Interim Report in the context of the Sector Inquiry into Private Health Services and related Insurance Services, under Art. 40 of L. 3959/2011

EXECUTIVE SUMMARY

I. INTRODUCTION

The Hellenic Competition Commission (HCC) has initiated by decision of 5.7.2021 a sector inquiry into the provision of private health services and related insurance services, exercising the respective powers conferred on it pursuant to Article 40 of Law 3959/2011.

The Sector Inquiry was prompted in view of the rearrangements taking place in the wider private health services and insurance services sector in the last five years, including strategic partnerships and mergers between undertakings, the fast-moving technological development and digital transformation of health services, as well as the development and management of large databases (Big Data) of service providers and customers.

This sector inquiry aims at providing a comprehensive overview of the market structure, the regulatory framework that governs it and the prevailing conditions of competition.

In particular, the sector inquiry seeks to:

(1) reflect the structure and specificities of the market as it tends to take shape following the acquisitions that take place in the wider health and insurance sector, as well as any structural links between competitors, in order to better understand the intensity of competition in the sector and the concentration observed in certain geographic markets (e.g. Attica), the possible strong bargaining power of specific market players and/or the possibility of tacit coordination of health service providers in markets that determine the quality of health services (infrastructure, technologies, pharmaceuticals and healthcare material, etc.).

(2) examine the competition parameters in health services and related insurance services and the bargaining power between insurance providers and health service providers with regard to prices and customer canvassing through other parameters such as quality, variety, network range, etc.

(3) identify any regulatory issues and other barriers to entry in the health and insurance service market which may affect competition, innovation and market growth.

(4) assess the role of data and new technologies in the competitive conditions prevailing in health services and related insurance services, in view of any consequent changes in the value chain for the undertakings active in these sectors and competition issues that may arise in the future as well as addressing any of issues by the existing legal framework.

The Interim Report is the first step in examining the conditions in the **health services** and **related insurance service markets**. It consists of three chapters: the **first chapter** presents the Authority's investigation into the **health services sector**, the **second** focuses on the investigation into the **related insurance services sector** and the **third** discusses the **more specific issue concerning data and new technologies** in health and insurance services.

CHAPTER 1: HEALTH SERVICES

II. THE HEALTH SERVICES SECTOR and THE NATIONAL HEALTH SYSTEM IN GREECE

The health services sector in Greece is subdivided into Primary, Secondary and Tertiary Healthcare.

Primary Healthcare refers to open healthcare services and includes services and medical treatment, which are carried out with the aim of preventing and remedying health damages in hospital outpatient clinics, all-day clinics and their diagnostic laboratories, National Emergency Aid Centre (EKAV), Healthcare Centers and Regional Clinics, Rural Clinics, Polyclinics and Greek National Healthcare Organisation (EOPYY) Clinics, Rehabilitation - One-day Hospitalization Centers, Private Clinics that operate outpatient clinics and accredited Diagnostic Laboratories, Private Health Service Providers[1], Mental Health Units, Chronic Hemodialysis Units, Mobile Primary Healthcare Units[2], Mother, Child & Teen Protection Centers, where available to the Organization and its Physiotherapy Laboratories, Private Physiotherapy Laboratories and home physiotherapists. In addition, the Primary Health Care of the National Health System (NHS) also includes mental health service provision structures which are found in three different types: a) Adult Mental Health Centers (33 units in 2019), b) Mental Health Centers with Community Mental Health Services for Children and Adolescents (14 units in 2019) and c) Child and Adolescent Mental Health Centers (12 units in 2019).

Secondary Healthcare refers to closed healthcare and includes services and medical treatment carried out within hospital departments, in contracted private clinics, mental health units, closed hospitalization recovery-rehabilitation centers and hospitals for chronic illnesses, including those providing one-day hospitalization.

Tertiary Healthcare also refers to closed healthcare services provided by the special, regional and university hospitals adequately equipped to cover specialized health services, health conditions and research.

The **National Health System (NHS)**, which was established in 1983, provides free Primary, Secondary and Tertiary Health Care services to those residing in Greece. **Primary Health Care (PHC**) means all integrated services within the National Health System, which have as their purpose the surveillanve, maintainance and improvement of human health. These services include health promotion, disease prevention, diagnosis, treatment, comprehensive care and follow-up. The State is responsible for the provision of quality PHC services to the entire population, respecting their rights and needs (see Article 1 (1) of Law 4486/2017 *"Reform of Primary Healthcare, urgent regulations falling within the competence of the Ministry of Health and other provisions"*). Public PHC facilities include health centers, local health units, personal physicians (the institution was introduced by Law 4931/2022) and other facilities.[3] Public PHC facilities include health centers, local health units, personal physicians (the institution was

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[1] Law 3846/2010 (GG 66 A΄), *see, in particular, Article 28 "Private healthcare services providers (PHC)*

[2] See Law N.2071/1992 Article 14.

[3] See, in that regard, Law 4486/2017 "Reform of Primary Healthcare, urgent regulations falling within the competence of the Ministry of Health and other provisions") (GG A΄ 115/07.08.2017), as in force and https://www.moh.gov.gr/articles/health/dieythynsh-prwtobathmias-frontidas-ygeias/monades-p-f-y-dhmosioy-tomea-tmhma-a. After the enactment of Law 4486/2017 on the "Reform of Primary Healthcare", the term Health Center was expanded to include decentralized units, where, at the first Primary Healthcare level services are provided by the Local Health Units (TOMYs), the Regional Clinics (RC), the Multipurpose Regional Clinics (MPRC), the Specialized Regional Clinics (SRC), the Local Clinics (LC) and other PHC units. The institution of the personal physician was established by Law N.4931/2022 "A Doctor for all, equal and quality access to the services of the National Health Services Organisation and Primary Healthcare and other urgent provisions" (GG A΄ 94/13.05. 2022).

introduced by Law 4931/2022) and other facilities. Secondary Health Care services (i.e. closed healthcare services with the possibility of admission and hospitalization) are provided by hospitals, wider institutional care units which are organized as Legal Persons Governed by Public Law.[4] In particular, for NHS hospitals, a distinction is made between general and specialized hospitals.[5] University Hospitals fall under the Tertiary Healthcare category[6].

The Greek NHS is quite different from other European health systems, as it does offer universal coverage, but it is based on both taxation and insurance, and it also shows a very large share of private expenditure. In our country, 89% of private healthcare expenditure comes directly from "users" (citizens), and only a percentage of 11% is covered by private insurance companies.[7] In other European countries, the opposite is the case. Specifically, the Greek health system is a mixed system, combining social security (SS) and the centrally funded National Health System (NHS).

The National Organisation for the Provision of Health Services (EOPYY), now covering 90% of the population, operates as the **main buyer of public health services** with a theoretically strong bargaining power vis-à-vis healthcare providers.[8]

II.1. THE DEMAND FOR HEALTH SERVICES IN GREECE

The main determinants of demand in the health sector are the demographics and the overall health status of the population, the various risk factors and case of disease which hinder the health of the population and, of course, the general economic situation and tourism (Aletras, 2002)[9]. In particular, demand for private health services largely depends on the quality of services provided by the public sector.

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[4] See, in that regard, A. Stergiou 1.2 “Θεσμικό πλαίσιο σε: Δίκαιο Κοινωνικής Ασφάλισης” *(Institutional framework in: Social Security Law)*, 4th ed., 2022 pp. 233-242, point 537 et seq. on the regulatory framework regarding Secondary Healthcare.

[5] Op. cit. footnote 17. General hospitals provide treatment to patients who belong to more than one therapeutic category, while special hospitals refer to one therapeutic group. See and article 7 para.2 of Law 3329/2005.

[6] Op. cit. footnote 17, point 543 *According to Article 13 of Law 1397/1983, the university clinics established in the NHS hospitals, staffed by university physicians, have, as hospital care units, an operational mission that does not differ from that of the other units of the same hospitals, which are staffed with the medical NHS staff* (with reference to the Council of the State Decision no. 1678/02). For the distinction between Primary, Secondary and Tertiary Healthcare see also K. Kremalis, “Δίκαιο της Υγείας” (Health Law), v.1, 2011 p. 36 et seq.

[7] See ELSTAT quarterly publication "GREECE IN FIGURES July-September 2022" (p. 144) which states that, for the year 2020, the total private funding of health expenditure amounted to €5,934.6 million, private payments amounted to €5,256.4 million and private insurance stood at only €678.2 million.

[8] The purposes of EOPYY according to article 18 are: a) The provision of health services to the active insured persons, pensioners and their protected family members, b) The operational coordination and the achievement of cooperation between the entities that constitute the primary healthcare network, i.e. Health Centers and the Regional Clinics of the NHS, doctors on duty in rural areas, primary healthcare units of Local Authorities, healthcare service provision units of the EOPYY and of its contracted doctors, as well as other bodies governed by public and private law, c) The organization of the operation of the above bodies, the establishment of quality and efficiency rules for the provision of health services, the funding management and control, as well as the rational utilization of available resources, and d) The determination of the criteria and conditions for concluding contracts for the provision of primary and secondary healthcare with public and private sector entities and with contracted doctors, as well as the revision and amendment of these terms, whenever and wherever required. Primary healthcare is provided to the insured persons by the Health Units, by the contracted doctors and by the doctors of the Health Centers and Regional Clinics. By decision of the competent Minister of Labor and Social Security, primary healthcare can also be provided by other private doctors, depending on the needs that will arise by geographic region and specialty, in order to provide uninterrupted service to the insured persons. Medication prescriptions issued on behalf of the insured persons are filled without prior approval by a competent medical officer, regardless of the amount.

[9] Aletras, V. and Matsanganis, D. (2002), “Οικονομική και χρηματοδοτική διαχείριση Υπηρεσιών Υγείας” Volume A, HOU, Patras.

Regarding the demographic factor, the population of Greece has been decreasing since 2011 and is projected to decline to 8.3 million in 2050[10]. In terms of population ageing, according to 2017 OECD data[11], Greece is ranked in the third place among the countries with the most elderly population in the developed world[12], with 21.7% of its population aged 65 and older and 6.8% 80 years and older, when the OECD average is 17.4% and 4.6%, respectively. In Greece, people over the age of 65 and over the age of 80 will represent 37% and 14%, respectively, in 2050[13]. The population ageing index in Greece is estimated to have increased from 9.3% in 2016 to 17.8% in 2050.[14]

With regard to the overall health status of the population in Greece and, in particular, to morbidity due to chronic diseases, the percentage of diabetic adults amounts to 4.6% compared to the 6.4% OECD average. Also, 79.4% of the population aged 15 and older reports good or very good health, 15.0% moderate health and 5.6% bad or very bad health[15], [16].

Demand for private health services depends on the quality of services provided by the public sector. In relevant domestic measurements as well as in studies conducted by the Observatory of Health Reforms,[17] low satisfaction is recorded both for the general population and for users of health services, which suggests that this specific opinion is not due to stereotypes and prejudices, but is also confirmed on the basis of citizens' contact with the public health system.[18] Similarly, in many relevant international rankings[19], Greece is placed in a low place in terms of satisfaction rates and response of the National Health System to citizens' expectations. Consequently, and due to the fact that the quality of the services provided by the public sector is low, it is expected that the demand for private health services will increase. The fact that, according to an OECD study, health expenditure in Greece is lower than the European average[20] also contributes to this.

In 2019, Greece's total health expenditure amounted to 7.8% of GDP, compared to 9.9% in the EU, corresponding to a per capita expenditure of €1,603[21] compared to €3,523 in the EU. [22] The total health expenditure in Greece for 2020 saw an increase, amounting to 9.5% of GDP (against 10.9% on average in the EU) and ranks the country in 12th place among the EU27 countries[23]. Correspondingly, the per capita health expenditure in Greece in 2020 amounted to €1,731 when

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10 See diaNEOSis(2016) "Το Δημογραφικό Πρόβλημα Της Ελλάδας" (*The Demographic Problem of Greece*). EAP Patra.

11 See OECD (2019), «Health at a Glance 2019: OECD Indicators», OECD Publishing, Paris, https://doi.org/10.1787/4dd50c09-en and SEV (2020) «Η υγεία στην Ελλάδα: Σε αναζήτηση σχεδιασμού για το μέλλον", Bulletin on the Greek Economy, Issue 176.

12 After Korea and Japan.

13 The study by diaNEOsis (2016) on the *"The Demographic Problem of Greece: A Survey"* predicts that in 2050 the population of people aged 65 and older will constitute up to 33% of the population.

14 Hela, G. (2016). Thesis, University of Piraeus, Department of Economics, p. 25.

15 See Hellenic Statistical Authority (2020) «Έρευνα υγείας: Έτος 2019». (*Health Survey: 2019*)

16 In the OECD survey (2019), "Health at a Glance 2019: OECD Indicators", it is reported that 10.4% of the population aged 15 and older in Greece reports not being in a good health condition to 8.7% in the OECD.

17 See Health Policy Institute (2017), «Έκθεση για τις μεταρρυθμίσεις στην υγεία. Παρατηρητήριο Μεταρρυθμίσεων στην Υγεία 2017» and Health Policy Institute (2018) «Έκθεση για τις μεταρρυθμίσεις στην υγεία. Παρατηρητήριο Μεταρρυθμίσεων στην Υγεία 2018». (*Reports on Health Reforms. Health Reform Observatory 2017 and 2018, respectively*).

18 See diaNEOSis (2020) «Το νέο ΕΣΥ: Η ανασυγκρότηση του Εθνικού Συστήματος Υγείας» (*The new NHS: The reconstruction of the National Health System*)

19 See Health Consumer Powerhouse (2018), «Euro Health Consumer Index 2017», available at https://healthpowerhouse.com/media/EHCI-2018/EHCI-2018-report.pdf.

20 State of Health in the EU- 2021 Greece Health Profile.

21 Adjusted amount depending on purchasing power.

22 See State of Health in the EU Greece Health Profile 2021, OECD and European Observatory on Health Systems and Policies, p. 8, https://health.ec.europa.eu/system/files/2022-01/2021_chp_gr_greek.pdf.

23 Health at a Glance, OECD 2022 edition, p.131.

the equivalent of the EU27 countries is €3,159[24]. It is also pointed out that pharmaceutical expenditure, whether prescribed or not, except for that given in hospitals, has decreased from 2011 to 2019 (from 2.8% of GDP to 2.3% of GDP) and increased during 2020 to its maximum rate in the last decade (2.9% GDP)[25].

The proportion of total expenditure covered by the public reached almost 60% in 2019. Public current health expenditure, although with an upward trend in recent years (4.8% of GDP in 2018, 5.0% of GDP in 2019), are set at 5.9% of GDP in 2020 compared to the much higher 6.6% of GDP in 2010, which ranks Greece 16th among EU27 countries for 2020 and may affect the provision of reliable and quality medicinal and hospital care to the population, and especially to those who do not have the alternatives of resorting to private providers[26]. It is also noted that the total investments in infrastructure and equipment in the health sector in Greece were in 2020 below 0.20% of GDP, which corresponds to the lowest level (24th place) of the EU27 countries even though the public sector, in particular, has enormous needs for hospital infrastructure modernization[27].

The overwhelming reliance on direct private payments for medical expenses in Greece means that a large percentage of households face "catastrophic health expenditure"[28], i.e. direct payments that exceed 40% of total household expenditure, after deducting any expenditure aimed at ensuring basic needs (i.e. food, housing and utility bills). Over half of total catastrophic expenditure in Greece is paid by the poorest 20% of households.[29]

Technology also plays a major role in the demand for private health services. the existence of modern equipment and advanced diagnostic technology is of vital importance for the proper functioning of health facilities. High-tech provision offers faster, easier and more valid health service provision than private health facilities, unlike public clinics which tend to lack diagnostic and medical equipment, building infrastructure, sufficiency of hospital beds and medical/nursing staff.

Fragmentation of benefits and coverage, inefficient public procurement, excessive pharmaceutical expenditure and inadequate primary healthcare have had significant effects on the operation and organization of the public sector resulting in much higher private health expenditure.

II.2. SUPPLY OF HEALTH SERVICES – PRIVATE HEALTH SERVICES

The health service providers are distinguished into: a) Legal entities governed by public law which include public general and university hospitals that are part of the National Health System as well as military hospitals, b) Legal entities governed by public law with a special legal status which include public hospitals that are part of the National Health System but not supervised by the Ministry of Health, c) private clinics, i.e. Legal entities governed by private law of a profit-making nature that are health units where health and nursing services are provided and d) in other Legal entities governed by private law which include private health

24 Health at a Glance, OECD 2022 edition, p. 129.
25 https://data.oecd.org/healthres/pharmaceutical-spending.htm.
26 https://data.oecd.org/healthres/health-spending.htm#indicator-chart.
27 Health at a Glance, OECD 2022 edition, p.209.
28 Op. cit., p. 15-16. *"Catastrophic health expenditure is commonly defined as payments for health services exceeding 40% of household disposable income after subsistence needs are met (i.e. food, housing and utility bills)".*
29 Op. cit., p. 15-16.

units under the State's supervision (e.g. private non-profit clinics, rehabilitation and recovery centers).

Private health services are divided into: a) **private diagnostic centers and polyclinics** providing Primary Healthcare[30] and b) **clinics** providing Secondary Healthcare. Private clinics, like public hospitals, are divided into General, Mixed and Specialized clinics. General clinics include clinics that necessarily have a pathology department and a general surgery department. Mixed clinics are those that have hospital departments with more than two specialties of a purely pathological or purely surgical field and definitely a department of basic specialization in these fields, i.e. a pathological department or a general surgery department. Specialized clinics means clinics having nursing departments exclusively for one (1) medical specialization[31].

II.2.1 Size of the health services industry

According to the Hellenic Statistical Authority's (ELSTAT's) yearly census survey on hospitals, the number of hospitals, which includes both private clinics and public hospitals, in 2019 in Greece amounted to 269, marking a decrease by 3.9 % in the last four years.

II.2.2 Size of private health services industry

The size of the private healthcare industry as a whole in terms of value is estimated at €1,864m in 2021, showing an increase of 15.3% from 2020 and with an Average Annual Rate of Change (AARC) of 4.0% in 2014 -2021. The also positive AARC of 1.2% in the period 2013-2021 is noted[32].

II.2.3 Industry concentration degree

Private health services industry shows a moderate degree of concentration, with five major groups active in it (HELLENIC HEALTHCARE GROUP (HHG), ATHENS MEDICAL GROUP, BIOIATRIKI, IASO and EUROMEDICA).

II.2.4 Recent horizontal mergers in the healthcare industry: towards a higher market concentration

In the period 2017-2022, a number of horizontal mergers in the health sector were notified and examined by the Hellenic Competition Commission. Those merger notifications were mainly lodged by the investment fund under the name CVC Capital Partners (hereinafter CVC) through its subsidiary under the name Hellenic Healthcare S.A.R.L (hereinafter also HHG). These concentrations led to the creation of a strong group with a presence in the Greek health market (mainly in Attica) and led to an increased market concentration. Economic analysis of horizontal mergers in health markets has focused on the anti-competitive effects of such mergers on prices, service quality and decision-making process by both health service providers

[30] Private provision of Primary Healthcare includes the personal practices of private physicians and dentists.

[31] Article 16 Law 4600/2019, as in force.

[32] See Stochasis Sector Inquiry (2022) «Ιδιωτικές υπηρεσίες υγείας» (*Private health services*).

and private health insurance providers in the upstream market with which health service providers negotiate, in case of a horizontal market concentration.[33]

II.2.5 Key players: financials and shareholding structure

The major private providers of Primary and Secondary Healthcare services are: a) HELLENIC HEALTHCARE GROUP (member of the CVC group), b) ATHENS MEDICAL GROUP, c) EUROMEDICA group, d) BIOIATRIKI group, e) IASO group and f) EUROCLINIC.

II.2.6 Common ownership and interlocking directorates

The Authority's investigation so far does not show any information regarding the existence of common ownership or common management (interlocking directorates) between the major healthcare providers. This issue will be further investigated in the Final Report of this Sector Inquiry.

II.2.7 Vertical integration of healthcare providers: effects on competition

Also of particular interest is the vertical integration of health service providers, through their expansion into adjacent markets of health insurance services. In this context, the acquisition of Ethniki Asfalistiki by CVC investment fund to which HELLENIC HEALTHCARE GROUP (HHG) belongs, which was approved by the European Commission (2022), offered the possibility to examine possible anti-competitive effects of non-horizontal mergers in the health sector[34].

Literature in the last decade shows the particular interest of researchers, at a theoretical and empirical level, regarding the effect of mergers between non-competing companies in the broader health sector (cross-market mergers). In particular, interest has mainly focused on

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[33] M. Gaynor & W.B. Vogt, Competition Among Hospitals. (2003) 34(4) RAND Journal of Economics, 764–778; C. Capps, The quality effects of hospital mergers, (Discussion paper, U.S. Department of Justice, Antitrust Division, 2005); L. S. Dafny, How Do Hospitals Respond to Price Changes?, (2005) 95(5) American Economic Review, 1525–1547; L.S. Dafny, Estimation and Identification of Merger Effects: An Application to Hospital Mergers, (2009) 52(3) The Journal of Law and Economics, 523–550; A. S. Moriya, W. B. Vogt, and M. Gaynor, Hospital Prices and Market Structure in the Hospital and Insurance Industries, (2010) 5(4) *Health Economics, Policy and Law* 459–79; M. Gaynor, Martin, K. Ho & R.J. Town, The Industrial Organization of Health-Care Markets.(2015) 53(2) *Journal of Economic Literature*, 235-84; L. Dafny, Hospital Industry Consolidation: Still Moe to Come?, (2014) 370(3) New England Journal of Medicine 198-199; L.S. Dafny, Evaluating the Impact of Health Insurance Industry Concentration: Learning from Experience, (2015) Commonwealth Fund Issue Brief, 33; G. Gowrisankaran, A Nevo & R Town, Mergers When Prices Are Negotiated: Evidence from the Hospital Industry, *(2015) 105 American Economic Review*, 172–203; C. Garmon, The Accuracy of Hospital Merger Screening Methods, (2017) 48(4) The RAND Journal of Economics, 1068–1102. See also, N.D. Beaulieu, L S Dafny, B E Landon, J B Dalton, I Kuye & J M McWilliams, Changes in Quality of Care after Hospital Mergers and Acquisitions, (2020) 382 *New England Journal of Medicine* 2, 51–59; B. Handel & K. Ho, The Industrial Organization of Health Care Markets, NBER Working Paper 29137 (August 2021); M. Shepard, Hospital Network Competition and Adverse Selection: Evidence from the Massachusetts Health Insurance Exchange, (2022) 112(2) American Economic Review, 578-615; S.Venkatesh, C. Syverson, A. Sacarny, R. Sadun, M. Gaynor, Opening the Black Box of Hospital Mergers, VoxEU CEPR (Jan. 2022).

[34] Commission Decision M.10301 - CVC / ETHNIKI (24.2.2022).

markets where common owners exist. In such markets, mergers between non-competitors can harm competition by raising the prices of services offered.

II.2.7.1. Vertical integration and effects on competition: a summary of economic theory

Regarding relations between hospitals and physicians, any vertical integration through concentration or vertical agreements may, according to the economic theory, bring about positive results in patient healthcare due to better coordination and, in particular, the integrated care approach that allows a better interconnection of medical records electronic data collected by physicians and healthcare data collected by hospitals, facilitating collaboration between different medical teams and nursing personnel[35]. However, it is noted that some theoretical models as well as empirical studies report price increases both for medical procedures covered by private (or public) insurance[36], and more generally for procedures that are not covered by private (or public) insurance[37].

1. Also, literature also does not rule out vertical foreclosure effects, where vertical integration restricts competing hospitals' access to medical services (especially specialized ones) or creates some form of monopoly which may have exploitative effects in the labor market (medical and hospital staff) and vertical foreclosure effects, in case the verticalization limits the access of competing hospitals to medical services (highly specialized)[38] or creates some form of monopsony which may have exploitative effects on the labor market (medical and hospital staff)[39]. It is interestingly stressed that in the context of its assessment of the CVC/National Insurance merger, the European Commission noted that physicians in Greece do not appear to have exclusivity contracts with hospitals and that they usually offer their services in more than one hospital (multihome)[40]. According to the Commission, physicians direct their patients to any of the hospitals they work with[41]. Vertical integration of health service providers or insurance companies observed through mergers or other possibly vertical practices, such as tying practices, exclusivity contracts, etc. can have both positive and negative effects on competition.

[35] See O. Williamson, The Vertical Integration of Production: Market Failure Considerations, (1971) 61(2) American Economic Review Papers & Proceedings 112-123 on the positive effects of vertical integration for transactional efficiency.

[36] See C.S, Carlin, R. Feldman & B. Dowd, The Impact of Hospital Acquisition of Physician Practices on Referral Patterns, (2016) 25 Health Economics 439-454 (in empirical terms); See generally for theoretical arguments that vertical integration of hospital services and physicians leads to price increases and relatively limited economic efficiencies A. Evans Cuellar, P. J Gertler, Strategic integration of hospitals and physicians, (2006) 25(1) Journal of Health Economics 1-28; However, see F. Ciliberto, D. Dranove, The effect of physician-hospital affiliations on hospital prices in California, (2006) 25(1) Journal of Health Economics 29-38 (a study that finds no price effects, except for hospitals in non-urban areas where vertical integration results in price reductions).

[37] See C. Capps, N. Dija, T. Shvydko & Z. Zabinski, Stacking the Blocks: Vertical Integration and Antitrust in the Healthcare Industry, CPI Antitrust Chronicle (May 2021), p. 5 and the literature cited therein.

[40]CVC/Ethniki Asfalistiki, para. 81.

[40]CVC/Ethniki Asfalistiki, para. 81.

[40]CVC/Ethniki Asfalistiki, para. 81.

[41] CVC/ Ethniki Asfalistiki, para. 82.

II.2.7.2. Example of Analysis of vertical effects on competition: the CVC/National Insurance merger (2022)

The Commission thoroughly examined the effects of the vertical integration of insurance companies and hospitals in the CVC/National Insurance merger (2022). Specifically, the effects of the merger on both the health insurance market, which had a national dimension, and on the market for general health services from private hospitals (without distinguishing, in the context of the merger assessment, specific specialties or between inpatient and outpatient departments), with the geographic market covering Attica, and referred to the existence of distinct markets for obstetric clinics and diagnostic centers at a local level. The Commission considered possible foreclosure effects: both on input and customer foreclosure.

III. REGULATORY FRAMEWORK FOR HEALTH SERVICES

The healthcare industry is governed by a complex regulatory framework consisting of more than 90 legislative instruments. Highlights of the regulatory framework are listed below, with particular emphasis put on private clinics (secondary healthcare).

III.1. ESTABLISHMENT AND OPERATION OF PRIVATE CLINICS

The framework governing the establishment and operation of private clinics is provided, in particular, by Law 4600/2019 "Modernization and Reform of the Institutional Framework for Private Clinics, Establishment of a National Public Health Organization, Establishment of a National Institute for Neoplasms and other provisions"[42]*, as applicable. A private clinic is a "health unit in which health and patient care services are provided, in accordance with the accepted modern concepts and methods of medical science"* [43]. Laboratories, pharmacies and clinic departments are counted as parts of the private clinic[44].

A license to establish and operate a private clinic can be granted to natural or legal persons governed by private law[45]. The same natural or legal person may be granted more than one license to establish and operate private clinics. The shares or units of the capital companies of a Private Clinic are registered in their entirety.

III.2. CLAWBACK & REBATE SYSTEM

In the context of the reforms that took place over the past decade 2010-2020 and the implementation of structural changes deemed necessary in the health sector, the so-called "clawback & rebate" mechanism was launched, which can be translated as an "automatic return/pay-back and discount". This mechanism falls under the category of State interventions and policies aimed at containing (in other words, streamlining), ensuring a better control and the containment/reduction of expenditure. It applies to both pharmaceutical costs and health service costs, such as diagnostic tests, hospitalization, physiotherapy and special education. In

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[43] Article 1 of Law 4600/2019 *"Modernization and Reform of the Institutional Framework of Private Clinics, Establishment of a National Public Health Organization, Establishment of a National Institute for Neoplasms and other provisions"*, as in force.

[44] Article 31 of Law 4600/2019

[45] Article 3 of Law 4600/2019.

particular, the "clawback" mechanism essentially refers to an automatic mechanism for the return of EOPYY budget overruns.

On the other hand, the "rebate" system consists in the compulsorily scaled rebate that private providers are required to offer to EOPYY.

The "clawback & rebate" mechanism was extended to the period 2019-2022 by Article 25 of Law 4549/2018 " Provisions concerning the conclusion of the Financial Goals and Structural Reform Agreement - Medium Term Fiscal Strategy Framework 2019-2022 and other provisions"[46]. The latest amendment to the provision, it was extended to 2025 in accordance with article 77 of Law 4837/2021.

III.3. HOSPITAL COST ACCOUNTING

In the context of the reforms that took place during the past decade 2010-2020 and the implementation of structural changes deemed necessary in the health sector, including the creation of a universal management system and fair distribution of financial resources, the pilot implementation of a Cost Accounting System was promoted for Hospital Services (HCA)[47], with the primary goal of developing a modern cost accounting system in hospitals[48]. To reach this goal, the so-called DRG (Diagnosis Related Groups) system was adopted, translated as "*system of Diagnostically Homogeneous Groups*": these are groups of operations defined by medical parameters (diagnosis, medical procedure, etc.) and differentiated according to their medical complexity .

IV. HCC's INQUIRY FINDINGS

IV.1. PROFILE OF THE UNDERTAKINGS PARTICIPATING IN THE INQUIRY

For the purposes of the sector inquiry, extended questionnaires were sent at the beginning of 2022 to a total of 99 recipients, out of which 86 companies responded, and in particular to 24 insurance companies and 75 health service providers, using specifically designed questionnaires by category.

Of the 75 private health service providers which were selected to receive the Authority's questionnaire, 62 responded and of the 62, 60 stated that they were still active in the market.

Private healthcare providers were asked to provide financial data, information about their activities, their view of the level of competition in the market, the potential impact of acquisitions and mergers, the influence of the State, the identification of barriers to market entry, the significance of the information which they or their competitors become aware of, etc.

The responses from 60 companies-respondents indicate that the majority of health service providers-respondents (35/60) cover general clinics. Next, the second largest percentage represents special clinics specializing in psychiatric or neurological conditions (13/60), special clinics specializing in ophthalmological services (2), pathological services for chronic and incurable diseases (2), hemodialysis unit (1), and rehabilitation centers (5). Finally, 3 mixed

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[46] GG 105/A΄/14.06.2018.

[47] The term "Hospital Services" is also found as "Hospitalizations".

[48] Except for those related to the medical care of patients in psychiatric hospital departments, medical care of patients in hospital outpatient clinics and rehabilitation in specialized hospital departments or rehabilitation centers.

clinics, which have surgery-obstetrics and gynecology departments or surgery-orthopedics-ohthalmology and urology departments, also participated in the inquiry.

IV.2. INTERVENTIONS TO THE SECTOR'S OPERATION

Most of the private health service providers consider that there are interventions in their activity by public bodies. For example, they argue that interventions come from the EOPYY, the EOPYY's Unified Regulation for Healthcare Benefits (EKPY), the health regional directorates, the rigorous institutional framework, the bureaucratic legislative framework, the pricing policies for medical services, and the clawback & rebate mechanism. In addition, it is emphasized that clinics that focus on mental illnesses as well as rehabilitation and recovery centers are forced to suffer financial losses due to the monopoly nature of EOPYY as an insurance institution. In addition, it is stressed that in recent years there have been distortions in the market due to lower- price policies, the imposition of VAT on individual categories of health services and the imposition of a price observatory on materials and services. In particular, the compulsory contracts with EOPYY under the Diagnoses Related Groups (DRG) system with clawback & rebate is emphasized by the providers. Reference was also made to the following: the interventionism of the NHS, in which private providers are called upon to provide staff and other resources (during the COVID-19 pandemic), the monopsony role of the EOPYY which results in a cut in the income of private health service providers due to clawback & rebate mechanisms and the legislative framework that imposes a bureaucratic licensing and license-amending and extending procedure.

IV.3. ENTRY AND ACTIVITY BARRIERS

Regarding the existence of barriers to the development of health services due to the current regulatory framework, most of the respondents (62%) consider that such barriers do exist.

Most of them consider that one of the main barriers is the clawback & rebate mechanism. Many responses refer to issues related to the existing regulatory framework (complexity and constant changes, overregulation, existence of outdated laws and their problematic implementation). Fewer responses referred to time-consuming procedures, bureaucracy combined with the number of actors involved, differences in the licensing framework between old and new clinics, high taxation and high VAT, strict licensing requirements, large capital needs, setting of thresholds and price caps, restriction of marketing and advertising, absence of quality standards, "grandfathering clauses", unjustified delays in the issuance of ministerial decisions and the exclusion of insured persons from health services due to a vertical, rather than case-by-case, application of the regulatory framework.

IV.4. MARKET STRUCTURE AND COMPETITIVE PROCESS

This section presents the opinions of the respondents:

- regarding competition parameters (Section IV.4.1);

- in terms of the degree of concentration and market power in the sector (Section IV.4.2);

- on the effects of concentrations on the market (Section IV.4.3);

- regarding the existence of distortions in competition and, in particular, with respect to anti-competitive and other problematic practices, practices between health service providers and insurance companies, cooperations between private clinics and pharmaceutical companies, as well as other possible distortions (Section IV.4.4), and finally,

- the possible solutions proposed (Section IV.4.5).

IV.5. HEALTH SERVICES AND THE COVID-19 PANDEMIC

In this Section, the opinions of the interviewed providers are recorded regarding the effects of the pandemic on the activities of private health service providers, as well as the effects of the pandemic on effective competition. Multi-dimensional answers were given to the question: emphasis was put on the increase in the operating costs (PCR tests, rapid tests, masks, protective suits, face shields, creation of special spaces, upgrading of the call center to deal with the huge volume of calls) and because of the tightening-up of the operating framework, prevention and control measures were adopted, as well as all the prescribed health protocols for the safety of patients, persons accompanying patients-visitors and staff, with an indicative reference to the active surveillance of staff, patients and accompanying persons, the laboratory testing of new patients, hosting and post-hospitalization patients in the specially adapted waiting areas and medical service areas, the supply of suitable anti-Covid-19 protection and preventive testing equipment, the cleaning and disinfection of the premises, surfaces and equipment, etc.

CHAPTER 2: INSURANCE SERVICES

V. PRIVATE HEALTH INSURANCE MARKET

Chapter 2 focuses on issues related to the insurance services industry. The relevant analysis is limited to the private insurance industry.

V.2. THE DEMAND FOR HEALTH INSURANCE SERVICES

The demand for health insurance services is directly and indirectly influenced by a number of factors. The most important factors concern both the economic developments and the cost of insurance services (premiums). Other factors are health conditions, while the demographic developments are considered to particularly concern the private health insurance sector, as they involve both the age distribution of the population and the existing situation of public insurance as well as any developments and future prospects thereof[49].

V.3. SUPPLY OF HEALTH INSURANCE SERVICES

Insurance companies (insurers) are active in the private insurance market, which in Greece, according to the law, can be limited liability insurance companies, as long as it is not a non-life insurance or a reinsurance company, apart from being a limited liability company, it can also be organized as a mutual insurance undertaking[50]. The insurer's counterparty is the insurance policyholder, who concludes the insurance contract, and may not be identified with the insured

[49] See Stochasis 2022, Chapter “Demand”, Section "Determinants of Demand"

[50] Article 14 para. 1 (b) L. 4364/2016, it can also have the form of a European company as defined in Regulation 2157/01.

subject, who is the person subject to the insurance risk, and in whose favor the insurance coverage is provided, while it should be noted and that the policyholder/insured subject may not coincide with the beneficiary of the policy, who is the person entitled to collect the insurance claims incurred[51].

In addition to insurers, the role of insurance distributors (former insurance intermediaries)[52] is crucial in the insurance market. Insurance distributors are professionals[53] who mediate between the policyholder and the insurer with a view to concluding an insurance contract.

The insurance sector also involves other professionals, such as technical experts, claims adjusters, etc.

Particular reference with regard to the health insurance industry should be made to the undertakings providing health insurance management services.

V.3.1 Size of the insurance industry

On 30.9.2021, 37[54] insurance companies are found active in the Greek private insurance market, a number unchanged compared to 30.9.2020. The companies are categorized on the basis of their operating license and insurance operations, as follows[55]: 2 life insurance companies, 18 non-life insurance companies and 17[56] companies which simultaneously pursue life insurance and non-life insurance activities (including life insurance companies that, from the non-life insurance, are the only to pursue the “Accidents” and “Health insurance” activities). According to the Financial Stability Review of the Bank of Greece (November 2022), no significant changes were observed in the structure of the Greek private insurance market during the first half of 2022.

V.3.2 Degree of concentration and recent concentrations

The Greek market for the provision of health - accident - sickness insurance concerns a competitively structured market with a low degree of concentration, as it is offered, among other insurances, by many insurance companies that operate either in the form of a limited company or in the form of a branch, with diversified and largely low shares.

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[51] For more information on the concepts of "insurance policy holder", "insured person" and "policy beneficiary" see and I. Rokas, Insurance Law ibid., p. 29.

[52] For more information on the concept of insurance mediation, see and E. Tziva, Bancassurance: Distribution of insurance products by credit institutions”, 2020, pp. 94 et seq.

[53] Insurance agents, insurance agent coordinators and insurance brokers (Article 4 paras. 3, 4, 5, 6 L. 4583/2018).

[54] Since 31.12.2021, the insurance companies active in Greece now amount to 36, due to the Generali Life - Life Insurance Company / Generali Hellas Insurance SA (formerly AXA Insurance SA) merger.

[55] Regarding data relating to the market players active in the private supply of health insurance services, their type of activity and their financial figures, see Report of the Governor of the Bank of Greece for 2021, Chapter *"Overview of the private insurance market"*, p. 253 et seq.

[56] Since 31.12.2021, the number amounts to 16 companies following the merger carried out between two of them αυτών.

VI. REGULATORY FRAMEWORK FOR HEALTH INSURANCE

VI.1. GENERAL REMARKS

The modern EU supervisory framework for private insurance was fundamentally revised by Directive 2009/138 on the undertaking and exercise of insurance and reinsurance activities (Solvency II)[57]. The new system, which is similar to that for the supervision of credit institutions[58], rests on three pillars: a) quantitative requirements (capital adequacy, technical provisions and equity), b) qualitative requirements (governance system, supervisory control) and c) public information (information provided to the public as well as to the supervisory authorities)[59]. Through the Solvency II system, a single EU law was put in place for the supervision of life and non-life insurance companies as well as reinsurance companies and insurance groups[60]. The above Directive transposed into Greek legislation by Law N 4364/2016.

VI.2. LICENSING

Any taking up of insurance and reinsurance activities, subject to the relevant provisions on freedom of establishment and provision of services[61], requires license granting the supervisory authority[62]. This license is valid for the entire European Union (single license).

In particular, insurance companies are granted an operating license either for the category of non-life insurance or for life insurance activities[63]. The operating license for the exercise of primary insurance operations is granted a) by class of insurance, based on the risks covered by that insurance class and b) by group of two or more insurance classes.

VI.3. SUPERVISION

Following their licensing, all insurance and reinsurance companies active in the Greek insurance market are subject to the relevant provisions of the regulatory framework set by N 4364/2016 which, as mentioned above, incorporates Directive 2009/138/EC into Greek law.

Insurance companies in Greece are supervised by the Bank of Greece. During the operation of the insurance companies, the supervisory authority monitors the continuing compliance of the

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[57] Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009, Taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II). See also Directive 2014/51/EU of the European Parliament and of the Council of 16 April 2014 amending Directives 2003/71/EC and 2009/138/EC and Regulations (EC) No 1060/2009, (EU) No 1094/2010 and (EU) No 1095/2010 in respect of the powers of the European Supervisory Authority (European Insurance and Occupational Pensions Authority) and the European Supervisory Authority (European Securities and Markets Authority)

[58] Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

[59] See I. Rokas, Solvency II- "Εποπτεία των (Αντ)ασφαλιστικών Επιχειρήσεων" (*Supervision of (Re)Insurance undertakings*), 2016, pp. 10-14.

[60] See also P. Chatzinikolaou-Aggelidou Ασφαλιστικό δίκαιο (*Insurance Law*) op. cit, p. 337.

[61] Article 115 et seq. of Law 4364/2016. On the contrary, in order to pursue insurance activities, companies from third countries must be licensed by the supervisory authority (Article 130 L. 4364/2016).

[62] See Article 10 (1) L. 4364/2016. In Greece, the competent supervisory authority is the Bank of Greece.

[63] See Article 11 L. 4364/2016.

latter with the provisions of current legislation, with the main purpose of protecting policyholders, insured persons and insurance beneficiaries[64].

VI.4. INSURANCE CONTRACT

In accordance with Article 1 (1) of Law 2496/1997 (Insurance Law), the insurer undertakes, uder the insurance contractual terms, the obligation to pay for a fee (premium) to his counterparty (insurance policyholder) or to a third party, provision (insurance) when the claim on which it was agreed that his obligation depends (insurance claim) arises. As the insurance coverage, which constitutes the service provided by the insurer, is fully determined by the contractual terms, which are pre-formulated insurance terms, insurance is considered to be a "legal product"[65].

The insurance contract and the relationship of insurer - policyholder / insured person is still governed by certain special provisions from which it is not possible to deviate to the detriment of the counterparty of the insurer, at least as far as mass insurances are concerned.

VI.5. REGULATION OF THE INSURANCE SECTOR AND COMPETITION LAW

First of all, the regulation of the insurance sector is complementary to free competition law[66]. This is because the regulatory framework of the insurance sector serves objectives that could not be served by competition law rules, such as the protection of insurers' solvency and the protection of the interests of the insured persons. The obligation to protect the insurers' solvency lies with the special supervisory and regulatory framework that is currently governed by N 4364/2016, also discussed above. As for the protection of insured persons, specific provisions of the law governing the insurance contract, as well as the provisions of the consumer protection law, provide protection to the insured person/policyholder, while the provisions of Law 4583/2018 which incorporated the IDD Directive impose obligations to the distributors[67], in the interest of insured persons' protection. For example, it is stipulated that the insurance intermediary (now "distributor") must disclose any conflicts of interest before concluding an insurance contract[68].

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[64] See Article 19 L. 4364/2016 and Greek Supreme Court (Areios Pagos) Decision no. 668/2005 Review of Commercial Law 2005, 749.

[65] See also I. Rokas Συμβατικό ασφαλιστικό δίκαιο (*Contractual insurance law*) op. cit., p. 11.

[66] For more details, see G. Panitsas op. cit., p. 306 et seq.

[67] See also A. Karagounidis, "Οι υποχρεώσεις του διανομέα ασφαλιστικών προϊόντων έναντι του πελάτη σύμφωνα με την Οδηγία (ΕΕ) 2017/97 ("IDD") και τον Ν 4583/2018, ΔΕΕ 2020, 1129". (*The obligations of the distributor of insurance products towards the customer in accordance with Directive (EU) 2017/97 ("IDD") and Law 4583/2018, CJEU 2020, 1129.*)

[68] See G. Panitsas op. cit., p. 306-307.

VII. FINDINGS OF THE HCC's SECTOR INQUIRY

VII.1. PROFILE OF THE UNDERTAKINGS PARTICIPATING IN THE INQUIRY

For the purposes of the inquiry, questionnaires were sent to twenty-five (25) companies operating in the insurance sector. These questionnaires contained seventy-three (73) questions[69].

VII.1. ENTRY AND ACTIVITY BARRIERS

Regarding the questions on whether there are entry barriers in the health insurance market and whether the existing regulatory framework affects competition, the vast majority of insurers answered in the negative[70]. Furthermore, those insurers who responded positively did not provide convincing justifications, as the high/uncontrollable cost of providing health services[71] and other similar justifications that cannot be deemed as an entry barrier were invoked as being a "barrier".

VII.2. MARKET STRUCTURE AND COMPETITIVE PROCESS

The Greek market for the provision of health - accident - sickness insurance involves a competitively structured market with a low degree of concentration, as such insurance, inter alia, is provided by many insurance companies that operate either in the form of a limited company or in the form of a branch, with diversified and largely low shares.

This Section presents a further analysis on the following: the relations of insurance companies with insured persons and competition parameters, the cooperation between insurance companies, as well as the relations of insurance companies with private health providers.

VII.3. HEALTH INSURANCE AND THE COVID-19 PANDEMIC

Finally, regarding the current circumstances as shaped by the health crisis, a large number of insurers stated that they provide coverage against secondary or incidental complications of COVID-19. Furthermore, the current health crisis has not brought about a downturn in the private insurance market; on the contrary, some say the opposite has been observed, as more people have turned to private insurance due to the strain on the public health system, while less serious medical cases have further decreased due to the desire of many insured persons to avoid non-emergency hospitalizations.

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[69] Of these, questions one to eleven (1-11) concerned information and documents that the companies were required to provide. Questions twelve to sixteen (12-16) contained financial information and data that were used in the implementation and analysis of the inquiry, while the rest related to qualitative characteristics of the industry, the way businesses operate and the level of competition within the country.

[70] It should also be noted that […] pointed out that the presence of large reinsurers facilitates new players entering the market.

[71] See for example […], […], […].

CHAPTER 3: DATA AND NEW TECHNOLOGIES

VIII. GENERAL COMMENTS

VIII.A. Digital competition and health and insurance services

The rise of the digital economy has been the most important modern economic phenomenon. "Big Data" and "digital platforms" currently dominate the scholarly debate in different fields of law with growing interest in artificial intelligence and the "Internet of Things". Big data analytics and the massive collection of personal data can track consumer behavior (their digital identity) in detail as they browse the Internet, and help companies predict the types of products and services that might engage consumers' interest.

Through the collection and evaluation of personal data from different channels, platforms and devices and being able to share this information, the different parts of the human health value chain (medicine, preventive medicine, healthcare, etc.) they can also gain a single insight into the consumer/patient. This technological capacity may lead to the development of a new business model in the industry.

Healthcare providers and health insurance companies are increasingly relying on the data they collect to personalize their offers and limit their risks when managing costly medical conditions, exacerbating the information asymmetry they already benefit vis-à-vis their customers, who do not have access to an equivalent data volume or advanced data analysis techniques.

This Chapter presents the possible distortions of competition from the use of (personal) data and algorithms, the use of personal data and theories of harm to competition, the Authority's preliminary findings from the responses of health service providers and health insurance providers to questions about the use of data, algorithms and new technologies in the respective industries, as well as regulatory initiatives at European level regarding competition issues arising from the digitization of health and insurance services.

IX. INQUIRY FINDINGS

The Section presents the preliminary findings of the Authority from the responses of health service and health insurance providers to questions about the use of data, algorithms and new technologies in the respective industries, and in particular regarding the collection, processing and access to data (Section IX.1.1), in the creation and exploitation of data pools (Section IX.1.2), as well as the use of algorithms / big data and increased access to data as a factor distorting competition (Section IX.1.3), issues relating to the use of new technologies (Section IX.2.) and, in particular, the use of Artificial Intelligence (AI) technologies (Section IX.2.1), the risks and benefits of the integration of new technologies (Section IX.2.2) addressing the distortions of competition caused as a result of the use new technologies (Section IX.2.3), utilization and protection of patient data (Section IX.2.4), and other innovation mechanisms (Section IX.2.5).

SUMMARY - CONCLUSIONS

The overall conclusions that can be drawn from the Interim Report are that the structure of private health services shows a moderate degree of concentration, while the main trend observed is the acquisition of private clinics by investment funds, with the most important example being the concentration of a series of private clinics under the control of CVC funds in the last five years.

Some of the participants in the Authority's inquiry express concerns about the concentration trends in the market and, in particular, the parallel activity of large health service providers in the market for the provision of health insurance services (vertical integration).

However, most participants do not consider any company to be "dominant" in the market. However, vertical integration of the health industry with the health insurance sector (through mergers or various practices/agreements) emerges as an issue of particular importance. Such practices could involve exclusivity agreements, tying practices, “all or nothing” clauses, MFN clauses, non-compete agreements[72], which may also lead to vertical anti-competitive foreclosure effects, under certain conditions, and which are examined ex post by the Competition Commission[73].

However, health providers indicate as the main sources of competition distortion, on the one hand, the increased concentration in the market, and on the other hand, cost containment mechanisms and rationalization of the state budget for health, such as the institutionalized Closed Consolidated Hospitalization (CCH) of the EOPYY, which requires further consideration. Also, most participants consider that there are regulatory barriers to market entry and activity as well as interventions in the activity of private health service providers by public bodies.

It is further noted that during the Covid-19 pandemic, revenues have been reduced, and operating costs of private clinics increased for various reasons. However, the pandemic also had a positive effect on the operation of private health service providers, as it led to investments in digital modernization, recruitment of new staff and expansion of operations, which ultimately brought profits to providers.

The observation on the shift of the insured persons towards private health service providers and the awareness-raising for patients regarding the need for access to quality health services is of particular interest. This in turn led to a shift to private insurance services and a search for satisfactory insurance plans, with further development of the industry. On the other hand, some population groups were excluded from access to health services.

Regarding the **health insurance sector**, the main conclusion is that it is characterized by the existence of a relatively large number of market players, while the observed concentrations are mainly of a horizontal nature (between competitors) and, in a sense, reflect the more general market ‘shake-out’ European trend in the insurance field due to of the high capital requirements of EU legislation.

In terms of the impact of mergers on the market, a mixed picture emerges, with horizontal mergers between insurance companies being viewed positively, albeit with some concerns expressed regarding the consolidation of activities in the health and insurance markets.

Key parameters for selecting an insurance program are, inter alia, the level of insurance premiums, the scope of insurance coverage, the reputation of the provider as well as the cooperation network with health providers it provides. It appears that there is sufficient differentiation of health insurance plans, while it is observed that consumers who hold health insurance with an insurance company also have another insurance coverage from the same

[72] For a useful summary, see Katherine L. Gudiksen, Alexandra D. Montague, Jaime S. King, Amy Y. Gu, Brent D. Fulton, and Thomas L. Greaney, Preventing Anticompetitive Contracting Practices in Healthcare Markets (Petris Centre, Research Report, Sept. 2020).

[73] Commission Regulation (EU) 2022/720 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices, OJ [2022] L 134/4; Guidelines on vertical restraints 2022/C 248/01.

company. From the responses of the participants, it appears that the bundling of health insurance plans with other insurance plans is a rather common commercial practice.

The Authority's inquiry so far indicates that health providers appear to have more bargaining power than insurance companies. Some insurance companies consider groups such as HHG, Iatriko, Euroclinic, Bioiatriki, Affida and Iaso to be essential commercial partners.

The market for health insurance services is affected by the cost and quality of health services as well as the degree of concentration in the latter market, with higher concentration particularly affecting the position of smaller insurers. It is noted that, due to the inability of insurance companies to influence the cost of hospital care, which is exacerbated by the lack of a transparent compensation scheme, many insurance companies resort to concluding individual contracts with health providers. Of particular interest is the fact that, to this end, small and medium-sized private insurance providers do not directly contract with health providers but rely on the use of insurance management services offered by certain intermediary players. In addition, the use of a medical officer for collective bargaining with health care providers was pointed out. In addition, reference is made to various practices for the selection of specific clinics by insurance service providers, such as a tendering procedure carried out by an insurance company with a predetermined monthly premium per insured person, the selection of a clinic on the basis of a predetermined annual cost regardless of the number of hospitalizations of the specific portfolio, capitation programs, etc. Commercial relations between the health services providers, health insurance and the above intermediaries-providers of insurance management services, as well as their possible effects on the market are proposed to be further considered.

The Covid-19 pandemic appears to have had a beneficial impact on the economic activity of health insurance providers, as many patients switched to private insurance due to the strain on the public health system.

Regarding data and new technologies, the key assumption of the Interim Report is that an appropriate regulatory framework geared towards the protection of and access to health-related data will contribute to enhancing competition and the development of medical technology start-ups and incumbents, with increased innovation and enhanced quality of medical services as a direct effect.

The HCC's sector inquiry leads to the following conclusions:

Private clinics collect and process their patients' personal data internally and communicate the necessary information to insurance, private and non-public, and auditing bodies in compliance with the GDPR (following the patients' written consent).

Health insurance service providers collect risk assessment data when concluding the insurance contract (medical history and examinations), and then the data involved in determining compensation, namely medical diagnoses and hospitalization data, medical test results, surgery records, hospital invoices, etc. Insurance companies receive from the clinics the individual medical data of each case, normally to the extent necessary to assess whether the case falls within the scope of insurance coverage and the individual information regarding hospitalization costs, etc.

Participating health service providers believe that, in order to provide better relevant services to patients, it is necessary for health service providers and health insurance providers to have access to data related to the patient's medical records as well as the complete medical records of patients, including, for example, data on diseases, hospitalizations, medical examinations/test results -laboratory tests, radiodiagnostic examinations, medication, with the

aim of providing the best possible services. However, health service providers generally do not see access to data as providing a particular competitive advantage.

In addition, it is estimated that increased access to citizens' health-related data by health insurance companies may lead to a distortion of competition and an increase in the market power of certain health insurance providers. Discrimination against categories of citizens and reduced access to health and insurance services is also not excluded. In this context, the HCC's initiative to create a Code of Ethics for the processing of personal data by insurance companies is of particular interest, in order to specify the general principles and obligations arising for insurance companies and protect insured consumers.

The use of data pools for personal medical data by health or insurance companies is considered to have both positive and negative effects. Most of both healthcare providers and health insurance providers inquired have not identified practices of leveraging a company's power in neighboring markets through the use of big data and/or algorithms.

Among the new "cloud" technologies, artificial intelligence (AI) and blockchain, only the first (cloud service) has been widely used and for a sufficient time period for its effects _which are positive_ to be evident, and the full transition from the culture of "offline storage" to that of the cloud was strongly endorsed.

In particular with regard to artificial intelligence (AI), the majority of the private clinics inquired pointed out its beneficial effects on service quality, the faster service of a larger volume of patients and cost reduction. The use of these technologies will give comparative advantages to medical service providers who will adopt them.

Finally, several health providers-respondents point out the need for mechanisms to facilitate innovation, as well as that the HCC might contribute to this by implementing Article 37A of Law 3959/2011.

From all the above information collected and inquiries conducted by the Authority, it also follows that for the further investigation into the sector and the conditions prevailing in it, but also in terms of data use, a systematic discussion with market players and public bodies for possible solutions to issues that may arise is important. This is because the investigation into the specific value chain undertaken within the framework of competition law and policy should take into account various aspects (e.g. the qualitative aspect) in terms of providing an inextricably linked services (healthcare and health insurance) in the interest of competition and the end consumer.

The conclusions to be drawn from the second public consultation will be incorporated into the Final Report. Also, for the preparation of the final report, a systematic effort will be made by the HCC by carrying out surveys (possibly through an opinion poll) and recording the opinions of consumers and consumer associations regarding the issues of concentration and competition in the markets concerned, while ad hoc cooperation with the Consumer Ombudsman will continue.