a loss. If, on the other hand, the GVH's intervention eliminates such restriction, the aforementioned harm will no longer be present. Thus, the value of the gain achieved as a result of the action of the GVH is equal to the value of the harm prevented had the intervention of the GVH not taken place, as illustrated by Chart 1.

¹ After the market opening, the sale of rapid self-tests to the general public was permitted in all retail outlets that were licenced by the regulatory authority to distribute certain medicines listed by law.

² Market opening was originally introduced by Government Decree 34/2022 of 8 February 2022 (Article 1. Section 2), then extended, expired and reintroduced through various laws, as follows:

09.02.2022–31.05.2022: introduction by Government Decree 34/2022 of 8 February 2022 (Article 1. § Section2), repealed by the repealing of Act I of 2021, on 01.06.2022 (Article 5/A) (expiration via dynamic sunset clause).

01.06.2022–30.09.2022: extension and expiration via sunset clause by Act V of 2022 (Article 3).

28.10.2022–30.06.2023: reintroduction and then technical termination by Government Decree 417/2022 of 27 October 2022 (Article 3), repealed by Government Decree 211/2023 of 1 June (Article 3).

01.07.2023–31.12.2023: extension, then expiration via sunset clause by the temporary modification of Act XCVIII of 2026 (Article 86/B); the modifying provision was Act XIX of 2023 Article 70, repealed by Article 72 of the same Act on 01.01.2024.

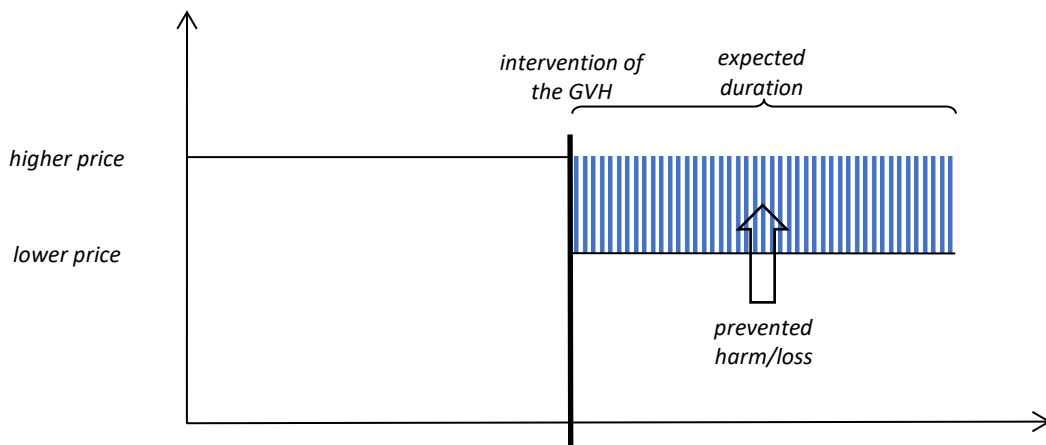
³ Jelentés a COVID-19 antigén gyors tesztek magyarországi piacon lefolytatott gyorsított ágazati vizsgálatról, Gazdasági Versenyhivatal, Budapest, 04.02.2022 (AL/478/2021) (accelerated sector inquiry report). (Available only in Hungarian.)

https://www.gvh.hu/dontesek/agazati_vizsgalatok/piacelemzesek/agazati_vizsgalatok/vegleges-jelentes-a-covid-19-antigen-gyorstesztek-magyarorszag-piacan-lefolytatott-gyorsított-agazati-vizsgalatrol

⁴ Guide for helping competition authorities assess the expected impact of their activities, OECD (2014).

<https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/evaluation-of-competition-interventions/Guide-competition-impact-assessmentENG.pdf>

Chart 1: Prevented consumer harm in competition enforcement



5. To perform the calculation, only three parameters need to be determined: the size of the price difference caused by the restriction, its duration and the affected turnover.

Direct benefit =

= Prevented harm =

= Relevant turnover × Price difference × Expected duration

6. When it comes to competition enforcement, the relevant turnover is usually known or can be relatively easily determined from the data gathered in the course of enforcement, while for the price difference (e.g. cartel surcharge) and expected duration, there are default values based ultimately on empirical research that can be used when no case-specific data are available. In general, the quantification concerns all relevant cases closed over a certain period (which in a smaller economy may consist of several years to moderate fluctuations), thus the inevitable individual inaccuracies may cancel each other out.⁵

7. This calculation concerns a case where competition has been restricted by regulation, and therefore the restriction has been removed by a government measure – proposed by the GVH – to make the entry rules more pro-competitive, rather than by enforcement intervention by the GVH to address the conduct of market players.

8. In this case, the parameters in the formula were interpreted as follows:

- i. relevant turnover: the turnover of self-test retail sales (size of the market);
- ii. price difference: the extent of the price decrease after market opening, or more precisely the part of the price decrease related to market opening (the default values related to competition enforcement were not relevant for this calculation due to its different context);
- iii. expected duration: the period when liberalised retail was effective.

⁵ More on the general framework, e.g.: *Ex-ante* assessment of welfare gains achieved by the GVH (*ex-ante* impact assessment) – Cases involving anticompetitive practices and mergers, 2017-2022, Hungarian Competition Authority, 12.04.2023.

https://www.gvh.hu/en/gvh/analyses/ex_ante_impact_assessment

3 Calculation

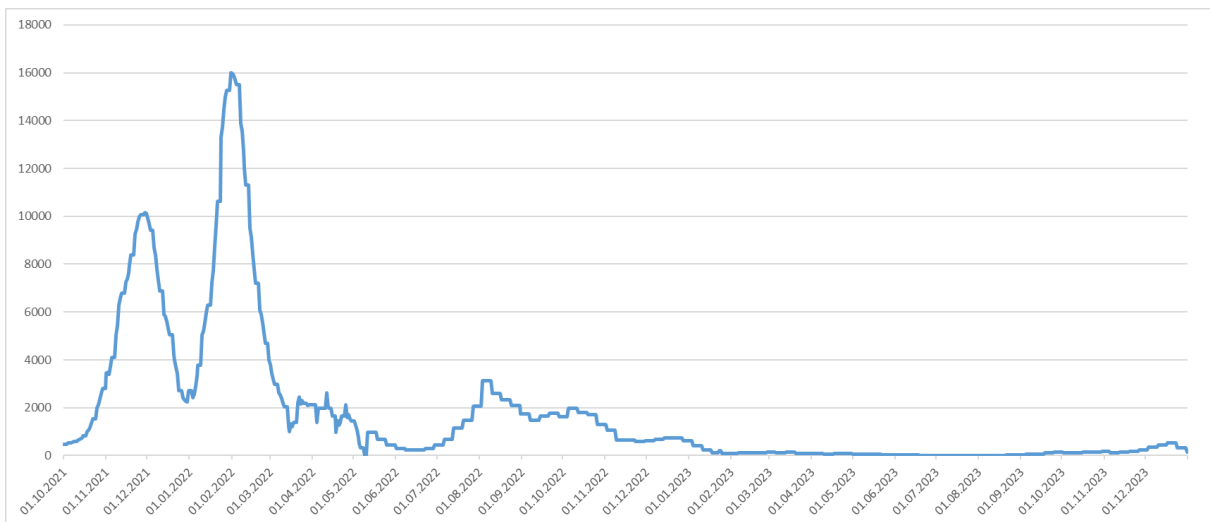
3.1 Relevant turnover

9. Due to its nature and design, the accelerated sector inquiry did not reveal either the relevant turnover or sufficient data to make a reasonable approximation of the relevant turnover. Data on sales volumes were only gathered for a subset (a sample) of the retail outlets.

10. These data were useful for the accelerated sector inquiry to identify sales trends, but did not reveal a nation-wide turnover or sales volumes. Moreover, they concerned Q4 of 2021, and therefore did not cover 2022 and 2023, including the liberalised period. Extrapolation from the 2021 volumes would not have been meaningful either, as sales volumes certainly fluctuated, driven by pandemic waves. No nation-wide data were found in the public domain.

11. However, data were available on the pandemic, in particular the daily confirmed new cases from March 2020 to the end of 2023, covering the whole period of liberalised retail. From these data, it was possible to infer how many rapid self-tests were purchased, given the close relationship between the two variables. It was a well-known and widespread practice of general practitioners at the time to base their diagnosis of Covid-19 on the results of rapid self-tests used (and purchased) by the patients. Chart 2 shows the evolution of daily confirmed new cases in the broader period of interest.

Chart 2: Covid-19 curve in Hungary from the last quarter of 2021 until the end of 2023



Note: Daily confirmed new cases, 7-day moving average. Source: Our World in Data, based on WHO data, where data on Hungary have been provided by the Hungarian government.⁶

12. In the absence of specific data on the relationship between the sales volume of rapid self-tests and daily confirmed new cases, we assumed that, on average, a certain number of tests were purchased and consumed for each confirmed new Covid-19 case; namely that 1 test was purchased and consumed by the diagnosed patient for each case, and 3–5 additional tests were purchased and consumed by others, producing a negative result. (We used the 7-day moving average of the daily confirmed new cases, as it is less volatile. This had negligible effect on the results.)

⁶ <https://ourworldindata.org/covid-cases>

The Hungarian government provided data on a daily basis until May 2022, then on a weekly basis; in the latter period, the 7-day moving average became a sort of weekly average, resulting in a less fine-grained curve.

13. As a result, we obtained an interval and used its two endpoints as two possibilities in the calculation. This is summarised by Table 1.⁷

Table 1.: Assumptions on the average number of rapid self-tests per confirmed new case

Baseline (extremely conservative)	Reasonably conservative	
	More conservative	Less conservative
1+0 rapid self-test	1+3 rapid self-tests	1+5 rapid self-tests

14. The estimated sales volume was multiplied by the average price of the rapid self-tests to obtain the corresponding turnover (also as a range).

3.2 Price

15. The average price before market opening was identified from the data gathered in the course of the accelerated sector inquiry.⁸ As these data were considered reliable until November 2021,⁹ the latest reliable data for the average price before market opening was the price in November 2021: HUF 3,577 per test.

16. The extent of the price decrease was taken from business media reports. The *Népszava* newspaper reported a 50% price decrease and a 100% increase in volume, citing the data from the Association of Network Pharmacies.¹⁰ Other media reports were also available, reporting other, often even larger price decreases, but their sources seemed to be sporadic.¹¹ Table 2 summarises price information.

Table 2: Price information

Average price before market opening	Observed price decrease	Base price (average price during liberalised retail)
3,577	50%	1,789

Note: Per test prices in HUF, 2022 value.

17. At the same time, the price evolution raised doubts as to whether this price decrease can be solely attributed to market opening. The accelerated sector inquiry found that average test prices had

⁷ There might be cases where the diagnosis was not based on the results of rapid tests, and not all rapid tests used to make the diagnosis were self-tests, as there was also testing in healthcare facilities and in various corporate screening programs, using different types of rapid tests purchased in different ways. (Tests used (and purchased) by companies to screen their staff may have represented a large proportion of the rapid tests used, as they were more widely used than for symptom clarification. However, for this very reason it is unlikely that they accounted for a significant proportion of positive test results (and consequently of confirmed new cases).) At the same time, in many cases where positive cases were found, testing was repeated before diagnosis and may have been repeated several times after recovery.

Additional self-tests, producing negative results, were used by the contacts of the diagnosed person (or of those who showed symptoms), such as family members and co-workers, and by people who self-tested before or after certain events (e.g. before or after family events, or when returning from a trip abroad).

⁸ Also shown by Chart 9 of the accelerated sector inquiry report.

⁹ Accelerated sector inquiry report, page 32, second paragraph.

¹⁰ Danó Anna: *Eltűnnek a koronavírus-fertőzés kimutatására szolgáló gyors tesztek a boltokból*, *Népszava*, 01.10.2022.

https://nepszava.hu/3171009_kivonjak-a-boltokbol-a-covid-tesztek

¹¹ Koncsek Rita: *Rázúdultak a gyors tesztek a kiskereskedelmi egységekre*, *Világgazdaság*, 02.03.2022.

<https://www.vg.hu/vilaggazdasag-magyar-gazdasag/2022/03/razudultak-a-gyorstesztek-a-kiskereskedelmi-egysegekre>

Csökkent a minőségi, svájci gyártású Covid-tesztek ára Magyarországon, *Origo*, 16.03.2022.

<https://www.origo.hu/itthon/2022/03/csokkent-a-minosegi-svajci-gyartasu-covidtesztek-aramagyarorszagon>

already decreased significantly towards the end of 2021, presumably due to economies of scale and learning as the market evolved. It well may be that this process ended by November 2021, but it is also possible that it continued to some extent for some time. Therefore, we could not rule out that the average price at the time of market opening was somewhat lower than in November 2021 and that the price would have further decreased to some extent thereafter, even without market opening.

18. As we wanted to capture the effects of liberalisation (and only of liberalisation), we only considered part of the 50% price decrease since November 2021. Multiple scenarios were set up, assuming that 50%, 75% and 90% of the total observed price decrease was due to market opening. This is summarised in Table 3.

Table 3: Assumptions on the share of market opening-related price decreases within the total price decrease

Baseline (extremely conservative)	Reasonably conservative	
	More conservative	Less conservative
50%	75%	90%

19. Based on the above, we determined the prices used in the calculation, as summarised in Table 4.

Table 4: Average prices in the calculation

Designation	Baseline (extremely conservative)	Reasonably conservative	
		More conservative	Less conservative
Share of price decrease caused by stronger competition due to market opening	50%	75%	90%
Counterfactual price (the hypothetical price without market opening in the calculation period)	2,683	3,130	3,398
Base price	1,789	1,789	1,789

Note: Per test prices in HUF, 2022 value.

3.3 Time period

20. While it is clear that when entry regulation was more relaxed (09.02.2022–31.12.2023, except for roughly October 2022, see footnote 2), the calculation did not concern the whole period of liberalised retail. The market opening was a sudden move by the government (the government decree entered into force the day after its publication in the national gazette), and therefore, the alternative distribution channels needed some time to develop and become sufficiently established (sources of supply had to be explored, tests had to be purchased, etc.). As a result, prices were unlikely to immediately reach the level of liberalised retailing. Media reports indicate that this transition period was likely to last until March 2022,¹² and we do not have sufficient information or reasonable assumptions on prices during this transition period.

¹² On 11 February, the online news portal 444 reported that *DM*, a large drugstore chain, was still preparing to distribute rapid self-tests, and *Mol*, a large petrol station chain, was still considering it (Vég Márton: A DM-ben is lehet majd antigén gyorstesztet venni, a Mol még nem döntött, 444.hu, 11.02.2022).

<https://444.hu/2022/02/11/a-dm-ben-is-lehet-majd-antigen-gyorstesztet-venni>

According to reports by the online financial news portal *Pénzcentrum* and the business daily *Világgazdaság*, *Tesco*, a large supermarket chain, and *Rossmán*, a large drugstore chain, were already selling the rapid self-tests in their shops in late February and early March, but *Rossmán* still wanted to broaden its selection, while *DM* was about to launch retail distribution in two weeks

21. In addition, our assumption on the relationship between daily confirmed new cases and the sales volume of rapid self-tests, which is critical for the calculation of the relevant turnover, arguably breaks down in the fall of 2023. As the pandemic and the consequences of infection gradually became less severe (see Chart 2), people became less cautious and the tests became less important than before, which affected the intensity of their use.

22. An even earlier endpoint is conceivable, as the possibility to sell rapid self-tests in shops other than pharmacies and specialised medical device stores was terminated on 1 October 2022 (first termination, known well in advance), and was only reintroduced on 28 October 2022 after another GVH advocacy (reintroduction). It is therefore possible that some alternative retailers stopped selling rapid self-tests permanently, albeit we are not aware of such a case.

23. Based on the above, the calculation period starts on 1 March 2022 and ends on 30 September 2022 or 31 August 2023 (in the latter case, most of October 2022 is excluded). In other words, we used a range again, i.e. multiple options.

24. Thus, we have two periods. First, from the end of the transition after market opening until the first termination, and second, from the reintroduction until one of our key assumptions no longer holds (we will see later that the results are not sensitive to whether we have precisely determined this second endpoint). These two periods constitute the entire effective liberalised period, as summarised in Table 5.

Table 5: Relevant periods (assumptions on the effective period of liberalised retail)

Entire effective liberalised period	
Period One 01.03.2022–30.09.2022	Period Two 28.10.2022–31.08.2023
More conservative	Less conservative

25. Between Period One and Two there is a transitional period, roughly October 2022, when retail was not liberalised. Here again, we do not have sufficient information or reasonable assumptions on price movements between the base price and the pre-liberalised price level (similarly to the first transition, right after market opening), and therefore the calculation does not cover this transition either.¹³

3.4 Other aspects

26. The calculation was performed in 2024, and therefore the results were adjusted for inflation between 2022 and 2024 (although the price used in the calculation is November 2021 price), using the annual average retail price indices published by the Hungarian National Bank.

27. A difference from the general approach is that we do not compare the results with the budget of the GVH, as the calculation was for a single measure (and not for the whole type of GVH activity) and this measure was not that a GVH measure (although it was initiated by the GVH). In other words,

(Megérkeztek az olcsó COVID-tesztek: már ennél az üzletláncnál is meg lehet őket venni, Pénzcentrum, 28.02.2022; Koncsek Rita: Rázúdultak a gyorstesztek a kiskereskedelmi egységekre, Világ gazdaság, 02.03.2022).

<https://www.penzcentrum.hu/egeszseg/20220228/megerkeztek-az-olcso-covid-tesztek-mar-ennel-az-uzletlancnal-is-meg-lehet-oket-venni-1122451#>

<https://www.vg.hu/vilaggazdasag-magyar-gazdasag/2022/03/razudultak-a-gyorstesztek-a-kiskereskedelmi-egysegekre>

¹³ A third transition is the final months of the liberalised retail mentioned earlier, where we have neither sufficient information nor reasonable assumptions on sales volumes. This period is therefore not included in any of our calculations.

the calculation was not done in a social investment context and therefore did not involve a social discount rate. Thus, our results on consumer benefits have a very straightforward interpretation.

4 Results

28. Based on the above, nine versions of calculation were identified in terms of effective price decrease and the average number of tests per confirmed new case (as summarised in Table 6), and each version was performed for multiple possible time-periods.

Table 6: Calculation versions

1+0 rapid self-tests; 50% of price decrease	1+3 rapid self-tests; 50% of price decrease	1+5 rapid self-tests; 50% of price decrease
1+0 rapid self-tests; 75% of price decrease	1+3 rapid self-tests; 75% of price decrease	1+5 rapid self-tests; 75% of price decrease
1+0 rapid self-tests; 90% of price decrease	1+3 rapid self-tests; 90% of price decrease	1+5 rapid self-tests; 90% of price decrease

Note: Number of tests per confirmed new case; share of price decrease caused by stronger competition.

29. As the extremely conservative versions (highlighted in grey) were only used as a baseline, only the results of the reasonably conservative versions (highlighted in green) are presented as a range: the results under the more conservative and less conservative assumptions (i.e. the top left and bottom right darker green versions respectively, which represent the two endpoints of the range) are presented for the two periods mentioned above.

30. Those results are summarised in Table 7.

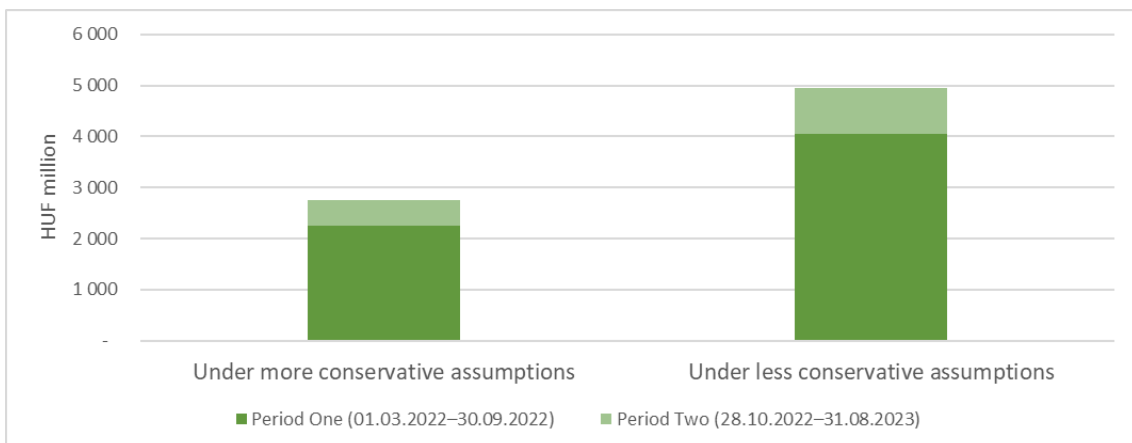
Table 7: Calculated consumer benefits

Time-period	More conservative assumptions	Less conservative assumptions
Period One (01.03.2022–30.09.2022)	2,252	4,054
Period Two (28.10.2022–31.08.2023)	496	892
Whole effective period of liberalised retail	2,748	4,946

Note: HUF million, 2024 value.

31. Chart 3 shows the two versions and the benefits generated in each period. It is striking how disproportionate those amounts are to the length of the two periods.

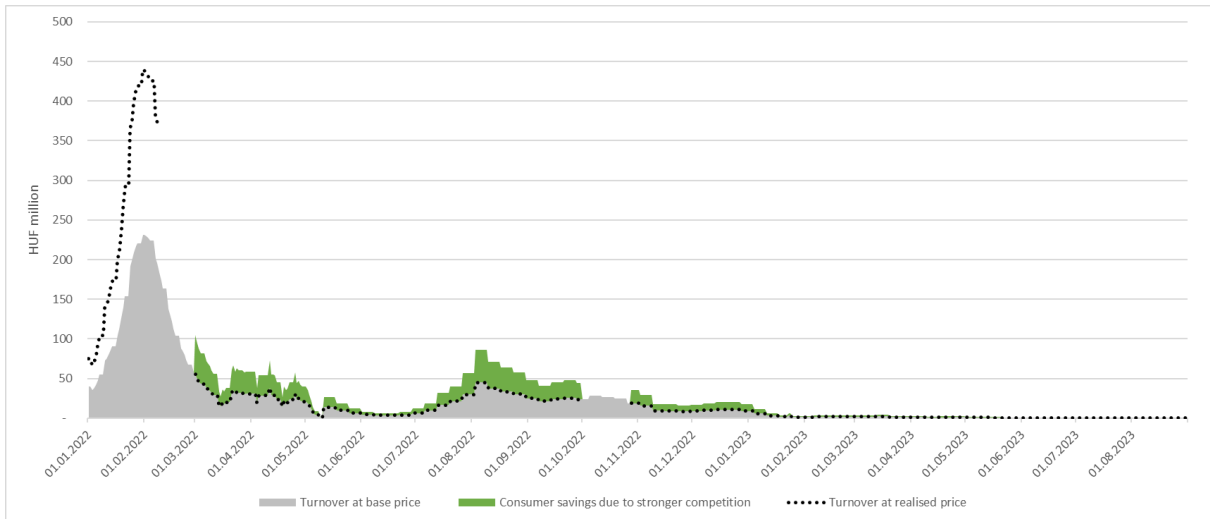
Chart 3: Calculated consumer benefits



Note: 2024 value.

32. Chart 4 shows the evolution of consumer benefits. (For clarity, results based on the less conservative assumptions are presented throughout this annex, but the pattern is similar in all versions of this calculation.)

Chart 4: The evolution of calculated consumer benefits



Note: 2024 value, under less conservative assumptions.

33. This chart adapts Chart 1 to the case, with the remark that the vertical axis shows the amount of money, i.e. turnover (price x volume) rather than the price alone. The shape of curves is similar to Chart 2 (more precisely to its interval from 2022 to the end of August 2023), as the sales volumes in the calculation are based on the number of daily confirmed new cases.

34. The grey area represents the turnover at base price. Above it is the area representing the turnover at counterfactual price (i.e. the hypothetical price without market opening). The price is higher before market opening and lower in the two calculation periods. In the calculation periods, the difference between the higher and lower price turnover is the consumer benefit, which is marked in green (the green area actually extends to the right end of the chart but is too narrow to be visible due to the scale of the chart). Accordingly, the dashed line representing the realised turnover is located in the upper edge of the upper area before market opening, while in the two calculation periods it is located in the upper edge of the lower (grey) area. As we do not have sufficient information or reasonable assumptions on prices in the transitional periods (see paragraph 25), there are gaps both in the dotted line and in the green area.

35. Chart 4 also explains why the calculated benefits are disproportionate to the length of the periods: The number of daily confirmed new cases is not constant, and Period One has a disproportionate number of cases (and therefore, a disproportionate number of rapid self-tests sold). In other words, even if Period Two is longer, it contains far fewer new cases. It is easy to recognise that the ratios between the results for different periods are determined solely by the shape of the pandemic curve and are therefore the same regardless of which version of the calculation is considered. In addition, a change in the end date of Period Two clearly has little impact on the results.

Remarks

36. Although we are not able to quantify it in the absence of sufficient information, liberalised retail has of course brought consumer benefits in the last four months of 2023, although those benefits were relatively modest (see paragraph 21).

37. This quantification only captures the direct price effect of market opening. The benefits of liberalisation in terms of decreasing the number of Covid-19 cases and moderating the spread of the pandemic through improved availability and affordability, and the wider use of rapid self-tests, might be much greater. Some of those benefits are financial (e.g. less expenditure on medication and hospitalisation, or fewer days in sick leave), while others are non-financial, in terms of better quality of life (and even lower mortality at this stage of the pandemic). (At the same time, deterrence – often mentioned in a similar context when it comes to competition enforcement – is not relevant in this particular case.)

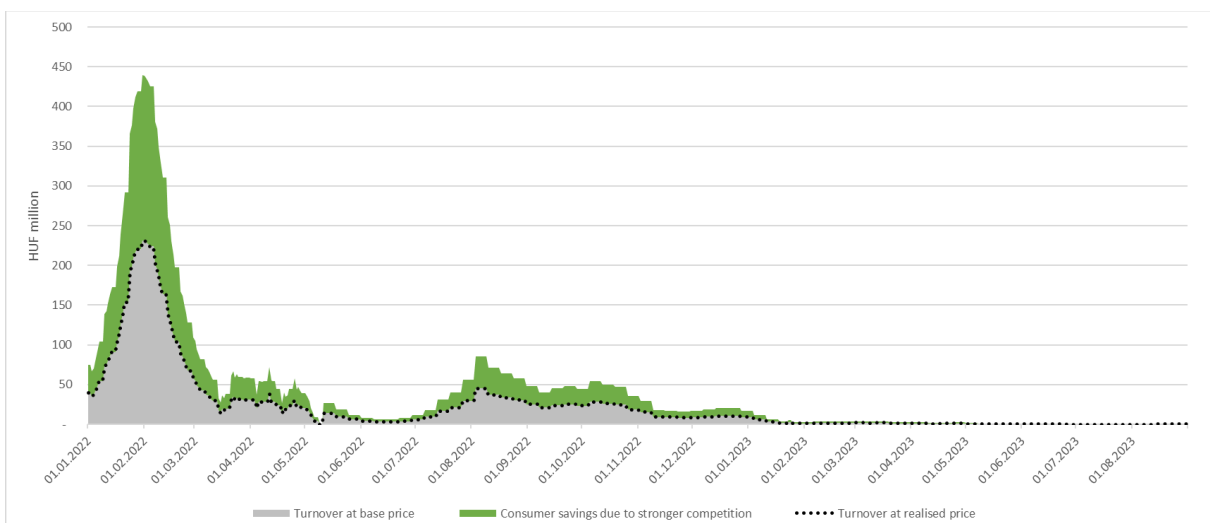
38. This project is part of a broader programme of the GVH, which aims to quantify the benefits to society. Given the fact that the project is a specific competition advocacy action, merging it with the general *ex-ante* impact assessment of the GVH (which concerns classical competition enforcement), may wrongly give the impression that the combined exercise covers both enforcement and advocacy in their entirety. Nevertheless, given their shared methodology, it is reasonable to consider the results of both exercises side by side. If the temporary market opening in the retail of Covid-19 rapid self-tests were part of the latest (interim) GVH *ex-ante* impact assessment (for the period 2018–2023), it would be the 4–6th largest item out of the 23 cases (+1 government measure) in terms of direct consumer savings, and would change the calculated consumer benefit from 2 times (cumulative 2018–2023) to 2.06–2.13 times the GVH budget, depending on the version of this calculation. This indicates that the direct consumer benefits from the implementation of the GVH’s advocacy proposals could be large, as large as similar benefits from some major competition enforcement cases.

5 Extended calculation and results

39. The Covid-19 rapid self-tests have always been intended for use by non-professional laymen and have been designed and equipped with instructions accordingly. This raises the question of how much the calculated benefits would have been if drugstores and similar retail outlets had been allowed to sell the rapid self-tests from the outset (i.e. always, or from the time those tests were introduced). This is a fictional scenario, but it may be illuminating to compare it with a real-life scenario.

40. Chart 5 shows a fictional scenario in which retail in drugstores and similar retail outlets is well established (effective) already at the beginning of 2022, and liberalised retail continues at least during the period under consideration.

Chart 5: The evolution of calculated consumer benefits in case of liberalised retail from the beginning (fictional scenario)



Note: 2024 value, under less conservative assumptions.

41. The shape of the curves is the same as in Chart 4, but there is no surcharge or transition (or gap); they are replaced by the green area of consumer benefit,¹⁴ and the realised price is equal to the base price over the whole period. Results are summarised in Table 8. (Logically, in this scenario, Period One begins on 01.01.2022 and, for simplicity, Period Two begins on 01.10.2023.)

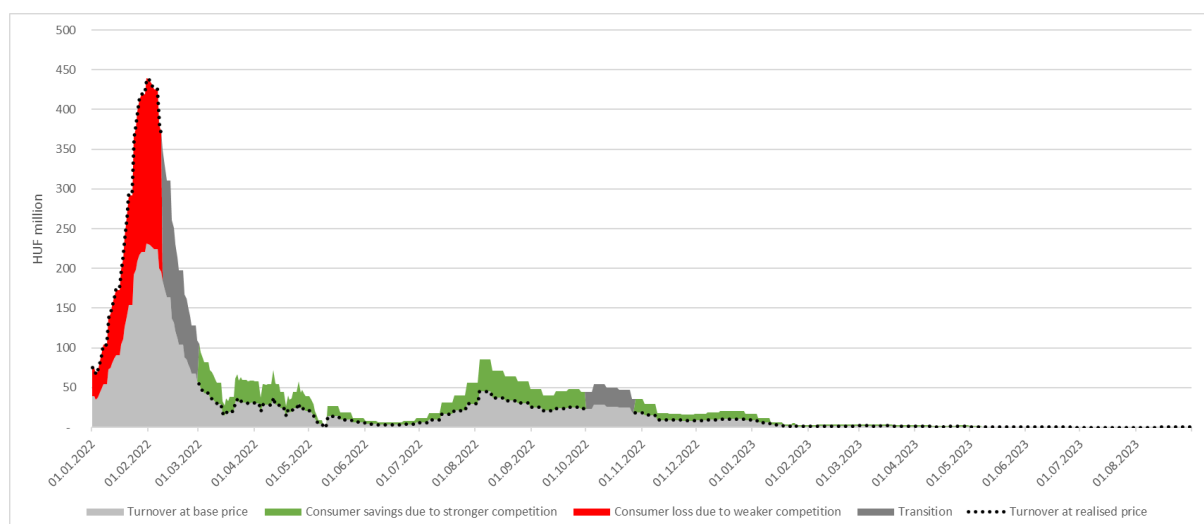
Table 8: Calculated consumer benefits in case of liberalised retail from the beginning (fictional scenario)

Time-period	More conservative assumptions	Less conservative assumptions
Period One (01.01.2022–30.09.2022)	6,078	10,940
Period Two (01.10.2022–31.08.2023)	839	1,509
Whole effective period of liberalised retail	6,917	12,450

Note: HUF million, 2024 value.

42. Consumer savings would be markedly higher in this case (compared to those summarised in Table 7.) Part of the difference between the real-life and the fictional scenarios is the consumer loss due to the fact that in the real world, retail in the beginning of 2022 was limited to pharmacies and specialised medical equipment stores, so consumer had to pay more.¹⁵ This restricted competition had a direct financial cost to consumers, as shown in Chart 6.

Chart 6: The evolution of calculated consumer benefits and loss



Note: 2024 value, under less conservative assumptions.

43. It seems that consumers first paid a kind of surcharge (red area), which they later (green area) – after some transition and with the exception of the gap (grey areas) – were able to save thanks to market opening. The former is consumer loss, while the latter is consumer benefit. Those losses and benefits are visibly disproportionate to time, as their magnitude depends only on the sales volume of rapid self-tests sold (i.e. according to our assumption, it depends only on the evolution of the confirmed new cases). Table 9 summarises the results.

¹⁴ The initial transition was either postponed until 2021, a period not covered by this chart (in the case of earlier market opening) or there would have been no transition at all (in the case of liberalised retail from the beginning). The October 2022 transition has turned into consumer benefit.

¹⁵ The remaining roughly one third of the difference is accounted for by the transitional periods marked in grey in Chart 4 (see also Table 9 and Chart 7). During these periods, benefits were generated not only in the fictional scenario, but (arguably) also in the real-life scenario, but we cannot quantify these latter benefits, and therefore they are not included as benefits in the corresponding calculation.

Table 9: Ranges of calculated consumer benefits and loss

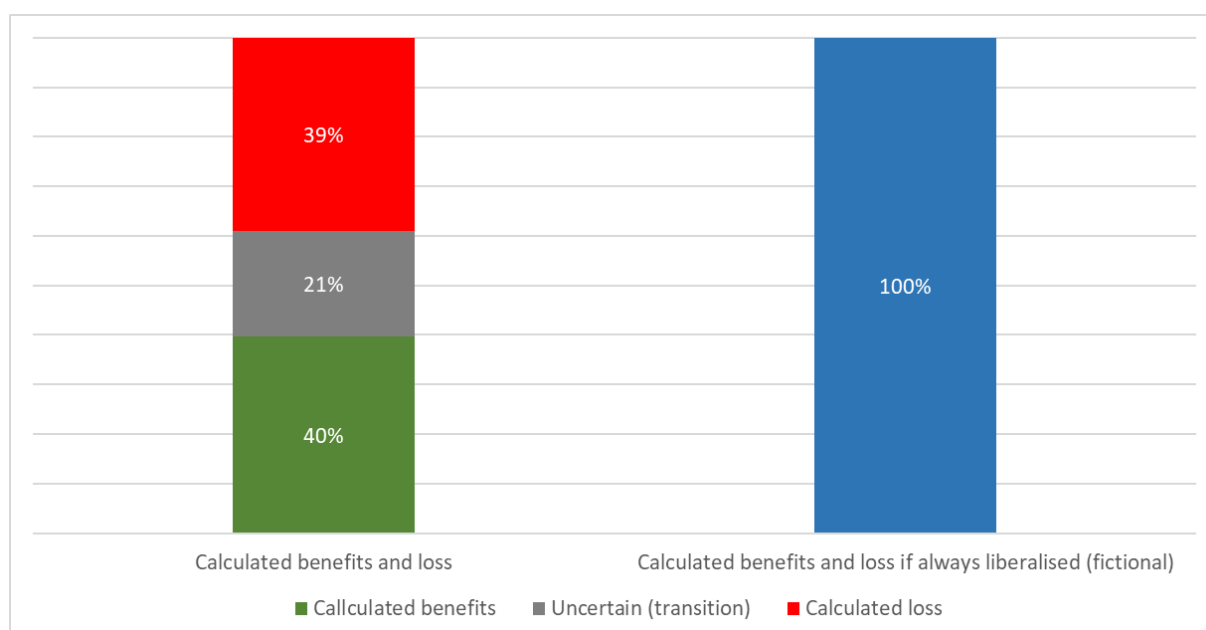
Time-period	Calculated benefits	Calculated benefits if always liberalised (fictional)	Calculated loss	Uncertain (transition)
Period One (01.01.2022–30.09.2022)	2,252–4,054	6,078–10,940	2,700–4,861	1,125–2,026
Period Two (01.10.2022–31.08.2023)	496–892	839–1,509	-	343–617
Whole effective period of liberalised retail	2,748–4,946	6,917–12,450	2,700–4,861	1,468–2,643

Note: HUF million, 2024 value. The lower bounds are the results under more conservative assumptions, the upper bounds are the results under less conservative assumptions.

44. If, for simplicity, we assume that half of the transition-related amount is benefit and the other half is loss, the calculated benefit produced by the government's measure to open the market will be around HUF 2.8–6.3 billion, while the estimated consumer loss from restricted retail before market opening will be around HUF 3.3–6.2 billion (at 2024 value).

45. The proportions of consumer benefit and loss for the extended calculation period is shown in Chart 7. The same proportions are seen in all versions of this calculation and regardless of whether the results are adjusted to inflation (as these are only determined by the shape of the pandemic curve).

Chart 7: The proportions of calculated consumer benefits and loss in the extended calculation period



Note: 01.01.2022–31.08.2023 period.

46. The column on the right shows the difference between the higher and lower price multiplied by the total volume of sales in that period, while the column on the left shows the proportion of consumer benefit, consumer loss and the uncertain part associated with transitions within this amount of money.

47. All these findings show that consumers would have been much better-off, had the retail of rapid self-tests never been limited to pharmacies and specialised medical device stores.

Remarks

48. The calculation cannot look back to 2021, as we believe that the key assumptions used to determine the relevant turnover are not sufficiently reliable for this period. Of course, if retail had been liberalised in 2021, there would have been consumer benefits in that year, but we are not able to quantify them. At the same time, their potential magnitude is relatively large, given the pandemic wave towards the end of 2021 (see Chart 2) and the more cautious attitude towards infection at the time, increasing demand. The significant demand for rapid self-tests is also indicated by the contemporary social unease about the high prices and limited availability of rapid self-tests,¹⁶ which lead to the launch of the GVH's accelerated sector inquiry. Also, the accelerated sector inquiry found that in 2021 rapid self-tests in Hungary were significantly more expensive than in neighbouring countries,¹⁷ and therefore it is reasonable to assume that they would have been significantly cheaper (than observed) already in 2021 if retail had been liberalised from the outset.

49. The case of 2024 is similar, except that the consumer benefit would have been relatively modest in this period (see paragraphs 21 and 36).

¹⁶ One indication of this was the question addressed to the Prime Minister about the prices of rapid self-tests during his international press conference on 21.12.2021 (45:06-46:50 minutes).

<https://www.facebook.com/kormanyzat/videos/orb%C3%A1n-viktor-nemzetk%C3%B6zvet%C3%A9s%C3%A9n-2021-december-21/1094708411367014/>

¹⁷ Accelerated sector inquiry report, page 20-24 (Chapter IV).