

Wealth of Ecowellness Biohacking

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ABSTRACT: The contemporary finance literature is focused on monetary assets and financial instruments. In a holistic approach, this article draws attention to humane features of capital in outlining the influence of a healthy lifestyle and biohacking on personal wealth. The COVID-19 pandemic raised awareness for healthy lifestyles as panacea to avoid viral complications as well as drove people to consult online information sources about healthcare as never before in the history of humankind. Previous work has connected health and capital on the individual, nuclear family level, corporate community standards and conduct as well as the overall economy. This paper focuses on the new trend of Ecowellness Biohacking. The term Ecowellness derives from ecological (as pertaining to nature) wellness. Wellness became prominent in the 1980s as a combination of Wellbeing and Fitness. Wellness is thereby the active practice of healthy habits (such as sports but also nutrition and mindfulness) on a daily basis to attain better physical and mental health outcomes. Ecowellness stresses the connection with nature for the wellbeing. Active Ecowellness trends include the transformation of the healthcare system through holistic approaches in nutrition, prevention, supplements and sports. Biohacking has recently become a prominent term in integrating biology, genetics, neuroscience and nutrition to enhance physical and mental performance as well as improve health and well-being. As a newly forming phenomenon since the early 2000s, biohacking comprises multiple fields such as nutrigenomics, do-it-yourself-biology and grinders. Nutrigenomics studies the effects of nutrients on the expression of an individual's genetic makeup and encompasses nutritional factors that protect the genome from damage. Do-it-yourself biology (DIY biology) is a biotechnological social movement, in which laymen/women are studying biological effects of life sciences with traditional research methods on their own. Do-it-yourself biology thereby comprises of bioinformatics projects that use programming; genetic engineering that makes use of big data from biology; open source medical experimentation; grinders who use technological implants or introduce chemicals to the body to influence body functions; as well as mostly modern tech-supported arts to achieve body outcomes. As the Ecowellness Biohacking trend is currently evolving, little attention has been paid to the economic impetus of Ecowellness Biohacking. Some suggestions are given about the business model of health-and-wellness-lifestyle coaching, but no clear economic model exists today that helps evaluate and discount the long-term value of Ecowellness Biohacking for the individual and society. This article first discusses the new trend of Ecowellness Biohacking to then estimate some of the positive impacts of the trend on the overall health, wellbeing and monetary success of individuals as well as the economic influence of Ecowellness Biohacking. The discussion is dedicated to address the potential but also the risks associated with this new trend of Ecowellness Biohacking.

KEYWORDS: Bioasset, Biohacking, Banking, Big data, Economics, Economics of Arts, Ecowellness, Finance, Grinders, Health, Healthcare, Investment, Law & Economics, Money, Multiplier, Precaution, Prevention, Socially Responsible Investment, Sustainability, Sustainable Finance, Wealth management

Introduction

The world of finance has a long-standing history of providing advice for individuals on how to maximize their personal wealth. Many different empirical strategies exist to whole-roundedly increase one's own portfolio and financial wellbeing. In the wealth of knowledge on mathematical formalization and the broadness of how to improve financial performance, the information on how health and wellbeing contribute to financial standings has largely been ignored. The COVID-19 pandemic has recently vividly outlined the importance of health for

individuals, families, corporations but also nation states. The disparate impacts of health responses to the same large-scale external shock became transparent within individuals, families and society around the world (Puaschunder 2022). Inequality arises in the access to quality healthcare that varies dramatically around the world (Puaschunder & Beerbaum 2020a, b; Puaschunder 2022). The post-COVID-19 resilience and recovery period holds the potential to create economic productivity and wealth via novel economic growth drivers, such as health and well-being on the individual, familial, corporate and larger-scale societal levels (Puaschunder 2021, 2022).

The COVID crisis triggered an interest in Ecowellness trends, including relocations from urban areas to more rural territories, as well as biophilia styles in architecture, which resemble nature at home. The post-pandemic COVID long haul situation, in which it is estimated that millions, if not billions, are suffering an impaired health and suboptimal well-being than what they could have enjoyed without COVID, raised attention to a healthy lifestyle. COVID long haulers were found to reduce some of the symptoms – mainly related to long-term low-grade inflammation – by reducing stress, living in harmony with the environment and changing precaution as well as nutrition to a healthier lifestyle (Salzburg Declaration 2020). All these trends have driven the contemporary advent of Ecowellness Biohacking.

Biohacking is an interdisciplinary, hands-on approach to optimize one's health and wellbeing. As an additional step to medical care prevention, biohacking lives from the self-determined individual that wants to maximize body performance throughout life on their own terms. Acknowledging that one knows one's own body the best but also by the help of cutting-edge technologies and crowdsourcing online, biohackers gain information for their own plan to improve body health and wellbeing over time. Positive examples of Biohacking include using nutrigenomics as a way to understand how nutrients influence the individual's genetics. Biohacking also gives space for do-it-yourself experimentation with nutrition and supplements. Biohacking also derives novel data from wearable or implemented gear that collects body function information in real time. All these new evolvments to understand the body and empower oneself with self-care open enormous potentials to improve the lives of the masses. At the same time, many questions remain open regarding the liability, oversight and impact on the medical field if Ecowellness Biohacking becomes a mainstream.

This article is a first preliminary attempt to outline some of the features and impacts of Ecowellness Biohacking. The article makes the case the Ecowellness Biohacking is a way to reduce costs over a lifetime by precaution, prevention and overall productivity of a human life. In this light Ecowellness Biohacking appears as novel and complementary resource to improve individual wealth as well as economic prosperity of nation states.

The article is structured as follows: First, the concept of Ecowellness Biohacking will be explained. Then the contemporary drive to marry finance with wellbeing will be introduced in order to make the case that health can be an overlooked factor to boost personal finance and productivity over a lifetime. Ecowellness Biohacking should thus be considered as an economic input factor for national productivity and economic growth, which will be argued in the third part of the paper. The discussion offers an analysis of the positive advantages but also the potential risks of Ecowellness Biohacking trends as well as future prospects calling for additional research on Ecowellness Biohacking economic features.

Ecowellness Biohacking

The concept of Ecowellness derived in the 1980s from a combination of ecological wellness. The idea of 'wellness' originally derived from the integration of 'wellbeing' and 'fitness.' Wellness described the fact that fitness and sports can lead to an overall improvement of health and wellbeing. Ecowellness then integrated a holistic view of ecological influences on wellbeing.

Overall, Ecowellness captures positive ecological influence on health and wellbeing. Spending time outdoors and nurturing the body with ecological care in healthy food are all meant to lead to a whole-rounded physical and mental state of betterment.

The concept of Ecowellness evolved throughout the previous decades. Notable are influences like the green wave in the German speaking world, which emphasized awareness for an ecological care of the general population. Environmental catastrophes, like the Chernobyl nuclear disaster but also climate change, have driven the demand for Ecowellness attention. Most recently, the COVID pandemic and its long lasting impacts on the general world population have furthered the concept of Ecowellness. During the pandemic, a moving tendency from metropolitan areas to more rural areas became noticeable. While lockdowns and restrictions were imposed in countries all over the world, biophilia trends boomed, which brought nature design into interior architectural solutions. During the days when hospitals and healthcare providers urged to remain at home if possible and e-health as well as telehealth options were granted, the general population turned to online solutions for all sorts of medical concerns. As lingering health issues in some COVID long haulers persisted over time, health and wellbeing were boosted with Ecowellness attention in terms of healthy nutrition, stress free environments as well as sleep hygiene and supplements. Ecowellness also became part of the rising Biohacking trend.

Biohacking is a concept that started in the early 2000s with people using modern technology to boost physical performance and mental health. In general, Biohacking focuses on the people's own ability to enhance body functions with alternative and complementary means to the traditional medical approaches. As for the novelty and rising popularity of Biohacking, the concept is rather vaguely defined and can comprise of all individual steps a person can take to improve one's bodily and mental functioning. Biohacking oftentimes includes complete lifestyle changes or adjustments to honor positive health contributions and behavioral choices – for instance, enabled in diet plans, regular medical checks for health plan adjustments, sports routine and supplement plans as well as mental health and meditation. Biohacking is also oftentimes informed by newest healthcare and wellness trends. On a molecular level, Biohackers often track their health status in frequent checkups and then make informed adjustments to their daily routines, nutrition plans and supplement schedules accordingly. Biohackers are thereby oftentimes informed not only by online sources and information exchange in online forums for Biohackers. Biohackers are also prone to use real-time tracking devices (e.g., smartwatches, blood sugar monitors, that constantly monitor body functions electronically). Biohacking thereby integrates personalized technology development with online crowdsourcing of information instantaneously. Biohackers also study cellular and biological aspects of health and sometimes are referred to experimenting with influences – like medication and supplements but also lifestyle adjustments and nutrition – on their overall health and wellbeing. Biohackers appear to be open to try newest trends in lifestyle improvement and alternative healthcare.

Ecowellness Biohacking integrates the ecological imperative of Ecowellness with Biohacking methods. Ecowellness Biohackers apply the concepts and methods of Biohacking with particular attention to the ecological influences on the genome and human health performance as well as mental health. Plant-based, non-chemical nutrition, ecological benefits of outdoors activities (e.g., grounding therapy using barefoot walking outdoors as inflammation reduction method) but also harmony with the environment and sustainability in online contexts (e.g., hate-free zones, integrating natural environment features in online spaces, discussion about data storage sustainability) are the most cutting-edge advancements of Ecowellness Biohacking.

Financial Impetus of Ecowellness Biohacking

In the wealth of literature on individual finance and personal asset management, the information about health and wellbeing contributing to lowered medical costs and improved economic performance on the job market is rather scarce. Prevention in due course as a means to lower medical expenses over a lifetime is one of the behavioral aspects that is often missed out of long-term profitability calculus.

Ecowellness Biohacking may have multiple layers of positive contributions to the individual, community, nation state and overall economy. Health is connected to lowered medical expenses and productivity, which offers the best propensity to financial success and wealth accumulation. Ecowellness Biohacking enables the individual to change their lifestyles and adjust habits based on biological facts and individualized, personalized data results. Not only the individual becomes more productive if being healthy and cautious about medical risks, but also do family dynamics benefit from everyone being in good health and benevolent mental spirit. Anne Case and Angus Deaton (2020) make the case in their book titled “*Deaths of Despair and the Future of Capitalism*” that unhealthy lifestyles connected to economic influences lead to disastrous life expectancy outcomes.

While ample evidence exists on the economic impetus of multipliers since John Maynard Keynes’ *General Theory*, multiplier effects may vary based on the causes that receive governmental funding. Although evidence of country differences in multiplier effectiveness already exists, hardly any connection between economic productivity boosts due to multiplier effects after investment in overall governmental healthcare exists. Problematic appears that industry-specific multiplier measurements were primarily focused on industries such as construction and education. In addition, multipliers appear to trickle down in society with a certain time lag. Ecowellness Biohacking may serve as a prevention and holistic approach, whose impetus in the overall economy is hard to quantify as a prevention and precaution measure.

The COVID-19 era has generated growing attention to health capital and health wealth. The realization of the connection between health and economic productivity as a financial asset has largely been shed out of the contemporary finance literature. The overall well-being underlying human workforce productivity have become hidden driver of economic growth in the eye of a global contagion risks. With the growing awareness of long-term implications of COVID-19 – for instance in COVID long haulers, who have prolonged health impairment after an initial infection – but also with climate change pressuring healthy living conditions around the globe, Ecowellness Biohacking promises to alleviate the socio-economic fallout of the crisis and grant long-term benefits to humankind.

In the entirety, health wealth is a prerequisite for economic prosperity of corporations and nations. The aspect regarding Ecowellness also promises to contribute positively to climate stabilization goals, which grants the gift of positive transfers into the future for future world inhabitants.

Discussion

Ecowellness Biohacking complements traditional healthcare in an individualized, self-empowered and technologically-advanced way. Ecowellness Biohacking allows for a deeper embeddedness of human in nature in a harmonious way. The connection of health with productivity calls for further attention to health in standard economic growth theories. Future research on Ecowellness Biohacking should investigate the personal relation between health and financial outcome but also in the macroeconomic foundation of a healthy workforce and population for overall wealth of corporations and development of nation states. Ecowellness Biohackers also promise to hold the

key to prevention-focused lifestyles and healthcare-dependent multipliers granting more widespread and long-term health as a prerequisite of stable economies and successful societies.

At the same time, Ecowellness Biohacking holds several potential risks and negative externalities. For one, the question of oversight of self-imposed dietary restrictions as well as biomedical experimentation arises. People's experimental attempts may cause problems of lacking scientific proof and medical control. While industry problems can be evaded with Ecowellness Biohacking, such as lobbying and biased medical care, biohackers may fall for self-acclaimed experts and group dynamics in internet forums. Ecowellness Biohacking may also erode support of the general medical system, which may cause financial distress that then trickles down negatively on those segments who are the weakest and financially most constraint.

As for the future of Ecowellness Biohacking, in the contemporary attempts of the European Union and the United States to bring nature into national and international accounting, Ecowellness could be estimated for its positive impact on society. The European Union Next Generation EU Sustainable Finance Taxonomy but also the US endeavors to bring nature into economics as well as assess changes in environmental and ecosystem services in benefit-cost analyses could also start focusing on Ecowellness as a prerequisite to be productive for nations. The forthcoming World Bank Changing Wealth of Nations report integrates natural resources and greenhouse gas emissions into international accounting, which could in the future also feature Ecowellness aspects, such as a stable and favorable climate.

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