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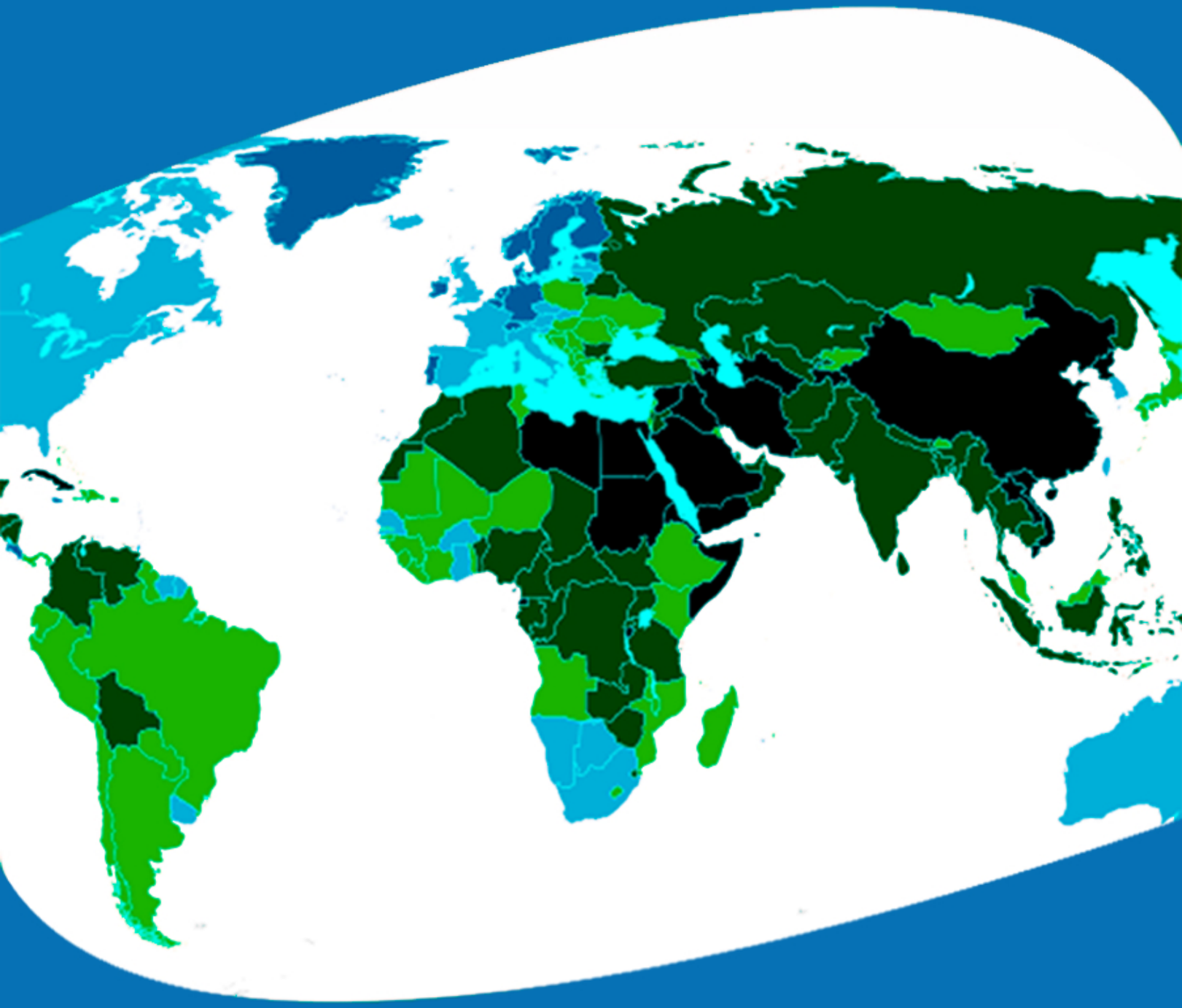

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บทบรรณาธิการ

วารสารวิชาการผลประโยชน์แห่งชาติฉบับที่ 4 อยู่ในช่วงของการแพร่ระบาดไวรัส COVID-19 ระลอก 4 ของไทยและอีกหลายประเทศนำมาซึ่งความสูญเสียอย่างเหลือคณานับเป็นเสมือนกับเผชิญสมรภูมิรบระหว่างกองกำลังรัฐบาลกับศัตรูที่มองไม่เห็นจนทำให้สังคมเริ่มเรียนรู้ว่าวัคซีนต่อต้านไวรัส COVID-19 คือเครื่องมือหรืออาวุธทางภูมิรัฐศาสตร์ที่สามารถยึดพื้นที่และสร้างความมั่นคงปลอดภัยกลับคืนมาหากฉีดวัคซีนได้เร็วในทางตรงกันข้ามไวรัสไม่ได้หายไปไหนเพราะไวรัสได้กลายพันธุ์และแพร่กระจายอย่างรวดเร็วไปทั่วทุกประเทศโดยเฉพาะสายพันธ์เดลต้าที่มีการแพร่กระจายที่รวดเร็ว การจะคาดหวังว่าสถานการณ์ทางระบาดวิทยาในโลกจะดีขึ้นอย่างเห็นได้ชัดก็ต่อเมื่อประชากรส่วนใหญ่จะได้รับการฉีดวัคซีน ผู้ผลิตวัคซีนยังมีงานอีกมากที่ต้องทำและทำให้แต่ละประเทศมีความตึงเครียดมากยิ่งขึ้นกับการเอาชนะภารกิจนี้ผู้นำแต่ละประเทศตระหนักดีว่าทั้งอนาคตของเศรษฐกิจและชะตากรรมทางการเมืองของผู้นำนั้นขึ้นอยู่กับการหลีกเลี่ยงการล่มสลายที่สำคัญที่เกี่ยวข้องกับโควิด ซึ่งจะนำไปสู่การล็อกดาวน์ครั้งใหม่ตั้งแต่โรคเริ่มแพร่กระจายไปทั่วโลกเมื่อปลายปี 2019 สิ่งที่สำคัญที่สุดคือการควบคุมโควิดอย่างสมบูรณ์ถ้ารัฐไหนไม่ทำ ก็จะเสี่ยงที่จะได้รับการกลายพันธุ์ใหม่และปัญหาต่าง ๆนั้นจะกลับไปอยู่รอบข้างของตัวคุณเอง นี่คือเกมส์ความมั่นคงของชาติ ในสถานการณ์ปัจจุบันคือการต่อต้านโรคระบาดและการคุกคามของการก่อการร้ายทางชีวภาพความมั่นคงของชาติซึ่งในวารสารฉบับนี้ภูมิใจนำเสนอในขณะที่ผู้นำโลกในช่วงหนึ่งเดือนที่ผ่านมาได้เริ่มต้นการแบ่งโลกและเขตอิทธิพลของตนเองโดยการประชุมสุดยอดร่วมกันระหว่างโจ ไบเดน และวลาดีมีร์ ปูตินที่สวิสเซอร์แลนด์ซึ่งในวารสารฉบับนี้ได้นำเสนอบทวิเคราะห์มุมมองด้านภูมิรัฐศาสตร์เกี่ยวกับการแบ่งโลกในช่วง COVID-19และกลยุทธ์ของรัฐศูนย์กลางแม้ว่าสงครามโรคระบาด COVID-19ยังไม่ยุติลงก็ตามทำให้เห็นแนวโน้มในอนาคตของรัฐต่าง ๆในระบบโลกต้องกำหนดการตัดสินใจการเลือกตำแหน่งของตนเอง

ดังที่ทราบกันดีถึงจุดมุ่งหมายของวารสารนี้ คือการสร้าง และค้นหาความรู้ใหม่ ๆ ทางวิชาการด้านภูมิรัฐศาสตร์ ภูมิเศรษฐกิจ นวัตกรรมด้านต่าง ๆ ให้แก่สังคม และเพื่อเป็นสื่อกลางในการติดตามความก้าวหน้าในแวดวงวิชาการทั้ง 3 ด้านดังกล่าว โดยเฉพาะอย่างยิ่งวารสารฯ ได้ให้ความสำคัญกับการรักษาผลประโยชน์ของชาติ และรู้เท่าทันสำหรับการปรับตัวในเงื่อนไขใหม่หลัง COVID-19ดังนั้นบทความในวารสารฉบับนี้ที่มีจำนวนทั้งสิ้น 7 เรื่องจึงเป็นบทความวิชาการที่เข้มข้นตามแนวทางวารสารเหมือนเดิมโดยได้รับความร่วมมือจากนักศึกษาปริญญาเอกจากเซอร์เบีย สหราชอาณาจักรที่เน้นย้ำถึงภัยคุกคามด้านความปลอดภัย ของไวรัสโควิด-19 ว่าเป็นภัยคุกคามที่ไม่ใช่แบบดั้งเดิม และการก่อการร้ายทางชีวภาพยังคงเป็นภัยคุกคามที่น่าจะเป็นไปได้อย่างไร รวมถึงระบบสาธารณสุขเช่นกันที่ต้องการความรู้จากสหสาขาวิชาชีพเกี่ยวกับความมั่นคงของชาติ การเสริมสร้างความมั่นคงด้านสุขภาพของโลก มีความจำเป็นสำหรับความร่วมมือและความมุ่งมั่นในสาขาวิชาและภาคส่วนต่าง ๆ นอกจากนี้ จำเป็นต้องมีทัศนคติ แนวทาง และวิธีการใหม่ ๆ เพื่อประกันความมั่นคงของชาติในยุคสมัยใหม่ที่ภัยคุกคามกำลังพัฒนาอย่างรวดเร็ว ความมั่นคงของชาติไม่สามารถรับรองได้ด้วยวิธีการและแนวทางแบบเดิม ๆ อีกต่อไปและงานวิชาการจาก

ยูเครนอีกจำนวน3เรื่องจึงได้ศึกษาค้นคว้าเพื่อหาคำตอบการพัฒนาการจัดการศึกษาทุนมนุษย์ การกีฬาและการบริการด้านสุขภาพที่เป็นแนวโน้มของรัฐในสภาวะปัจจุบันของการพัฒนาเศรษฐกิจ โดยคำนึงถึงแนวคิดสมัยใหม่และความขัดแย้งของการพัฒนาเศรษฐกิจ

จะเห็นได้ว่าบทความในลักษณะนี้ค่อนข้างขาดแคลนในแวดวงวิชาการของไทยที่ “วารสารวิชาการผลประโยชน์แห่งชาติ”ได้คัดสรรนำเสนอผ่านความร่วมมือจากหลากหลายนักวิชาการผู้มีประสบการณ์

บรรณาธิการหวังเป็นอย่างยิ่งว่าวารสารของเราฉบับนี้ จะมีส่วนต่อยอดความคิด และนำเสนอวิธีคิดแบบใหม่ตามภูมิทัศน์ที่เปลี่ยนไป เพื่อการตั้งคำถามที่มีความชัดเจน และแหลมคมมากยิ่งขึ้น โดยผู้อ่านจะได้รับความรู้ในกระแสธารการเปลี่ยนแปลงโดยเฉพาะอย่างยิ่งในสถานการณ์COVID-19ที่กำลังทวีความรุนแรงเพื่อให้เกิดการถกเถียงในทางวิชาการอย่างสร้างสรรค์ อันจะช่วยให้เกิดมุมมองใหม่ ๆ ในทางวิชาการต่อไป

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การแบ่งโลกช่วงโควิด-19:ตัวตนและพลังความสัมพันธ์ของรัฐศูนย์กลาง

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บทคัดย่อ

บทความนี้เพื่อศึกษาแนวคิดการเปลี่ยนตำแหน่งของรัฐศูนย์กลางและตัวตนพลังสัมพันธ์ระหว่างรัฐศูนย์กลางสำหรับการแบ่งโลก จากการศึกษาค้นพบว่ารัฐศูนย์กลางแต่ละรัฐไม่สามารถกำหนดระเบียบการใหม่ของโลกได้รัฐแต่ละรัฐอยู่บนหลักการของการไม่เผชิญหน้าทางการทหารโดยตรง เนื่องจากสหรัฐอเมริกามีข้อเสียเปรียบด้านการต่อรองและจะไม่ขัดขวางสร้างอุปสรรคแก่พันธมิตรของตน(อียู)หากเป็นโครงการด้านเศรษฐกิจแม้ว่าจะร่วมมือกับฝ่ายตรงกันข้ามของสหรัฐฯ มีแนวโน้มว่าสหรัฐฯอาจร่วมมือกับตะวันตกในการสกัดยับยั้งการพัฒนาผลิตภัณฑ์เทคโนโลยี่ขั้นสูงและโซนการใช้ดอลลาห์ลดบทบาทลงแทนที่โดยโซนเงินหยวน ยูโร และรูเบิล เนื่องจากรัสเซีย จีนสามารถใช้เงินสกุลท้องถิ่นของตนในการขายทรัพยากรโดยเฉพาะพลังงานและการเบียดแทรกตลาดพลังงานในยุโรปและจีนซึ่งสามารถสร้างโซนเทคโนโลยี่ของตนเอง รัฐศูนย์กลางได้กำหนดเขตอิทธิพลของตนบนฐานเทคโนโลยี่ที่แตกต่างกันแต่มีเป้าหมายเดียวกันเพื่อเป็นหลักประกันตำแหน่งของตนในการปกป้องอธิปไตยโดยตำแหน่งของสัดส่วนGDPโลกไม่สามารถประกันทรัพยากรได้โดยตนเองและบริการสินค้าด้านอธิปไตยได้

คำหลัก:รัฐศูนย์กลาง อธิปไตย การแบ่งโลก รัฐสถานีปั๊มน้ำมัน รัฐแท่นเงิน

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Dividing the world during COVID-19: Identity and power relations of the central state

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ABSTRACT

This article aims to study the concept of changing the position of the central state and identity, power of interstate relations is the center for the divide of the world. The study found that each central state could not establish a new world order. It based each state on the principle of non-direct military confrontation because the US had a bargaining disadvantage and would not hinder its allies (EU). If it is an economic project, even if it cooperates with the opposite US. It is likely that the US may cooperate with the West to curb the development of high-tech products and the dollar use zone has reduced, replaced by the yuan, euro and ruble zones. Because of Russia and China can use its local currency to sell resources, especially energy and infiltrate European and Chinese energy markets, which can create its own technology zones. The central state has defined its own sphere of influence by different technological bases but has the same goal of ensuring its position is the ability to protect sovereignty. The position of global GDP cannot ensure its own resources and sovereign goods services .

KEYWORDS: Central state, Sovereignty, Dividing the world, Gas station state, Printing press state

บ ท น ำ

การระบาดใหญ่ของไวรัสโคโรน่าได้เร่งกระบวนการแบ่งโลกออกเป็นค่ายสนับสนุนของสหรัฐฯ และจีนทำให้เราเห็นข้อจำกัดของระบบทั่วโลก ที่สำคัญเห็นเกี่ยวกับรัฐที่สามารถปกป้องตนเองโดย วัคซีนที่ผลิตในประเทศการระบาดของไวรัสโคโรน่ากลายเป็นปัจจัยสำคัญที่ต่อสู้เพื่อยึดพื้นที่เดิม กลับมาที่กำหนดโดยทรัพยากร (วัคซีน) เป็นปัจจัยสำคัญในการพัฒนากระบวนการทางภูมิ รัฐศาสตร์ จีนมีความโดดเด่นในการแก้ปัญหานี้และค่อย ๆฟื้นตัวทางเศรษฐกิจ สหรัฐฯแม้ว่าจะ สามารถที่จะยับยั้งการแพร่ระบาดต่อมาแต่การฟื้นตัวทางเศรษฐกิจนั้นยังมีปัญหา เนื่องจากสหรัฐฯ พิมพ์เงินที่ไม่มีการค้ำประกันสินทรัพย์แต่อย่างใดในช่วงกลางเดือนมีนาคมปีนี้ สภาคองเกรสได้ผ่าน แผนใหม่มูลค่า 1.9 ล้านล้านดอลลาร์ซึ่งรวมถึงการเบิกจ่าย "เงินเฮลิคอปเตอร์" ใหม่ งานเริ่มขึ้นใน โครงการต่อต้านวิกฤติที่ใหญ่ที่สุดในประวัติศาสตร์ ซึ่งจะได้รับการออกแบบเพื่อลงทุนในโครงสร้าง พื้นฐานของอเมริกา และเพิ่มเงินอีกประมาณ 3 ล้านล้านดอลลาร์ ดังนั้นยอดรวมของการใช้จ่ายเพื่อ ต่อต้านวิกฤติเพิ่มเติมในสหรัฐฯจะสูงถึง 8 ล้านล้านดอลลาร์ และนี่อาจไม่ใช่จุดจบ[1]ทำให้จีนและ รัสเซียลดความสนใจการใช้เงินดอลลาห์ในการสำรองเพื่อการค้าระหว่างประเทศและประกอบทั้งจีน และรัสเซียกำลังเปลี่ยนรูปแบบการพัฒนาเศรษฐกิจของตนเองที่จะลดการพึ่งพาเงินดอลลาห์ สหรัฐ ๆมีความต้องการที่จะกลับคืนมาสู่มหาอำนาจเช่นเดิมคือการกำหนดกติกาและกฎของตนเอง เป็นหลัก หากรัฐใด ๆไม่ยินยอมก็จะใช้มาตรการคว่ำบาตรเพื่อกดดันทางเศรษฐกิจและโดดเดี่ยว จากประชาคมโลกโดยการใช้เงินดอลลาห์เป็นเครื่องมือในการทำการค้าระหว่างประเทศ แต่ใน สถานการณ์ปัจจุบันการที่สหรัฐจะกลับคืนมาสู่มหาอำนาจได้นั้นขึ้นกับว่ามีรัฐใดบ้างที่ยินยอม หมายถึงเรากำลังพูดถึงรัฐที่มีอธิปไตยเป็นของตนเองที่มีกำหนดกติกาด้วยตนเองหรือร่วมกับรัฐ อื่น ๆ ตัวตนและพลังความสัมพันธ์ต่อกันนั้นจะกำหนดตำแหน่งและบทบาทของตนเองซึ่งในช่วงโค วิด-19นั้นมีสามรัฐที่มีแนวทางอิสระและอธิปไตยอย่างชัดเจนคือรัสเซีย สหรัฐฯ และจีน เป้าหมายบทความนี้เพื่อศึกษาแนวคิดของการเปลี่ยนตำแหน่งรัฐศูนย์กลางและตัวตนพลัง ความสัมพันธ์ของรัฐศูนย์กลางของการแบ่งโลก

1. การเปลี่ยนตำแหน่งมหาอำนาจของการแบ่งโลก

การแบ่งโลกมาจากหลักการของการจัดระเบียบโลกโดยประเทศมหาอำนาจที่เห็นเป็น รูปธรรมคือหลังสงครามโลกครั้งที่2สามมหาอำนาจประกอบด้วยสหราชอาณาจักร สหรัฐอเมริกาและสหภาพโซเวียตโดยมีข้อตกลงกันที่จะรักษาดุลยภาพอำนาจต่อกัน จาก ประวัติศาสตร์ที่เป็นรูปธรรมคือข้อตกลงยัลต้า(Yalta Agreement)ที่นำเอามาปัญหาต่าง ๆก่อนสิ้นสุด สงครามโลกครั้งที่สองมาเป็นแนวปฏิบัติที่ประเทศมหาอำนาจในเวลานั้น(ผู้ชนะ)ตกลงกัน ดังนั้น หลังสงครามโลกครั้งที่สองเยอรมนีและญี่ปุ่นในฐานะรัฐที่เคยมีอิทธิพลและมีโซนอิทธิพลของตนเอง ได้หายไปจากแผนที่โลก ในขณะที่สหราชอาณาจักรกลายเป็นส่วนหนึ่งของโซนอิทธิพลสหรัฐฯโดย สมัครใจซึ่งในช่วงปีค.ศ.1945 - 1960 เราจะเห็นโซนสองโซนหลักคือโซนโซเวียตและโซนสหรัฐซึ่ง สหรัฐฯได้พัฒนาอย่างแข็งขันในทรัพยากรของตลาดที่เข้าถึงได้ใหม่ ปริมาณตลาดขั้นต่ำคือประชากร ที่มีกำลังซื้อ 250-300 ล้านคน[2] สหรัฐฯทำได้ดีกว่าสหภาพโซเวียตเนื่องจากมีตลาดที่ใหญ่กว่า ของจำนวนประชากรและมีฐานเทคโนโลยีของตนเองทำให้สามารถแบ่งงานกันทำในอุตสาหกรรมที่ ซับซ้อนได้มากยิ่งขึ้น อย่างไรก็ตามสหรัฐฯประสบปัญหาด้านวิกฤติโครงสร้างเศรษฐกิจในทศวรรษ ที่1970ทำให้ไม่สามารถเปลี่ยนฐานเทคโนโลยีใหม่ที่สอดคล้องกับรายจ่ายด้านการทหาร ส่งผลทำ ให้เข้าสู่โซนเทคโนโลยีการบริการต่อมาซึ่งไม่ได้อิงอยู่กับการแบ่งแยกแรงงานกับภาคการผลิตโดย อาศัยเทคโนโลยีทางการเงินซึ่งกลายเป็นมหาอำนาจขั้วเดียวในช่วงปลายทศวรรษที่1990ในที่สุด

คำว่า "มหาอำนาจ" ปรากฏครั้งแรกในปี ค.ศ. 1944 ในหนังสือ "มหาอำนาจ" ของวิลเลียม ฟอกซ์ ที่เกี่ยวข้องกับประเทศในมหาอำนาจสามประเทศ แต่แพร่หลายในทศวรรษปี ค.ศ. 1960 แนวคิดเรื่อง "มหาอำนาจ" เป็นศูนย์กลางของทฤษฎี "สามโลก" ของเหมา เจ๋อตง ซึ่งประกาศครั้งแรกในปีค.ศ. 1964ระหว่างการสนทนากับคณะผู้แทนจากพรรคสังคมนิยมญี่ปุ่น เหมากล่าวหาสหภาพโซเวียตว่า "สมรู้ร่วมคิดกับสหรัฐฯ เพื่อครอบครองโลก" เหมากล่าวถึงสหภาพโซเวียตและสหรัฐฯ ว่าเป็นมหาอำนาจที่เปรียบเทียบได้ในด้านอำนาจทางทหารและเศรษฐกิจโดยรวมกับประเทศอื่น ๆ ทั้งหมดของโลก และแสดงแรงบันดาลใจที่ก้าวร้าวอย่างที่ไม่เคยมีมาก่อนในประวัติศาสตร์โลก [3] จากนั้นBrzezinski ได้พัฒนาแนวคิดต่อมาว่ามหาอำนาจประกอบด้วยปัจจัย 4 ประการที่จำเป็น ได้แก่ การทหาร เศรษฐกิจ วิทยาศาสตร์ เทคนิค และวัฒนธรรม มหาอำนาจถือว่าเป็นประเทศที่สามารถมีอิทธิพลอย่างมากต่อการเมืองของคนทั้งโลกและเพื่อให้บรรลุเป้าหมาย มักจะถูกบังคับให้รัฐต่าง ๆเข้าสู่ การเป็นพันธมิตรกับมหาอำนาจ ในความคิดของ Brzezinski สหรัฐฯยังคงเป็นเจ้าโลกได้โดยคำจำกัดความนี้ให้ความเข้าใจไปว่าแม้ว่าประเทศใดที่มีฐานะเศรษฐกิจอันดับใหญ่ต้น ๆของโลกหากไม่สามารถที่จะปกป้องผลประโยชน์ของตนเองได้นอกพื้นที่ประเทศตนเองก็ไม่สามารถนับเป็นมหาอำนาจได้ อำนาจของมหาอำนาจไม่เพียงแต่ใช้อำนาจทางการทหารหรือเศรษฐกิจเท่านั้นแต่สามารถกำหนดการควบคุมประเทศอื่นได้ที่ทำให้ประเทศนั้นไม่สามารถตัดสินใจอย่างอิสระซึ่งขึ้นกับแก่นของอำนาจคือจะมีรัฐแกนกลางและรัฐต่าง ๆเป็นก่อตัวเป็นบล็อก แนวคิดนี้ได้นำเอาการทหาร (ซึ่งจำเป็นต้องรวมอาวุธนิวเคลียร์ทางยุทธศาสตร์ในโลกสมัยใหม่ด้วย)ซึ่งมีความเหนือกว่ารัฐอื่น ๆ ส่วนใหญ่ทำให้สามารถใช้อำนาจอธิปไตยได้ไม่เฉพาะในภูมิภาคของตนเท่านั้นแต่ยังอยู่ในส่วนที่ห่างไกลที่สุดในโลกด้วย[4]

อย่างไรก็ตามแนวคิดดังกล่าวนี้ยังมีคำถามว่าการเปลี่ยนแปลงตำแหน่งมหาอำนาจในแต่ละช่วงเวลานั้นเกิดขึ้นได้อย่างไรน่าจะเป็นปัญหาหนึ่งที่ว่าปัจจุบันมหาอำนาจเดิมสหรัฐฯไม่สามารถปรับตัวได้เมื่อมีคู่แข่งใหม่อย่างจีนทำให้ไม่สามารถกำหนดระเบียบใหม่ของโลกได้ที่จะจัดการควบคุมส่วนแบ่งที่ตนเองต้องการและเข้าถึงสินทรัพย์ได้ยากมากยิ่งขึ้นส่งผลให้คำสั่งเดิมเริ่มไม่เป็นที่ยอมรับหรือถูกท้าทายจากคู่แข่ง สถานะความเป็นเจ้าโลกทำให้รัฐที่เป็นคู่แข่งขาดความยำเกรงและสามารถที่กำหนดกฎเกณฑ์ของตนเอง หรือดำเนินการตัดสินใจร่วมกันโดยอาศัยอำนาจทางการทหาร การเมือง และเศรษฐกิจ และเป็นหลักการที่ต้องมีข้อตกลงของการแบ่งปันผลประโยชน์ของแต่ละฝ่าย อย่างเช่นข้อตกลงยัลต้าซึ่งกลายเป็นระเบียบการของโลกต่อมาด้านหนึ่ง แต่อีกด้านหนึ่งนั้นเป็นหลักการที่ไร้ระเบียบการแต่ละรัฐจะใช้กฎหรือนโยบายต่อการปกป้องอธิปไตยหรือโซนอิทธิพลของตนเองอย่างที่ปรากฏในปัจจุบัน

จากการศึกษาของวอลเลอร์สไตน์ (Immanuel Wallerstein) นักสังคมวิทยาชาวอเมริกัน[5] ได้ค้นพบว่าการล่มสลายและการเพิ่มขึ้นของมหาอำนาจทางภูมิรัฐศาสตร์ของโลกมีความสัมพันธ์กับการปรับโครงสร้างของเศรษฐกิจโลกที่อธิบายไว้ในวัฏจักรเศรษฐกิจจะเรียกขั้นตอนนี้ว่า"วงจรของรัฐชั้นนำ" ขั้นตอนแรกของ "อำนาจที่เพิ่มขึ้น" เผยให้เห็นการเผชิญหน้าทางภูมิรัฐศาสตร์เมื่อมหาอำนาจสู่การแย่งชิงมรดกของความเป็นผู้นำมีความได้เปรียบทางเศรษฐกิจในระยะยาวโดยอาศัยการค้นพบคลื่นเทคโนโลยี่ใหม่ในการขยายตัวด้านการลงทุนประกันการกระจายความล้นเหลือของทุนให้เกิดประสิทธิภาพและเพิ่มแรงงานการผลิต

ในขั้นตอนที่สองมีภาวะถดถอยทั่วไปในเศรษฐกิจโลกซึ่งจำกัดโอกาสในการขยายตัว อย่างไรก็ตามอำนาจที่เพิ่มขึ้นด้วยความได้เปรียบทางเทคโนโลยี การผลิต และการค้าสามารถปกป้องผลประโยชน์ของตนและบรรลุวุฒิภาวะอันเป็นเจ้าโลกได้ ศูนย์กลางการเงินโลกกำลัง

เปลี่ยนไปและ "อำนาจที่แท้จริง" เริ่มต้นขึ้นเป็นรัฐชั้นนำซึ่งมีการแข่งขันที่สูงในตลาดต่างประเทศ หมายถึงการเปิดกว้างของเศรษฐกิจโลกและการค้าเสรี

ขั้นตอนสุดท้ายของ "การล่มสลายของอำนาจ" เกี่ยวข้องกับการลดประสิทธิภาพการผลิตและการเพิ่มมาตรการกีดกันเพื่อต่อต้านคู่แข่งที่มีความแข็งแกร่งโดยกำหนดรูปแบบสามลิงค์บน "คลื่นยาว" ของการพัฒนาเศรษฐกิจโลก (คลื่นยาวคอนดราเทียฟ) การเคลื่อนไหวของ "รัฐชั้นนำ" ของโลกในช่วงสองร้อยปีที่ผ่านมา ศูนย์กลางของแรงโน้มถ่วงของเศรษฐกิจโลกได้เปลี่ยนจากสหราชอาณาจักรไปยังเยอรมนีและหลังจากนั้นสหรัฐฯ ในโลกปัจจุบันไปยังภูมิภาคเอเชียแปซิฟิก การเปลี่ยนแปลงในวัฏจักรดังกล่าวจะเปลี่ยนโครงสร้างทางภูมิรัฐศาสตร์ของโลกเป็นระยะ (ระเบียบโลก) ส่งเสริมความก้าวหน้าของมหาอำนาจใหม่และเขตอิทธิพลของตนเอง วัฏจักรการเมืองโลกแต่ละรอบสัมพันธ์กับวัฏจักรเศรษฐกิจโลกของคอนดราเทียฟสองรอบติดต่อกันต่อมา วัฏจักรการเมืองโลกหนึ่งรอบที่ยาวนานคือประมาณ 100 ปี ในความสัมพันธ์ทางเศรษฐกิจระหว่างประเทศ หากคำนึงถึงแนวคิดของวัฏจักรธุรกิจ (เศรษฐกิจ) ซึ่งสะท้อนถึงความผันผวนของผลผลิตแห่งชาติ รายได้ และการจ้างงาน พร้อมกับกิจกรรมทางเศรษฐกิจที่เพิ่มขึ้นหรือลดลงเป็นระยะเวลานานถึง 10 ปี

ตารางที่1*.แบบจำลองแบบพลวัตของอำนาจและการแข่งขัน (การวิเคราะห์ศตวรรษของอังกฤษและสหรัฐอเมริกา)* [6]

ขั้นตอนของการเป็นเจ้าโลก	สหราชอาณาจักร	สหรัฐอเมริกา
อำนาจที่เพิ่มขึ้น	คลื่นคอนดราเทียฟลูกที่หนึ่งขั้น A	คลื่นคอนดราเทียฟลูกที่สามขั้นA
การแข่งขันกับฝรั่งเศส (สงครามนโปเลียน) ประสิทธิภาพการผลิต การปฏิวัติอุตสาหกรรม	การแข่งขันกับเยอรมนี ประสิทธิภาพการผลิต Fordism การผลิตสินค้าจำนวนมากด้วยเครื่องจักร	
ชัยชนะแห่งอำนาจ	คลื่นคอนดราเทียฟลูกที่หนึ่งขั้น B	คลื่นคอนดราเทียฟลูกที่สามขั้น B
ชัยชนะทางการค้าในละตินอเมริกาและควบคุมอินเดีย การประชุมเชิงปฏิบัติการของโลก "ช่วงเวลาที่ยากลำบาก"	ชัยชนะทางการค้าในการล่มสลายของระบบการค้าเสรีของอังกฤษในที่สุด ความพ่ายแพ้ทางทหารของเยอรมนี "ภาวะเศรษฐกิจตกต่ำครั้งใหญ่"	
วุฒิภาวะความเป็นเจ้าโลก	คลื่นคอนดราเทียฟลูกที่สองขั้นA	คลื่นคอนดราเทียฟลูกที่สี่ขั้นA
ยุคการค้าเสรี ลอนดอนกลายเป็นศูนย์กลางของเศรษฐกิจโลก ความเจริญรุ่งเรืองของวิคตอเรีย	ระบบเศรษฐกิจเสรีของเบรตตันวูดส์ อิงจากเงินดอลลาร์ นิวยอร์กเป็นศูนย์กลางทางการเงินของโลกใหม่ "ยุคทองแห่งการเติบโต" (สำหรับสหรัฐอเมริกาเป็นหลัก)	
การล่มสลายของความเป็นเจ้าโลก	คลื่นคอนดราเทียฟลูกที่สองขั้น B	คลื่นคอนดราเทียฟลูกที่สี่ขั้น B
ลัทธิจักรวรรดินิยมแบบคลาสสิก รัฐในยุโรปและสหรัฐอเมริกากำลังต่อสู้กับสหราชอาณาจักร การปฏิวัติอุตสาหกรรมครั้งใหม่นอกสหราชอาณาจักร	ภาวะเศรษฐกิจตกต่ำครั้งใหญ่ หวนคืนสู่องค์ประกอบของการปกป้องที่ต่อต้านการแข่งขันของญี่ปุ่นและยุโรป	

จากตารางพบว่าในคลื่นยาวคอนดราเทียฟขั้นA (ลำดับแรกตามลำดับ) ขึ้นไป มีการเผชิญหน้ากันระหว่างมหาอำนาจหลักทางภูมิรัฐศาสตร์เพื่อสิทธิในการสืบทอดความเป็นผู้นำ การวิเคราะห์ย้อนหลังแสดงให้เห็นว่าความก้าวหน้าทางเทคโนโลยีใหม่กระจุกตัวอยู่ในประเทศเดียว ดังนั้น การเพิ่มประสิทธิภาพการผลิตจึงทำให้ประเทศนั้นมีความได้เปรียบทางเศรษฐกิจในระยะยาวและกลายเป็นโซนเทคโนโลยี่ของตนเอง การเปลี่ยนคลื่นเทคโนโลยี่จากวิกฤติโครงสร้างเศรษฐกิจเดิม หากรัฐใดรัฐหนึ่งสามารถก้าวสู่คลื่นเทคโนโลยี่ในโครงสร้างเศรษฐกิจใหม่ก็สามารถที่จะก้าวขึ้นสู่รัฐชั้นนำได้และสามารถสืบทอดความเป็นรัฐชั้นนำได้ หากขาดการกระตุ้นอุปสงค์เมื่อใดก็ไม่สามารถที่จะลดความเสี่ยงแก่สถานประกอบการได้ กลายเป็นข้อจำกัดสำหรับการกระจายความเสี่ยง เครื่องมือด้านเครดิตและการประกันภัยจึงมีขีดจำกัดในทางปฏิบัติไม่ได้เพิ่มประสิทธิภาพของผู้ผลิตอีกต่อไป(รวมถึงบริการ) ความเป็นไปได้ในการกระตุ้นสินเชื่อของการบริโภคก็หมดลงในทางปฏิบัติ หากรัฐไม่ได้ปรับตัวสู่คลื่นเทคโนโลยี่ใหม่ก็จะก่อให้เกิดวิกฤติหนี้ที่รุนแรงที่สุดกำลังเกิดขึ้นในโลก เป็นผลให้วิกฤติประสิทธิภาพของเงินทุนที่ลดลงเริ่มขึ้นในโลกซึ่งเกี่ยวข้องกับการลดลงอย่างรวดเร็วของอัตราการแบ่งงานแนวที่ลึกยิ่งขึ้น[7]ก็จะทำให้โซนอิทธิพลของตนเองลดลงด้วย เนื่องจากไม่สามารถประกันความสามารถของภาคการผลิตของตนเองได้จากการแข่งขันของคู่แข่งรายใหม่ ธุรกิจไม่เพียงต้องการสร้างรายได้เท่านั้นแต่ยังจ่ายเงินจากรายได้สำหรับบริการธนาคารดอกเบี้ยธนาคารและเงินทุนอีกส่วนหนึ่งเพื่อลงทุนในการพัฒนาทางวิทยาศาสตร์และทางเทคนิค การเติบโตของการค้าทำให้เกิดความต้องการเทคโนโลยีและสิ่งประดิษฐ์ที่ช่วยปรับปรุงโลจิสติกส์ การยึดพื้นที่ใหม่จึงมีความจำเป็นเพื่อแก้ปัญหาการสะสมทุนส่วนเกินสำหรับนายทุนเมื่อเงินทุนในพื้นที่เดิมไม่สามารถทำกำไรได้อีกต่อไป เงินทุนส่วนเกินบังคับให้นายทุนต้องหาแหล่งลงทุนในพื้นที่ทางภูมิศาสตร์ใหม่

Giovanni Arrigi นักสังคมวิทยาชาวอิตาเลี่ยนสังเกตเห็นความสัมพันธ์ระหว่างการสะสมทุนมากเกินไปในประเทศศูนย์กลาง"มีแนวโน้มที่จะขยายเขตรอบนอกของระบบทุนนิยมโลกว่าในบางครั้งทุนสะสมในปริมาณที่มากกว่าการนำกลับมาลงทุนในการผลิตและการแลกเปลี่ยนสินค้าภายในอาณาเขตที่มีอยู่ ระบบการสะสมทุนในพื้นที่ใหม่จะทำให้วิกฤติมีความ "ล่าช้า"ครั้งต่อไปของการสะสมที่ลันเหลือ ดูดซับส่วนเกินเหล่านี้ผ่านการขยายตัวเชิงพื้นที่" [8] สภาพเช่นนี้ทำให้เกิด "ประสิทธิภาพเงินทุนที่ลดลง"หรือกล่าวอีกนัยหนึ่งคือเกี่ยวข้องกับการเพิ่มขึ้นของจำนวนเงินทุนเริ่มต้นสำหรับการผลิตที่เพิ่มขึ้นอย่างมีนัยสำคัญ กำไรจะเท่ากับศูนย์หรือขาดทุนได้ชี้ให้เห็นว่าด้วยการผลิตซ้ำที่เพิ่มขึ้นเงินทุนต้องใช้เงินลงทุนเริ่มต้นมากขึ้นเรื่อย ๆ เพื่อรักษาความสามารถในการทำกำไรจากการผลิตครั้งใหม่ ๆ การลดลงของประสิทธิภาพของเงินทุนสามารถแก้ไขได้ด้วยการขยายตลาดเท่านั้น การพัฒนาความก้าวหน้าทางวิทยาศาสตร์และเทคนิคเป็นไปได้ก็ต่อเมื่อชนชั้นกลางใช้กลไกที่จะลดความเสี่ยงให้กับผู้ผลิต ในประวัติศาสตร์ของระบบเศรษฐกิจทุนนิยมมีการคิดค้นกลไกเพียงสามประการเท่านั้นคือ การให้กู้ยืมแก่ผู้ผลิต (ความเสี่ยงบางส่วนถูกโอนไปยังระบบธนาคาร) การขยายตลาดผลิตภัณฑ์ (ความเสี่ยงของผู้ผลิตในระบบเศรษฐกิจเริ่มต้นจะลดลง) การให้กู้ยืมของผู้บริโภค (ความเสี่ยงของผู้ผลิตจะลดลงจากการแจกจ่ายให้กับผู้มีส่วนร่วมอื่น ๆ ในกระบวนการทางเศรษฐกิจ)[9] เนื่องจากความเสี่ยงของผู้ผลิตที่เติบโตขึ้นพร้อมกับการแบ่งงานกันแนวลึกยิ่งขึ้นสำหรับการลงทุนต่อไปไม่ก่อให้เกิดประโยชน์ผลตอบแทนของผู้ผลิตได้ทำให้เกิดการลดกำไรอย่างรวดเร็ว

วิธีการที่จะลดความเสี่ยงของผู้ผลิตได้ผ่านการขยายตลาดการขายสินค้าที่มีความจำเป็นในการขยายระบบเศรษฐกิจเพื่อพัฒนาอย่างต่อเนื่องตามธรรมชาติ โซนเทคโนโลยีเป็นระบบที่มีการแบ่งแยกแรงงานแนวที่ลึกยิ่งขึ้น คุณสมบัติพื้นฐานของโซนเหล่านี้คือการรวมกันทางเทคโนโลยี

จนกว่าจะมีการนำเสนอทรัพยากรที่เป็นระบบเพื่อเพิ่มอุปสงค์หรือกระจายความเสี่ยงของการลงทุนเมื่อการสะสมทุนที่ล้นเกิน เทคโนโลยีใหม่ในแต่ละคลื่นยาวคอนดราเทียฟจะเริ่มต้นการเปลี่ยนแปลงอย่างกว้างขวางในคลื่นเทคโนโลยีในทางกลับกันจะเปลี่ยนแปลงอำนาจเศรษฐกิจของรัฐนั้น ๆด้วย เป็นผลให้เศรษฐกิจโลกจะเปลี่ยนไปและจัดปรับความสมดุลอำนาจทางภูมิรัฐศาสตร์ ตลาดเดิมของรัฐที่เคยครอบครองจะถูกครอบครองมาสู่เจ้าของเทคโนโลยี่ใหม่ซึ่งเป็นผู้ที่มีความแข็งแกร่งมีอำนาจอธิปไตย และความสามารถเพียงพอจะสามารถเข้าร่วมในการแบ่งแยกตลาดใหม่ได้[10] เรื่องนี้เป็นเรื่องที่มีความสำคัญเชิงกลยุทธ์ที่รัฐชั้นนำจะต้องพัฒนาคลื่นเทคโนโลยี่ใหม่เพื่อแก้ปัญหาการสะสมทุนที่ล้นเกินและการรักษาโซนเทคโนโลยี่ของตนเอง อย่างที่เราเห็นในปัจจุบันการสูญเสียตำแหน่งทางเศรษฐกิจของสหรัฐฯแก่จีนคืออำนาจที่สามารถต่อต้านสหรัฐฯได้และสามารถกำหนดกฎเกณฑ์ของระเบียบโลกระหว่างประเทศได้ สิ่งที่สำคัญสามารถปกป้องอธิปไตยของตนเองได้จากตรงนี้เราสามารถเห็นรัฐชั้นนำในปัจจุบันตามหลักพื้นฐานนี้มีสามรัฐคือสหรัฐฯ รัสเซียและจีนที่เป็นรูปธรรม

2.ตัวตนของพลังความสัมพันธ์ต่อกันระหว่างรัฐศูนย์กลาง

เศรษฐกิจรัสเซียในแง่ของความสามารถในการซื้อเป็นหนึ่งในห้าผู้นำของโลกและเป็นเบอร์หนึ่งในยุโรป[11] รัสเซียได้ก่อตั้งและกำลังให้บริการอาวุธพิเศษอย่าง"Avangard", "Peresvet","Poseidon", "Burevestnik", "Zircon", "Sarmat", "Prometheus" และอื่น ๆ ปัจจัยอำนาจทางการทหารอย่างขีปนาวุธที่สามารถโจมตีสหรัฐฯโดยที่สหรัฐฯไม่สามารถป้องกันได้มีความสำคัญกว่าเปอร์เซ็นต์ของ GDP ของโลกและกองทัพรัสเซียเป็นกองทัพที่แข็งแกร่งที่สุดในโลก อย่างความขัดแย้งที่ปรากฏในซีเรีย กองทัพรัสเซียได้แสดงให้เห็นเป็นประเทศเดียวในโลกที่สามารถรับรองความปลอดภัยแก่รัฐอื่นได้ในเขตที่ตนเองคุ้มครองจากการคุกคามของสหรัฐได้ เนื่องจากข้อเท็จจริงที่ว่าเมื่อเผชิญกับกลุ่มติดอาวุธกลุ่มรัฐอิสลาม รัสเซียต้องเผชิญกับผลประโยชน์ของสหรัฐฯ และทีมงานสหรัฐฯ(สหภาพยุโรป)ซึ่งเป็นมหาอำนาจ รัสเซียชนะในการเผชิญหน้าครั้งนี้ ทำให้มหาอำนาจต้องละทิ้งแผนการที่จะเปลี่ยนผู้นำที่ได้รับการเลือกตั้งอย่างถูกกฎหมายของซีเรียก่อให้เกิดการเปลี่ยนแปลงความสมดุลของอำนาจ แม้แต่จีนในปัจจุบันก็ไม่สามารถทำได้ที่จะใช้กลยุทธ์การป้องกันตนเองโดยการทหารและนอกพื้นที่ของตนเอง นอกจากการเผชิญหน้าปัญหาทะเลจีนใต้ที่อ้างว่าเป็นพื้นที่ของจีนซึ่งเป็นเส้นทางเดินเรือที่มีมูลค่าการค้า 3.4 ล้านล้านดอลลาร์ต่อปี การควบคุมช่องทางเดินเรือมีความสำคัญไม่เพียงแต่สำหรับการจราจรเชิงพาณิชย์แต่ยังรวมถึงกองทัพเรือที่กำลังเติบโตของจีนซึ่งกำลังแผ่อิทธิพลของจีนในภูมิภาค ในปี ค.ศ. 2016 จีนได้เพิกเฉยต่อคำตัดสินของศาลอนุญาโตตุลาการระหว่างประเทศ ทำให้เกิดความตึงเครียดกับฟิลิปปินส์ เวียดนาม สหรัฐอเมริกา บรูไน มาเลเซีย และไต้หวัน[12]

จีนเป็นศูนย์รวมอำนาจการเติบโตทางเศรษฐกิจและมีความแข็งแกร่งของทหารเหมือนกับสหรัฐฯและเงินหยวนได้แสดงบทบาทแทนเงินดอลลาร์ในโซนเศรษฐกิจของจีน(Regional Comprehensive Economic Partnership -RCEP)[13] ซึ่งมีศักยภาพทางเศรษฐกิจมหาศาลเป็นผู้นำในเทคโนโลยีขั้นสูงเช่นการสื่อสารเคลื่อนที่และไมโครโปรเซสเซอร์รุ่นที่ 5 นอกจากนี้ จีนยังประสบความสำเร็จมากขึ้นในการพัฒนาหุ่นยนต์ กลไกที่แม่นยำ และการแปรรูปวัสดุ วันนี้จีนเป็นเจ้าของสิทธิบัตรด้านการพัฒนาและเทคโนโลยีขั้นสูงในโลกจำนวนร้อยละ 25 และในสถานการณ์เช่นนี้ ระบบการคุ้มครองสิทธิบัตรก็เริ่มที่จะต่อต้านอเมริกาเอง สหรัฐฯจะไม่สามารถไล่แซงจีนได้อีกต่อไป แต่

กองทัพจีนก็ยังห่างไกลไม่สามารถเป็นทหารรักษาการณ์ของโลกได้ [14] ดังนั้นจีนจะไม่สามารถแทนที่สหรัฐฯอย่างอัตโนมัติ ความสำเร็จของเศรษฐกิจจีนเกิดขึ้นได้จากตลาดเงิน เทคโนโลยี และการขายสินค้าไปตะวันตก หากไม่มีตลาดและดอลลาร์เหล่านี้จีนก็อาจประสบปัญหาตามมา ด้านหนึ่งจีนไม่ยินยอมให้สินค้าจากสหรัฐฯเข้าไปจำหน่ายในตลาดจีนเนื่องจากสินค้าของจีนราคาถูกกว่าและสหรัฐไม่สามารถผลิตสินค้าได้โดยตนเองต้องอาศัยการซื้อสินค้าจากจีน แต่จีนก็ไม่สามารถมุ่งเน้นไปที่ตลาดภายในประเทศหากเป็นผลิตภัณฑ์ไฮเทคมีเฉพาะตลาดในสหรัฐฯและสหภาพยุโรปอาจส่งผลทำให้การผลิตลดลงอย่างน้อยครึ่งหนึ่ง เมื่อนั้นจีนจะเป็นประเทศที่ต่างไปจากเดิมอย่างสิ้นเชิง การหดตัวของตลาดจะนำไปสู่การลดการพัฒนากิจกรรมการวิจัย หมายถึงการสูญเสียความสามารถในการแข่งขันซึ่งเป็นผลมาจากการพัฒนาเศรษฐกิจของจีนในรอบหลายปีได้อาศัยเงินกู้การลงทุนเทคโนโลยีและตลาดตะวันตก อย่างไรก็ตามภาวะของการขาดดุลการค้าครอบคลุมโดยการพิมพ์ดอลลาร์ อัตราเงินเฟ้อจึงเริ่มเดบโตอย่างแข็งแกร่งในสหรัฐฯและการย้ายโรงงานไปสหรัฐฯไม่ประสบความสำเร็จต้องใช้เวลาอีกหลายปี จีนก็ตัดสินใจที่จะละทิ้งเงินดอลลาร์โดยกำลังพัฒนาและทดสอบเงินหยวนดิจิทัลอยู่และพยายามสร้างโซนเงินหยวนขึ้น[13] รองรับการประกันเป็นศูนย์กลางการเงินใหม่ของภูมิภาคและรัสเซียก็กำลังดำเนินนโยบายการลดการใช้เงินดอลลาร์อย่างแข็งขันได้เปลี่ยนไปใช้บัญชีการค้าของสกุลเงินประจำชาติรวมถึงการใช้เครื่องมืออีคอมเมิร์ซช่วยให้รัสเซียและจีนลดผลกระทบด้านลบจากการคว่ำบาตรจากสหรัฐอเมริกาและประเทศตะวันตกจำนวนหนึ่ง ก่อให้เกิด"ลักษณะเชิงคุณภาพของการค้า" ซึ่งเติบโตเกือบ 14 เท่าตั้งแต่ปีค.ศ. 2000 และในช่วงสามปีที่ผ่านมาเกิน 100 พันล้านดอลลาร์สหรัฐ [15]

สิ่งนี้คุกคามค่าเงินดอลลาร์ได้หากเงินดอลลาร์สูญเสียสถานะเป็นสกุลเงินโลกก็จะไม่มีอะไรให้พิมพ์เพื่อซื้อสินค้าจากจีน หมายถึงการลดลงอย่างรวดเร็วในมาตรฐานการครองชีพของชาวอเมริกัน แต่อีกด้านหนึ่งยุโรปและสหรัฐฯเป็นตลาดที่ร่ำรวยที่สุดสำหรับสินค้าจีนหากมีตลาดจำหน่าย โรงงานในจีนก็จะกลับมารุ่งเรืองอีกครั้งซึ่งแตกต่างกันอย่างที่เห็นได้ชัดในช่วงโรคระบาดไวรัสโคโรน่า ชาวจีนหลายล้านคนจะตกงาน สิ่งนี้จะทำให้เกิดความไม่พอใจซึ่งอาจนำไปสู่การปฏิวัติในจีนและการเปลี่ยนแปลงอำนาจในประเทศไปสู่รัฐบาลที่นิยมสหรัฐ และนำไปสู่การแตกแยกในมิตรภาพกับรัสเซีย เศรษฐกิจของจีนจะล่มสลาย นอกจากนี้จีนยังพึ่งพาอุปทานของไฮโดรคาร์บอนเป็นอย่างมาก การทหารจีนไม่คุกคามเช่นกันไม่มีสงครามใดที่จีนชนะ การจัดหายุทโธปกรณ์ทางทหารก็ไม่สำคัญเช่นกันหากไม่มีประสบการณ์การต่อสู้ที่เชี่ยวชาญในสนามรบ ชาวจีนมีความสามารถด้านการค้าแต่ไม่ใช่นักรบ ดังนั้นการแสดงบทบาทที่เป็นผู้เล่นหลักและกำหนดกติกาอย่างอิสระของภูมิรัฐศาสตร์โลกมีข้อจำกัด อีกทั้งจีนกำลังระดมสรรพกำลังทั้งภาครัฐและเอกชนกับการคว้าทรัพยากรด้วยวิธีการทางเศรษฐกิจซึ่งได้ใช้ความสามารถของการซื้อแหล่งทรัพยากรและเทคโนโลยีจากทั่วโลก ตลอดจนสร้างโลจิสติกส์ให้กลายเป็นศูนย์กลางพลังงานที่มีศักยภาพในอนาคต ตามโครงการOBOR(One Belt One Road)ที่จะเป็นศูนย์กลางอำนาจที่สามารถสร้างอำนาจทางเศรษฐกิจได้ซึ่งการรวมตัวโดยประเทศด้วยความสมัครใจทำได้ยาก เนื่องจากจีนจะลดอธิปไตยทางเศรษฐกิจของรัฐที่เข้าร่วมมากกว่าที่จะได้ประโยชน์ซึ่งกันและกัน ซึ่งประเทศเพื่อนบ้านตระหนักดีประเทศต่าง ๆจึงต่อต้านการครอบงำทางการเมืองของจีนอย่างสุดความสามารถ ดังนั้นชาวจีนจึงไม่มีอำนาจครอบงำทางการเมืองแม้แต่ในภูมิภาคของตนเองหากประเทศเพื่อนบ้านสามารถหาทางเลือกพันธมิตรที่ดีกว่า [16]

สหรัฐฯคงไม่ปล่อยให้จีนสร้างโซนเทคโนโลยี่โดยตนเองในขณะที่จีนก็รู้ดีว่าการล่มสลายทางเศรษฐกิจของสหรัฐฯไม่เป็นผลดีต่อจีนเนื่องจากสหรัฐฯต้องใช้เวลาในการจัดหาผู้ผลิตรายใหม่ ซึ่งตอนแรกนั้นอาจมีราคาที่สูงกว่าและไม่สามารถทดแทนสินค้าราคาถูกจากจีนได้แต่ต่อไปก็อาจจะทำให้ราคาถูกลง ในขณะที่จีนหากถูกโดดเดียวจากจีนก็สามารถปรับทิศทางการค้าของตนไปยังอาเซี่ยนได้อีกครั้ง ซึ่งอยู่ภายใต้การควบคุมการค้าของจีนอยู่ อาจจะทำให้จีนมีอำนาจทางเศรษฐกิจที่มีความแข็งแกร่งยิ่งขึ้นมีอิทธิพลต่อประเทศที่สาม ๆจำเป็นเชิญชวนให้จีนทำการค้าและลงทุน อิทธิพลนี้อาจยิ่งใหญ่และแข็งแกร่งกว่าการส่งเสริมรูปแบบทางการเมืองของจีน ๆที่ได้เพิ่มอิทธิพลอย่างมากในประเทศต่าง ๆ เช่น ออสเตรเลีย อินเดีย ไทย และเวียดนาม ประเทศที่พึ่งพาความสัมพันธ์ทางเศรษฐกิจกับจีนมากที่สุดคือลาว, ฟิลิปปินส์, เวียดนาม, ออสเตรเลีย[17] พร้อมทั้งรัสเซียจะได้ประโยชน์เหล่านี้อย่างเต็มที่และมีเวลาพัฒนาเศรษฐกิจของตนเองได้อย่างราบรื่น ด้วยอาวุธยุทโธปกรณ์ของรัสเซียและศักยภาพของขีปนาวุธนิวเคลียร์ทำให้รัสเซียสามารถดำเนินนโยบายการค้าและเศรษฐกิจที่เป็นอิสระได้ เนื่องจากการคว่ำบาตรทางการค้าและเศรษฐกิจของสหรัฐฯและพันธมิตรอาจจะสร้างปัญหาตามมาที่สหรัฐฯไม่สามารถกำหนดตามแนวทางที่ตนเองต้องการได้จึงอาจลดความเชื่อมั่นของประเทศต่าง ๆที่ต้องการหาแนวทางอิสระตัดสินใจโดยตนเอง ปัจจัยด้านความสามารถในการซื้อของประชากรที่มีสัดส่วนที่มากกว่าไม่ประกันให้ได้ว่ารัฐจะมีอธิปไตยและความสามารถในการดำเนินนโยบายได้อย่างอิสระ ทำให้เกิดโอกาสการดำเนินนโยบายเศรษฐกิจที่เป็นอิสระและลดการควบคุมโดยสหรัฐฯลง และผลิตภัณฑ์พิเศษเฉพาะที่รัสเซียเท่านั้นที่เสนอในตลาดโลกไม่ใช่น้ำมันและแก๊สอย่างที่ตะวันตกเรียกกันว่า"รัฐปั๊มน้ำมัน" แต่เป็นสินค้าด้านการป้องกันอธิปไตยของชาติซึ่งรัสเซียมีความสามารถในการแข่งขันอย่างยิ่งที่ไม่ทำให้ประเทศให้เป็นอาณานิคมของตะวันตก นี้เป็นการบริการที่ไม่เหมือนกับรัฐอื่น ๆซึ่งสหรัฐฯ จีนไม่มีความสามารถในการเสนอสินค้าตัวนี้ในตลาดโลกแน่นอนว่าสินค้าตัวนี้จำเป็นต้องมีสัมปทานและตกลงสัญญาต่อกันไม่ใช่การให้เปล่าอย่างที่ผ่านมาแบบอดีตสหภาพโซเวียต

ในทางตรงกันข้ามยุโรปมีฐานะเป็นแค่รัฐดาวเทียมไม่สามารถก้าวขึ้นสู่รัฐชั้นนำได้แม้ว่าบางรัฐอย่างเยอรมนีจะมีความแข็งแกร่งทางเศรษฐกิจแต่สูญเสียอำนาจอธิปไตยตกอยู่ใต้อำนาจของสหรัฐฯ โดยสิ้นเชิง ยุโรปไม่สามารถดำเนินนโยบายอิสระ ยุโรปไม่สามารถดำเนินนโยบายภายในประเทศได้ ผู้นำไม่สามารถแต่งตั้งรัฐมนตรีได้หากไม่ได้รับความยินยอมจากเอกอัครราชทูตสหรัฐฯ[18] จึงไม่ถูกต้องที่จะเปรียบเทียบสัดส่วนของGDPโลกปัจจุบันกันอย่างเช่นชาวอเมริกัน มีขนาดใหญ่เป็นสองเท่าของรัสเซีย แต่เศรษฐกิจทั้งหมดขึ้นอยู่กับการบริโภคที่ไม่มีที่สิ้นสุดโดยเฉลี่ยแล้ว ชาวอเมริกันบริโภคอาหารมากกว่าชาติใดในโลก แม้แต่เปรียบเทียบกับประเทศที่มั่งคั่ง แต่การบริโภคนั้นมาจากสินเชื่อเครดิตเป็นส่วนใหญ่ ทั้งหมดนี้ถือเป็นส่วนสำคัญของ GDP ของสหรัฐฯ รัสเซียมีส่วนแบ่งของ GDP ในเศรษฐกิจโลก2%ไม่ได้มีอิทธิพลต่อสิ่งที่เกิดขึ้นในโลกเพื่อเพิ่มการนำเข้าแก๊สไปยังประเทศในยุโรป เนื่องจากรัสเซียมีการผูกขาดแก๊สของโลกในการผลิตและการขนส่ง แต่โครงสร้างเศรษฐกิจภายในมีความสำคัญมากกว่า และสิ่งที่สำคัญสำหรับรัสเซียคือไม่ต้องไล่ตามรัฐอื่น ๆต่อ การเพิ่มขึ้นของเปอร์เซ็นต์ของGDP นี้คือวิธีการพึงพากำลังของตนเองได้อย่างอิสระตามกฎภูมิเศรษฐศาสตร์ที่ว่าหากรัฐใดเป็นเจ้าของทรัพยากรอย่างน้อย 1% ที่ประกอบเป็นสินค้าหรือผลิตภัณฑ์อีก 99% ของโลกเมื่อนั้นรัฐนั้นจะเป็นเจ้าของโลก ดังนั้นสหรัฐฯที่มีเศรษฐกิจเป็นอันดับหนึ่งจะปีนป่ายขึ้นไปทุกที่ที่สามารถควบคุมทรัพยากรของตนให้ได้ การขาดทรัพยากรในการผลิตทำให้เศรษฐกิจอยู่ในสถานะที่ยากลำบาก หรือจีนเช่นกันที่พยายามแสวงหาทรัพยากรที่ต่าง ๆ แตกต่างจากรัสเซียไม่ต้องกู้ยืมเหมือนสหรัฐฯ ส่วนแบ่งของ GDP โลกคือส่วนแบ่งของการใช้จ่ายใน

สกุลเงินดอลลาร์ซึ่งในความเป็นจริงหากสหรัฐฯใช้จ่ายมากก็ไม่ได้หมายความว่ามีการพัฒนามากขึ้น แต่หากสหรัฐฯใช้จ่ายอย่างไม่ฉลาดมากขึ้น GDPเป็นมูลค่าเพิ่มอย่างเช่นการทหาร การพัฒนาขีปนาวุธพิสัยกลาง การลงทุนเพิ่มเติมในอาวุธประเภทใหม่ สหรัฐฯ มีแผนจะลากรัสเซียเข้าสู่การแข่งขันด้านอาวุธ และทำให้เศรษฐกิจรัสเซียตกต่ำ ต่อจากนั้นก็โจมตีเศรษฐกิจรัสเซีย สหรัฐฯไม่เข้าใจว่าในรัสเซียทุกวันนี้งบประมาณทางทหารประกอบด้วยประสิทธิผลของการพัฒนาและจากนั้นก็นำไปใช้ในกองทัพเท่านั้นซึ่งดูได้จากงบประมาณที่แตกต่างกันถึง12เท่าแต่สหรัฐฯไม่สามารถคุ้มครองความปลอดภัยให้แก่ตนเองได้ แสดงให้เห็นว่าGDP ไม่เคยแสดงระดับการพัฒนาประเทศและปกป้องอธิปไตยสหรัฐฯได้GDPเป็นแค่เพียงตัวชี้วัดการบริโภคเท่านั้น เนื่องจากหนี้จำนวนมหาศาลของประเทศที่พัฒนาแล้วทั้งหมดการบริโภคจึงได้รับแรงหนุนจากสินเชื่อ

GDPสหรัฐฯทั้งหมด ระหว่าง 75 ถึง 80 เปอร์เซ็นต์เป็นภาคการบริการที่ไม่เกี่ยวข้องกับการผลิต เศรษฐกิจสหรัฐฯใช้ชีวิตโดยการปล่อยสินเชื่อเครดิต[19]และทั้งหมดนี้ได้สนับสนุนจากกองทัพอเมริกัน งบประมาณทางทหารของสหรัฐฯ มากกว่างบประมาณทั้งหมดของประเทศอื่น ๆ ทั้งหมดสหรัฐฯพิมพ์เงินและใช้เงินดอลลาห์เป็นตัวกลางในการแลกเปลี่ยนการซื้อขาย สินค้าที่ขายเป็นเครดิตในรูปของเงินดอลลาห์ทำให้ความขัดแย้งของรัฐซับซ้อนมากยิ่งขึ้นอยู่ในตำแหน่งที่เรียกว่า ″รายได้จากการบริโภคที่มากเกินไป″ จีนและสหรัฐฯยังคงมีระบบการบริโภคที่ประชากรของประเทศพร้อมที่จะซื้อสินค้าราคาถูกในปริมาณมาก ซึ่งส่งผลกระทบอย่างมีนัยสำคัญต่อสถานการณ์ทางเศรษฐกิจของประเทศ “สหรัฐฯ และจีนยังคงพึ่งพาการบริโภคที่มากเกินไป”ผลเสียที่ตามมาของสถานะการณ์นี้ ซึ่งกำลังปรากฏชัดต่อภูมิหลังของวิกฤติไวรัสโคโรน่าในปัจจุบัน ซึ่งกระตุ้นการล่มสลายของระดับการบริโภคในโลก[20]

สินทรัพย์ที่สำคัญที่สุดอย่างหนึ่งของสถานะมหาอำนาจสหรัฐฯคือดอลลาร์ ซึ่งเข้ามาแทนที่ทองคำในฐานะวิธีการทำธุรกรรมระหว่างประเทศ พูดง่าย ๆ ก็คือ โลกถูกบังคับให้ซื้อ ″กระดาษ″ ของอเมริกา โดยจ่ายด้วยผลิตภัณฑ์จริงของแรงงาน “การสร้างปิรามิดทางการเงินดังกล่าว เริ่มต้นด้วยข้อตกลงเบรตตันวูดส์ (Bretton Woods Agreements)นั้นทำได้โดยคนอัจฉริยะเท่านั้น ทุ่มเงินให้โลกทั้งใบในรูปของเงินดอลลาร์สหรัฐ พิมพ์ดอลลาร์ และซื้อกระดาษทั้งใบให้โลกทั้งใบ สิ่งเหล่านี้ยอดเยี่ยม จริงไม่รู้ว่ามันจะพัฒนาต่อไปอย่างไร พิมพ์ 14 ล้านล้านแล้ว ... หากศัตรูเรียกรัสเซียว่าเป็นประเทศสถานีบริการน้ำมัน (แม้ว่าน้ำมันจะเป็นผลผลิตที่มีความสำคัญทางปฏิบัติที่สำคัญที่สุด) ก็อาจเรียกได้ว่าสหรัฐฯเป็นประเทศแท่นพิมพ์โดยมีเหตุผลมากกว่านั้นมาก ในปีค.ศ. 2019 การส่งออกของสหรัฐฯ มีมูลค่ารวม 1.64 ล้านล้านดอลลาร์ ดอลลาร์ นำเข้า 2.57 ล้านล้าน การขาดดุลการค้าต่างประเทศมีมูลค่าประมาณ 40% (ในสัดส่วนดังกล่าวยังคงมีอยู่เป็นเวลาหลายทศวรรษ) ″[21] การค้าโลกโดยเงินดอลลาร์สหรัฐทำให้สหรัฐฯมีอำนาจเหนือกว่ารัฐอื่น ๆเนื่องจากสหรัฐฯสามารถกำหนดมาตรการคว่ำบาตรทางการค้ากับประเทศที่ส่งออกสินค้าดังกล่าวได้อย่างง่ายดาย รักษาโลกาภิวัฒน์ในการค้าโลกโดยเงินดอลลาร์สหรัฐฯสินค้าการค้าต่างประเทศมีการซื้อขายในสกุลเงินดอลลาร์สหรัฐ ๆจึงสามารถกำหนดมาตรการคว่ำบาตรทางการค้ากับประเทศที่ส่งออกสินค้าดังกล่าวได้อย่างง่ายดาย

สหรัฐฯเป็นแวมไพร์ระดับโลกซึ่งจะไม่สามารถดำรงอยู่ในฐานะเดิมได้หากปราศจากการแจกจ่ายความมั่งคั่งทางวัตถุให้แก่โลกโดยการใช้เงินดอลลาร์ วิธีหลักในการสะสมความมั่งคั่งสำหรับสหรัฐฯคือการพิมพ์เงินดอลลาร์ด้วยความช่วยเหลือจากการแลกเปลี่ยนทรัพยากรวัสดุของประเทศอื่น ๆ เป็นกระดาษสีเขียวค่าใช้จ่ายของธนบัตรซึ่งมีเพียงไม่กี่เซ็นต์ วิธีที่ดีที่สุดคือระบบเงินกู้จากปัญหานี้สหรัฐฯสามารถเลือกใช้มาตรการคว่ำบาตรกับคู่แข่งหรือศัตรูของตนเองทำให้เกิดความสั่นคลอนเครือข่ายเศรษฐกิจของรัสเซีย เส้นทางการค้า และโครงการเศรษฐกิจขนาดใหญ่

ต่าง ๆ ในรัสเซียอย่างโครงการ Nord Stream-2ซึ่งได้แบ่งเป็นฝ่ายต่อการเลือกระหว่างรัสเซีย และสหรัฐฯ รัสเซียจึงเริ่มลดการใช้เงินดอลลาห์สำหรับการสำรองการค้าเปลี่ยนไปเป็นเงินยูโรและหยวนแทน เงินดอลลาร์สหรัฐจึงค่อย ๆ ถูกแทนที่ด้วยสกุลเงินอื่น รัสเซียดำเนินนโยบายระหว่างประเทศที่เป็นอิสระเกี่ยวกับการชำระสกุลเงินของประเทศเมื่อทำสัญญาการค้าต่างประเทศในอาณาเขตของสหภาพศุลกากรยูเรเซีย เช่นเดียวกับจีน ตุรกี และเกี่ยวข้องกับประเทศอื่น ๆ พร้อมกับ การเพิ่มขึ้นของการผลิตและการขายแหล่งพลังงานของสหรัฐในตลาดอียู นี่คือความพยายามที่จะขับไล่รัสเซียออกจากตลาดพลังงานอย่างโครงการ "Nord Stream-2" แต่ก็ไม่ได้ผลเนื่องจากเป็นโครงการเศรษฐกิจมากกว่าการเมือง การนำมาตรการคว่ำบาตรทางการค้ามาใช้ในปัจจุบันไม่ค่อยให้ผลที่ดีแก่สหรัฐฯในทางตรงกันข้าม การคว่ำบาตรได้เพียงแต่เสริมสร้างความเป็นอิสระทางเศรษฐกิจแก่รัสเซียและทำให้รัสเซียใกล้ชิดกับจีนมากขึ้น

เศรษฐกิจของรัสเซียมีขนาดแค่2%ของGDPโลกในเรื่องนี้ รัสเซียพบว่าตัวเองอยู่ในสถานการณ์ที่ยากลำบาก ด้านหนึ่งรัสเซียมีความเป็นอิสระแบบดั้งเดิมของรัฐ มีความปรารถนาที่จะกำหนดเงื่อนไขและควบคุมตนเอง แต่อีกด้านหนึ่งขาดองค์ประกอบทางเศรษฐกิจสำหรับสิ่งนี้เป็นผลให้เริ่มมีความเชื่อว่า "รัสเซียไม่มีอะไรมากไปกว่าถูกภาคผนวกเป็นของเศรษฐกิจจีน" รัสเซียทำหน้าที่จัดหาทรัพยากรต่าง ๆ ให้กับจีนแต่ในความเป็นจริงนั้นความสัมพันธ์ระหว่างจีนและรัสเซียขึ้นอยู่กับมุมมองร่วมกันของระเบียบโลกและการลดบทบาทของสหรัฐฯในฐานะเจ้าโลกตามลำดับอีกทั้งยังมีปัจจัยของพื้นที่ใกล้เคียงในฐานะเพื่อนบ้าน มีความร่วมมือทางเศรษฐกิจเติบโตที่ต้องการสนับสนุนซึ่งกันและกัน อย่างที่รับรู้กันรัสเซียใช้ศักยภาพของฐานทรัพยากรของตนเองมุ่งความโดดเด่นอุตสาหกรรมด้านพลังงานและอุตสาหกรรมการทหารประมาณ 20% ของโลกและมีส่วนแบ่งที่ใหญ่กว่าเล็กน้อยในการส่งออกผลิตภัณฑ์การทหารที่ซับซ้อน ที่น่าสนใจหากสหรัฐฯเข้ามาขัดขวางรัสเซียพร้อมจะทำสงครามจริง ๆซึ่งสินค้าด้านอุตสาหกรรมการทหาร นอกจากจำหน่ายเทคโนโลยีที่ล้ำยุคแล้วพร้อมกับการเสนอการบริการด้านอธิปไตยซึ่งไม่สามารถประมาณน้ำหนักและอิทธิพลที่แท้จริงของอุตสาหกรรมแบบนี้ได้อย่างการ สร้างระบบป้องกันขีปนาวุธในยุโรปเพื่อต่อต้านรัสเซีย ในเรื่องนี้สหรัฐฯล้มเหลว รัสเซียได้ทำให้ระบบป้องกันขีปนาวุธเป็นศูนย์ ส่งผลให้การคุกคามหรือข่มขู่ของการและโจมตีรัสเซียเป็นโมฆะอาวุธความเร็วเหนือเสียงของรัสเซียจะไปถึงที่ใดก็ได้ในโลก

เราเห็นถึงกลยุทธ์ของรัสเซียแตกต่างจากจีนคือการมีอาวุธที่ล้ำหน้ากว่าคู่แข่งอย่างสหรัฐฯ หลังจากนั้นค่อย ๆพัฒนาเศรษฐกิจซึ่งสหรัฐฯไม่สามารถขัดขวางได้เนื่องจากสูญเสียอำนาจการต่อรอง ในขณะที่จีนในตอนแรกท้าทายเศรษฐกิจของสหรัฐฯ และจากนั้นจีนก็เริ่มติดอาวุธให้ตัวเอง และจนถึงตอนนี้กองทัพและเศรษฐกิจของสหรัฐฯ เหนือกว่ากองทัพและเศรษฐกิจของจีน และจนถึงปี ค.ศ. 2030 สหรัฐฯ จะพยายามระงับจีนให้เป็นคู่แข่งหลัก และรัสเซียเหมือนลิงฉลาดจะนั่งบนกิ่งไม้และดูการเผชิญหน้าของยักษ์สองตัวที่อ่อนแอลงในการเผชิญหน้า[22] กล่าวคือ กลยุทธ์ของรัสเซียคือการรักษาตัวเองให้ปลอดภัยก่อน เพื่อที่จะสามารถปฏิเสธผู้ที่แข็งแกร่งที่สุดในโลกได้ในขณะนี้ แล้วจัดการกับเศรษฐกิจ ด้วยเหตุนี้จึงมีความไม่สมดุลอยู่เสมอ เมื่อเศรษฐกิจที่ดูเหมือนว่าเศรษฐกิจสังคมรัสเซียไม่พัฒนามากในสายตาของต่างชาติแต่มีกองทัพที่แข็งแกร่งที่สุดทำให้ ผู้ธุกรานอาจเกิดความสับสนอย่างมาก สถานการณ์เวลานี้สหรัฐฯไม่ใช่ฝ่ายคุกคามรัสเซียด้านการทหารอีกต่อไปในด้านตรงกันข้ามสหรัฐฯต้องใช้ระยะเวลาเพื่อไล่ตามรัสเซียในอุตสาหกรรมการทหารด้านเทคโนโลยี่ความเร็วเหนือเสียง สหรัฐฯไม่พร้อมเผชิญหน้าการทหารและสงครามกับรัสเซีย แม้ว่าสหรัฐฯยังคงมีความแข็งแกร่งแต่ก็กำลังอ่อนแอลงและกองกำลังเหล่านี้ไม่เพียงพอที่จะต่อสู้กับรัสเซียและจีน จึงต้องเลือกว่าจะโฟกัสใคร เพื่อไม่ให้กระจายกำลังและไม่แพ้กับฝ่ายตรงกันข้ามทุกคนในคราวเดียวกัน รัสเซียแค่ต้องการไม่ให้รัฐรอบ ๆรัสเซียอย่างยูเครนสามารถ

ติดตั้งขีปนาวุธที่ใช้ระยะเวลา7นาทีในการยิงไปยังใจกลางเมืองรัสเซียได้ หมายถึงรัฐเหล่านี้ต้องเป็นรัฐกันชนไม่ใช่เป็นพันธมิตรนาโต้ สหรัฐฯเชื่อว่าหากปล่อยยูเครนคาดว่ารัสเซียต้องแลกกับไม่เป็นพันธมิตรทางทหารกับจีน แต่รัสเซียไม่ได้เชื่อแนวทางดังกล่าวมีแต่แนวคิดที่ว่าป้องกันตนเองไว้ก่อนในจุดที่ปลอดภัยจะทำให้เสริมสร้างเศรษฐกิจของรัสเซียได้อย่างสงบอย่างที่ดำเนินการอยู่ในปัจจุบัน ในขณะที่อีกสองยักษ์ใหญ่ทางเศรษฐกิจตรงกันข้ามอาจจะอ่อนแอลง เมื่อมีการเผชิญหน้าระหว่างสหรัฐฯและจีนดังกล่าวจะช่วยให้รัสเซียสามารถทะยานตัวทางเศรษฐกิจไปได้ หลังจากนั้นไม่มีใครสกัดยับยั้งได้และรัสเซียไม่ได้เสนออะไรเพราะรัสเซียสามารถปกป้องตนเองได้จากสหรัฐฯ เพียงแต่สหรัฐฯรับรู้แค่ว่าจะไม่ดำเนินการให้เป็นอุปสรรคต่อผลประโยชน์ของรัสเซียและเขตอิทธิพลของรัสเซีย ความเป็นพันธมิตรระหว่างรัสเซียกับจีนนั้นยังไม่มีใครรู้ว่าจะเป็นอย่างไรต่อไปแต่รัสเซียรู้ดีว่าการเป็นเพื่อนบ้านที่ดีกับจีนได้ประโยชน์อย่างมากในเวลานี้และจีนก็รับรู้เช่นกันแต่ จีนไม่รีบร้อนที่จะสร้างพันธมิตรทางทหารที่เต็มเปี่ยมกับรัสเซียเพื่อต่อต้านนาโต้ จีนจะใช้รัสเซียเป็นเกราะกำบังเพื่อการต่อรองกับสหรัฐฯเพื่อให้ได้เงื่อนไขทางเศรษฐกิจและการเมืองที่ดีที่สุดสำหรับความร่วมมือ อย่างไรก็ตามรัสเซียก็ใช้จีนสำหรับการลงทุนและการพัฒนาเทคโนโลยีของจีนเพื่อเร่งการเติบโตทางเศรษฐกิจนี้ก็เป็นค่าใช้จ่ายของจีนที่เป็นราคาที่คุ้มค่าสำหรับการรวมเป็นพันธมิตรทางทหาร

3.การแบ่งโลกของรัฐศูนย์กลางช่วงโควิด-19

รัฐศูนย์กลางในปัจจุบันมีรัฐของผู้มีอำนาจระดับโลกด้านทุนทางการเงินและการเก็งกำไรซึ่งศูนย์กลางหลักที่กระจุกตัวอยู่ในสหรัฐฯเป็นส่วนใหญ่ ทุนอุตสาหกรรมแบบดั้งเดิมและผู้เชี่ยวชาญของอินเทอร์เน็ตและ เครือข่ายสังคมซึ่งมีฐานอย่างเป็นทางการในสหรัฐฯเช่นกัน ในขณะที่จีนและรัสเซียคือคู่แข่งปัจจุบัน รัสเซียเป็นมหาอำนาจทางการทหารและพลังงานในขณะที่จีนพัฒนาตนจากโรงงานของโลกขึ้นเป็นศูนย์กลางอุตสาหกรรมระดับโลก แต่ไม่สามารถแข่งขันกับเพื่อนบ้านในเอเชียด้วยแรงงานราคาถูกและต้นทุนการผลิตต่ำได้อีกต่อไป สมาชิกRCEPจะเป็นผู้ผลิตแทนจีนและจีนก็พยายามที่จะรักษาความสามารถการซื้อของลูกค้าต่างประเทศด้วยการจัดหาคุณภาพในราคาที่เหมาะสมและจีนค่อย ๆเสริมด้วยการแลกเปลี่ยนเงินหยวนและนำเสนอเทคโนโลยี่ของตนเองอย่างเต็มที่ซึ่งอาจจะสร้างปัญหาตามมาแก่ส่วนแบ่งของบริษัทชั้นนำจากตะวันตกถ้าหากไม่มีมาตรการสกัดกั้นความก้าวหน้าทางวิทยาศาสตร์และเทคโนโลยีของจีน อาจทำให้สหรัฐและตะวันตกเกิดการว่างงานและสูญเสียตลาดไฮเทคของตนเองในอนาคตซึ่งอาจเป็นวิธีเดียวที่จีนสามารถรักษาฐานะกำลังเศรษฐกิจของตนเองได้และสามารถแซงหน้าสหรัฐฯอย่างมั่นใจในด้านเทคโนโลยีสารสนเทศและการสื่อสาร ในส่วน 5G จึงเป็นการเปิดมุมมองที่แตกต่างไปจากเดิมอย่างสิ้นเชิงสำหรับการพัฒนาตลาดโลก สามรัฐนี้จะเข้ายึดครองโลกที่แบ่งกันในโซนสกุลเงินที่มีอิทธิพล และสิทธิในการแยกโซนเป็นอิสระจะได้รับอนุญาตเฉพาะผู้ที่สามารถปกป้องสิทธิ์นี้ โดยวิธีการทางทหาร เนื่องจากระบบทุนนิยมโลกแบบเดิมที่อยู่บนทุนพื้นฐานของตลาดหุ้นวอลล์สตรีท ซึ่งมีพื้นฐานมาจากสกุลเงินดอลลาห์ที่มีความบกพร่องของหน้าที่และตัวตนได้สร้างความไร้น่าเชื่อถือของความยุติธรรมในสายตาของรัฐศูนย์กลางอย่างจีนและรัสเซียและพันธมิตรของสหรัฐในยุโรป การบริโภคที่ล้นเกินของสหรัฐส่งผลให้รัฐศูนย์กลางก่อตัวโซนเทคโนโลยี่ของตนเองในระดับภูมิภาคเพื่อประกันความเสี่ยงของทุนที่ล้นเหลือ ดังนั้นรัฐศูนย์กลางแต่ละรัฐอย่างรัสเซีย จีนจึงต้องหาแนวทางของตนเองโดยกำหนดโซนเทคโนโลยี่ของตนเองขึ้นใหม่จากโลกาภิวัฒน์เป็นภูมิภาคมหภาค

สหรัฐฯเป็นที่ชัดเจนว่าจะครองทวีปของตนเอง อังกฤษจะกลายเป็นสาขาของอเมริกาในยุโรป ยุโรปแม้ว่าเคยเป็นรัฐดาวเทียมแต่มีความสะดวกสบายและเป็นอิสระไม่มากก็น้อย ภายใต้แรงกดดัน

จากสหรัฐฯทั้งนี้ขึ้นยุโรปก็จะเลือกผลประโยชน์เศรษฐกิจก่อน ยุโรปกับจีนน่าจะมีความสัมพันธ์ทางการค้าการลงทุนที่ขยายตัวขึ้น จีนจะยังคงเป็นเศรษฐกิจที่ขนาดใหญ่พร้อมพื้นที่ที่มีอิทธิพลของตัวเองในRCEPและOBORและรัสเซียจะกลายเป็นแกนกลางของยูเรเซียด้วยโครงการพลังงานและอุตสาหกรรมการทหารซึ่งไม่ใช่สกุลเงินดอลลาร์อีกต่อไป รัสเซียมีความได้เปรียบเพราะมีทรัพยากรของตัวเอง การใช้เงินดอลลาห์ไม่มีความจำเป็นในการซื้อขายแลกเปลี่ยนกันหากมีโครงการร่วมกันในระหว่างภูมิภาคก็สามารถหาตำแหน่งตนเองที่ดีในระบบโลกซึ่งแตกต่างจากสหรัฐฯแม้ว่ามีทรัพยากรเพียงพอกับของตัวเอง แต่จะไม่สามารถจัดหาทรัพยากรให้ใครได้อย่างจริงจัง และอาจจะถูกเบียดแทรกภาคการผลิตออกจากตลาดเนื่องจากมีต้นทุนที่สูงกว่าคู่แข่ง ในขณะที่จีนแตกต่างจากสหรัฐฯแม้ว่าขาดแคลนทรัพยากรแต่จีนมีความต้องการแสวงหาและควบคุมทรัพยากรของโลกเพื่อสนับสนุนให้ตนเองเป็นโซนเทคโนโลยี่ที่อิสระโดยพึ่งพาเงินหยวนของตนเอง จีนมีความเชื่อมโยงกับทรัพยากรของรัสเซียจึงเชื่อได้ว่าสามารถแก้ไขปัญหาได้และจีนมีความเชื่อมโยงกับอาเซี่ยนสามารถที่จะควบคุมแรงงานทุนและทรัพยากรเพื่อประกันตลาดของจีนได้อย่างดีในRCEP ยุโรปแม้ว่ามีความพยายามที่จะเปลี่ยนไปสู่พลังงาน "สีเขียว" แต่ ก็ยังไม่สามารถทำได้อย่างรวดเร็วในระยะอันใกล้อย่างน้อยหนึ่งทศวรรษยังต้องพึ่งพาแก๊สจากรัสเซียด้วยเหตุผลทางเศรษฐกิจและมีความน่าเชื่อถือมากกว่า รัสเซียก็จะสงบกับยุโรปเนื่องจากท่อแก๊สไปสู่ยุโรปเป็นสินทรัพย์เชิงพาณิชย์ในขณะเดียวกันเป็นอาวุธทางภูมิรัฐศาสตร์

ตารางที่2*. เปรียบเทียบรัฐศูนย์กลางปัจจุบัน*[23]

ตัวบ่งชี้คุณลักษณะ	จีน	รัสเซีย	สหรัฐอเมริกา
ภาคการผลิตอันดับหนึ่งของโลก	ปัญญาประดิษฐ์ รถไฟความเร็วสูง โทรคมนาคม	อุตสาหกรรมการทหาร อุตสาหกรรมพลังงานนิวเคลียร์	เทคโนโลยีสารสนเทศ สตาร์ท อัพ อุตสาหกรรมการบิน
มีส่วนแบ่งชัดเจนด้านอุตสาหกรรมการทหารในตลาดโลก(%)	5.7	22	34
อธิปไตย	ภูมิรัฐศาสตร์	การทหาร ภูมิรัฐศาสตร์	เศรษฐกิจ
การบูรณาการ	SOC,OBOR,BRICS	SOC,EAEC,BRICS,OBOR	NATO,NAFTA
เขตอิทธิพลและสามารถตอบสนองต่อความช่วยเหลือจากรัฐอื่น ๆได้	โซนเงินหยวน OBOR อุตสาหกรรมการขุดเจาะในอัฟริกา(ซูดาน แองโกล่า)ทะเลจีนใต้ เครือข่ายโลจิสติกส์ การขนส่งระหว่างภูมิภาค ธนาคาร BRICS	โซนเงินรูเบิลเงินหยวนทองคำ เอเชียกลางอิหร่านซีเรีย OBOR, N-S Economic Corridor ท่อแก๊สกระแสเหนือ 2 กระแสตุรกี	SWIFT,IMF,FED ช่องแคบมะละกา ช่องแคบฮอร์มุส คาบสมุทรอาระเบีย แอตแลนติก ฐานทัพเรือของพันธมิตร
สินทรัพย์เชิงกลยุทธ์	การปล่อยสินเชื่อเพื่อแลกการสัมปทาน การเปิดตลาดการค้าเสรี การถือพันธบัตรสหรัฐฯ การครอบครองหุ้นหรือกิจการด้าน	การซื้อขายทองคำ การใช้ช่องทางทำธุรกรรมที่ไม่ใช่SWIFT การครอบครองกิจการพลังงานในตะวันออกกลาง การประกันความปลอดภัยเส้นทางการค้าหรือระเบียงเศรษฐกิจ การชดเชย	การคว่ำบาตร กฎหมายที่ขัดผลประโยชน์ของการค้า การลงทุน เทคโนโลยี การทหาร การปล่อยเงินกู้ในภาวะวิกฤติ การจัดอันดับความน่าเชื่อถือสถาบันการเงินเครดิต และวิชาการ

	พลังงานในตะวันออกกลาง อัฟริการะบบการชำระเงิน China UnionPay (CUP)	พันธมิตรด้านเศรษฐกิจ การทหารและอื่น ๆ การประกันความมั่นคงให้แก่รัฐพันธมิตร	

จากตาราง ได้แสดงให้เห็นว่ารัฐศูนย์กลางในปัจจุบันมีสามรัฐที่สามารถปกป้องอธิปไตยของตนเองได้และสามารถต่อรองกับคู่แข่งและพันธมิตรของตนเอง เป็นตัวบ่งชี้ว่าเป็นรัฐศูนย์กลางคือได้รับการยอมรับว่าเป็นผู้มีบทบาทสำคัญในเศรษฐกิจการทหารและความมั่นคงของโลกซึ่งสะท้อนถึงทั้งอำนาจทางเศรษฐกิจการทหาร นโยบายการทูตและระดับการยอมรับในระดับสากล ศักยภาพทางการทหารไม่จำเป็นต้องมีอาวุธนิวเคลียร์บังคับ แต่จะต้องเกี่ยวข้องกับความสามารถทั่วไปของผู้เล่นหลักในการใช้อำนาจทางทหารในการปฏิบัติงานตามพื้นที่ความขัดแย้งที่สามารถนำไปสู่สันติภาพและยอมรับของรัฐนั้น ๆซึ่งความสามารถนี้จะกำหนดมาจากตัวบ่งชี้ที่ชัดเจนที่สุดคือปริมาณการใช้จ่ายทางทหารของรัฐนั้นที่สามารถแสดง อำนาจทางการเมืองของรัฐได้รับการประเมินในแง่ของตำแหน่งในภูมิภาคซึ่งในปัจจุบันต้องยอมรับว่าสหรัฐฯ สูญเสียบทบาทของตนเองและถูกแทนที่โดยรัสเซียในขณะที่เทคโนโลยีพลเรือนและเศรษฐกิจจีนกำลังไล่แซงสหรัฐฯ

หากรัฐศูนย์กลางสามารถสนับสนุนทรัพยากรและสามารถเคลื่อนย้ายทรัพยากรโดยอาศัยโครงสร้างพื้นฐานของรัฐนั้น ๆได้อย่างปลอดภัย ลดการคุกคามการทหารและมีความแน่นอนตามเวลาก็จะทำให้มีความเป็นอิสระในการดำเนินโครงการเศรษฐกิจได้ร่วมกันระหว่างภูมิภาค รัสเซียสามารถที่สนับสนุนทรัพยากรในระดับภูมิภาค จีนและยูเรเซียทั้งหมดเท่านั้นและสามารถจัดหาให้ทั้งจีนและยุโรปด้วยซึ่งสหรัฐฯก็คงจะไม่ยินยอมทำให้เกิดขึ้นได้ง่าย การถอนกำลังของสหรัฐฯออกจากอัฟกานิสถานนั้นแสดงให้เห็นว่าสหรัฐฯกำลังยืมมือจีนและรัสเซียแก้ปัญหาในเอเชียกลางหากเอเชียกลางไร้เสถียรภาพนำมาสู่ความวุ่นวายด้านการก่อการร้าย การอพยพ ซึ่งไม่มีผลต่อจีนเนื่องจากจีนสามารถเจรจาได้กับทุกฝ่ายของรัฐบาลอัฟกานิสถานยกเว้นรัสเซียที่ต้องป้องกันชายแดนกับประเทศพันธมิตรในเอเชียกลาง ดังนั้นในอนาคตอันใกล้โลกจะถูกแบ่งออกเป็นโซนอิทธิพลของสกุลเงินจีน รัสเซีย อเมริกาและยุโรป(ยังตกอยู่ภายใต้สหรัฐไม่มากไม่น้อยแต่มีอิสระที่จะกำหนดโซนเงินยูโร)

ส ร ุ ป

การแบ่งโลกโดยรัฐศูนย์กลางเปลี่ยนจากโลกาภิวัฒน์ไปสู่ภูมิภาคช่วงโควิด-19เนื่องจากไม่สามารถกำหนดระเบียบการใหม่ของโลกได้อยู่บนหลักการของการไม่เผชิญหน้าทางการทหารโดยตรงเนื่องจากสหรัฐฯมีข้อเสียเปรียบด้านการต่อรองและจะไม่ขัดขวางสร้างอุปสรรคแก่พันธมิตรของตนหากเป็นโครงการด้านเศรษฐกิจแม้ว่าจะร่วมมือกับฝ่ายตรงกันข้าม แนวโน้มของสหรัฐฯในฐานะรัฐแท่นพิมพ์จะค่อย ๆลดบทบาทการสำรองเงินดอลลาห์ในการทำธุรกรรมระหว่างประเทศเนื่องจากรัสเซีย จีนสามารถใช้เงินสกุลท้องถิ่นของตนเองในการขายทรัพยากรโดยเฉพาะพลังงานและการเบียดแทรกตลาดพลังงานในยุโรปโดยรัสเซียซึ่งจะแบ่งเป็นโซนเงินหยวน รูเบิลและยูโร ในขณะที่จีนนั้นสามารถสร้างโซนเทคโนโลยี่ของตนเองโดยใช้เงินสกุลหยวนในRCEPเพื่อเป็นศูนย์กลางอุตสาหกรรมและรับประกันผลิตสินค้าที่มีคุณภาพและส่งมอบได้ตามที่ลูกค้าต้องการและจีนสามารถพัฒนาผลิตภัณฑ์โดยเทคโนโลยี่ชั้นสูงทำให้ในอนาคตหากสหรัฐไม่สามารถผนึกกำลังกับพันธมิตรเพื่อสร้างความได้เปรียบในการแข่งขัน คาดว่าจีนจะครอบครองโซนเทคโนโลยี่ของตนเองและตะวันตกส่วนใหญ่ก็จะส่งผลต่อการว่างงานและลดคุณภาพชีวิตของประชาชนในตะวันตกโดยเฉพาะ

สหรัฐฯ รัฐศูนย์กลางในฐานะเจ้าภาพหลักของการกำหนดการแบ่งเขตอิทธิพลของตนเองโดยฐานเทคโนโลยี่ที่แตกต่างกันแต่มีเป้าหมายเดียวกันที่ประกันตำแหน่งของตนเองคือความสามารถให้การปกป้องอธิปไตยและโซนอิทธิพลของตนเองได้ ฉะนั้นตำแหน่งของสัดส่วนGDPโลกนั้นต้องดูโครงสร้างเศรษฐกิจด้วยว่าสามารถประกันตนเองได้ในแง่ของทรัพยากรและโครงสร้างพื้นฐานที่สามารถเคลื่อนย้ายทรัพยากร แรงงานเงินทุนระหว่างภูมิภาค

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National Security: Countering Pandemics and the Threats of Bioterrorism

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ABSTRACT

This paper highlights the security threats like COVID-19 as non-traditional threats and explains how COVID-19 and experiences from bio-terrorism remain a likely threat and how it poses tangible tests to the national security, including the public health system. This research paper argues that the COVID-19 revealed that the security threats of the 21 century need multidisciplinary knowledge of national security beyond the state-centric approaches that cover many fields, and shows greater international cooperation, and more multilateralism. The paper also argues that to strengthen global health security, there is a need for collaboration and commitment across disciplines and sectors. Furthermore, new attitudes, approaches, and methodologies are required to ensure national security in the modern era where threats are rapidly developing. National security cannot be ensured through traditional methods and approaches anymore and require the recalibration of existing doctrines, concepts and strategies on national security, legal and their adaptation to the modern conditions.

KEYWORDS: Realism, Health Security, Bioterrorism, COVID-19, National Security

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1. Introduction. The Limitations of existing approaches in facing new threats . In the view of the theory of realism, states are the main actors in international relations. This is mainly explained based on the view that states are the only units that have the sovereign and legitimate right as well as the power to execute their authority to deal with any conflicts between people and groups and between states. States protect the interests of the larger world community and are also rational actors to choose strategies that increase their benefits and cut their losses [1]. Morgenthau [2, p. 290-292] believes that as long as the world is politically divided into ruling states, they will remain the dominant actors in international politics. States are free to take actions for their long-term interests, not based on moral values primarily. According to realism, governments must seek power and rely on themselves, because only through power states can protect themselves and improve the well-being of their citizens. In other words, states need to rely on their power capabilities vis-à-vis any external threats. To sum up, the realist's belief in the mismatch of interests in the world and their emphasis on the contentious nature of international relations have weakened the prospect of cooperation in this view.

However, cooperation is not impossible for realists. States will only cooperate if it serves their national interests and increases their national power. Stephen Walt, argues that today's critical situation shows us that states are still key actors in the international system. History has shown that in times of crisis and new events, human beings seek refuge in their national states more than any other regional or global organisation or institution. Stephen Walt states that after 9/11, Americans did not seek help from the United Nations, Microsoft or Amnesty International to protect their lives against al-Qaeda. Rather, they looked to the decisions of Washington and the federal government, and this is the case today [3].

On March 11, 2020, the World Health Organization described COVID-19 as a pandemic, pointing to over 3 million cases and 207,973 deaths in 213 countries and territories [4]. With the outbreak of the COVID-19, states have adopted strict control policies. There are ample examples that underscore state-centric efforts against the COVID-19. In most countries, states quarantined cities, limited and controlled the free movements of their citizens [5]. The states authorities entered many new areas showing their authority and craft more than ever in recent decades. International relations declined sharply, and states closed their borders to each other. All of this was in the face of a threat that endangered human life. Although corona is a global crisis, states preferred to deal with it on their own [6]. In various countries, tourists and foreigners, are not allowed to enter the country. Passengers are tested for COVID-19 and placed in quarantine. The issuance of e-visas and visa on arrival was partly suspended [6].

However, while from the realism's view, unilateral and state-centric actions may serve the national security interest to fight the pandemic "within the national borders", the pandemic is a global security threat and thus remains unsolved so long as other states and non-state actors have not done the same and states move on unilaterally. A major implication of the state-centric actions is that there is global competition on vaccines. Creating a COVID-19 vaccine is proof of the effectiveness of a

country's health care system, its technological advancement, and the sophistication of its scientific research.

Meanwhile, China, Russia, and the United States from the beginning associated huge diplomatic importance to establishing the global dominance of their vaccines. U.S. media especially emphasised Russia and China were attempting to increase their global power via COVID-19 vaccines [7]. During the November BRICS summit, Russian President Vladimir Putin openly praised the high effectiveness of Sputnik V and announced on forum associates to join in the vaccine's joint creation and deployment. In January 2021, to encourage extensive global vaccination with the Russian vaccine, Putin declared Sputnik V "the best in the world" [8]. China raised the claim that Chinese-manufactured vaccines would be made a "global public good," adding later that the vaccinations would be shared at fair prices to the developing world [9]. While India lately made global headlines with its so-called "vaccine friendship" directed at South Asian nations, Russia and China will also stay committed to producing vaccines at competitive prices and the United States has lately declared help for the initiative, besides one of President Joe Biden's first orders rejoining the World Health Organization [10].

There is a consensus that the outbreak of this infection will cause changes in the international power structure and impose real challenges to global public health security. One clear example is the rising dependence of developing countries on developed nations in solving global threats such as the COVID-19 and the fact that COVID-19 has caused the so-called vaccine diplomacy, the prioritisation of nations, for instance, the prioritisation of the American people over the rest of the world. These examples show the lack of solidarity among the nations [11]. Another issue is the lack of trust in the World Health Organisation. This went so far that even the United States withdrew from the organisation. President Donald Trump criticised the World Health Organization for preventing the announcement of the danger of a corona outbreak, adding that "the United States should reconsider its relationship with the World Health Organisation and cut off financial help to the organization" [12].

Furthermore, the pandemic condition does not simply endanger human beings but also tears down the economy. Regarding possible obstacles to growth, there are some regional differences, as people in developed economies are more probable than their counterparts to relate the pandemic as well as high levels of the national deficit, and supply-chain disruptions. At the same time, concerns over insufficient government aid, unemployment, inflation, and uncertain demand are more top of mind in emerging economies.

Thus, realism does not give solutions to the existing security challenges of the 21st century. Today, states are concerned about maintaining the overall stability of their country and region. This has primarily to do with the change in the quality of the security threats. The outbreak of COVID-19 is a national security crisis that has led to diminished economic actions, enormous unemployment, and income losses around the world. The travel restrictions, social demonstrations, economic side effects and the so-called vaccine diplomacy show the limitation of existing approaches. Simply put, the existing responses to the pandemic from a realism point of view with the states as the most important actors are better at explaining risks and dangers than giving solutions. States cannot satisfy their needs completely through their own national statecraft. Global measures are favourable in both circumventing infectious diseases and reducing economic disturbances.

2. COVID-19: A wake-up call for modern threats

As we face this challenge of the contemporary century today, we need to check the very nature of our comprehension of national security threats. The virus was first observed in Wuhan, China in December 2019 [13]. Afterwards, on the 11th of March 2020, the virus was categorised by the World Health Organization [14]. Until now it is still mysterious precisely how the birth of the virus is. When it comes to such mysterious diseases, the fundamental priority of security becomes a human being and this makes multidisciplinary knowledge of national security beyond the state-centric approaches therefore necessary [15].

Thus far, the issue has received broad interest from academics and researchers with some extensive discussions about non-traditional security issues. For instance, "COVID-19: National Security and Defense Strategy" addressed by Congressional Research Service, from a realist perspective honours deterrence and uses people and states as its referent point and holds that the eruption of COVID-19 pandemic has imposed threats to the US national security and disaster preparedness (Congressional Research Services, 2020). Rage Taufika discusses the management of states in defeating the COVID-19 pandemic and says that states should not militarize the COVID-19 administration because it is a war of humans against the infection, not a conflict between humans. The national defence includes any attempts to support national sovereignty, secure national integrity, and guarded citizens against armed threats [16, p. 3]. Taufika also argues that there are no connections between global health and the military [16, p. 4].

The paper argues that the COVID-19 pandemic cannot be seen only through the lens of traditional realism, as in the case of COVID-19, it is not a military threat. It is rather a security challenge towards the public health system that can endanger human security. This paper aims to move beyond the traditional lens of realism on security and focuses on COVID-19 as a non-traditional security threat and explain why Covid-19 is non-traditional security. Whatever the reason for epidemics or arising infectious diseases is, the reaction to them will need to realise that initially in most circumstances, the public health system will be the first instance to detect outbreaks and put forward the measures. Also, the danger of any intended usage of infections as biological weapons should be taken precariously and the most helpful answer to these dangers is to strengthen multilateral global public health standards.

3. Health security as a matter of National Security

How can we explain exactly national security? The answer is it is not straightforward. to achieve a consensus on the explanations. While there is a consensus that national security involves defending the territory of the states, national cohesion and integrity, economic success as well as the lives of its citizens, the meaning can be extended. It can further incorporate assurance for key allies and partners, security of values such as democracy and fundamental human rights, or supporting a world order with stability and certain democratic values and principles. How a state determines national security helps it figure out and protect against intimidation to that security. National security can also be seen as a complex and multi-level system that cover all fields of activity. It exemplifies a set of subsystems each of which has its own structure. Each of the fields of activity and important interests is influenced by different threats. Therefore, security issues have to be divided into components according to their fields of activity [17, p. 3].

Although there are many types of definitions and examples of what national security and the threat are, not all debates and concepts are purely academic. Some governments, such as the George W. Bush and Obama administrations had set national security and threats to it more broadly, paying greater attention to threats like a pandemic disease. The 2017 Trump NSS however cut the pattern concentrating on a restricted list of interests and threats to them [18]. In the 21st century, the threats to national securities come in wider models and forms than they did a century ago.

To defend citizens, territory, and economy, states need to acknowledge the more comprehensive variety of threats. With the pandemic, what is at stake is essentially a matter of national security, namely attaining herd immunity that restabilizes public health, international relations including economic vitality, and that social life can continue safely. The COVID-19 outbreak has intensified the case that pandemic preparation and response, including the distribution of vaccines, are subjects of national security. States can use their influence to develop a synchronised international strategy to the shared anxieties vis-à-vis vaccine and misinformation which pose a threat to public health security as well. The fact that vaccine trust and misinformation are interests of national security should be included in high-level dialogues at the UN, including the Security Council.

4. Concern about Bioterrorism

Bioterrorism worry rises after the deliberate release of biological agents at the end of the twentieth century. Letters carrying anthrax powder were posted through the U.S. postal system and created panic among the population. The emergence of the COVID-19 in 2019 is a significant

security threat of the early 21st century, fundamentally affecting international relations, our life and trends. The COVID-19 has made the nations consider how good or how poor the public health system is prepared to manage a large-scale emergency [19]. Bioterrorism issue is connected with the intentional spreading of deadly infections. The emergence of COVID-19 and the experiences of bioterrorism have made administrations across the world recalibrate national security policy against non-traditional threats.

Although thus far there have been no unusual deaths recently due to bioterrorism, however, it poses vital security challenges that can cause deadly infections. COVID-19 illustrates how the increase of infections is a possible threat to society that has come to our attention after 9/11. Following COVID-19, thinking about bioterrorism might become again a subject of national securities globally and transform existing laws and official constructions related to protection, including the movement of public and products, separation and quarantine, vaccination, the expansion of facilities, such as hospitals and emergency facilities and certification of healthcare professionals. Therefore, adjusted national biodefense strategies seem to be very essential that can transform the existing arrangements implemented by states and put governments in a better place while facing the threats.

While infection outbreaks among troops have always been a concern, the potential occurred in the twentieth century to systematically produce biological weapons and then produce these weapons at an industrial scale. After the horrors of the gas battle in World War I, and from the “Spanish flu” that killed over 50 million people towards the end of the war, the League of Nations banned the use of asphyxiating, poisonous or other gases in war as well as ‘bacteriological methods of warfare under the 1925 Geneva Protocol. Essentially however biological weapons and important programmes to develop biological warfare capabilities soon appeared in several states. Yet, despite intense progress, which ultimately showed that biological weapons could make a great threat to populations as nuclear weapons, biological weapons were not integrated into military thoughts and planning, and there has been no identified use since 1945.

Bioterrorism first appeared as a political concept during the early 1990s in the United States. As the Cold War faded, the threat of terrorists armed with biological weapons and other weapons of mass destruction began to replace the Soviet threat. Various assessments of the importance, urgency and scale of the threat were present in the early political debates on bioterrorism. Alarmists, who included leading scientific and technical advisers, tended to emphasise the possibility of‘ apocalyptic attacks with natural pathogens and genetically engineered hybrids, and the vulnerability of the civilian population. They are less focused on the identities of bioterrorists and in their interests in pursuing such attacks or in their capacities to do so. Sceptics, however, tend to have background and training in the history,

politics and culture of terrorism, and for them, puzzles of identity, interests and circumstances of earlier attackers are the fundamental questions to ask [20].

Disease outbreaks like COVID-19 have not historically been regarded as a subject of national security. Although it is crucial to mention that little credible evidence exists yet that COVID-19 is bioterrorism, however, it raises the awareness that states or terrorists would, or even could, resort to biological weapons, and that in modern national security doctrine, capitals should flow into the preparedness and civilian biodefense plans of substantial institutional proportions. In the United States, the danger of bioterrorism developed in the Bush administration's fundamental security concerns during its two terms in office and initiated a series of new legislation, policies and programmes to further strengthen US preparedness and defence against a biological attack [21]. Worry about the threat of international terrorism linked with WMD proliferation was also exported from the United States to international security conferences. The international community's premier security committee, the United Nations Security Council agreed in resolution 1540 that all states should refrain from delivering any sort of support to non-state actors that try to get biological and other weapons of mass destruction for terrorist purposes [22].

Following this guide, the Obama administration paid even more attention to its reaction to possible bioterrorism. The administration's first crucial policy initiative on biosecurity was the National Strategy for Countering Biological Threats. While the Bush Administration's efforts had been concentrated on biodefence, the Obama administration's strategy was concentrated on deterrence. It emphasised combining intentional infection eruptions from bioterrorism attacks with naturally happening infection outbreaks, to set up a more integrated connection across all types of biological hazards. In his 2011 speech to the United Nations General Assembly, President Obama called upon all nations to 'come together to stave off, and see, and combat every sort of biological threat – whether it's a pandemic like H1N1, or a terrorist threat, or a treatable infection. In February 2014, the US began the Global Health Security Agenda to establish the global ability to avoid, inspect and promptly respond to biological dangers [23].

5. Bioterrorism's threat assessments

Historically, in terms of state threats, during the 20th century, the extent and sophistication of the extensive Soviet biological weapons programme took Western intelligence communities entirely by surprise when it started to be disclosed at the end of the Cold War. The most striking negligence, nevertheless, was the inaccurate examination of Iraq's biological weapons programme before the United States attacked Iraq in 2003. This shows how the CIA analysts used data and their assessment of the

particular technical features of information instead of the more perplexing social, political and economic dynamics covering Iraq's biological weapons advancement. The global essence of science proceeds with more knowledge hubs and it is becoming simpler in future to abuse the science for a vaster group of people, and vulnerabilities are becoming bigger.

There are commonly at least four classes of biological threats: unintentional outcomes of research, laboratory accidents, absence of knowledge and carelessness. For any future infectious disease outbreak, health intelligence and other fields of social science can come up with concepts, methods, practices and tools to control and inspect health incidents or assess risks [24]. An examination of the political, social and cultural context could for instance find proper policies linked to the governance of healthcare, population movements or identify potential riskcases. The intervention success in infectious disease requires especially an advanced intelligence perspective that includes other sciences as well.

International security specialisation on security intelligence for instance is a critical part in fighting effectively bioterrorism, particularly in the works to defend critical and relevant organisation's network. Security intelligence can find out when something goes wrong, see exactly what occurred and prepare all the characteristics required to assess its threat and risk. Thus, security intelligence can be very helpful for critical analysis to discover what happened during a security incident so that proper measures can be taken to diminish a threat or at least its costs. However, the ultimate purpose of security intelligence is to do predictive analysis, which means to assess what an attacker will do so that every countermeasure can be taken into the consideration to thwart an enemy. The cyber risks include attacks on systems, supply chains, or strategic infrastructure to harm, damage or contaminate crucial stocks of vaccines, antibiotics, cell or immune medicines or even malware that could be used to trigger data manipulation [25].

The COVID-19 shows that a lack of cooperation and profound knowledge can lead to the breakdown of the state (or government) to keep up its interest in the long term. But, in the long term, the lack of strategic intelligence about the "condition or subject of interest," in the local and international context, can also lead to a threat to the national security of a state. A concerning condition is that the global build-up of biodefence infrastructure and abilities can indicate that states are shifting closer to being in a place to jeopardize or execute a biological attack. Hence, there is perpetually a risk of 'sudden change of mind or shift of doctrines in the defence and research. Russia, for instance, claims that the US military is making a series of dual-use labs on its border, that it is secretly gathering Russian biological substance, and that the United States is developing biological tests near Russia's peripheries. These claims already show that maintaining a robust body of strategic intelligence available quickly to policymakers is fundamental as much as gaining intelligence power and cover the worldview, ideological attitudes, geopolitical relations, international and local legal frameworks, and the social and cultural perceptions of

all parties of interest. Thus, many sectors and dimensions of national security are interconnected and cannot be accomplished without one another. This research, therefore, emphasizes security intelligence, particularly the evolving role of information security in the national security systems

6. Conclusion .This paper concludes that in the field of national security attention is perpetually directed to 'traditional' terrorism. Although there are few terrorists potentially able in bringing their ambitions to success, it is very hard to identify them all and international terrorism continue to present worrying geopolitical circumstances. When added to the ambition of terrorist groups the capacity to make chemical, biological, radioactive, or nuclear attacks, the future risks present intenser concerns for national securities. Bioterrorism in its variety of potential forms is not just a danger for the future but also today. Therefore, finding proper measures against potential bioterrorism need to be one of the highest priorities of national securities. Experiences from COVID-19 can be very helpful.

To defend a nation and to eliminate or mitigate the various spectrum of security threats in the 21st century and future requires a preventative and intelligence-led approach that proceeds beyond the classic state-centric approaches. Simply put, awareness of health security risks and the scope of threats should trigger an improvement of the stakeholder's actions and methods involved in analysis and intelligence gathering as well as threat assessments. To strengthen global health security, the traditional state-centric constructions must actively recalibrate and connect with non-security actors and integrate room for fresh streams of science and academic actors to contribute to formulating multidisciplinary, empirically conscious and policy-relevant strategies in global health security.

Moreover, this paper concludes that a primary element in facing effectively a potential risk of potential future bioterrorism is the attainment of the ability to gain new insights and mitigate against failure. The attempts to offer vaccines exclusively to some countries with higher prioritisation can be seen as a drastic example of zero-sum thinking, as it represents a self-helped solution to the outbreak of Covid-19. Therefore, in the wake of the unusual challenges presented by COVID-19, and any possible future bioterrorism, nations should capitalise on their social and public responsibility to collaborating beyond borders, share knowledge to combat the modern threats more effectively.

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The dichotomy of democracy – autocracy through the prism of the covid-19 pandemic

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Bible, Mathieu, chapter 20.

15. Is it not lawful to me to do what I wish with my own things? Or is your eye evil because I am good?

16. So the last will be first, and the first will be last.

A little music spreads into the western world, putting forward the quick success of the authoritarian China face to coronavirus, while the European and American democracies prove to be disorganized, without real preparation, and undisciplined in the hour of confinement. Dictatorship 1-democracy 0? [1].

ABSTRACT

2020 and 2021 can generally be classified as "Years eaten by locusts" (allusion to the title of Borislav Pekić's book "The Years Eaten by Locusts"). In the spirit of Durkheim, this period, especially the first period of the epidemic, from December 2019 to June 2020, could be called "the period of acute anomie". The global exchange has come to a brutal halt, large numbers of people have been imprisoned for weeks, entire sectors of social life have been blocked, and socio-economic inequalities have become even more pronounced. This situation gave birth to a specific type of anomie, pandemic anomie *[2]* in which there was a new restructuring of the positions of China, and the West.

Since the end of World War II, and especially since the fall of the Soviet Union, democratic Western regimes have dominated the international scene, imposing their economic and political model as the only correct and desirable one. However, their difficulty in finding the key to effective pandemic control has called into question their hegemony and the superiority of their model. Not only was their crisis management less effective, but it was not more democratic compared to so-called authoritarian countries.

KEYWORDS: Covid-19, Democracy, Autocracy, China, West, Pandemic.

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Introduction. Epidemics, by taking human lives, also put entire societies in the grip of social tensions and are a threat to states and their survival. The consequences of long-term policies are coming to light. Thus, the constant reduction of investment in public health services and the cessation of industrial production of medical materials has led many countries into great difficulties in the fight against coronavirus.

Institutions face challenges to which they have difficulty finding adequate answers, which clearly shows the demagoguery between the proclaimed principles and their actual application. The gap between the proclaimed and the real is particularly striking in the "best of all arrangements" – in democracies. Democracy, which is based on the election of representatives of the people who are supposed to work for the benefit of the electorate, should be the best political system, protecting its citizens in all aspects and situations. However, Covid-19 has questioned this premise of the superiority of democracy.

Theoretical approach. With the end of the Cold War, the economic, political, and social model of the West has shown its superiority and seemed to spread to the entire planet. So, Fukuyama in his famous article "The End of History?" *[3]* predicted that the world would peacefully fit in and rearrange itself according to the Western mould, adopting liberal capitalism under US hegemony. However, the adoption of the economic model of the West by countries such as China and India has, paradoxically, weakened its primary bearer and propagandist. Freed from the rigidities of a planned state economy, China and India waged silent revolutions, which, just a few decades later, permanently changed the levers that moved the world. The West won, it imposed its model, but that victory led to its own loss *[4]*.

"I remain convinced, as far as I am concerned, that Western civilization, more than any other, was the creator of universal values, but proved incapable of conveying them in the right way" *[4, p. 56]*; "His drama (drama of the West), today, as yesterday, over the centuries, is that he has been constantly divided between the desire to civilize the world and the will to dominate it - two irreconcilable demands" *[4, p. 66]*.

In his book "The Clash of Civilizations and the Remaking of World Order", Huntington says that modernization differs from Occidentalization and by no means produces a universal civilization *[5]*. According to him, the world order is organized around civilizations. Societies that share cultural affinities cooperate; states are grouped around the guiding-state of their civilization. The West's claims to universality are increasingly bringing it into conflict with other civilizations, especially China and Islam. Westerners must accept that their civilization is unique, but not universal. A war between civilizations can be avoided if political leaders accept that politics has become multicivilizational and if they cooperate to preserve such a state of affairs *[5, p. 17, 18]*. "Every civilization considers itself the centre of the world and writes its history as if it were the central drama of human history. This is certainly even more true for the West than for other cultures. This mono-civilizational view is increasingly losing its relevance and use in the multi-civilizational world" *[5, p. 67]*.

The notion of democracy, the political doctrine that considers that sovereignty should belong to all citizens, is so deeply rooted in Western culture that it is generally regarded as a purely Western concept. Thus, democracy is a value that the West considers having a mission to expand and establish in countries where it did not exist before.

Amartya Sen tries, in addition to the idea of universal suffrage to which democracy is often reduced, to underline the question of its complexity. According to him, there are general roots, common to all forms of society. Sen shows through numerous examples that pluralism, diversity and freedom are in the history of many nations. According to him, this common heritage is a sufficient reason to question the thesis that democracy is a purely Western concept. By democracy, Sen means not only the mechanical exercise of the right to vote but a free and responsible discussion of political issues concerning the community. These roots can be found outside of ancient Greece and the West in general: for example, in ancient India and elsewhere in Asia, as well as in Africa. In his book, Sen illustrates the existence of ancient democratic traditions in various civilizations with concrete examples and warns that the sin of "cultural imperialism" should not be repeated in the future, that is, the attribution of democracy exclusively to Western countries. Instead, he advises that those aspects that represent the values that all people have adopted and shared at different moments in their history should be explored and developed *[6]*.

The beginning of the Covid-19 epidemic and the approach to solving the sanitary crisis

With the first cases of Covid-19, the very existence of the epidemic was analysed as if it automatically stemmed from the authoritarian characteristics of China. According to analysts in Europe, the oppressive bureaucratic structure has prevented the transfer of information from the local to the central level of government, transforming the local epidemic into a global pandemic.

It is not new to explain the problem of natural disasters as a political problem arising because of the lack of democratic governance. This theory finds its origin in simplified interpretations of the works of Amartya Sen, who in his 1982 essay argued that famine was not so much a matter of food shortages, as of undemocratic governments, because the free press would have initiated the government of the country to react *[7]*. In undemocratic regimes, the lack of accountability stems from a lack of transparency due to the lack of freedom of the press and information.

On the other side of autocracy, in the West, the notion of democracy is not just an analytical category, but functions as part of Western identity, its essence. In this sense, democracy establishes and maintains a complex of Western superiority over others. Since Fukuyama defines it as the end of history, that is, the universal model to which all countries of the world will eventually adhere, Western Democrats have long been irritated by the fact that China does not openly transit to democracy, according to the prophecy of democracy as the end of history and the West as the destiny of the world. Thus, Fukuyama in an interview he gave to France culture in August 2019, states: "China challenges the hypothesis that it will become more democratic as it becomes richer" *[8]*.

In the west, the coronavirus has been treated less as a public health problem and more as a political issue. When the confinement of the Chinese population was announced in January 2020, this interpretation was further reinforced: lockdown was presented as a totalitarian measure, stemming from the very nature of the authoritarian Chinese regime, not as a consequence of an epidemic. The Chinese authorities' decision to isolate tens of millions of its citizens has heightened a sense of radical diversity between Europe and China. During this period, the superiority of democracy was vigorously affirmed *[9]*.

Then, when the prospect of closure seemed no longer so exotic in Europe, while, at the same time, Wuhan started easing epidemiological measures, the media began to question the capacity of democracy to manage the crisis better than it was done in China. A new question has been asked: is, after all, authoritarianism better equipped to deal with sanitary crises? The answer, however, remained unchanged: of course not *[10]*. Beginning April 2020, when China announced its success in eradicating the virus, Western democracies imposed quarantine measures, as the death rate in Europe was significantly higher than in China. However, disbelief and uneasiness over their own inability to fight the epidemic effectively, were suppressed by the claim that Chinese figures were forged, which is typical of Chinese propaganda. Thus, it is said that since there is no accurate information, it is not possible to make comparisons with data from Western democracies, whose statistics, of course, are accurate and reliable. In other words, a comparison between democracy and dictatorship is impossible *[11]*.

Sanitary crisis management

There are few situations that are so conducive to international comparison, such as the one that resulted from the Covid-19 pandemic. The global character of the pandemic makes us pay special attention to its progress in other countries. We monitor the solutions of foreign governments and compare their efficiency with the success of our government in crisis management. Our gaze is focused either on what is very far away – foreign countries, or on what is very close – locally, but what lies between these two spaces, other political preoccupations, are completely forgotten and unprocessed by the media *[12]*. This interspace is filled by only one actor: the state, which, acting as a mother or as a stepmother, adopts emergency measures, controls their observance, advises and insults, daily changing its own discourse in general confusion that it seeks to cover up by invoking medical experts. However, in this frantic activity, the states of Western democracies were not able to provide the basic things for the protection of medical staff and the population in general – as banal as hand sanitizers and face masks.

In crisis management, there were no major differences in solutions between authoritarian and democratic regimes. One thing is certain: democracy has not proved to be more efficient and honest in communication than authoritarian countries. Strict confinement was applied not only by China, which was constantly pointed at as an authoritarian regime, but also by "proven" democracies, including France. It is true that the configuration was stricter in China than in France, but, progressively, with the use of drones and other surveillance measures, this difference narrowed *[13]*. In a sense, confinement in France was stricter and more massive than that applied in China: China closed only one of its provinces and a

few cities, while in France there was a national closure of 67 million inhabitants and a state of emergency was declared *[14]*.

The United States, the European Union, and the United Kingdom were indecisive and ineffective in fighting Covid-19. At a time when Donald Trump and Boris Johnson were obstinately closing eyes to the danger, preferring sacrificing their own population by minimizing the risk of virus in order to sustain economic activities, China has sent to help other countries, democratic and undemocratic, its experts, masks and respirators.

The countries of the European Union made their own decisions, implementing measures to regulate the crisis without waiting for the decisions of the EU bodies, which were without organized action and clear ideas. In addition to the general confusion and the lack of basic means to fight the infection, the most astonishing was the complete lack of solidarity between Western democracies, and even between the sister-countries, members of the European Union. Cases of hijacking deliveries of masks from China, diverting planes carrying them, competitions in offering prices to get the necessary product, have completely compromised the standard discourses and postulates of the European Union, as well as its traditional political friendship with the United States.

The first political, founding act of European integration, the Declaration of Robert Schuman of May 9th, 1950, states, among other things: "Europe will not be built all at once, nor in a complete construction: it will be built through concrete achievements, above all creating de facto solidarity" *[15]*.

If the very postulate of European integration has been so rudely called into question in a situation where all its members are simultaneously facing a common enemy, and when solidarity was much needed, the question arises as to the very essence of this institution? In the absence of aid from expected sources, Italy, among the first in Europe to be hit hard by the epidemic, has sought help from China, Cuba and Venezuela *[16]*. Russia and Cuba were the first to send trained medical staff, while China sent masks and respirators to the unfortunate member of the European Union, which, for its part, criticized the lack of solidarity coming from the EU organization and its members *[17]*.

Unlike France, where there were no masks for the population during the entire period of the first confinement, when the official discourse tended to deny the importance of masks to combat the epidemic, some countries, like Serbia, realizing that they could not expect help from the European Union, turned to China and received the necessary medical equipment from it. However, the actions that China presented as an expression of solidarity were soon interpreted by Western analysts as China's efforts to expand its political influence and improve its reputation as an eternal oppressor and autocrat, as generally presented in the Western media *[18]*.

In an analysis of the causes of the shortage of protective masks during the first wave of the pandemic, the OECD concluded that the global shortage of this product was a result of a supply and demand problem that countries complicated by resorting to protectionism, and that they should not act in the same manner next time, if they have learned anything from this pandemic *[19]*.

The lack of coherence in French government statements and a radical change in doctrine when it comes to the need to wear protective masks have significantly undermined French confidence in their government and its ability to manage the health crisis. Thus, the results of a survey of March 8 and April 9, 2020, in which about a thousand respondents participated, who answered the question: "How do you assess the government's position regarding its recommendations on wearing masks?", showed that 73% of respondents thought that the government did not do what was necessary to supply health staff and hospitals, 76% stated instability, 77% thought that the government was not clear, 77% thought that government statements were not coherent, 77% thought the government had not told the truth to the French *[20]*.

Democracy and inequalities on the inner plane

In addition to the hesitation and incoherence of the World Health Organization, the medical corps and the governments in finding measures to combat the epidemic, the sanitary crisis has underlined the social inequalities. Class, racial and gender differences were illuminated by the spotlight of the crisis. The virus, by itself, does not differentiate between class, gender, and race, but the way it is chosen by the authorities to combat it, restores and multiplies existing latent or visible social differences.

And while companies were strongly supported by the state, while most staff were ordered to work from home, taking advantage of teleworking, while those who own holiday homes left the cities, the message to ordinary workers was that the economy must not stop and therefore health risks must be taken. The French Minister of Labour condemned construction companies for defeatism when they wanted to temporarily close non-priority construction sites *[21]*. Public transport in France continued to operate according to the usual program, without special protection measures. Thousands of workers – cashiers, cleaners, delivery men, continued to work and, of course, medical and nursing staff, in a direct exhausting fight with an insufficiently known enemy.

The only places that a priori provided equal treatment to all were public health services. Those same services that have been the subject of constant restrictions for decades, and whose employees are now required to be heroes in the fight against a mysterious enemy, without basic means of protection. The applause, the shouts, the pounding of pots and other manifestations of the closed population every night at eight, in support of the medical staff in most countries detained by the coronavirus, sounded like an empty tirade of third- callers escorting real fighters to the front lines.

Underlining social inequalities in France as elsewhere, were also seen in the way police had controlled compliance with prescribed governmental measures. In the neighbourhoods where the wealthy population lives, mostly vacated after large number of it had left the city, the presence of the police was almost imperceptible, while full supermarkets continued to operate despite poor attendance. Conversely, neighbourhoods inhabited by workers were subject to frequent police inspections, in conditions of supply

problems and a large presence of people on the streets, due to dense population, cramped apartments and a small percentage of those who work remotely and who could go to some accommodation out of the city. In those conditions, there were the most controls, there were fines, there were recordings of how the state enforces order in times of crisis. The highlight was the use of drones and street cameras to monitor, identify and punish the disobedient. Methods that in "out-of-crisis" times are so eagerly criticized as contrary to the freedoms and rights of citizens, so inappropriate for democracies, and typical of Chinese and other autocrats *[22]*.

The second round in the fight against Covid-19: vaccines

After the democratic West failed in the first round, i.e. the supply of masks and other medical needs, the next move, which had to enable regain and re-establishing of its supremacy, was to find a vaccine against covid-19. The internal competition of Western democracies was interrupted by news from Russia that they found the vaccine against Covid-19. The fact that the Russians were the first to announce that they had found the vaccine (which they symbolically named Sputnik V) revived the wounds of the Cold War, and reinforced the usual distrust of the West, or democracy, towards countries they call autocratic.

The poor start of the EU vaccination campaign has given China and Russia room to pick up political points in the Balkans and Central and Eastern Europe. The geographical division of zones of influence was reminiscent of the bloc division of East and West during the Cold War, with China entering as a new, powerful player in the old, already seen constellations. In the race for the vaccine, which replaced the former race to conquer space, the Russians, by launching the first vaccine against Covid-19 and giving it the symbolic name Sputnik V, almost jokingly reminded the West and the world in general that they were remaining an important factor in the fight for global supremacy. The Chinese, continuing their 17 + 1 program in Europe, expanded and strengthened their field of influence on the old continent. China and Russia seemed to be giving the EU a lesson in soft power on its own ground. Several EU member-states as well as neighbouring countries have turned to Moscow and Beijing for additional procurement of vaccines, facing a lack of timely information, delays and insufficient deliveries of vaccines by the EU.

Regarding the skipping of centralized procurement of vaccines across the EU by its members, the President of the European Council, Charles Michel, stated: "We should not let ourselves be misled by China and Russia, both ***regimes with less desirable values than ours***, as they organise highly limited but widely publicised operations to supply vaccines to others" *[23]*. In her report published in The Economist Intelligence Unit on April 28, 2021, entitled "Western Powers Have Lost Vaccine Diplomacy Battle," Agatha Demarais, director of global forecasting, says: "With vaccine diplomacy, Russia and China seek to leverage resentment against Western countries which have pre-booked more than half of the global supply of vaccines this year and are prioritising immunising their own populations"

[24]. Regarding Chinese and Russian vaccines, Western countries have expressed great suspicion and criticism, but have not offered any alternative. The United States and the United Kingdom accepted the distribution of their vaccines only after their domestic needs were met, forcing even European Union countries to turn to China and Russia for help [25].

In response to accusations coming from the West, the Kremlin has argued that Moscow and Beijing do not use vaccines as a means of influencing the international scene. Vladimir Putin responded to the claims of one European Commissioner that the European Union does not need the Sputnik V vaccine (at a time when the supply of vaccines to its population was extremely slow): "We are not forcing anyone to do anything (...) but we wonder whose interests those persons are defending, whether the interests of pharmaceutical companies or the interests of European citizens?"

It should be said that the vaccines against Covid-19 produced nine new billionaires. The independent government organization Oxfam said the new fortunes came about thanks to the fantastic profits of pharmaceutical companies that have a monopoly on the production of the Covid-19 vaccine. The first two riches, which stand out from the rest, are held by the CEO of Moderna, Stéphan Bancel ($ 4.3 billion) and the CEO and co-founder of BioNTech, Ugur Sahin ($ 4 billion). Other billionaires, owners of shares in pharmaceutical companies, earned 32.2 billion dollars, which, according to Oxfam, is enough to vaccinate the entire population of India [26].

Vaccination campaigns in some European countries outside the EU

In the general confusion, unrealistic promises of the governments and the real shortage of vaccines against Covid-19 in the countries of the European Union, a very successfully organized campaign of vaccination by some European countries outside the large EU family appeared as a sharp contrast. Representatives of the UK, a European dissident, implicitly, or explicitly, explained their success as a happy outcome of their departure from the European mastodon [27].

Serbia, for years on the margins of the EU, not expecting more massive assistance for its population from this organization, turned in time to its Far Eastern and Eastern partner – China and Russia. In an article in the daily newspaper Le Figaro of March 4, 2021, the following comment was given: "On the old continent, the champions of vaccination are Great Britain and Serbia. Is it incidentally that they are outside the European Union? Unfortunately, we have to ask ourselves that question. London has developed its own vaccines and is now relying on India to multiply their production. From the very beginning, Belgrade counted only on China and Russia, sure that it would be left behind by its friends from the West. It is also no wonder that the EU member state that follows it closely – Hungary – was the first to violate common rules on the issue. ... The European Union's ambitious vaccination strategy was supposed to ensure cohesion, equality and solidarity – at the best price. That was missed" [28].

Conclusion. The fact that states with democratic regimes have not been more effective than authoritarian regimes in fighting the epidemic, calls into question the very foundation of the democratic idea. The fact that the American president is neglecting the health and lives of his nation, at a time when the Chinese are sending their experts and medical supplies around the world, represents a historical change. Democracy, not in its technical sense, but in its essence, as a government exercised by the people and for the people, has long since become just a fan of technocrats in power. Democracy means that people participate in it, that they adhere to it, that they believe in it. And that is why it is necessary to have an essence, and not just a technically repetitive ritual of the election. If one virus succeeds in eliminating all the specifics of democratic regimes, there is no reason for people to attach importance to such a regime, especially in a situation where authoritarian regimes have proven to be much more effective in protecting the health of their population [12].

Authoritarian regimes have long been studied in the West exclusively from the point of view of repression and most often in a stereotypical way. Over the last years, social science specialists have sought to analyse the authoritarian model of the "social contract" and how it produces the consent of the people. They concluded that the obtained legitimacy derives not from the democratic process, but from the obtained results, primarily economic. This agrees with the broad support that the Chinese give to their president, stemming from the rapid improvement of life and economic growth [11].

All the good practices that came from the East were greeted with suspicion and rejection. Western democracies have not properly weighed the danger of the virus, due to their self-representation of China as fundamentally different. The saddest thing in this context is the inability of leaders to collectively combat this common evil, instead of seeking to derive an ideological or tactical advantage from it.

Dominique Moisi from Institut Montaigne Paris writes: "A century from now, will historians see the coronavirus crisis as another step in the decline of the West? Asians, from China to South Korea, via Singapore, regardless of their political systems, are they not better ″culturally″ armed to face the pandemic? Are we not, faced with the rise of perils, victims of blindness, which reflects our frenzied individualism? Rationally, it should be obvious that one cannot save oneself. Viruses know no borders. ... The health crisis occurs at a time when we must find a new balance, between the all-market and the all-state. And in this phase of transition between two worlds, the coronavirus adds fear to fear" [29].

Preserving the dichotomy of democratic/autocratic social regimes is one-sided and outdated, but the West still insists on it, as if those traditional divisions, which date back to Montesquieu's Orientalism [30], are a familiar ground conducive to maintaining self-representation of democratic superiorities and Western regimes versus "others".

So, for NATO, **China is now a "systemic challenge" for the world order**. G7 press release, after the last summit in United Kingdom of June 2021, mentions China three times: to call for a transparent investigation into the origins of Covid-19 ″including in China″, for to call on it to ″respect human rights and fundamental freedoms″, and to ″emphasize the importance of peace and stability in the Taiwan Strait″ [30]. In an editorial, the *China Daily* judges that the **G7 may still live in "the illusion that the world is run by its diktats**." The G7 would do better to focus its attention on solving the real problems facing the world which are: containing the pandemic by ensuring an equitable distribution of vaccines, combating global warming and removing global economic uncertainties instead of attacking China [31].

Pierre Haski said, during the first wave of coronavirus: "At the time of the assessment, when the promises of ″never again″ emerge, as after every disaster, it would be good not to rewrite history. This pandemic will leave traces in every society and in international relations" [1].

Unfortunately, the same old stories seem to be written over and over again, although the dichotomy East / West, as well as other dichotomies, have significantly less room in the modern, interconnecting world. Instead of desperately trying to send China back to a totalitarian horizon and to free democracies from all authoritarian tendencies on principle, we had better try to think of democratic management of the crisis [13].

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Analysis and forecasting of the sphere of sports and health services development in Ukraine

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ABSTRACT

It is determined that the sphere of sports and health services is an integral element of the intangible production of the country`s economy. The definition of sports and health services is given and the peculiarities of demand formation for these services are revealed. The structure and dynamics of indicators of the development of sports and health services in Ukraine are analysed. It is determined that the number of business entities that provide sports and health services in Ukraine during the study period increased, despite fluctuations in the economy under the influence of the crisis of 2013-2014 sphere of sports and health services in Ukraine.

Trends have been identified and forecasting for the development of sports and health services in Ukraine. The main factors influencing the further development of sports and health services in Ukraine are indicated. The goals set in the Strategy for the Development of Physical Culture and Sports for the period up to 2028 are analysed.

It is proposed to strengthen state support in the field, promote physical culture and sports in the country, restore sports infrastructure. In order to achieve certain goals, it is important to establish fruitful cooperation between state institutions, local communities, private sports organizations, public associations, and specialists in this field.

KEYWORDS: Sports and health service, Physical culture, sports, Development of the sphere of sports and health services, Productivity in the field of sports and health services, Development forecasting.

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1. Introduction. Currently, in Ukraine, the economy is undergoing restructuring and expansion, respectively, this applies not only to the manufacturing sector but also to the non-manufacturing sector *(services)*. Thus, now such a component of the service sector as physical culture and sports is very relevant. "Health care, physical culture and social security" have formed into an independent socially-oriented sphere of the national economy. It defines the way of life of a significant circle of society, for which it is an effective way of physical recovery, moral development, and self-improvement, education of caring for nature and cultural heritage, mutual understanding, and mutual respect between peoples and nations. Creating conditions for people to be able to actively spend their leisure time, including the use of resources of mass sports and physical culture, should be one of the key activities of public authorities and all business entities.

2. Literature Review. Problems of functioning of sports and health services as an object of economic research have been the subject of scientific research in the works of such scientists as Alghadhywi M. Y. H., Naumko Yu. S., Samoilenko T. G., Tsymbaliuk I. *[1, 2]* in whose works the problems of sports infrastructure development are highlighted. Issues of organization of effective marketing of sports and health services are considered by Diachkov D. V. *[3]*, Leonova Y. O. *[4]*, Prokopova L. I., Chkhailo M. B. *[5]*. The role of sports and health activities in ensuring sustainable development was covered in the works of Velychko V. V. *[6]*, Stegney M. I., Bohatyrev K.O., Boshinda I. M. *[7]*. At the Stakhiv`s I. M. and Rybchych`s I. E. publications are devoted to the issue of financing sports and health services *[8-9]*. At the same time, the insignificant role of sports and health services in the presence of significant economic potential necessitates in-depth analysis and forecasting of indicators of sports and health services to justify ways to intensify its development in Ukraine.

3. Methodology. In the process of research in the performance of the tasks were used generally accepted in economics methods: dialectical, cognition – to reveal the essence and features of sports and health services; system-structural analysis – to determine the structure and dynamics of indicators of development of sports and health services in Ukraine; statistical and graphical – to assess changes in productivity and value-added at the cost of production of business entities in the field of sports and health services in Ukraine.

To characterize the economic potential of sports and health services, the performance indicators of economic entities that produce sports and health services are calculated and analysed. Productivity index (R_{fi}) is calculated as the ratio of the volume of products produced by economic entities of the i-th type of activity in the field of sports and health services (Qi) to the number of economic entities (Ti).

$$R_{fi} = \frac{Qi}{Ti} \qquad (1)$$

The forecast of the number of business entities in the field of sports and health services and the productivity of their activities based on the methods of correlation analysis and extrapolation.

4. Results. Implementing health, recreational and educational, communicative functions, physical culture, and sports are the most important means of developing the human potential of society *[6].* The emergence of public or mass sports, as a result of the process of democratization, led to the allocation of physical culture and sports in a separate area. Today, this area in many countries has become a full-fledged sector of the economy, ensuring the achievement of significant socio-economic effects in the development of human capital and improving the welfare of the population.

Researchers define sports and health service as a kind of physical culture and sports activity based on the use of various sports in order to preserve and strengthen people`s health, involve them in sports values, the formation of healthy lifestyle skills.

Sports and health services should be understood as organized forms of various sports in order to achieve this goal, as well as activities that provide it. This activity includes the maintenance of a network of sports and recreation facilities and the organization of visitor services during classes, the organization, and provision of sports competitions and entertainment events, trade, rental and repair of sports equipment and equipment, etc.

Sports and health services belong to the category of socio-cultural services. They are aimed at meeting the spiritual, intellectual needs of the individual and maintaining his normal life *[5].*

It is obvious that in the field of sports and health services there are laws and categories of market relations. The growth of the modern market of sports services and products for sports provides manufacturers working on it, the prospect of making large profits. The growing demand for sports and health services is formed by the population engaged in sports to maintain physical shape and health, as well as professional athletes. Representatives of professional sports form consumer demand, which is characterized by specific, increased requirements for quality and completeness of sports and health services and the specific mechanisms of promotion of ancillary goods and services related to this area *(*consultations of coaches and nutritionists, sports and special equipment, specific clothing, footwear, dietary supplements, etc.*) [4].*

The offer of sports and health services is carried out by coaches, club and other physical culture and sports organizations, sports and health centres, between which there is fierce competition. The prospects for the development of business activities for the provision of sports and health services are attracting more and more businesses, the number of which in Ukraine during the study period increased, despite fluctuations in the economy under the influence of the crisis of 2013-2014 *(*Fig. 1*).*

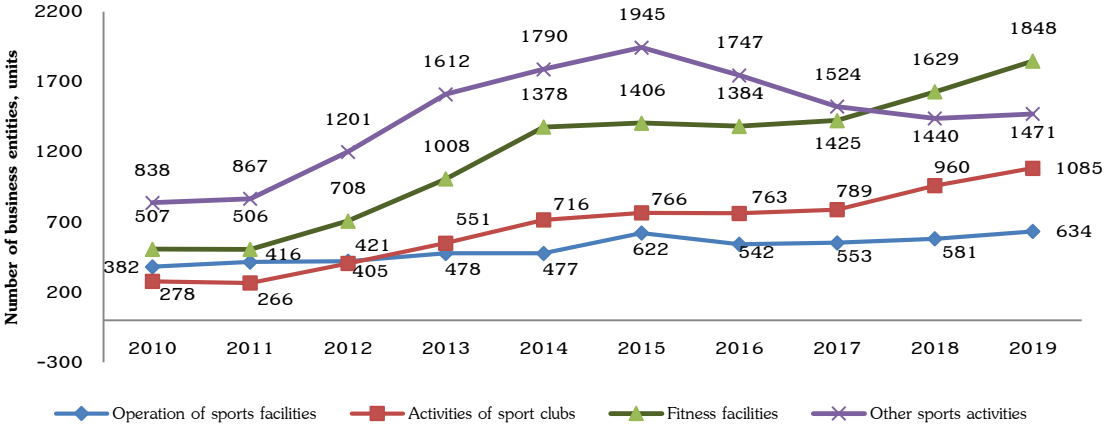

Figure 1. Number of business entities in the field of sports and health services in Ukraine

** Built according to the State Statistics Service of Ukraine [11].*

In the sports and health industry, there are commercial and non-profit organizations. Commercial successfully operates in the field of professional sports, providing paid sports and health services, organization of sporting events. These are mainly professional and amateur commercial sports clubs and health centres, sports and health organizations, paid sports sections, etc. In addition, a significant part of sports and health services by their nature are socially significant benefits that promote the ideas of sustainable development, and cannot be provided only by commercial entities. Non-profit organizations include organizations that promote a healthy lifestyle, play sports, and tourism that does not lead to paid services, including green tourism *[7]*. Analyzing the market of sports and medical services, it should be noted that the fitness industry dominates. The reason for this is the world fashion for a healthy lifestyle. The main players in the Ukrainian market are the networks of fitness centers of the middle price segment, which account for 37 % of the total number of business entities in the field of sports and health services *(*Fig. 2*)*.

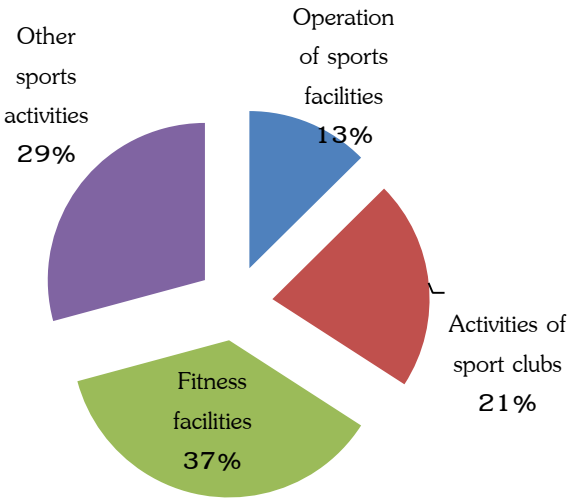

Figure 2. The structure of activities in the field of sports and health services in Ukraine in 2019

** Built according to the State Statistics Service of Ukraine [11].*

As of 2020, the largest network remains SportLife (67 sports clubs across Ukraine), followed by Sportland (9 clubs), MyFit (four clubs), InterFit (three sports clubs), and Planet Fitness. (two sports clubs), as well as companies operating in the premium segment, such as "5 element", "Grand Prix", "Tsarsky", "Aquarium", "Podolsky", "SportlifeDeluxe" [4].

The market of fitness services in Ukraine is actively growing. According to research conducted by the FitnessConnectUA project team, the annual turnover of this market in Ukraine today is $ 201.8 million, and the marketing agency Smart notes that about 19.7 billion UAH Ukrainians spend during the year "on classes for their body." Despite the hostilities and the economic crisis, more and more fitness clubs, fitness centers, etc. are opening in Ukrainian cities. This is because this market for services is very promising [13].

According to the state statistical reporting, 70,135 full-time employees work in Ukraine, of which almost 48.9% are employees of educational institutions, 21% are coaches in sports, 8.4% are employees of out-of-school educational institutions, and children's and youth sports institutions. schools, schools of higher sportsmanship, Olympic training centers, institutions of higher education with specific training conditions (except for coaches in sports), 2.6% of employees of structural units for physical culture and sports of all levels, 2.8% of employees of sports facilities, 2% of employees of physical culture and sports societies, 0.2% of employees of separate divisions of national sports federations, 3.4% of sports instructors in sports, 10.7% of other employees of institutions, establishments, organizations in the field of physical culture and sports [14].

The volume of the Ukrainian market of sports and health services was estimated by analysts at 675 million dollars. as of the end of 2018 (of which 210 million dollars fall on the capital). At the same time, the level of demand for sports services in Ukraine is still far from the world (for example, in the US 20 % of the population are permanent members of sports clubs). According to experts, more than 70 % of Ukrainians do not visit sports centres at all and do not do fitness [4]. The recession in the economy of Ukraine during the crisis of 2013-2015 had a negative impact on the overall productivity of economic entities in the field of sports and health services (Table 1). This is caused by a decrease in the purchasing power of the population, a fall in the national currency, a decrease in the actual volume of sports and health services.

Table1. *Productivity of business entities in the field of sports and health services in Ukraine, thousand dollars*

Years	Productivity of activity in the field of sports and health services in general $R_i=f(i)$	Productivity by individual entities			
		Functioning of sports facilities f_1	Functioning of sports clubsf_2	Functioning of fitness centersf_3	Other activities in the field of sport f_4
2013	157.5	162.8	668.1	42.8	53.2
2014	112.1	135.6	422.6	39.1	44.6
2015	62.2	72.9	266.9	23.0	13.6
2016	67.9	84.8	265.7	25.3	22.0
2017	60.8	91.9	209.9	31.5	18.9
2018	94.2	100.7	390.1	40.2	24.9
2019	107.8	156.5	371.2	55.5	36.0

** Built according to the State Statistics Service of Ukraine [11].*

Physical culture and sports as a social institution and a specific type of activity are aimed at reproducing the main productive force of society – man is currently undergoing profound qualitative, quantitative, and structural changes. The recession that has taken place in the development of the physical culture movement requires an increase in the number of sports facilities, the use of sports facilities for their intended purpose, and the effective work of leading specialists and scientists in the field of physical culture and sports.

The sharp narrowing of the sports and health services market in Ukraine is explained by experts by the occupation of part of the eastern regions and the Crimean peninsula, the transformation of the market during the "maturity" period, and the devaluation of the Ukrainian hryvnia. Military actions and occupation in the anti-terrorist operation zone caused a reduction of the market of sports and improving services in Ukraine of various segments, from an economy class to a "luxury"class, by 20 % [3].

Determinant for the development of physical culture and sports is sports infrastructure, however, the provision of the population of Ukraine with sports and sports facilities is currently much lower than the required level *[1; 2].* In Ukraine, the process of restoring sports infrastructure begins through the introduction of special programs in the State Fund for Regional Development, 10% of which is allocated for the construction and repair of sports facilities *[9].* According to statistical data, in 2016–2019, more than UAH 1 billion was allocated in Ukraine for the restoration of sports infrastructure in the regions. From 2016 to 2018, 2,650 sports facilities were built. For the first time, a subvention was provided to local budgets for the construction of sports palaces *(*UAH 150 million*) [1].*

According to statistics, in 2016-2019 in Ukraine for the restoration of sports infrastructure in the regions was allocated more than 1 billion UAH. Due to which 32 objects were restored and built in 2016 in the amount of 100 million UAH, 100 objects in 2017 in the amount of 374 million UAH, and 137 objects worth 600 million UAH were approved. in 2018. From 2016 to 2018, 2,650 sports facilities were built. For the first time, a subvention was provided to local budgets for the construction of sports palaces *(*150 million UAH*).* The construction of sports palaces has started in Rivne – 42 million UAH, Khmelnytskyi – 54 million UAH. The budget of the Ministry of Youth and Sports provided 400 million UAH on subventions to regions for repair, reconstruction, and construction of palaces of sports and pools *[15].*

In Ukraine most state-owned sports facilities are under the economic management or operational management of professional sports organizations *(*specialized educational and sports institutions, clubs*)* and are on the balance sheet of these organizations. Today in Ukraine the material and technical base of the sphere of physical culture and sports is weak. In terms of the level of swimming pools and gyms in Ukraine, it is 2-3 times inferior to the leading countries of the world. Provision of pool areas in Ukraine is only 14% of the norm; 80% of sports facilities do not meet modern requirements *[13].*

The global economic crisis caused by the COVID-19 pandemic has a negative impact on the development of the market of physical culture and sports in Ukraine. Continuous lockdown for a long period of time, then the introduction of adaptive quarantine, countering the pandemic required enormous public financial support. The need for the introduction of certain quarantine restrictions by the state logically led to an escalation of tensions with almost all areas of business.

In Ukraine today, the economic potential of sports and health services is poorly realized. The industry provides only about 0.2 % of value-added from all types of economic activity, which proves the need for development and absorption of state support for the sphere in order to intensify its development *(*Table 2*).*

Table 2. *Value added at factor costs of business entities of sports activity in 2013-2019*

Years	Total		Including physical persons-entrepreneurs	
	thousand UAH	as a percentage of value added for all types of economic activity	thousand UAH	in % to the total of business entities of corresponding type of economic activity
2013	2957288.3	0.285	224864.3	7.6
2014	3307335.7	0.256	181120.8	5.5
2015	3468809.0	0.248	201245.0	5.8
2016	4332413.9	0.240	321129.4	7.4
2017	3861208.0	0.171	533634.3	13.8
2018	6473681.4	0.258	736682.2	11.4
2019	6360743.9	0.214	946963.8	14.9

** Built according to the State Statistics Service of Ukraine [11].*

In terms of business entities, it should be noted that both the number and performance of individual entrepreneurs engaged in sports and health services are growing. Thus, the share of value-added of sports and recreation activities produced by entrepreneurs for the period 2013-2019 increased to 14.9 %. The positive side of commercialization is to attract the necessary additional resources to maintain and implement sports activities. In the field of physical culture and health, commercial relations have led to the intensification of the development of organizational structures aimed at meeting the needs of consumers in physical culture and health, sports and health, entertainment services, etc.

Using the method of economic and mathematical analysis, it is determined that while maintaining stable conditions, the field of sports and health services in Ukraine tends to resume and intensify its development, as evidenced by the forecast trends in the number of businesses in this area and increase their productivity (Fig. 3).

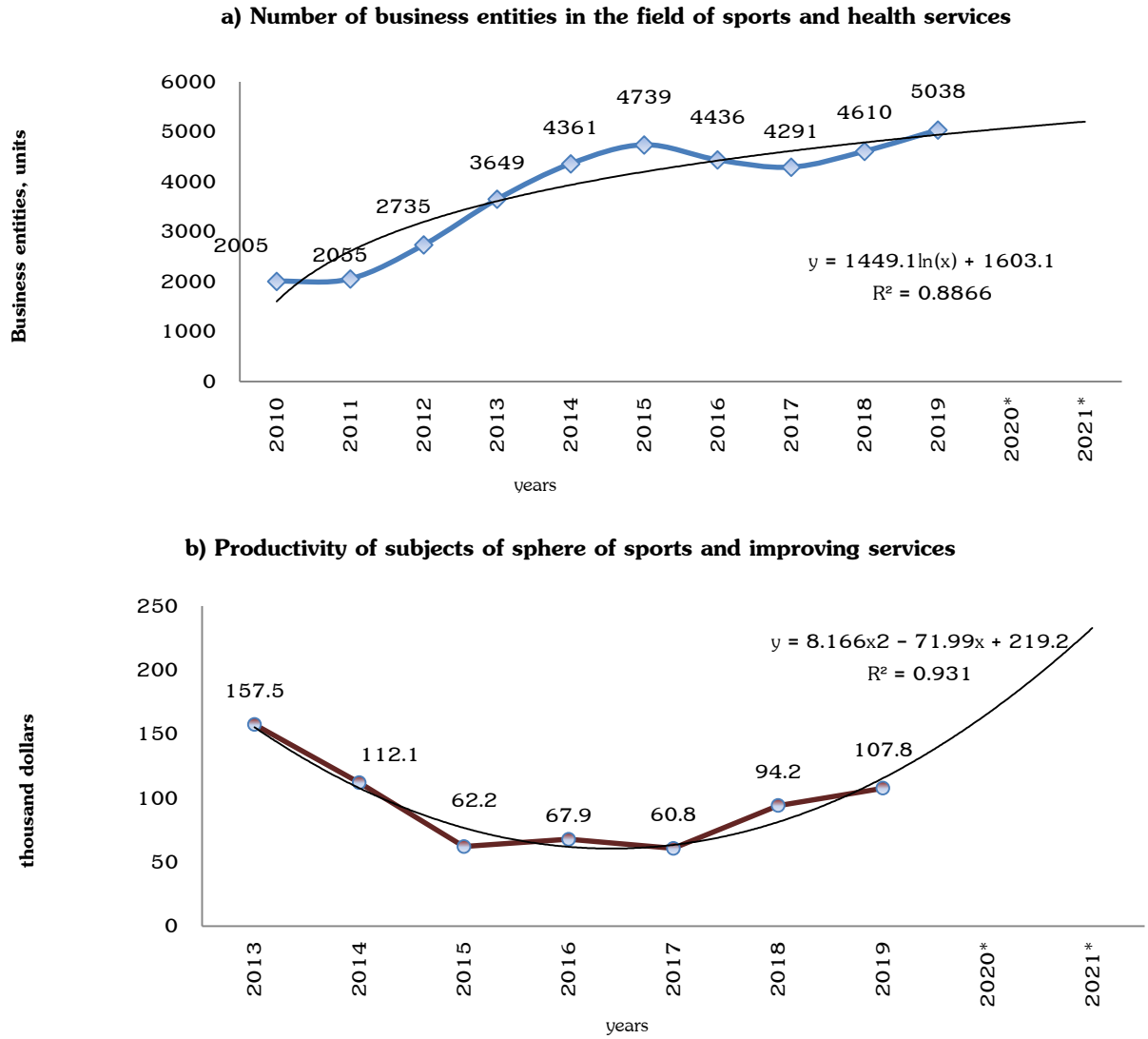

Figure 3. Forecasting the development of sports and health services in Ukraine

** Built according to the State Statistics Service of Ukraine [11].*

However, the difficulty of forecasting the development of sports and health services is that only within the analysis of supply, demand and productivity is difficult to predict the structure, pace, and proportions of the industry. Physical culture participates in the implementation of socio-cultural and educational function, which is manifested in market conditions not only at the level of spontaneous supply and demand but also requires rational organization and effective management by the state. At the present stage of the development of Ukrainian society, the urgency of comprehensive support of physical culture and sports by the state remains; this state of affairs is regulated by current legislation. The state regulates relations in the field of physical culture and sports through the formation of state policy in this area, the

creation of appropriate state bodies, financial, logistical, personnel, information, regulatory, and legal support for the development of physical culture, and sports.

When conducting an economic analysis of sports and health services, it is necessary to take into account state policy and the parameters of the industry, defined by law, in particular in the Strategy for the Development of Physical Culture and Sports for Ukraine until 2028 *[12].* The strategic goal of the development of sports and health is to improve the health of the population; support of high efficiency of people; prevention of various social phenomena; implementation of the constitutional guarantee of the right of citizens to equal access to physical culture and sports, and the development of sports infrastructure provides an influx of new jobs, contributes to the creation of entertainment industry.

In order to create favorable conditions for strengthening the health of citizens as the highest social value, ensuring the realization of the individual`s right to physical activity, the National Strategy for Physical Activity in Ukraine for the period up to 2025 "Physical activity – healthy lifestyle – healthy nation" *[16].* The National Strategy is financed from the state and local budgets, as well as other sources not prohibited by law. The main goal of the Strategy is to create all the necessary conditions for healthy physical activity and a healthy lifestyle, to shape the health of the nation, which is the main value of the state. One of the priority areas to achieve this goal is the formation of the infrastructure of modern and attractive sports facilities at the place of residence, in places of public recreation, on the basis of secondary schools, which should be easily accessible to various segments of the population, especially the poor.

5. Discussion and Conclusion. In Ukraine, the activity of providing sports and health services is a separate area, as evidenced by a number of its inherent characteristics:

1. This sphere is formed by business entities, both natural persons–entrepreneurs, and organizations that have the rights of a legal entity engaged in sports and health activities.

2. The end product of this sphere is sports and health services, the goals and technologies of production of which are based on the basic provisions of the theory and methods of physical education and sports.

3. Its functioning ensures the availability of human resources and the system of training specialists in physical culture and sports.

4. The existence of a state system of accounting and statistical reporting.

5. Characteristic is the sectoral separation of sports and health organizations on the basis of a single governing body – the Ministry of Youth and Sports. Activities are regulated by special legal provisions, in particular, the Law of Ukraine ″On Physical Culture and Sports″, the Strategy for the Development of Physical Culture and Sports until 2028.

This makes it possible to state that the activity of providing sports and health services has all the features that allow it to be attributed to the social *(non-productive)* sphere of the economy.

Among the main reasons for the deterioration of the situation in the field of physical culture and sports in Ukraine, we can highlight:

– insufficient sports infrastructure capable of meeting the needs of the population in daily physical activity in accordance with physiological needs, including persons with disabilities;

– non-compliance of sports facilities with world quality standards;

– low level of propaganda in the media and education of the population on the awareness of the value of health, the lack of an effective system of incentives for the population to maintain their health;

– low prestige of professions in the field of physical culture and sports, low level of material incentives for employees of the public sector in this area;

– low level of medical and medical-biological support of persons engaged in physical culture and sports;

– insufficient budget funding and insufficient attraction of extra-budgetary funds;

– lack of preferences for business structures that would stimulate investment in physical education and sports.

Several factors can contribute to the growth of sports and health services in Ukraine, such as the growing popularity of fitness as a global trend; state policy in the field of sports, which helps to increase the number of people who do sports, in particular in fitness clubs; increasing public funding and recognizing the priority of development of sports and health services in achieving the goals of sustainable development and improving the quality of life.

Despite the problems that have arisen in the state and society, the development of physical culture and sports remains one of the priorities of public policy.

To solve this problem, Ukraine has adopted a Strategy for the development of physical culture and sports for the period up to 2028 *[12]*. The strategy identifies five key objectives, including the promotion of physical culture and sports; strengthening attention to the preparation of athletes for participation in top sports competitions, improving the level and quality of sports medicine, scientific support of training athletes, the autonomy of sports federations for the development of sports; creation of a network of world-class sports infrastructure, ensuring the accessibility and attractiveness of sports facilities; digitalization of physical culture and sports, support of initiatives in the field of sports IT startups; providing the sphere of physical culture and sports with qualified personnel potential.

Among the expected results of the implementation of the adopted Strategy are an increase in the level of physical culture of the population and an increase in the share of people who choose a regular physical activity to 30 %.

To achieve the set results, it is important to have comprehensive interaction of state bodies with public organizations of physical culture and sports, which requires purposeful coordinated work of state institutions, territorial communities, production structures, private organizations, public associations, and specialists in providing physical culture and sports services. This will allow using the opportunities provided by the country`s reform of financial decentralization and enhance the economic potential for the development of physical culture and sports.

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Scientific Approaches to the Understanding of Human Capital Concept

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ABSTRACT

The article systematizes scientific approaches to understanding the nature of the category "human capital". The historical periodization of the concept development is offered. A review of classical and modern approaches to the interpretation of the essence, forms of manifestation, and derivatives of human capital. The study forms the methodological basis for the study of human capital in modern conditions of economic development, taking into account modern concepts and paradoxes of economic development.

KEYWORDS: Human Capital, Economic Theory, Capitalism.

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1 Introduction. The development of social relations in recent decades is characterized by changes in basic concepts and rethinking the place and role of man in them. Qualitative changes in the economy, as a form of organization of social relations in the field of production and distribution of material goods, bring to key positions human capital as a key factor of production. New economic systems, which on the one hand are based on the results of the scientific and technical process, define the human resource as the main quality unit capable of ensuring their effective functioning and sustainable development. Anthropocentrism is a cross-cutting concept of human development that means a revision of approaches and understandings to the positions of the category of "man" in the economic space. Strategic guidelines for sustainable, intelligent, and inclusive human development form the basis for a qualitative rethinking of the content and prospects of human capital development. Accordingly, there is a need to expand the boundaries of scientific knowledge of this category through the prism of transformational trends.

2 Literature Review. The study of the nature and economic content of the category "human capital" is reflected in the works of such classics of economic theory as A. Smith, D. Ricardo, W. Petty, K. Marx, T. Schultz, G. Becker. The current stage of development of economic theory has introduced new interpretations and approaches to understanding the concept of "human capital", which is reflected in the works of I. Pominova, O. Hrishnova, O. Brintseva, O. Bendasyuk, O. Nosyk. On the one hand, the presence of a large number of scientific literature sources forms a broad methodological basis for the study of human capital and forms of its manifestation. However, there is a need to systematize and distinguish evolutionary approaches, key interpretations, derivatives, and manifestations of this category, which creates the basis for a deeper understanding of the nature of human capital and the formation of a methodological basis for studying this category in the context of modern economic processes and phenomena.

3 Methodology. In the process of research, the methods generally accepted in economics were used, in particular: monographic – for the selection of interpretations of the category "human capital"; theoretical and comparative analysis – to identify key differences and approaches to the interpretation of the category of "human capital", its types and derivative forms; historical and logical – to identify the key stages of development of the category of "human capital"; analysis and synthesis, system-structural, abstract-logical – to systematize the key components of the category "human capital".

4 Results. Conceptual approaches division into periods. Theoretical approaches to defining the essence of human capital have been formed over a considerable period of time. According to the change of approaches, concepts, formation of new scientific schools, this category was interpreted by scientists in different ways.

Thus, the development of the concept of "human capital" should be considered in view of the three key stages of its formation, namely:

Stage I. XVII century – the middle of the XX century. Formation of theoretical and methodological principles and scientific basis.

Stage II. The 60s-80s of the twentieth century. Consolidation of the concept of "human capital" in the general economic theory.

Stage III. 80's of the twentieth century – our time. The development and pluralism of approaches, and consolidation of synergetic content of the concept.

The first stage is characterized exclusively by the formation of theoretical and methodological foundations for the development of this concept. During this period, there were no clear views and approaches to the definition of human capital. However, most scholars believe that Adam Smith's views on the definition of labour as a basic factor of production and unit of value forms the basis for the separation of human capital [1]. However, the formulation of the classic economic theory did not contain clear signs of the transfer of the functions of capital to human labour, and in fact, was limited to the identification of manual labour as a factor of production.

Developing the theoretical approaches of A. Smith, David Ricardo empirically proves the fact that there is a significant correlation between the cost of human education and the level of wages. At the same time, D. Ricardo draws attention to the importance of the level of development of education for the economic progress of the country [2]. Accordingly, the views of the scientist emphasize the role and importance of qualifications, skills, and abilities for both the individual and for social development as a whole. Conceptually important are the views of the scientist on the value expression of labour as a factor of production, in particular, in terms of emphasizing the benefits that should be received by the individual. Thus, D. Ricardo draws attention to the existence of natural and market value of labour. The difference in the quantitative expression of the potential and actual income level of the individual is explained in terms of the level of supply and demand. At the same time, by the natural value, he actually meant the minimum or critical level of value needed to meet basic needs. However, from the point of view of the modern concept of sustainable development, it is interesting to say about the increase in the natural cost of labour, which is due to social progress – that is, raising social standards is based on economic growth [3].

A fundamental contribution to the formation of the concept of human capital was made by William Petty, who was the first to attempt to quantify human labour. Thus, the scientist believed that human capital forms the real physical ability of the individual, which should also be attributed to the structure of national wealth. The cost of the bulk of people, according to the concept of W. Petty, was equal to twenty times the equal income that can bring [4].

The approach proposed by Karl Marx is based on the development of human qualities through the prism of fixed capital production, thus substantiating the theory of labour costs. In particular, the scientist considered the process of saving working time in terms of production as the formation of fixed capital, which is actually a person. In addition, he drew attention to the importance of improving the skills and abilities of the individual, believing that their impact is straightforward in relation to increasing productivity [5].

The American economist John Bates Clark in his works also identified capital with the man himself. According to this approach, education, improvement of skills and abilities are considered as an accumulation of capital [6].

In their research, the American economist Irving Fischer and the French researcher Leon Walras considered wages as a percentage of the value of human labour that can accumulate as physical capital [7].

The approach of M. Tuhan-Baranovskyi is interesting, who in his research considered work as a commodity, paying attention to its specific features. Thus, the scientist argued that, unlike goods that are products of industrial production, labour is identified by him with man, and therefore is considered not as an object but as a business entity [8].

At the same time, the founder of the Cambridge School of Economics, Alfred Marshall, in his works defined the role of assessing the capital value of man in terms of labour research. In particular, he has the basic concepts of justifying the importance of investing in human capital. Thus, the scientist believed that the cost of education can produce added value for both the micro-level and contribute to the creation of conceptual innovations capable of systemic change and intensification of development [9].

Thus, at the first stage of the formation of the concept of human capital, no definition was proposed that could be considered as a basic definition of the category. However, the fundamental foundations for the theoretical and methodological substantiation of the role and place of man in economic discourse were laid.

The second stage is fundamental in terms of a clear separation of the concept of human capital in the structure of the economic theory. Thus, the founding parents of this area are representatives of the Chicago School of Economics.

The author of the concept of "human capital" T. Schultz understands human capital as a stock of acquired knowledge, skills, experience, health, abilities, motivations, and energy that can be used for a certain period of time to produce goods and services, at the same time capital is an integral part of man and that is why it is the future source of his income. "It is a form of capital because it is a source of future earnings or future pleasures or both. He is human because he is an integral part of man".

The key contribution to the formulation of the concept was made by Theodor Schultz, substantiating the position that human abilities and qualities are a form of capital [10]. Importantly, the scientist expanded the understanding of the category of "labour" as a factor of production, aptly noting that expanding the understanding of this category to the object of investment creates opportunities for innovative development of the entire economic and social system [11].

In a narrow sense, the scientist considered human capital as a set of knowledge, a set of knowledge, skills, and abilities used to meet the comprehensive needs of man and society [10]. In fact, this very definition has become fundamental and system-forming for the whole concept.

Substantiating the need to invest in human capital to obtain added value in the future, T. Schultz focuses on five main areas that should also be attributed to human capital:

1) medical institutions and services, including all costs that affect life expectancy, endurance, strength, and viability of people; 2) training at the place of work; 3) formal education at primary, secondary, and higher levels; 4) training programs, in particular, in agriculture; 5) migration of people and families to adapt to changing jobs [12].

According to the scientist, human resources are like, on the one hand, natural resources, and on the other – material capital. After birth, man, like natural resources, has no effect. Only after proper "processing", a person acquires the quality of capital. That is, with increasing costs to improve the quality of the labour force, labour as a factor is gradually transformed into primary human capital. Scientists argued that human capital is a form of capital because it serves as a source of future earnings or future pleasures. And it becomes human because it is an integral part of man.

T. Schultz used the concept of human capital to analyze and substantiate the growth prospects of countries. He was one of the first to calculate the amount of human capital for the United States in 1961. According to him, the main results of investing in people – are the accumulation of people's ability to work, their effective creative activity in society, maintaining health, and more. He saw that human capital has the necessary characteristics of a productive nature that is able to accumulate and reproduce.

The second key figure in the development of "human capital" was the American economist Gary Becker, who considered the essence of the category, focusing on value and production aspects. Thus, according to the scientist, human capital is formed by the production knowledge, skills and training that a person has, and in particular the value formed as a result of the cost of training, education, health [13].

G. Becker, creating a general theory of human capital formation, simultaneously analyzed the economic efficiency of education. According to his conclusions, the human capital of the enterprise is a set of skills, knowledge, and abilities of a person, the cost of which through education, internal corporate training can eventually bring significant profits to both the employee and his employer. [14].

G. Becker in his work "Human Behaviour: An Economic Approach" believes that "human capital is a stock of knowledge, skills, motivations that everyone has, and its main feature - in inseparability from the personality of its carrier; it is formed through investments in education, accumulation of work experience, health care, geographical mobility, information retrieval" [13]. Knowledge and competence in the concept of human capital were identified as fundamentally important sources of economic growth, and, accordingly, the economic role of education, science, health care, which were previously treated separately as industries that consume rather than produce.

G. Becker considered education, gaining professional experience, healthcare, geographical mobility, and information retrieval to be investments in human capital. These investments improve skills, knowledge, or health and therefore increase cash or in-kind income. In addition, the scientist formulated a universal model of distribution of personal income, which is based on the distribution of supply and demand of investment depending on family income and the natural abilities of schoolchildren. From this Becker concludes that families who leave a legacy deduct investment in

human capital in the optimal amount, against those families who do not leave a legacy, often under invest in their education [13].

However, during this period, there were some other approaches to the definition of human capital. Thus, S. Fischer considers human capital first of all innate abilities and talents of the person, and only then its achievements owing to education and qualification [15].

At the same time, E. Dolan and D. Lindsay define human capital as the capital of mental abilities acquired as a result of "formal learning, education or practical experience" [16].

Representatives of filter theory also consider education to be the main mechanism that selects and ranks people according to their ability levels, although productivity is more influenced not by education but by the personal capabilities of the employee. The left-wing current in relation to human capital has argued that its main component is education, which promotes the development of human capital and ensures the competitiveness of the economy. The orthodox current claims that human capital consists of the properties and abilities of the people involved in its formation and creates a dynamic model of investment in human capital. In the scientific works of J. Mincer, in particular, in the work "Schooling, experience and earnings" the results of scientific research on the formation of investment in human capital are presented. That is, his approach is based on the assessment of the parameters of the so-called production function of earnings. According to research, the level of income is 60% influenced by education, work experience, number of hours worked, with education having the greatest impact, 25%. Among the investments in human capital that develop a person's mental abilities, the scientist includes education, training, medical services, the cost of optimizing migration, and others [17].

The representative of the neo-institutional direction of economic thought S. Rosen supplemented the theory of human capital by analyzing the main components of investment in brand-specific human capital, including the cost of adaptation of workers to the firm and the formation of workers' teams [18].

Nobel laureate Simon Kuznets considered the accumulated national human capital as the most important factor of economic development. In Capital and the American Economy (1961), he emphasized that the country's greatest asset is its people with their skills, experience, and motivation for useful economic activity [19]. S. Kuznets pointed out the connection between the level of accumulation of human capital of the country and its technological development, the formation of new technological systems.

Thus, at the second stage of development of the concept of human capital is its separation into a separate scientific field of research within economics. However, the research conducted within this period forms the basis for considering the category through the prism of interdisciplinary and synergetic. It is important to form a theoretical and methodological basis for studying the impact of human skills on the level of development of the economic system in general, and the formation of specific sectors in particular. These basements have given impetus to the development of the concept in the future, which continues today.

The third period of development of the concept of human capital is characterized by the expansion of the range and tools of its knowledge. During this period there is a formalization of the system of derived forms and specific formations on the basis of human capital. Also important is the approach to the consideration of human capital at different levels of functioning and deepening research on the relationship between the categories of "human capital" – "economic development".

In order to systematize the modern discourse of human capital research, let us pay attention to the opinion of John Kenneth Galbraith, who draws attention to the fact that human capital as an economic category cannot exist only in a market economy, in market conditions, like other forms of capital to work is a commodity that brings not only value but also added value. The market pays for what has value. It is in a market society that people's inequality in their intellectual abilities is most striking. The gap between what a person really is and his or her current successes, on the one hand, and what he or she thinks about his or her capabilities and achievements, on the other, is ruthlessly exposed. J. Galbraith noted: "The dollar invested in human intelligence often brings a greater increase in national income than the dollar invested in railways, dams, machinery, and other capital goods. Education is becoming a highly productive form of capital investment" [20].

Currently, there are many approaches to defining the category of "human capital", which in essence form a general concept, but have distinctive features. The analysis of theoretical research made it possible to identify the most significant and conceptual definitions and systematize them in terms of three approaches:

1. Functional approach, which consists in introducing into the understanding of the essence of human capital functional characteristics that reflect the ability to reflect.

2. The resource approach reflects the understanding of human capital as a system of accumulation of qualities, skills, and characteristics capable of creating added value.

3. The production approach gives an understanding of human capital as a direct means of production.

At the same time, due to the synergetic nature and multidisciplinary of scientific approaches to the study of the concept of human capital, there are some difficulties in defining its essence. Thus, I. Kalenyuk proposes to study the nature of human capital from the standpoint of economics and sociology. In particular, she believes that from the point of view of economic research, when assessing human value, people themselves cannot be assessed, so the category of "employee" does not belong to the economic, but only the stock of knowledge, skills, abilities and professional abilities cannot be called human capital, so this category is considered by the researcher as a system of economic relations. At the same time, if a certain set of abilities and acquired knowledge of a person is integrated into this system, they can be interpreted as capital [21].

5 The dual nature of human capital

An equally important aspect of the study of scientific knowledge of the concept of "human capital" is its dual nature. Accordingly, the definition of the key characteristics and features of this concept also requires consideration of the category of "capital" and characteristics that move from one category to another.

As G. Bashnyanin et al. note, capital is traditionally understood as one of the factors of production or everything that is used for production, but is not directly consumed in it, except for slow depreciation. [22].

V. Pozhuiev et al. consider capital as a factor of production in the form of value that can bring profit. However, the scholar notes that capital and any means of labour, which is often seen as physical capital, should not be equated. A tool can become capital only when its owners enter into certain relationships with the owners of other factors of production [23].

Capital is not a thing, not property, but economic relations about a thing, about a change in value, its capitalization [22].

It is worth paying attention to the opinion of H. Rozhkov, who draws attention to the fact that human capital is intangible, and therefore has a non-material or intangible nature, respectively, can be described as ″invisible assets″ [24].

Summarizing the results of theoretical research and based on the priorities and objectives of human capital in the development of knowledge economy, in our opinion, it should be characterized by such basic parameters that do not contradict but only generalize all the above points of view. According to the current interpretation, the key component is the knowledge that affects others, and in modern conditions of knowledge, economy determines the process of human capital development. At the same time, the process of knowledge formation is related to the availability and possibility of obtaining information [25].

O. Bendasiuk notes that the introduction of the category of human capital has significantly expanded the theoretical and analytical apparatus of economic analysis. It also allowed taking into account the life cycle of the employee's reproduction, investment aspects of human behaviour in the labour market, to include human lifetime to key economic resources [26].

From the point of view of comparing the main characteristics of the categories "capital" and "human capital", it is important to determine those specific features of the latter that substantially distinguish it from the former. In particular, various scientists offer the following approaches:

O. Nosyk draws attention to the intangible nature, which is reflected in man and causes his inalienability from the owner (illiquidity), in addition to the intellectual property rights of the individual, and the possibility of use by others. The scientist also draws attention to the significant role of non-economic (irrational) motivation to invest, when, for example, the cost of educating a child is borne by the family not only to earn high income in the future but also to change its social circle, increase social status and more. At the same time, there is a dependence of the amount of human capital on human lifetime, first of all, the duration of the period of its productive activity. Also important is the significant role of consumption factors in the formation of human capital. In addition, the ability of human capital to self-invest when the available stock of human capital is an investment in its further accumulation, and the ability to provide the owner and user of human capital not only various forms of tangible or monetary income but also intangible benefits (e.g. human capital is a factor) intangible benefits of its owner, such as reputation and competitiveness in the labor market) [27].

A. Dobrynin draws attention to such a feature of human capital as exhaustion. Thus, the depreciation of human capital is determined by the degree of natural wear (aging) of the human body and its inherent physiological functions, as well as the degree of moral (economic) wear due to deactivation of knowledge or change in the value of education [28].

A. Rassadyna emphasizes that human capital is a long-term economic resource, the reproductive turnover of which is 5-6 times higher than the duration of the average turnover of fixed capital; its "depreciation" has a reverse sign: the productive value of the worker increases over time [29].

B. Pasckhaver identifies the possibility of using not only cost but also non-cost indicators to assess human capital, which can be monetary and non-monetary, as one of the features of human capital. The basis of monetary valuation of human capital is the method of capitalization or the effect of its use, or consumer spending. Unlike human capital, as the scientist points out, the assessment of reproducible capital does not require a discount calculation: tangible goods have a real market price, which should be reflected in accounting through current and periodic revaluations of balance sheet items. B. Pasckhaver identifies the possibility of using not only cost but also non-cost indicators to assess human capital, which can be monetary and non-monetary, as one of the features of human capital. The basis of monetary valuation of human capital is the method of capitalization or the effect of its use, or consumer spending. Unlike human capital, as the scientist points out, the assessment of reproducible capital does not require a discount calculation: tangible goods have a real market price, which should be reflected in accounting through current and periodic revaluations of balance sheet item [30].

A comprehensive definition of the essence of human capital requires consideration of all its components, in particular, those inherent in the capital as such, and specific qualities that characterize the intellectual and creative activity of man.

6 Levels of knowledge and functioning of the category "human capital"

Thus, the consideration of human capital levels is substantiated. In particular, the following levels of human capital functioning should be distinguished: personal; organizational; macro level; mega level.

The study of human capital at the global level is an objective requirement of the modern economy, in which any capital is either initially global in nature or becomes so in the process of accumulation. New economic forms are built around global network structures of capital, management, and information, and access to technical skills and knowledge through such networks is now the basis of productivity and competitiveness [31].

By nature, human capital is more international than physical capital. Effective development of scientific knowledge and inventive activity in the modern world is impossible within purely national boundaries, and the generation of the bulk of the latest technological ideas is concentrated in a limited number of the most developed countries; formation of a system of trademarks for goods and services in the world's leading economies is designed in advance for international use (world-famous trademarks, which are associated with consumers around the world with the highest quality standards); The functioning of a key component of the system of human capital formation - higher education – can be effective only in the conditions of the widest possible use in the educational process of the latest

achievements of science and wide exchange of international teaching experience by teachers and students [32].

Global human capital is a set of knowledge, experience, skills, creativity, intellectual products, and relationships accumulated in the process of intellectual activity and historical development of mankind, involved in the system of world social production for the economic development of mankind [33].

7 Structure and forms of human capital

An equally important aspect of research that affects the understanding of the essence of the category of "human capital" is the question of its forms. It is the forms of human capital that can influence its development in each case because they have different opportunities to create added value.

Human capital has various forms, due to the multifaceted content of this interdisciplinary category. The form of an object or process is "the internal structure, structure, defining and determining the order of the object or the order of the process". Forms of human capital are interconnected structural elements (components), the separation of which is based on the definition and application of certain criteria for structuring its content. The most common approaches to defining the forms of the human capital of the individual as interrelated elements of its structure are investment and resource [34].

According to O. Nosyk, the structure of human capital is not a set of its forms, but a certain ordering, interconnection, and interdependence of elements of human capital as an integrative system. Thus, among these forms should be distinguished basic, i.e. those that are the source and basis of other forms, and complex, defined by the basic forms, in some way they are generalized, integrated, and implemented in the process of human activity in various social spheres. It is on their basis that complex forms of human capital are formed – intellectual, labour, organizational and entrepreneurial, human social capital [27].

According to G. Becker, forms of human capital are determined according to the objects of investment in man. These are education, vocational training, acquisition of other types of knowledge as a result of "investing in information", medical care and health care (investment in health), information retrieval and mobility (investment in the ability to change), family education [14].

Human capital is a measure of people's ability to earn an income based on the use of their human qualities, among which education and qualifications stand out [35]. Negative human capital is an accumulated stock of special and specific knowledge, pseudo-knowledge, skills, moral and psychological characteristics, which is purposefully used by man in social and labour relations, does not increase productivity, but at the same time affects the growth of income of its owner, reducing possible enterprise profit and national income [36; 37]. The phenomenon of formation of negative human capital is due to factors of macro-, meso- and microeconomic, as well as personal levels, which are political and socio-economic instability, distrust of government, insecurity, uncertainty in the socio-labour sphere, deepening differentiation of quality of educational and medical services, increasing the negative impact of corruption, the gradual reduction of investment in the development of the social sphere, training and rehabilitation of staff, lack of resources and opportunities for quality education [36].

L. Shevchuk considers potential and real human capital as the basic human capital and introduces the concept of "advanced human capital". It is a monetary capital intended for preschool and school education, the functioning of the health care system, culture and housing, institutions, organizations and enterprises that provide normal living conditions, without which it is impossible to create basic human capital and ensure its reproduction [38].

Instead, the traits presented by the authors should be identified with human potential, i.e. natural, acquired at birth and physiologically developed, as well as acquired as a result of education, life, intellectual and work experience opportunities. The latter does not necessarily involve reaping the benefits.

In general, human capital includes such characteristics as intelligence, education, health, ability to work, quantitative and qualitative work, level of education, acquired qualifications, quality of life [39]. In this case, based on the analysis of foreign and domestic sources, we can identify three basic components of human capital: physiological, related to natural human health, its physical and biological essence; labour, which is manifested as a person's ability to produce work, his labour motivation, productive attitude to work, acceptance and observance of accepted rules and norms of labour culture; intellectual, including intelligence, acquired knowledge, skills, abilities, experience. From the point of view of today's level of information economy the most important factor that ensures the efficiency of innovation processes is the intellectual component of human capital [40].

I. Skoblyakova, A. Tsyrenova, G. Rozhkov in the structure of human capital allocate health capital, cultural and moral, labour, intellectual, organizational, entrepreneurial and social capital [41; 42; 24].

S. Klimov in the composition of inalienable human resources identifies the following components:

– biophysical capital as a vital resource of the individual, his physical and psychological potential, considered in the context of the ability to create value;

– intellectual capital as a set of inalienable intellectual human resources;

– social capital as social resource of the individual, the potential of social interaction, human inclusion in a particular social environment.

"All these types of resources are closely connected with the individual, constitute his physical and spiritual essence and cannot be alienated without the destruction of the individual himself" [43].

Thus, the structure of human capital, its forms of manifestation and derivatives are interpreted by different scientists in different ways, depending on the selected feature. However, it should be noted that a common feature of such classification and / or structuring is the synergistic combination of the categories "person" and "capital".

8 Discussion. Thus, in our opinion, human capital is a factor of production formed on the basis of knowledge, skills, and abilities of the individual, as well as their derivatives, characterized by the ability to create added value in tangible and intangible form, have value and quality characteristics, and which require capital investment in order to ensure quality and reproduction in the form of development. The

concept of human capital in modern scientific discourse has all the hallmarks of polystructural and synergy. Studies of the nature and essence of this category have long gone beyond a purely economic understanding. The cross-sectoral nature of human activity should be considered a consequence of the evolutionary progressive development of human capital, which creates the basis for the development of complex subsystems of the economy. Accordingly, the complexity of the nature of human capital shapes different approaches and methods of its study. In order to optimally define the essence and formation of methodological foundations for understanding the nature of human capital, the process of studying its content should be carried out taking into account the historical aspect of its formation and genesis; identification of properties that are laid down through the category of "capital"; organizational levels of manifestation; logical-structural aspect and derived forms.

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The Concept of Spherical Waves of Higher Education Development Management

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ABSTRACT

The aim of the article is to develop the concept of spherical waves of management of higher education development in Ukraine**.** The concept consists in integration into European Higher Education Area **(**EHEA**)** on the basis of five spherical waves**:** equal interaction of all participants of the educational process; extension of management actions to various spheres of activity of the higher education institution **(**HEI**)**; interactions with stakeholders; dissemination of management actions at different levels; coverage of all successive phases of the management process**.** The spherical wave of higher education management within a HEI is defined as a set of certain homogeneous elements **(**phases, levels, stakeholders, spheres or participants of the educational process**)**, which is targeted management influence from the relevant management center **(**HEI's leadership**)** to achieve strategic, tactical and operational goals of the HEI in the EHEA**.** The mechanism of involvement of stakeholders in cooperation with the HEI is described**.**

KEYWORDS: Spherical waves, Higher education, Development management, Higher education institution, European Higher Education Area.

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1. Introduction.*Concept* **(**from the Latin conceptus – «concept», «water accumulation, reservoir», «conception», «fruit»**)** – an innovative idea, that contains a creative meaning **[**1 **].**

In the context of the formation of the European Higher Education Area **(**EHEA**)**, the directions of research of conceptual bases of management of development of higher education in Ukraine were as follows**:** conceptual bases and directions of development of higher education in Ukraine **[**2 ; 3; 4**]** ;conceptual bases of innovative way of development of higher education in Ukraine **[**5; 6**]** ; conceptual foundations of higher education in the information society **[**7**]** ;conceptual principles of management in the system of higher education **[**8; 9**]** ; conceptual approaches to public administration of higher education **[**10; 11**]** ;conceptual vision of changes in corporate governance standards in the higher education system of Ukraine **[**12**]** ; conceptual principles of quality management in higher education **[**13; 14; 15**]** ; conceptual principles of communication activity of a modern university in the conditions of internationalization of higher education **[**16**]** ;We proposed strategic directions for modernization of the higher education management system in Ukraine **[**17**]** ;Researchers from other countries have studied the following management aspects in higher education**:** innovations in the management of higher education in Syria **[**18**]** ; concept **"**quality development**"** in the UK **[**19**]** ; entrepreneurial university: an exploratory model for higher education [20]

However, conceptual bases of management of development of higher education in Ukraine need to be improved and supplemented in terms of an integrated approach**.**

2. Proposed Techniques / Algorithms. The aim of the article is to develop the concept of spherical waves of management of higher education development in Ukraine**.**

To implement it, the following tasks were set and performed**:**

1) define the concept of «spherical wave of higher education management within a higher education institution **(**HEI**)**»;

2) describe the elements of each wave;

3) develop a mechanism for attracting stakeholders to cooperate with HEIs**.**

The method of synthesis is used in the work to construct a new concept of higher education development management in Ukraine; analysis – to decompose each wave of the concept into individual elements**.**

3. Experimental Results. The term *spherical wave* comes from physics and means a wave that propagates from or coincides with a point source [21]**.** In our opinion, the *spherical wave of higher education management within the HEI* is a set of certain homogeneous elements **(**phases, levels, stakeholders, spheres or participants of the educational process**)**, which is targeted management influence from the relevant management center **(**HEI's leadership**)** to achieve strategic, tactical and operational goals of the functioning of the HEI in the EHEA**.** According to the developed concept (innovative idea), the management cycle in HEI lasts one year. The five equivalent waves begin to

appear at the beginning of the new school year and subside before it ends. Their graphic image is given in **Fig. 1**.

The first spherical wave of management of the development of higher education includes all participants in the educational process: scientific, scientific-pedagogical and pedagogical workers; applicants for higher education and other persons, studying in the HEI; specialists-practitioners, who are involved in the educational process in educational and professional programs; other employees of the HEI.

The second spherical wave of management of higher education development contains 13 spheres of management of HEI: household, economic, investment, information and analytical support, marketing, international, research and innovation, accounting, educational, career guidance, social, personnel management, financial.

The third spherical wave of higher education development management unites 16 groups of external stakeholders, who can influence the activities of the HEI or make decisions in it, be influenced by these decisions or perceive themselves: Ministry of education and science (MES), National Agency for Higher Education Quality Assurance (NAQA), public authorities (except MES), local governments, Supervisory board, applicants, religious organizations, grantors, investors, media, employers, labor exchanges, business structures, local communities, non-governments organizations (NGOs), graduates.

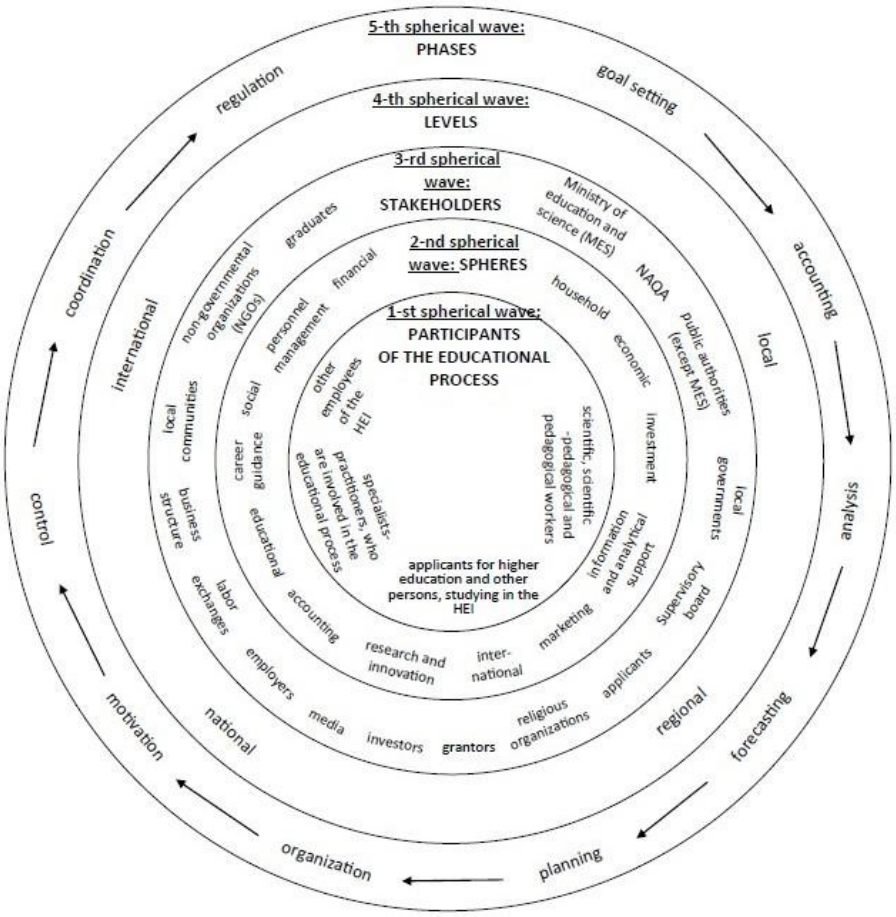

Figure 1. The concept of managing the development of higher education in Ukraine in the functioning of the EHEA in the form of spherical waves [22]

The fourth spherical wave of higher education development management includes four levels, which can cover the process of the HEI management: local, regional, national, international.

The fifth spherical wave of higher education development management contains **10** consecutive phases (activities), in which the HEI is carried out: goal setting, accounting, analysis, forecasting, planning, organization, motivation, control, coordination, regulation.

According to the concept, the management of the HEI in Ukraine is to integrate into the EHEA on the basis of five spherical waves:

– equal interaction of all participants of the educational process;

– extension of management actions to various spheres of activity of the HEI;

– interaction with stakeholders, the mechanism of involved of which to cooperation with the HEI is shown in **Fig. 2**;

– dissemination of management actions at different levels;

– coverage of all successive phases of the management process.

Let us dwell on the analysis of these spherical waves in more detail.

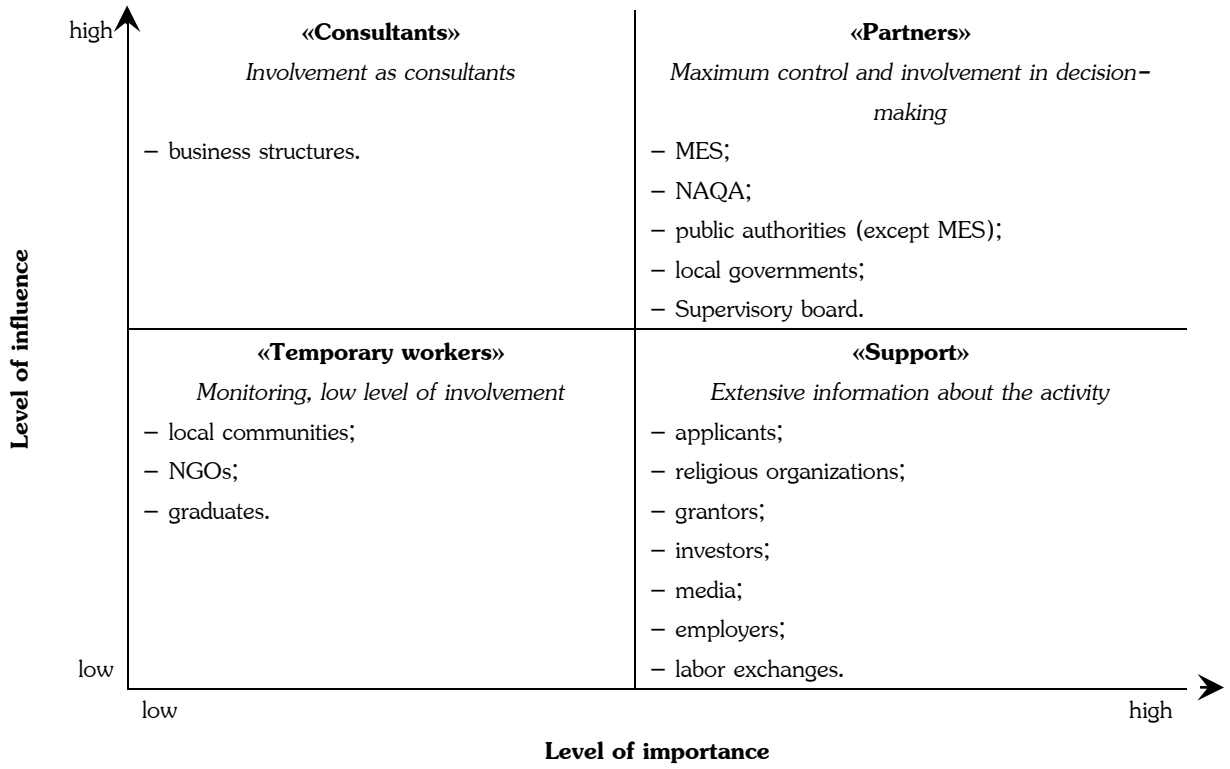

Figure 2. The mechanism of involvement of stakeholders to cooperation with the HEI [22]

The first spherical wave of management of higher education development is the following participants of the educational process of a separate HEI:

– scientific, scientific-pedagogical and pedagogical workers;

– applicants for higher education and other persons, studying in the HEI;

– specialists-practitioners, who are involved in the educational process in educational and professional programs;

– other employees of the HEI.

Their rights and responsibilities are described in the Law «On Higher Education»: Article 57 «Rights of scientific-pedagogical, scientific and pedagogical workers»; Article 58 «Duties of scientific-pedagogical, scientific and pedagogical workers»; Article 62 «Rights of persons, studying in the higher education institutions»; Article 63 «Duties of persons, studying in the higher education institutions». However, the law does not specify on what principles the relationship «leader – subordinate» should be built. And this is necessary in order to protect lower-level officials from discriminatory actions of their leaders.

Such relationships should be considered in two aspects:

– the attitude of managers (rector, vice-rectors, deans, heads of departments, etc.) to subordinates;

– the attitude of subordinates to managers.

Since every leader must be a leader among his subordinates, accordingly, he must have leadership qualities. Thus, G. Yukl developed 19 categories of leader behavior. These are, in particular: the main emphasis on production (in our case, – the provision of educational services); sensitivity, attentiveness; nasal; praise and recognition; remuneration for activities for the benefit of the company (in our case, – HEI); participation in decision-making; transfer of powers; explanation of roles; goal setting; teaching; distribution of information; problem solving; planning; coordination of actions; facilitation of work; involvement of consultants; establishing a favorable climate in the team; conflict management; discipline and criticism [23].

In fact, this list contains requirements for the leader in the process of managing his team. But it can be supplemented and detailed on the basis of information from the main Christian book – the Bible, because the basic moral principles of human life are described in it.

First, on the basis of Old Testament examples (in the order of their mention in the Bible), we can identify 14 desirable qualities for modern managers of the HEI of different levels (rector, vice-rectors, deans, heads of departments, etc.). This is shown in **Fig. 3**. These include the following: decency, trust in subordinates, resolving interpersonal conflicts in the team, keeping the word, sacrifice, magnanimity, initiative, care for sick (tired, exhausted) subordinates, generosity, gratitude, respect for dead subordinates, determination, loyalty, honesty. At the same time, in our opinion, the categories of moral behavior of subordinates in the HEI should include: love, fidelity, respect (honor), obedience, patience. This is shown in **Fig. 4**.

And on the basis of the categories of leader behavior developed by G. Yukl, we will try to form a list of desirable qualities for the subordinate, some of which will be a mirror to them and to some extent paradoxical. Our idea is that the ideal worker should work conscientiously without expecting reward; first of all to be exacting to itself, instead of to the administration. After all, in case of non-performance by the boss of any of the above 19 actions, the subordinate can expect disappointment. In size, it will be directly proportional to his expectations.

Therefore, the portrait of the ideal subordinate should contain the following touches:

– the main emphasis on professional activity – conscientious performance of official duties;

– compassion – taking into account the mood and condition, in which colleagues are at work and, in particular, the leader («Rejoice with those who rejoice, and cry with those, who cry» [24]) ;

– self-pumping – the search for their own motivating factors to improve their work (increase self-esteem in its better, faster and more efficient performance, etc.);

– modesty – avoiding praise and recognition, which can lead to anxiety and vanity;

– lack of initiative in the matter of additional remuneration for activities for the benefit of the HEI – such an initiative should belong to managers or colleagues, who are familiar with the work of the employee;

– participation in decision-making – if they are made collectively;

– acceptance of additional powers (at the initiative of management) – performance of part of the functions of another employee, responsibility for their implementation;

– clarification of the role – their job responsibilities and rights, as well as the degree of responsibility;

– realization of the set goals – fulfillment of management requirements;

– self-study – independent professional development;

– awareness – awareness of the state of affairs within the HEI;

– participation in problem solving – initiative in difficult situations;

– planning – rational management of working time (effective time management);

Categories of behavior of managers of different levels of the HEI on the basis of Old Testament examples
decency
Joseph, who ruled over the entire estate of his master Potiphar (Pharaoh's courtier, chief of the guardians), refused to sleep with his wife at her suggestion (Gen. 39:1–12).
trust in subordinates
The Egyptian pharaoh placed thirty-year-old Joseph over his house and all the land of Egypt (Gen. 41:37–46).
resolving interpersonal conflicts in the team
When Moses saw two Jews quarreling, he said to the offender: «Why are you beating your neighbor?» (Exodus 2:13).
keeping the word
Jephthah, the Gileadite, promised the Lord that in the event of a victory over the Ammonites, after his peaceful return, he would bring Him to the burnt offering that would come out to meet him from the gates of the house. Jephthah was first met by his only daughter, over whom he made his vow (Judges 11:29–40).
sacrifice
To avenge the Philistines, Samson did not spare even his life. He removed two middle pillars, on which the house of the Philistine rulers stood, and perished alone with three thousand enemies on the roof (Judges 16:26–30).
magnanimity
The Lord pointed to Saul as a king for Israel, but some unworthy people neglected him and did not offer him gifts. About a month later, Saul defeated the Ammonites and people wanted to kill those, who were against his reign. However, he did not allow it (1 Sam. 10:17–11:13).
initiative
Saul's son Jonathan, along with his armor-bearer, secretly from his father ascended the rock to the Philistine detachment, defeating his enemies, and thus inspiring the Israelites to battle (1 Sam. 14:1–23).
care for sick (tired, exhausted) subordinates
King David once persecuted the Amalekites, who took captive the inhabitants of his city, Sekelag. Only four hundred of six hundred men, who accompanied the king, were able to pursue the enemy to the end and return the captives. The other two hundred stopped exhausted near the Vosor stream. After a happy return with the victory, the king decided to divide the spoils equally among all: those, who went to war and those, who remained in the camp (1 Sam. 30:1–25).

Figure 3. Categories of behavior of managers of the HEI on the basis of Old Testament examples [22]

Categories of behavior of managers of different levels of the HEI on the basis of Old Testament examples
Generosity
After the ark of God was solemnly transferred to the city of David (Zion), the king distributed one loaf of bread, a piece of fried meat, and a cake to each nation, to all the Israelites present (2 Sam. 6:18–19).
Gratitude
During King David's stay in Mahanaim, when he was fleeing from his son Absalom, Barzillai, the Gileadite, provided him and the people with him with food. After defeating his enemies, David told Barzillai to go with him, and the king would feed him in Jerusalem (2 Sam. 19:32–33). In addition, before his death, he commanded his son Solomon to show mercy to the sons of Barzillai so that they would be among those, who are fed at the king's table (1 Sam. 2:7).
respect for dead subordinates
Tobit, the Naphtali, was taken captive to the country of Assyria, to Nineveh. There he did many good deeds to his fellow tribesmen, in particular, if he saw one of them dead and thrown out of the city wall, he buried him (Tov. 1:1–17). Judas Maccabeus, after defeating Gorgias' army, collected up to two thousand drachmas of silver and sent them to Jerusalem to offer sacrifices for the sin of his dead soldiers, who were idolaters (2 Maccabees 12:32–45).
Determination
Judith, an Israelite, was not afraid to go to Holofernes, the commander of the Assyrian army, and kill him, protecting her people from death and plunder (Judith 8–13).
Loyalty
Three pious Jewish men, Ananias, Mishael and Azariah, refused to worship the golden idol erected by king Nebuchadnezzar and were thrown into a furnace burning with fire (Dan. 3:8–21).
Honesty
Eleazar, the scribe, refused to eat the meat he had prepared under the guise of an idol sacrifice, so as not to tempt the Jews (2 Maccabees 6:18–31).

The end of Figure 3.

– coordination of actions – coordination of their actions with other persons, involved in the implementation of common tasks, subject to subordination;

– facilitating the work of the team – with the help of innovation proposals, innovative approaches, optimization of various processes, etc.;

– counseling – transfer of own professional experience to colleagues (less knowledgeable or beginners);

– establishing a favorable moral climate in the team – with the help of friendliness and sincerity in communication;

– prevention of inflaming conflicts – dispassionate, impartial, tolerant attitude to the conflicting parties, participation in their reconciliation;

– self-management and self-criticism – organization, objective view of the results of their work.

Categories of moral behavior of subordinates in the HEI
love
When David wanted to drink during the war, three of his brave warriors risked their lives to break through the Philistine camp to draw water from the well of Bethlehem and bring it to him (2 Sam. 23:15–16).
fidelity
When David fled from his son Absalom and was forced to leave Jerusalem, he was followed even by a stranger Effei, who said, «... wherever my lord king is, whether in life or in death, there will your servant be» (2 Sam. 15:21).
respect (honor)
David, who was persecuted by king Saul, had the opportunity to kill him several times, but did not take advantage of this, saying to his people, «... the Lord will not allow me to do this to my master, the Lord's anointed, to lay my hand on him ...» (1 Sam. 24:7).
obedience
«Submit yourselves to all the rulers of men for the Lord's sake: whether to the king, or to the supreme authority, or to the rulers, as from Him sent to punish the wicked and to praise those, who do good ...» (1 Pet. 2:13–14).
patience
N. Serbsky urges: «Do not allow the land to be more patient than you, when the peasant plows it or the one, who builds the road, leveled it. Be patient like it, because you are destined for a great reward» [25].

Figure 4. Categories of moral behavior of subordinates in the HEI [22]

As you can see, this list of desirable qualities of the subordinate is quite complete. He describes two aspects:

a) attitude to work;

b) relationships with management and colleagues.

But, if desired, everyone can create their own portrait of the ideal subordinate, modifying our proposed option.

The second spherical wave in higher education in Ukraine – the spheres of activity of the HEI: household, economic, investment, information and analytical support, marketing, international, research and innovation, accounting, educational, career guidance, social, personnel management, financial.

The third spherical wave in higher education in Ukraine is stakeholders. Among the stakeholders-«partners» of higher education we include those organizations (MES; NAQA; public authorities (except MES); local governments; Supervisory board), which have the maximum control and involvement in

decision-making on the HEI. They are able to do this through the adoption of various regulations, funding, and so on.

In our opinion, the *stakeholders* of higher education, on whose *support* the HEI should count, and who should be widely informed about various aspects of their activity, include:

– applicants – receive information about educational services and at the same time potentially provide the teaching staff with a teaching load;

– religious organizations – provide moral and spiritual support to participants in the educational process;

– grantors and investors – finance scientific-innovative, educational and other spheres of activity of the HEI;

– media – widely inform the public about the activities of the HEI, and, in particular, carry out their popularization;

– employers and labor exchanges – offer vacancies and provide employment for graduates.

It should be noted, that the HEI and religious organizations in Ukraine are not prohibited from cooperating. Such interaction can take place through chaplaincy and the construction of a chapel in the HEI, where employees and students will be able to satisfy their moral and spiritual problems. It should be noted, that the Basic Law of Ukraine was adopted, «aware of the responsibility to God, their own conscience, previous, present and future generations» [26]. On this basis should be based the morale of scientific, scientific-pedagogical and pedagogical workers, and the academic integrity of the participants in the educational process; to affirm their moral values [27]. In addition, some scientists point out, that the innovative way of development of higher education in Ukraine, its conceptual foundations should include the training of highly moral personnel and the spiritual orientation of education [5; 6; 7].

Stakeholders-«consultants» of higher education include business structures, whose representatives the HEI can involve to advise on the commercialization of their developments, as well as the competencies, that students must acquire by the end of their studies to apply for high-paying positions in these organizations.

Stakeholders-«temporary workers» of higher education, in our opinion, are graduates, NGOs, as well as local communities, whose level of involvement is low and whose activities should be monitored by the HEIs.

The *fourth spherical wave in higher education in Ukraine* is the levels of management of the HEI, where HEIs interact with various stakeholders: local, regional, national, international.

The *fifth spherical wave in higher education in Ukraine* – successive phases of management of HEI: goal setting, accounting of the resources (material, financial, labor); their analysis; forecasting on this basis the future of the HEI; implementation strategic, tactical and operational planning of various indicators of the HEI; organization in accordance with the formed plans educational, scientific-innovative and other types of activity of the HEI; employee motivation; control, coordination and regulation, if necessary, of their work.

The developed concept of managing the development of domestic higher education in the form of spherical waves makes it possible to achieve the strategic, tactical and operational goals of the functioning of HEI in the European educational space.

Human resources management occupies one of the leading positions in the management of the development of higher education institutions. According to the Law «On Higher Education» scientific-pedagogical, scientific and pedagogical employees of HEIs of all forms of ownership have the right:

– for academic freedom, which is realized in the interests of the individual, society and humanity in general;

– for academic mobility for professional activities;

– to protect professional honor and dignity;

– participate in the management of the HEI, including electing and being elected to the highest body of public self-government, the academic council of the HEI or its structural subdivision;

– choose teaching methods and tools that ensure high quality of the educational process;

– to ensure the creation of appropriate working conditions, increase their professional level, organization of recreation and life, established by law, regulations of the HEI, the terms of individual employment agreement and collective agreement;

– free use of library, information resources, services of educational, scientific, sports, cultural and educational departments of the HEI;

– to protect intellectual property rights;

– for advanced training and internship at least once every five years;

– receive housing, including office;

– receive preferential long-term loans for construction (reconstruction) and purchase of housing;

– participate in associations of citizens;

– for social and pension provision.

In addition, they are guaranteed:

– creation of appropriate conditions for work, advanced training, organization of life, recreation and medical care, including for teachers with disabilities;

– payment in case of loss of job compensation in accordance with the law;

– surcharges for the degree of Doctor of Philosophy and Doctor of Science in the amount of 15 and 25 % of the salary, respectively, as well as for the academic title of associate professor and senior researcher – 25 % of the salary, professor – 33 % of the salary *[27]*.

At the same time, pedagogical and scientific-pedagogical employees of educational institutions are paid monthly allowances as a percentage of the salary (salary rates) depending on the length of pedagogical work in the following amounts: over 3 years – 10 %, over 10 years – 20 % and over 20 years – 30 % [28]. That is, educators have to wait 3, 7 and 10 years for the next bonus for years of service.

For example, at the University of Alberta (Canada), a member of the teaching staff, who is appointed for 12 months or more, is entitled to a salary increase after each subsequent 12-month period. And an employee, whose term of appointment is less than 12 months, is entitled to promotion after he has

accumulated at least 8 months for the appointment. An employee receives an allowance if he has been appointed to the next appointment, provided that: the assessment of the efficiency of work for the previous year was at least satisfactory; the employee has received no more than seven increases in the past. In addition, an additional increase may be granted by decision of the official [29].

The minimum wages in this HEI, depending on the levels at which teachers can move, are given in **Table 1**. As you can see, in Canada, wage growth depending on length of service may occur more often, than in Ukraine. In our opinion, it is expedient to adopt this experience in the domestic sphere of higher education.

Returning to the Law «On Higher Education», we note that scientific, scientific-pedagogical and pedagogical workers in case of termination of the previous contract and the appearance of other applicants for the position he held, are not guaranteed the primary right to enter into a new contract. And, in our opinion, employees of the HEIs, who have fully fulfilled the terms of the previous contract should have such right. If the manager wants to increase the requirements, it can be declared in the new contract.

Table 1. Minimum salaries of teaching staff for 2019-2020 academic year, thousand dollars [30]

Step on scale	Assistant lecturer	Associate lecturer	Full lecturer
1,0	63,152	75,912	92,267
2,0	65,704	79,183	95,826
3,0	68,256	82,454	99,385
4,0	70,808	85,725	102,944
5,0	73,360	88,996	106,503
6,0	75,912	92,267	110,062
7,0	78,464	95,538	113,621
8,0	81,016	98,809	
9,0	83,568	102,080	
10,0	86,120		
11,0	88,672		
12,0	91,224		
Increase in value	2,552	3,271	3,559

In our opinion, improving the efficiency of higher education development management in Ukraine should be based on strengthening cooperation with all stakeholders in higher education. Relevant measures of cooperation of the HEIs with stakeholders are presented in **Fig. 5**.

Thus, cooperation with the *MES, NAQA, public authorities and local governments* may consist in the formation of the HEIs amendments and proposals to various normative-legal or legislative acts of these institutions; participation in joint educational and research projects.

Members of the *Supervisory board* should be involved in the joint development of a strategy/set of strategies of the HEI.

Applicants should be informed as much as possible through all possible communication channels (especially their own website, as well as social networks, newspapers, radio, television, trade fairs, open

days, advertising on transport) about educational services and their cost, conditions of study and living, leisure and various opportunities for development (courses, trainings, interest clubs, etc.); among them it is necessary to hold competitions to identify talented potential students.

Representatives of *religious organizations* can take part in various educational activities in the HEIs, such as the beginning and end of the school year, the Day of the University, the Faculty, etc. to form high moral personalities from students.

Work with *grantors and investors* should be based on the commercialization of the results of research and development carried out by employees of the HEIs. For this purpose, a special department of commercialization can be created in the HEIs.

The *media* should be invited to all important events of the HEIs for full coverage of significant events, as well as to be involved in advertising. They should be informed by the public relations staff.

Employers and labor exchanges should be invited to the HEI to inform students about available vacancies, requirements and career opportunities. To increase the number of entrants to the paid form of training and intensify cooperation with employers, it is advisable to enter into tripartite contracts, according to which:

Stakeholders of the HEIs	**Cooperation measures**
«Partners»	
– MES; – NAQA; – public authorities (except MES); – local governments;	– formation amendments and proposals to normative-legal or legislative acts by the HEIs; – participation in joint educational and scientific projects;
– Supervisory board.	– joint formation of the strategy/set of strategies of the HEI.
«Support»	
– applicants;	– informing about educational services, their cost, conditions of study and living, leisure and various opportunities for development; – conducting competitions to identify talented potential students;
– religious organizations;	– participation in joint educational activities;
– grantors; – investors;	– commercialization of the results of research and development carried out by employees of the HEIs;
– media;	– coverage of significant events in the life of the HEIs; – advertising;
– employers;	– informing about available vacancies, requirements for them and career opportunities; – conclusion of tripartite contracts;

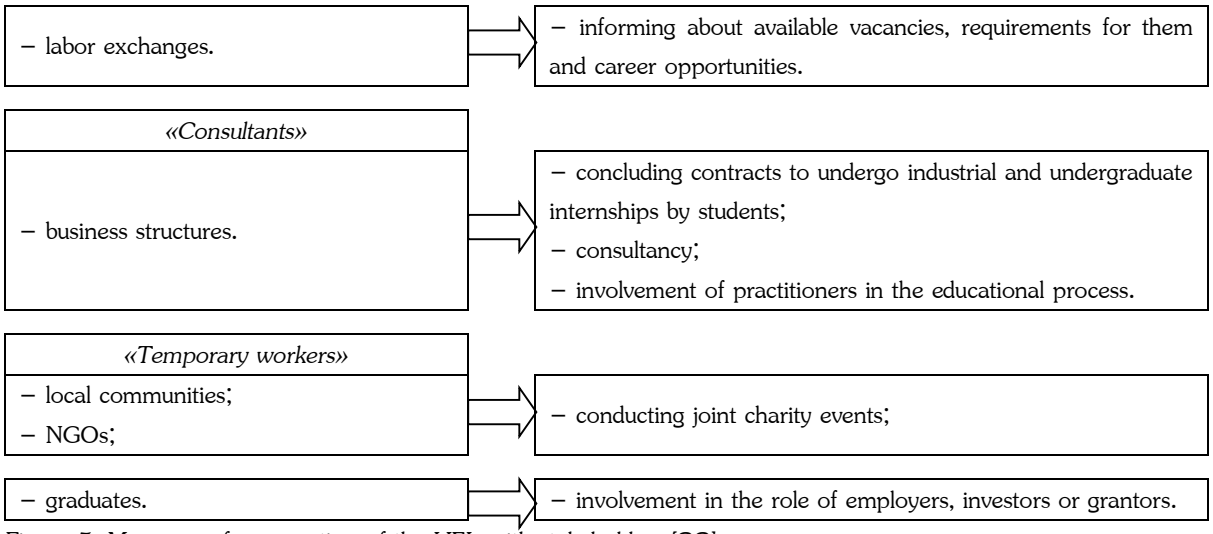

Figure 5. Measures of cooperation of the HEIs with stakeholders [22]

– employers pay for students' education, provide them with a base of practice;

– HEIs form in students the competencies, needed by employers;

– students acquire the necessary competencies for employers and after graduation must work for employers for the period specified in the contract.

The first steps in this direction have already been taken: the Cabinet of Ministers of Ukraine approved the Concept of training specialists in dual education. According to this document, the *educational institution*:

– provides theoretical training, the integrity of the educational curriculum, compliance with educational standards and professional standards, is responsible for the quality of training of students;

– has the right together with the employer to determine the educational programs according to which the educational process is organized according to the dual form of education;

– is responsible for establishing cooperation between the educational institution and employers, as well as further effective communication between the parties;

– selects enterprises, institutions and organizations that provide places of practical training in the dual form of education;

– together with the designated employers develops and approves the curriculum of the relevant educational program;

– together with the designated employers ensures the coordination of the content of the theoretical and practical part of the program;

– coordinates the training of the student at the enterprise and together with the representative of the enterprise accepts the report about the results of training on the dual form of education and evaluates the results;

– adopts relevant internal documents, appoints persons/units responsible for the implementation of the dual form of education;

– organizes discussions of the educational program (programs) on the dual form of education in the specialty (profession) with employers/professional associations for compliance with professional standards and requirements of employers to the competencies of future professionals.

In turn, the *employer*:

– may initiate cooperation with the educational institution for the training of specialists in the dual form of education;

– ensures compliance with the requirements of labor protection established by law;

– together with the educational institution participates in the development and approval of educational programs and curriculum;

– participates in the selection of students for training in the dual form of education;

– maintains a constant dialogue with the educational institution and the applicant on the stages and results of training by appointing a person responsible for cooperation with the educational institution on a dual form of education;

– evaluates together with the educational institution the learning outcomes in accordance with the educational program;

– provides a job to the applicant at the enterprise, institution or organization, which provides a monetary reward;

– assigns a qualified employee to students;

– provides the necessary resources and information materials to perform the work, creates the necessary conditions and opportunities for students to implement the curriculum;

– if necessary, creates conditions for raising the professional level of employees, who train students in the workplace;

– together with trade unions or their associations decide on working conditions, the introduction and determination of allowances, surcharges, bonuses, rewards and other types of material and moral incentives for workers, who provide training to students in the workplace.

For its part, the *applicant* must:

– to be responsible for the implementation of the curriculum in accordance with the schedule of the educational process in accordance with the goals and objectives of on-the-job training;

– follow the rules of internal labor regulations of the enterprise, institution or organization;

– maintain contact with the person responsible for the implementation of the educational program of dual form of education, timely inform the employer and the representative of the educational institution in case of problems;

– follow the rules of labor protection, industrial sanitation, occupational health and fire protection;

– to bear material responsibility for the equipment and property according to the concluded contract;

– timely perform the tasks assigned to him during the on-the-job training and individual tasks at the appropriate level *[31]*.

It is necessary to conclude contracts with *business structures* to undergo industrial and undergraduate internships by students and at the same time use their employees as consultants, as well as to involve

practitioners in the educational process, who will be able to fully transfer their professional knowledge to students.

Cooperation with *local communities* and *NGOs* should be strengthened in terms of joint charity events: cleaning parks, helping the poor, volunteering and more.

Graduates who liaise with their alma mater may act as employers, investors or grantors in the future. To this end, it is advisable to create an alumni association, the governing body of which would work on a voluntary basis.

And it is expedient to strengthen internal interaction of *participants of educational process* by means of appointment to students of personal tutors (mentors): one – from among teachers, and one – from among postgraduate students or senior students; as well as an increase in the workload of teachers of consultation hours.

To expand *international* cooperation, the Ministry of Education and Science of Ukraine developed the Conceptual Principles of State Policy for the Development of English in Higher Education [32], which aims to create opportunities for cultural, educational and professional development and prosperity of every citizen, promote integration and economic growth of the HEIs, improving the quality of educational services in the field of higher education in Ukraine, promoting the implementation of European and global aspirations of Ukraine and its economic growth.

4. Discussion and Conclusion. Thus, the concept of managing the development of higher education in Ukraine in the form of spherical waves involves managerial influences on such elements as participants in the educational process, the sphere of activity of HEIs, stakeholders, levels and phases of management. This concept can be used to intensify work with stakeholders in any HEI in Ukraine and, in addition, in HEIs in other countries.

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Knowledge Absorptive: The New Paradigm in Educational Administration

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ABSTRACT

The Educational Administration theory have a diversity of changes and as quick as society moves towards a globalization, 21st century, digital era, ASEAN and the Education 4.0 concepts. Whether it happens to the new paradigm such as Non-Cognitive Skills, STEM, World Class Standard School, Civil-state School or Corporate University meanwhile it comes to educational administration in basic education for coincides with the existing Corporate University. The two institutions format also requires a new paradigm called Knowledge Absorptive as a new tool of educational administration in modern times. On the basis of knowledge management and its influence on the management of modern enterprises, rather than by the general theory of knowledge management applications with educational administration. Educational organizations will be more developed than at present, so knowledge management is at the heart of one of the educational administration. In addition, knowledge management and another idea that is interested in educational administration in present day. Especially when the idea of establishing a new institution, the private sector organizations have established their own institutions, including the public school called Civil-state School and the Corporate University, the process leading to Knowledge Absorptive. The enterprise development just improve the ability of the processes within the organization. The changed is more important, it is innovation and a new paradigm in the educational administration today.

KEYWORDS: Knowledge Absorptive, New Paradigm, Educational Administration

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Introduction. At present, there are many concepts, theories, research, bodies of knowledge, best practices, paradigms and tools for educational administration from various educational institutions, such as leadership in educational administration. Educational organization management towards excellence Innovation and information technology in educational administration knowledge management policies and strategic planning in educational administration, etc. Applying a variety of knowledge to apply in educational administration. It is a paradigm development in educational administration. Especially if new ideas and theories are used in planning or solving problems in response to the rapid changes in the 21st century, the digital age, and the Education 4.0 era, such concepts are essential for the new generation of education administrators.

Changes in educational administration that occur rapidly and diversified as society moves towards globalization, the 21st century, the ASEAN Community, the Digital Era, and the Education 4.0 Era, resulting in new ideas, theories and knowledge. There have been many occurrences such as Non-Cognitive Skills (Behavioral Skills), STEM stand for (S=Science), (T=Technology), (E=Engineering) and (M=Mathematics), World Class School (International Standard School) and Corporate University. Thiphayarat Siphetlueang[1] has defined that corporation university an educational institution which is part of the parent organization whose main purpose is something other than education, such as industrial plants, banks, hospitals, etc., with courses that can provide academic standing for students at the degree level Focus on personnel development in a lifelong learning style and in accordance with the mission and goals of the parent organization

When talking about educational administration at the higher education level, the term corporate university it seems to be a word that is always mentioned but when it comes to educational administration at the basic education level At present there is a word Pracharath School occurred at the same time as the existence of the University Corporation. Both forms of educational institutions rely on a new paradigm called knowledge absorption as a tool for educational administration in the present era.

From the University of the Corporation to the public school

From past to present there are two types of teaching and learning management in higher education: Traditional University and Corporate University. It consists of a full university or a closed university for a specific area, the open university and electronics university The University of the Corporation It is an educational institution that is part of the parent organization. The main business of the organization is not education. Thiphayarat Siphetlueang[1] said that one of the main reasons for the fact that businesses or enterprises are focused on participating in education management can be seen. From the research results, it was found that the continued prosperity of the private business sector depending on major changes of education to maintain a highly qualified and highly competitive workforce by what the new generation of employees need to know in order to be successful today unlike what former employees need to know, technological and economic changes have shifted

traditional needs. of employers to the need for a well-developed, trained and educated workforce As a result, private businesses are heavily involved in making education reform a reality.

As is known that the Thai education circle from the time before the education reform 1999 until the present. There have been many positive changes. Especially when it comes to the new management of education. Focusing on the mission of building manpower and producing graduates to meet the needs of the labor market establishment commercial enterprise manufacturing sector and the banking sector many new educational institutions have emerged, integrating and merging curriculum and teaching and learning both of basic educational institutions Vocational Institute and higher education institutions of various sizes Using the concept of Corporate University, Kannika Chaowatanakul[2]said that the Corporate University It is a new trend in education and human resource development in Thailand since the 1960s. Organizations and organizations in the United States and around the world such as Motorola, Sun Micro System, Walt Disney, McDonald. Old, IBM, Xerox, Ford Motor, etc., with the establishment of the University Corporation. To play an important role instead of providing training that focuses on the development of specific skills of personnel without focusing on learning in order to learn how to learn and in accordance with the action to achieve the goals of the organization as a whole

At present, there are many corporation universities in Thailand such as the Thai-Japanese Institute of Technology Promotion, Huachiew Chalermprakiet University, Panyapiwat Institute of Management Nation University, Kantana Institute, but if considering the administration of basic education There appears to be the Kamnoetwit School Project of the PTT Group and the Government's Pracharath School Project just two projects The Pracharath School is one of the Civil state strategies that the government announced as a policy in 2015 with the Pracharat network and various projects Under the Pracharat strategy for various government agencies Use it as a guideline to drive the development of Thailand to be strong, stable and prosperous in a sustainable manner. divided into two sub-strategies is the government and the people and people with government officials at the heart of the civil state strategy is to strengthen the participation of all citizens Because solving problems, reforms and developing the country in all aspects, there will be no success or concrete results. If there is no cooperation and participation between the people Government officials and governments, such as the Pracharat House Project The campaign to strengthen the Pracharath School, etc. [3]

The Pracharath School Project is a collaboration between the government, the private sector, and the civil society. for sustainable development of the country by the Ministry of Education as the agency responsible for the country's education Has assigned the Office of the Basic Education Commission (OBEC) to prepare the Pracharath School Project and make a memorandum of understanding basic education and leadership development between 3 government agencies, namely the Ministry of Education Ministry of Information and Communication Technology Ministry of Science and Technology and the private sector 19 agencies such as Charoen Pokphand Group, ThaiBev, SCG, Government Savings Bank, Mitr Phol Group. Acting as a mentor organization for educational

institutions to drive and enhance the education of Thailand Cooperation between the government, the private sector and civil society under the public school project this time is considered a new dimension in the field of education. It's the milestone. And it is a new step in the Thai education industry in driving, pushing and stimulating various achievements. by looking at the strategic level Collaboration between educational institutions at different levels especially basic educational institutions with government agencies and the private sector who have already seen many achievements especially the public school project This makes the overall picture of the cooperation under the Pracharat project become clearer.

It can be seen that educational administration at both levels It is a new form of educational administration where business organizations or private organizations have established their own educational institutions by educational administration at both levels of education both public schools and the University Corporation based on a concept called Absorbing knowledge (Knowledge Absorptive) to help in modern educational administration.

From knowledge management to the absorption of knowledge

It is commonly known that knowledge management is one of the tools which is important in the management of modern organizations at all levels and lines of work means to enhance the knowledge of the organization to benefit from the intellectual cost It is a complex and extensive activity. The main point is to view knowledge management as a management strategy. There is a practice or there is a systematic organizational plan that is consistent in the same direction throughout the organization knowledge building process It is strongly related to the classification, creation, collection and exchange of knowledge. This is consistent with Nonaka and Takenuchi[4] who said that knowledge is one of the most important resources that support organizational success. Because technology copying can be done quickly. Businesses therefore focus more on the organization's unique and lasting abilities with the good qualities of Tacit Knowledge, the inability to copy. (Inimitability) and immobility. Therefore, knowledge in the organization is seen as an important source of competitive advantage.

It can be seen that knowledge management is very useful and influential in managing modern organizations. If we apply knowledge management theory to educational administration Educational organizations will develop more advanced than today. Therefore, knowledge management is one of the heart of educational administration. In addition to knowledge management another concept which is interesting in modern education administration. especially when the idea of establishing a new educational institution where business organizations or private organizations have established their own educational institutions or provide support in the form of mentors, including the concept of Pracharath School and the University Corporation both of which require the absorption of knowledge. It came into being as a new tool in educational administration, as Jakrit Siririn[5] said that knowledge absorption is

the process and process of accepting knowledge that is absorbed (Absorption) and receiving knowledge coming from outside the organization (Acquisition) until the process of absorption (Absorptive) transfer process. (Transformation) and the process of applying such knowledge to benefit. (Utilization) for the organization to develop and improve the ability of various processes within the organization to lead to change and the important thing is innovative

Innovation will be an important tool that gives organizations unique capabilities that are superior to competitors resulting in a competitive advantage which leads to success which is the goal of the organization absorbing knowledge It is the expertise necessary to deal with the components of knowledge which is embedded in various places to be transferred to personnel in the organization The ability to absorb knowledge (absorptive capacity) is a strategic tool to absorb knowledge from the outside into the organization. Once the knowledge has been absorbed, it will go into the process of creating and transforming old knowledge into new knowledge to create a competitive advantage. Absorption of knowledge is the exploitation of external knowledge. To be used as a key component of innovation in the organization Knowledge absorption also refers to the ability of an organization to acquire knowledge and technology skills to assimilate the knowledge it needs which leads to the development and increase of the ability to absorb knowledge To drive business organizations together with the creation of new blood personnel. Generally, knowledge absorption has three dimensions, namely the process of learning what has been acquired. cognitive transformation process and learning processes to be useful, such as transferring knowledge in a particular industry The ability to absorb knowledge often depends on the gathering of people involved in one way or another, such as the Federation of Thai Industries. Thai Bankers' Association, The Thai Chamber of Commerce or specialized associations in the same profession or have a similar line of work, etc.

From the idea of absorbing knowledge the next step will lead to the process of cognitive transformation. which is the process of keeping knowledge available for use according to various experiences consistent with the transformation of knowledge which comes from absorbing knowledge and moving towards knowledge preservation and knowledge restoration And finally, it is brought into the learning process to be useful which is related to knowledge that can be connected Especially in the context of knowledge absorption is the integration between two processes. is to change the state of knowledge acquired and application of knowledge

Knowledge Absorption: A New Paradigm in Educational Administration

As already mentioned that knowledge absorption is a process and procedure for accepting knowledge acquired from outside the organization In order for the organization to develop and improve the capabilities of internal processes, leading to change and innovation and paradigm that gives the organization unique capabilities that are superior to competitors resulting in a competitive advantage which leads to success which is the goal of the organization

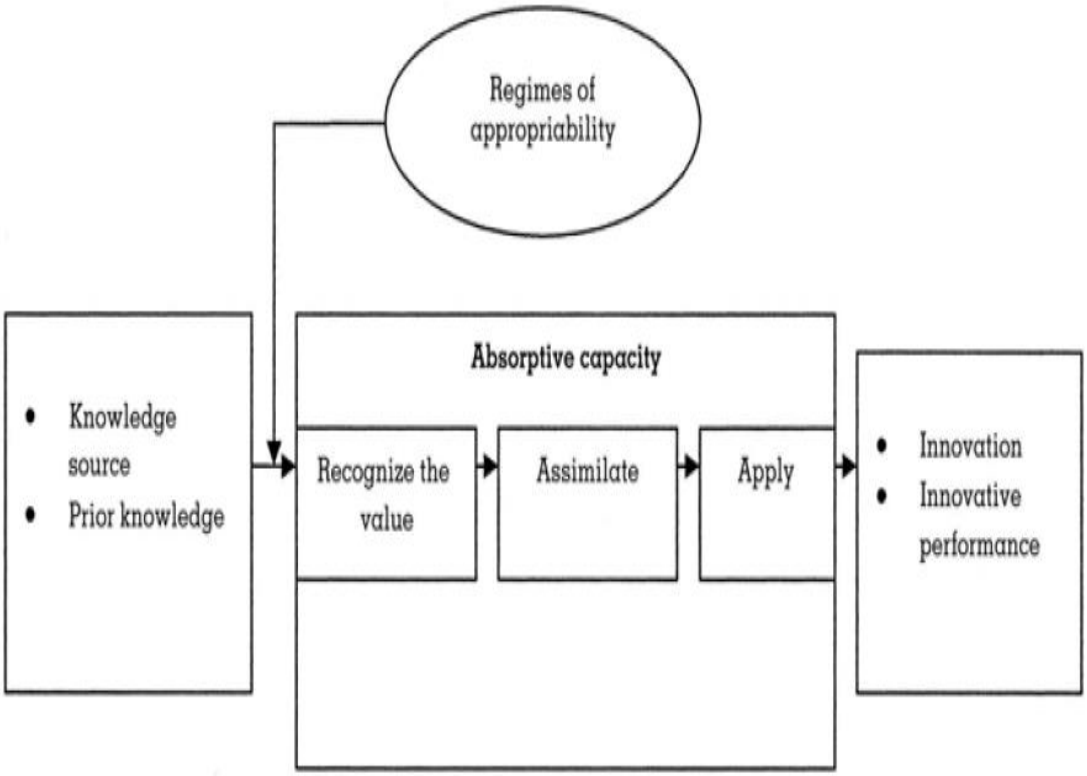

Figure 1: Concept of Knowledge Absorption[6]

As Cohen and Levinthal[6] define the absorption of knowledge as the recognition of the value of knowledge and absorbing that knowledge to be applied to the organization It is knowledge management both within the organization and outside the organization. By relying on the organization's ability to seek knowledge and skills in using technology to absorb such knowledge leading to development, treatment and empowerment Ability to absorb knowledge to create a competitive advantage and create new talents in innovation It can be divided into three dimensions and the ability to absorb knowledge: 1) acceptable value, 2) assimilation, and 3) adaptation to new knowledge. obtained from the outside to use, in line with Mowary and Oxley [7] who defined the absorption of knowledge as It is the expertise necessary to deal with the components of the embedded knowledge to be transferred and necessary to transform the imported knowledge, and Zahra and George [8]mentioned. The ability to absorb knowledge is a strategic tool for absorbing external knowledge through the ability to create and transform it into new knowledge to create a competitive advantage. Knowledge is the ability to leverage external knowledge, which is a key component of successful innovation. Therefore, the factors influencing knowledge absorption can be divided into two categories are internal and external factors. Most of the internal factors in the organization are the main factors and external factors will be secondary factors.

Here, let's give an example about absorption. Knowledge by using case studies of Nation University, outstanding in the field of Communication Arts, which has a 45-year corporate lifespan. In 2011, Nation University, regarded as a corporate university, was established to it is an educational institution in the Nation affiliated with the improvement of universities in Lampang Province and changed its name from the former university which was Yonok University to Nation University. That said, Nation University It is one of the corporate universities for that reason. Nation University aims to produce personnel with both theoretical and practical knowledge from the sponsoring organizations. Therefore, Nation University focuses on producing communication arts graduates to support the growth of the mass communication business. All-in-one in the digital age But looking back, even though there is no Nation University. But the Nation Group It has been accepted by Thai society at the level of communication arts institutions for 45 years.

The institutional identity of the Nation Group In other words, it is a lap stone that has both science and art. And the most important thing is the Nation Group. Emphasis on creating quality people and quality media starting from the print media is The Nation newspaper, Krungthep Turakij newspaper. Nation Weekend Magazine and the one that made famous in the latter era was the Kom Chad Luek newspaper. Before the line broke into the Analog television media business (Wave frequency) and officially Digital (Electric frequency) television media. During that time there was a radio broadcasting business which was accepted. And at present, it has been extended to the online media business. In the past 4 5 years, the Nation Group Has continuously created mass communication personnel to decorate the Thai media industry. Therefore, the absorption of knowledge of the Nation University to be seen as empirical information which as mentioned although there is no Nation University yet. But the public has a concrete perception of being an institution in the field of communication arts. Especially when there is a Nation University which is an institution of higher education would have to be Academic or many times more academic Together with professionals from business organizations namely the Nation Group, the parent company, makes the absorption of knowledge of Nation University more profound than ever[5]

It can be seen that the absorption of knowledge from business organization to corporate university It is as important as a professional teacher who divides the semester to teach. The result is that the learners will receive both theory is academic knowledge and practical It is the knowledge from the experience of an organization or professional, according to John Dewey [9] Learning by doing that has become the heart of the University Corporation or public schools especially the concept of absorbing knowledge derived from practical experience. Therefore, the concept of knowledge absorption is linked from knowledge management theory. In the context of modern educational management, educational institutions have undergone many changes from the past. Especially educational administration in the form of which business organizations or private organizations have established their own educational institutions or directly supported, such as the Pracharat School and the University Corporation that has brought the concept of knowledge absorption to assist in educational administration This is a new paradigm in educational management.

Conclusion. Absorbing knowledge it is the application of new knowledge at the paradigm level to apply in educational administration is the development of new tools in educational administration Especially if the concepts and theories related to the absorption of knowledge are applied in planning or solving problems. In order to meet the 21st century, the digital age, and the 4.0 education era, the absorption of knowledge is a necessity of the modern education administrators. Especially in the context of changes in educational administration that occur rapidly and varied according to the constantly moving society.

Especially educational administration at the higher education level is the university corporation and public schools both forms of educational institutions rely on the absorption of knowledge as a tool for educational administration because of educational administration at both levels It is a new form of educational administration. where business or private organizations have established their own educational institutions or provide support in the form of mentoring organizations by educational administration at both levels of education both public schools and the University Corporation based on a concept called Absorption of knowledge that educational institutions have absorbed from business organizations to help in the administration of education in the new era itself.

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รายนามผู้ทรงคุณวุฒิพิจารณาบทความ (Peer Review)

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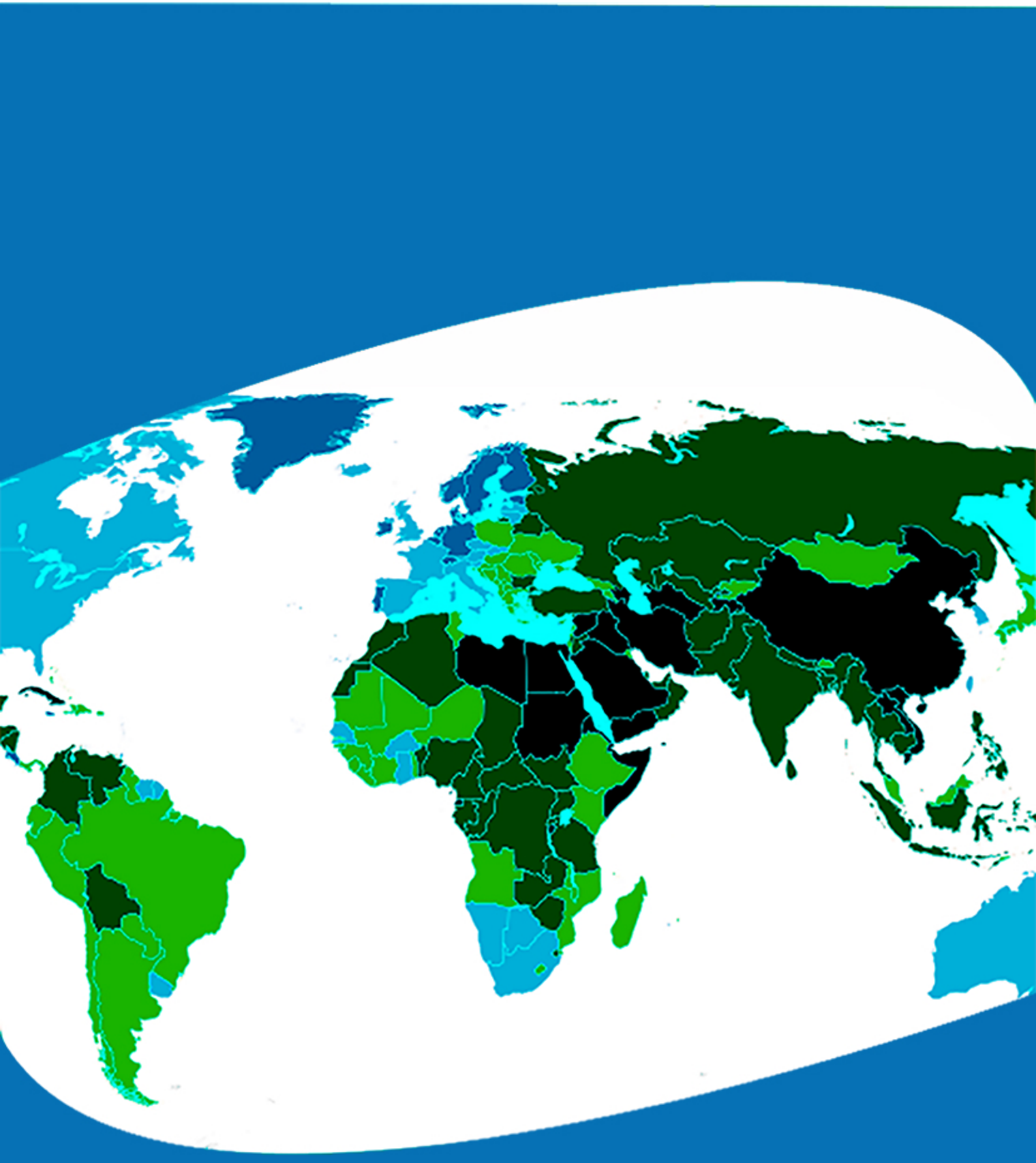
บทความทุกเรื่องที่ตีพิมพ์เผยแพร่ได้ผ่านการพิจารณาทางวิชาการโดยผู้ทรงคุณวุฒิในสาขาวิชา (Peer review) ในรูปแบบไม่มีชื่อผู้เขียน (Double-blind peer review) อย่างน้อย2 ท่าน

บทความที่ตีพิมพ์เป็นข้อค้นพบ ข้อคิดเห็นและความรับผิดชอบของผู้เขียนเจ้าของผลงาน และผู้เขียนเจ้าของผลงาน ต้องรับผิดชอบต่อผลที่อาจเกิดขึ้นจากบทความและงานวิจัยนั้น ต้นฉบับที่ตีพิมพ์ได้ผ่านการตรวจสอบคำพิมพ์และเครื่องหมายต่าง ๆ โดยผู้เขียนเจ้าของบทความก่อนการรวมเล่ม