

If We Can't Measure It, We Can't Fix It

Creating Common Metrics to Assess Health Investments, Measure their Impact on Economic Growth and Societal Well-Being, and Ensure Health and Financial System Resilience

With current estimated mitigation costs of \$12 trillion that COVID-19 has had on G20 economies and societies¹, the pandemic's financial and societal implications are far greater than the 2008 financial crisis.

As a result of its scale and trans-border nature the experience of COVID-19 has made clear that what is experienced locally must be addressed globally. As the largest drivers within the international economy, the G20 group of nations must work together to bring the global economy back on track. To do this, we must make well-planned, data-driven investments in health systems to promote sustainable economies and healthy societies.

This paper sets out a four-step framework on how the G20 can establish a series of health metrics to measure the performance of the Health Economy. Based on a wealth of research from the last two decades, this framework can help mitigate risks of future pandemics and ensure that governments understand the greater value of the Health Economy as a driver of economic growth, wealth and employment.

A key lesson drawn from this pandemic is that planned investments in health systems are critical for promoting sustainable economies and healthy societies. Equally, a wealth of research now demonstrates the detrimental costs of not investing in health.

"The health, economic, and societal benefits of investing in health far outweigh the costs. There is thus an imperative to change the mindset that considers health funding solely as a cost or an expenditure rather than one of the most effective investments. This outdated mindset has led to untold suffering, massive loss of lives and a global economic crisis." (Prof. Rifat Atun)

Unfortunately, this will not be our last health pandemic. However, with data-driven investment, careful planning, and pre-agreed ways of operating, it should be the last one that devastates our countries' populations, livelihoods, and economies.

Fortunately, the G20 is already on the correct path to making this course-correction.

Since the **G20 Presidency of Japan in 2019**, where G20 Health and Finance Ministers met jointly for the first time, Ministers recognized the important link between investments in public health and economic resilience, setting the scene for designing new governmental policies and private-public partnerships.

In 2020, the G20 Presidency of the Kingdom of Saudi Arabia have developed a new narrative for pandemic financing. The **2021 G20 Presidency of Italy** have not only recognized the interdependency between health and wealth but also created a "**high-level panel on financing the global commons for pandemic preparedness and response**"² that will provide evidence to G20

¹ <https://blogs.imf.org/2020/10/13/a-long-uneven-and-uncertain-ascent/>

² https://www.bancaditalia.it/media/notizie/2021/The-G20-establishes-a-High-Level-Independent-Panel.pdf?language_id=1

Finance Ministers & Central Bank Governors and identify gaps to find solutions in the global financing system for the global commons for pandemic prevention, surveillance, preparedness/response.

In support of the G20 Presidency of Italy, **The G20 Health and Development Partnership (G20HDP) with the support of partners including the WifOR Institute and Professor Rifat Atun - Professor of Global Health Systems Cluster at Harvard University and Ms Andrea Lucard from Medicines for Malaria Venture - have developed and adapted a set of common metrics that G20 countries should urgently consider adopting and promoting** to measure health as a sustainable public investment for future economic recovery and growth rather than “current account spending.”³ These metrics are based on two decades of work that has produced a robust body of published literature and policies that have been implemented already by some G20 governments.

We present the following framework to assist G20 Nations to further guide their health finance decision-making and policy to move from simple expenditure to effective investment in health, wealth, and growth of their nations and of the international community.

In the following eleven pages, this paper sets out:

- 1) How and why health brings in Return on Investment (ROI) to sustain long-term economic growth for societies.
- 2) Why we need common G20 metrics to measure the ROI on health and;
- 3) What the macro- and micro-economic metrics are that define the health-related ROI to the resilience of G20 economies.

This paper recommends that governments and **national parliaments in the G20 and multinational institutions, such as the International Monetary Fund (IMF), should incorporate these metrics into their multiannual surveillance procedures** to build health system resilience when assessing the performance of national economies.

³ https://www.ssdhub.org/wp-content/uploads/2020/09/SHORT_Recommendations-to-G20-Health-Ministers-1.pdf

How do Investments in Health Create an ROI for Sustainable Economic Stability and Growth?

For the last 12 months, the COVID-19 pandemic proved to be a significant economic, human, and development crisis that can only be stopped by addressing its root cause. As Lord Jim O’Neill, former Chief Economist of Goldman Sachs, recently outlined, **G20 countries have already spent \$12 trillion-plus on mitigating the pandemic’s consequences.**⁴ This is a significant budgetary constraint for G20 countries’ economic performance in the years to come.

The Rising Global Disease Burden and the ROI of Sustainable Health Investment for Healthy Societies and Economics

- **ROI in Cancer for Children:** For children with cancer there is a ROI of \$3 for every \$1 invested.
- **ROI in HIV/AIDS treatments in Low- and Middle-Income Countries (LMICs):** In addition to the large health gains generated, the economic benefits of treatment will substantially offset, and likely exceed, program costs in 10 years.
- **ROI Imaging Diagnostics for Cancer:** The net return of \$1 invested is \$12.43 diagnostic imaging and care for adult cancers.
- **ROI in Malaria Treatments:** A global investment of \$100 billion between 2018-2030, will help to avert around 3 billion cases of malaria, save over 10 million lives and make savings of \$7 trillion through increased productivity, health system savings and greater household prosperity.
- **ROI Reduction of Mortality Rate:** Investments to scale up health technologies and systems, to reduce infectious, child, and maternal mortality rates to these rates in most low-income and middle-income countries to those presently achieved in the best performing middle-income countries, would exceed costs by a factor of 9-20.
- **Burden of Migraine Disease:** The socioeconomic losses for the German economy in 2017 due to migraine headaches amount to 1.2 billion productive hours per year that corresponds to €100.4 billion economic burden in a year, when including the economic value chain effects.

Figure 1: Examples of disease burden, investments in health, and Return on Investment⁵

The IMF data demonstrates that medical solutions that reach societies faster and at scale, would result in an increase in global income of almost **\$9 trillion by the end of 2025.**⁶ This figure supports the notion that planned investments in health solutions would promote growth in the economies of tomorrow.

The world has witnessed several pandemics since the start of the Millennium. Throwing money at the problem during an outbreak has proven to be inefficient and short-sighted. Even now the common narrative amongst policymakers and the global health community focusses only on how much more money is needed from government’s stimulus spending to alleviate the economic consequences of the pandemic globally.

⁴ <https://www.project-syndicate.org/commentary/g20-must-fund-covid19-aid-act-accelerator-by-jim-o-neill-2020-11>

⁵ R. Atun et al. (2020), ‘Sustainable care for children with cancer: A Lancet Oncology Commission’, *The Lancet*, Vol. 21 e185;

R. Atun et al. (2011), ‘Economic Returns to Investment in AIDS Treatment in Low- and Middle-Income Countries’, *PLoS One* 6 (10);

R. Atun et. al (2021), ‘Medical imaging and nuclear medicine: A Lancet Oncology Commission’, *The Lancet* (2021 Forthcoming);

D. Jamieson (2013), ‘Global Health 2035: A world converging within a generation’, *The Lancet*, 382:1898-955.

⁶ <https://blogs.imf.org/2020/10/13/a-long-uneven-and-uncertain-ascent/>

There is insufficient emphasis on using these lessons learned and informing policymakers on the effects of early-planned health investments to achieve economic stability and growth that bring back people to work.

Equally, there is a lack of understanding and transparency about what kind of investments contribute to faster economic and societal recovery that can only be achieved with a common data-driven metrics framework.

G20 governments and leading economists must focus on how robust metrics can be used to bring transparency to benefits of health spending as a positive ROI to economies. There is no need to reinvent the wheel as there are rigorous data-driven frameworks that can immediately assist governments to measure the return on their health investments. Investments in tackling infectious and non-communicable diseases have shown substantial positive ROI's to societies and economies as outlined in the examples in Figure 1.

Why do we need a Set of Common Metrics Globally to Assess Health Risks and be Better Prepared for Future Pandemic Risks?

The multifaceted effects of COVID-19 and the post pandemic recovery agenda have forced policymakers globally to revisit their health investments and policies. It is apparent that earlier investments into vaccine, diagnostics and therapeutic capacity and production would have had high return on investments, given the high global lock-down costs per day.

Better quality in health care and strategic investments in health, have never been more important. The COVID-19 pandemic has revealed that the **health sector is seen as both the generator of health and of wealth.**

The Health Economy⁷ (HE) is a leading sector for sustainable economic growth. The HE is where economic policy goals can enhance capacity to achieve economic stability and growth objectives⁸. **Table 1 presents a 4-step approach for introducing metrics** to measure the ROI for health to achieve sustainable economic growth. These metrics derive from a combination of **macro and micro-economic approaches** and share a common denominator to connect the value chain of health and non-health (i.e. social, fiscal, economic policies areas) that until now have been assessed and evaluated in silos.

This 4-step approach proposes a set of metrics to measure the return on health investments, while considering fiscal and economic goals.

A Method to Assess the Overall Economic Effects of Health and their Implications on G20 Economies – Macro and Micro Economic Metrics

⁷ The Health Economy is defined as a distinct but heterogeneous economic sector that is comprised by core and extended areas of activity, represented by various subsectors, all having a common characteristic of promoting health. In the subsectors of the core area, the health expenditure that are related to products and services are measured by surveys and then quantified. The extended area includes the quantification of products and services of other subsectors, that are not captured in health expenditure surveys, although they also promote health (Federal Ministry for Economic Affairs and Energy (BMWi), 2017. "National Health Account for Germany. Summary of the Research Project of the Federal Ministry for Economic Affairs and Energy, Berlin". See: https://www.wifor.com/tl_files/wifor/publikationen/2015_Bericht_BMWi_GGRII_Zusammenfassung_ENGLI_SCH.pdf.)

⁸ D. Ostwald, R. Leidner and E. Alexandrakis (2021), 'Towards a Health Economy Policy- A Consolidated Economic and Health Policy Approach- A Solution for Sustainable Economic Growth, Stability and Wellbeing (Forthcoming, August 2021)

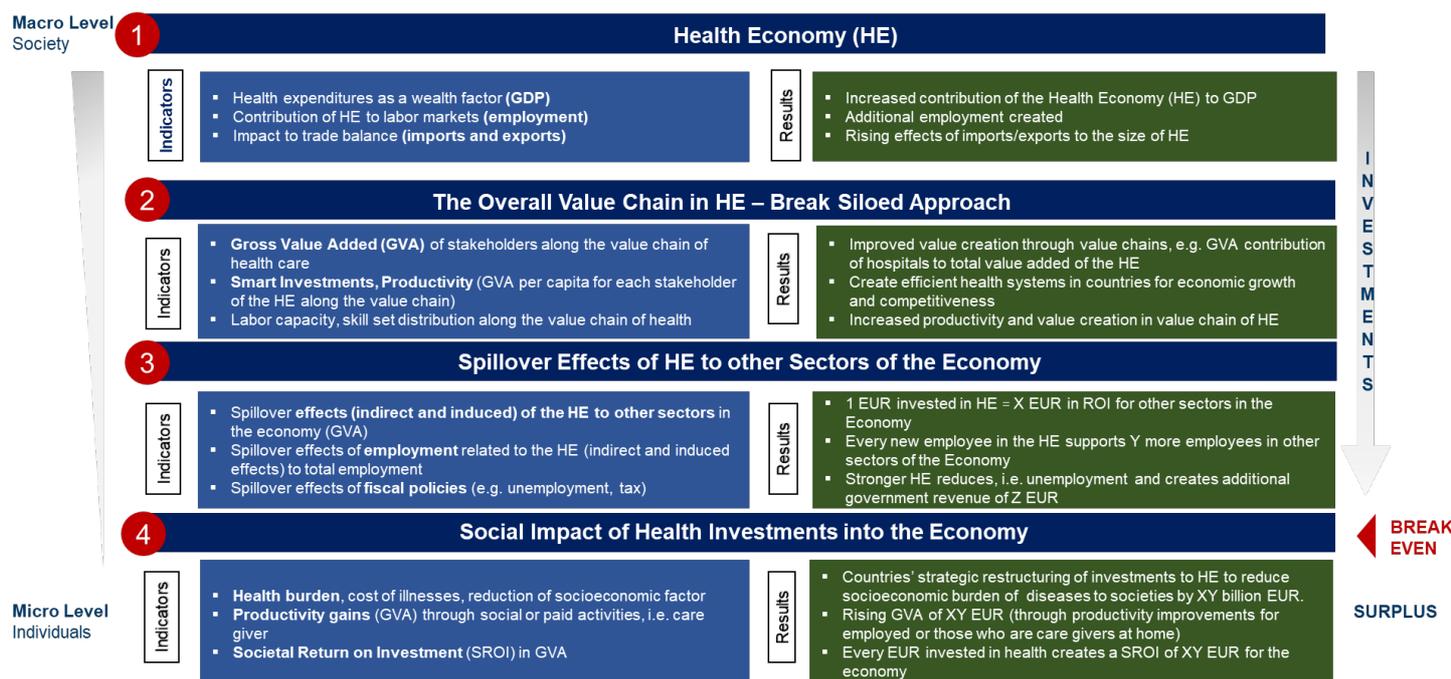


Table 1: Metrics that measure the ROI of health investments for economic stability and growth⁹

The 4-step roadmap provides a framework to shift political decision makers' views from considering healthcare as a cost to **seeing health as a creator and an enabler of economic growth, wealth, and employment.**¹⁰

1. Health Economy Reporting - Measuring the Impact of Health Expenditures on GDP at the National Level

We acknowledge the ecosystem of the extended health sector, in other words the Health Economy (HE), as a distinct sector that has a significant contribution to GDP and employment. This allows G20 governments and policy makers to view healthcare as a driver and enabler of economic growth, wealth, and employment rather than a cost.

As an example, since 2009, the German Federal Ministry of Economic Affairs has been developing metrics, focusing on **Gross Value Added (GVA)**. GVA is based on annually updated data from the official **national and international statistical services**, the Organisation for Economic Cooperation and Development (OECD), and the World Health Organization (WHO). In 2020, the German Government commissioned such an analysis for the entire European Union (EU), demonstrating the importance it places on these metrics and on the significance of being able to methodologically project **effects of health expenditures on National Accounting Systems (NAS)**.

⁹ R. Atun et al. (2020), 'Sustainable care for children with cancer: A Lancet Oncology Commission', The Lancet, Vol. 21 e185; R. Atun et al. (2011), 'Economic Returns to Investment in AIDS Treatment in Low- and Middle-Income Countries', PLoS One 6 (10); R. Atun et. al (2021), 'Medical imaging and nuclear medicine: A Lancet Oncology Commission', The Lancet (2021 Forthcoming); D. Ostwald et al. (2020), 'The socioeconomic burden of migraines: An evaluation of productivity losses due to migraine headaches based on a population study in Germany', Cephalalgia Vol 40. 14

¹⁰ Federal Ministry for Economic Affairs and Energy (2017), 'National Health Account for Germany: Summary of the Research Project of the Federal Ministry for Economic Affairs and Energy, Berlin- Gesundheitswirtschaft. Fakten & Zahlen. Ausgabe 2016'. Berlin. See: https://www.wifor.com/uploads/2021/03/2015_Bericht_BMWi_GGRII_Zusammenfassung_ENGLISCH.pdf.

Health Economy (HE) reporting applies an economic policy perspective to health and is comprised of the three sub-sectors of the Healthcare Economy, namely the (1) Industrial Health Economy (IHE), (2) Services, and (3) Support.

Indicative results of Impacts of the HE on GDP in the German, Global, and EU Economies in 2020

	Germany	EU	Global
 Gross value added	Every 8th euro In the overall economy is linked to the Health Economy*	9.6% Share of Health Economy in the overall EU** economy	9.3% Share of Health Economy in the overall global economy***
 Employment	Every 6th job In the overall economy is linked to the Health Economy*	12.5% Share of Health Economy labor force in the overall EU** economy	200m Jobs in the global economy***

* Germany: Every 8th euro of GVA and every 6th job is created in Health Economy (every 5th euro and 4th job was linked to the HE).
 ** EU: The HE made up to 9.6% of the EU's GDP and up to 12.5% of the EU labor market in 2020.
 *** Global: The GVA share of the global HE in total economy was 9.3% and contributed to 200 million employees.

Figure 2: The Impact of Health-related activity (activity related to the HE) on GDP in the German, Global, and EU Economies

The positive impact of the HE on some G20 economies can be seen in Table 2. For example, the German economy has a contribution of **11.7% in terms of GDP health expenditure that, however, generates an impact of 12% contribution** to the GDP. These findings support the argument that investing in health creates a visible ROI.

The evidence from other G20 countries such as Mexico, Argentina, Turkey, and Brazil support this argument. The political implications of aligning **health expenditure data to National Accounts are critical for planning and assessing the role of health for sustainable and inclusive economic growth.**

The evidence quantifies the **“return on investment (ROI) of health”** to national economies – e.g., to the extent to which **health expenditure stimulates National GDP**. This is important for countries like Germany, Ireland, and Switzerland, where such investments pay off, due to the high export rates of a strong industrial health economy.

	 Brazil	 Mexico	 Colombia	 Argentina	 Turkey	 Global¹	 Germany²
Share of health expenditures in GDP in 2017	9.5 %	5.5 %	7.2 %	9.1 %	4.2 %	9.9 %	11.2 %
Share of Health Economy in GDP in 2017	7.2 %	5.3 %	6.8 %	8.8 %	4.1 %	8.0 %	12.0 %
Labor force share in overall economy in 2017	7.4 %	5.6 %	7.4 %	8.6 %	5.7 %	6.2 %	17.0 %

Table 2: WifOR calculations. WHO (2018): Global Health Expenditure Database (accessed on 18.02.2020). (1) Initial WifOR estimation. (2) Methodological deviation due to more detailed data.

2. Interlinkages in the Health Economy – Analyzing and Assessing links between the Subsectors of the Heterogenous Health Economy (The Overall Value Chain of Health)

Professor Michael E. Porter from Harvard Business School defines a value chain as the end-to-end production chain from the input of raw materials to the output of final products and/or services. According to this rationale, each link, or third-party in the value chain, should add value to the original inputs and the outputs.¹¹

The challenge that we still face is that health continues to be viewed in silos and not as a backbone for economic stability and growth through its effects on supply chains. This is where the health dividend for a society is measured and its contribution in the context of the National Accounting Systems is captured (by calculating the GVA connected to health investments).

To prevent these silos, we suggest a **Value Added (VA) approach** that is in line with Porter’s concept. We can distinguish contributions and different added values of various companies and organizations along the **value chain of healthcare** and show interlinkages of interactions amongst various stakeholders including from the field of R&D, Biotech, MedTech, Pharma, Hospitals, Care Services. This allows us to identify and assess where the actual value is generated and what is gained at the patient level and what is the added GDP to the economy.

Our analysis identifies that **20-50%¹² of the value added in the HE sector is related to the Industrial Health Economy (IHE)¹³.** Sectors like R&D, Pharma, MedTech, Biotech, that are critical parts of the IHE, are important components of the value chain and hence have a strong footprint on the wellbeing of the society as generators of knowledge and as drivers of technological progress.

¹¹ Michael E. Porter (1985) *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.

¹² Ireland and Switzerland have up to 50%

¹³ The IHE is the industrially orientated part of the health economy and includes manufacturing of goods and the provision of services associated to health care. Consequently, the IHE related to the manufacturing of pharmaceuticals, medical devices and large medical equipment, as well as wholesale trade of those goods. In addition, the IHE includes all biotechnology products and processes, as well as digital applications and R&D activities in health care.

The HE must be understood as an integrated and functional sector that provides health. Only by strategically optimising the allocation of resources within the HE, can the supply chain of healthcare improve its efficiency throughout the overall value chain. By identifying and analyzing opportunities along the supply chain of health, siloed approaches can be reduced. This would lead to more comprehensive actions associated with smaller, though smarter, investments that are more efficient, support a healthy population, and promote societal wealth, economic growth, and better jobs.

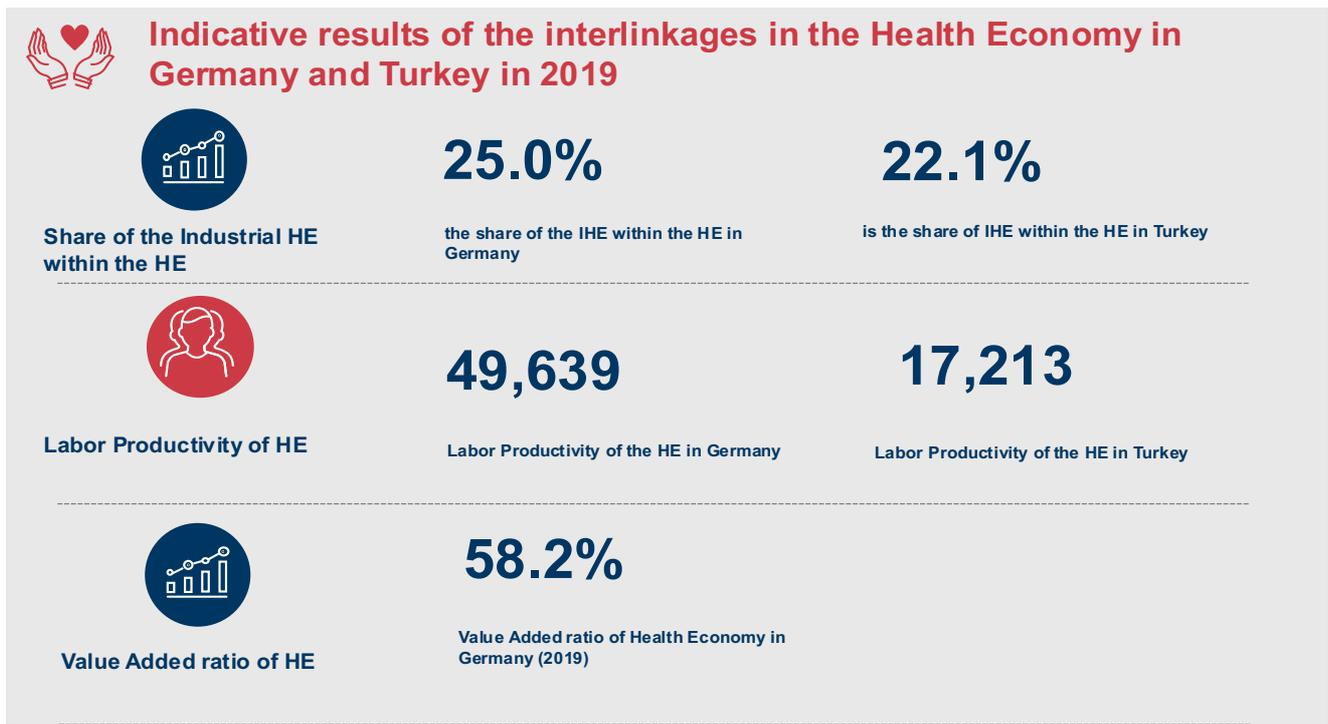


Figure 3: The Health Economy in Germany and Turkey

Building on such an approach is significant in the post-pandemic world. This is when governments will have to redirect their resources that can both provide a shield against health threats to economies and societies, while driving enhanced growth, so that economies can catch up with their development efforts, following the pandemic economic downturns.

- The Value-Added (VA) ratio of the Health Economy describes the ratio of the Gross Value Added (GVA) compared to the production value.
- Labor productivity describes the ratio of the GVA as compared to the employees. In Germany (2019), the labor productivity of the Health Economy amounted to 49,638 EUR per employee (and in Turkey it was 17,214 EUR).
- The German Industrial Health Economy (IHE), as part of the whole health economy, contributed in 2019 around ¼ of the GVA of the whole Health Economy (whereas the corresponding figure for Turkey was 22.1%).

3. Spillover Effects to other Sectors - Health Investments and their Impacts Beyond the Health Economy

Health investments have multiplier effects on the economy that appear along the supply chain. These are spillover-effects that arise outside of the HE and are either directly created or are indirect

– from suppliers’ activity – or are induced economic effects. Induced economic effects are direct and indirect activities that are connected to income and affect additional economic activity.

To assess spillover effects, the methodology follows the Input-Output (IO) analysis developed by the Nobel Prize laureate W.W. Leontief¹⁴. The IO analysis is based on National Accounting Systems (NAS) and is used to assess the HE and allows to compare with other sectors in the economy.

Establishing the **HE as a distinct macroeconomic sector** provides metrics that allow to make comparisons and draw conclusions on the contributions of various industries to the national economy. These are **similar methodological approaches used by the automobile industry or the energy sector**. Indicative results for spillover effects are metrics i.e., 1 euro invested in health creates and additional 0.82 euro in the overall economy or that, e.g. two employees in the HE create an additional job in the economy.

These results show the urgent need to adopt a new understanding of health and its value chain and to view the HE as a distinct macroeconomic sector. The HE requires the supply of goods and services as well as supporting jobs to operate, create additional economic activity, and as a result additional wealth, over and beyond health.

¹⁴ We calculate the estimated value-chain effects in the economy that are expected to arise due to increased economic activity of a healthier patient population. The indirect and induced effects for paid and unpaid work are calculate using input-output tables from the national accounts of a specific country applying Leontief multipliers. Reference to Leontief multipliers: W. Leontief, (1937) “Interrelation of Prices, Output, Savings and Investment. A Study in Empirical Application of the Economic Theory of General Interdependence,” *The Review of Economics and Statistics*, Vol. 19, no. 3, pp. 109–132, and W. W. Leontief, (1936) “Quantitative Input and Output Relations in the Economic Systems of the United States,” *The Review of Economics and Statistics*, vol. 18, no. 3, p. 105.

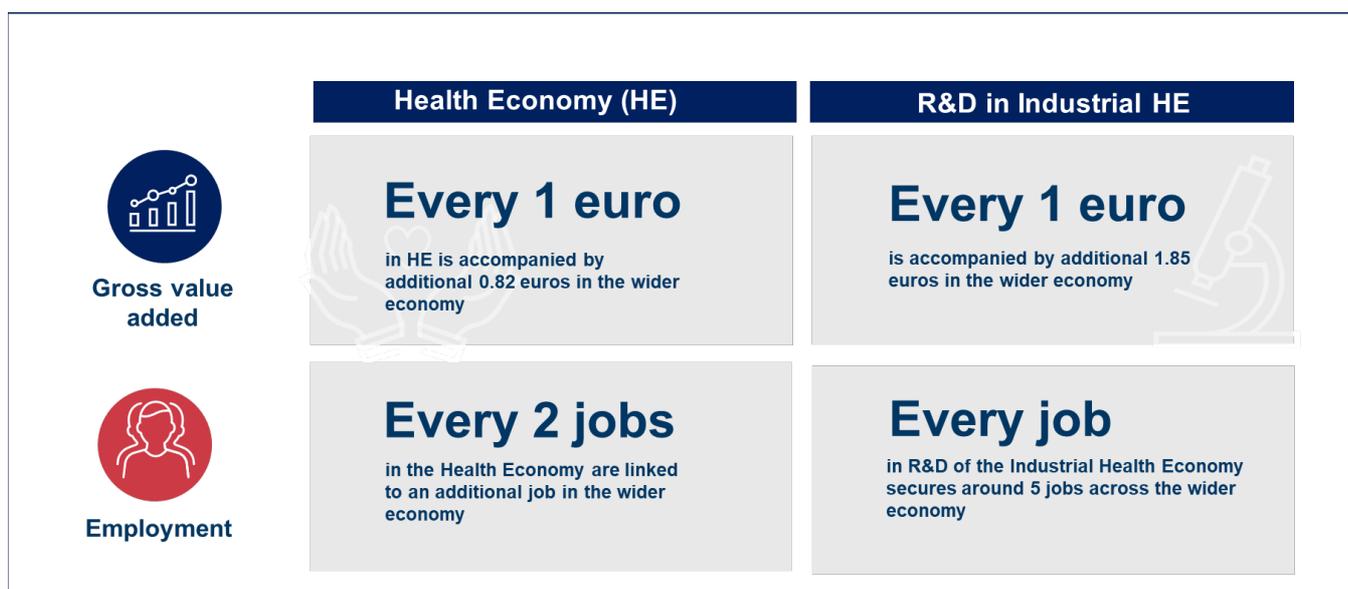


Figure 4: Examples of indicative results for spillover effects of the HE from the German economy

The importance within this context has become obvious during the recent COVID-19 induced economic crisis, where we clearly saw the strong relationships and interdependencies of the chemicals and logistics sectors due to changes along health-related supply chains.

4. Social Impact of Health Investments - Modelling the Societal Impact of Better Health (therapies, diagnostics, innovative medicines) to Society

In part 1-3, we highlighted the macroeconomic perspective on measuring health investments and how to assess their overall economic impact. **Part four takes a more micro-economic perspective** and focuses on patients, constituents, and the society as a whole and their impact on the economy.

In part 4, **epidemiological and economic methods** are used to estimate health outcomes and economic benefits related to medical interventions to society. The metrics and results used in part 1-3 can be integrated into part 4 to assess a more consistent and integrated model for **measuring socioeconomic impacts of health-related investments**.

To assess socioeconomic impact of health related investments through productivity measures, again, data will be used from the National Accounting Systems (NAS). NAS helps to extract information on the productivity (employment) of various parts of the population and sets benchmarks for further comparison. In our comparative analysis, we follow the paradigm that was set in the final report produced by the *Commission on the Measurement of Economic Performance and Social Progress*¹⁵, which was created by French President Nicolas Sarkozy in 2008. This report, compiled by Nobel Prize laureates, looked at identifying the limits of GDP by outlining **new metrics that take indicators like education, gender equality, and environmental sustainability into account.** Hence, our approach measures parameters such as education, gender etc. in terms of **GDP contribution (GVA)**, and also includes selected unpaid activities, e.g., caretakers in the family, incorporating their value added into the economy as part of our metrics outcome.

According to Professor Rifat Atun et al.¹⁶, amongst the **core metrics that explain how health affects poverty and contributes to the economy, is the factor of education which can be incorporated as Social Return on Investment (ROI) as outlined in the 4-step roadmap.**

Prof. Atun et al. argue that the prospect of longer, healthier lives, incentivizes people to invest more in their human capital, as they are better able to realize future long-term gains in employment and income. This helps countries to achieve a demographic dividend. They argue: **“investing in health improves health outcomes and arrests the vicious cycle of poverty, and illness.** The relationship between health and the economy runs both ways. It lasts throughout an individual’s lifetime and is intergenerational”. The results from the case study of the analysis reveal “different policies that were used to strengthen health systems, expand healthcare access, improve health outcomes, reduce poverty, and achieve economic growth”. They conclude that the countries that were studied, though successful, “face the rapidly growing burden of non-communicable diseases that will place demands on the governments’ health budgets. **Judicious investments will be needed** to develop strong health systems underpinned by **comprehensive Primary Health Care (PHC)**¹⁷ designed to manage chronic illnesses. Only then the achievements in health outcomes, poverty alleviation, and economic growth can be sustained”.

A comprehensive understanding of the type and scale of the linkages between health, wealth, and social well-being will allow countries to gather information on the ROI and SROI for both public and private investments in health and the economy. This in turn will allow policy makers to improve their decision-making criteria to drive social and economic stability and growth. Deriving from the 4-step roadmap approach to measure the ROI of health, we urge international and national policy makers in and beyond the G20 to re-think ways of financing health more sustainably.

The G20 Health and Development Partnership has already urged the global health community in 2020 for further collaboration amongst G20 governments, Finance Ministers, Central Bank Governors, the IMF, parliamentarians, and the private sector, to leverage blended and innovative financing models to close funding gaps that exist in health and that cannot only be closed by

¹⁵ *Report by the Commission on the Measurement of Economic Performance and Social Progress*, The Commission, [Paris], Stiglitz, J, Sen, A & Fitoussi, J-P 2011. See https://www.researchgate.net/publication/258260767_Report_of_the_Commission_on_the_Measurement_of_Economic_Performance_and_Social_Progress_CMEPSP, accessed 15 Feb 2021.

¹⁶ R. Atun et al. (2016), ‘Alleviation and the Economic Benefits of Investing in Health, Systematic Analysis and Policy Implications’, *Harvard T.H. Chan School of Public Health, Harvard University Forum for Finance Ministers*.

¹⁷ https://www.who.int/health-topics/primary-health-care#tab=tab_1

governments and philanthropy alone.¹⁸ In 2021, the global community is now a step ahead. The suggested metrics in this report will help to assess health investments and their impact on economic growth and societal well-being and open new ways of developing innovative financing mechanisms to strategically redirect smart investments into future investments in health.

Conclusion

This joint report has highlighted the value of investing in health from a micro and macro-economic perspective and how these approaches can be made consistent to suggest a set of common metrics to G20 countries measuring the Return on Investment of Health Investments – thereby optimizing future health investments, better preparing for future pandemics, and strengthening multilateral collaboration.

This report promotes the narrative that planned investments into health reopen and strengthen sustainable economies and societies and create better health and well-being for all under the SDG3 targets by the United Nations.

The **4-step framework, which suggests a common set of metrics for measuring health investments**, can be extended or built upon with further research and engagement with leading economists beyond the approach of these authors. In the post COVID-19 era, G20 countries and other nations will struggle in identifying ways to boost economic growth, while preserving social cohesion, assuring economic stability, and directing investments in resilient economic sectors that can demonstrate strong linkages with other sectors in the economy.

This paper argues that the health sector has all these characteristics and can also protect societies by achieving a dual goal – that of strengthening economic growth prospects while alleviating societal burden that is connected to diseases and an unhealthy population.

¹⁸ https://www.ssdhub.org/wp-content/uploads/2020/09/SHORT_Recommendations-to-G20-Health-Ministers-1.pdf

We recommend that G20 Heads of State and Government, Ministers, and B20 Engagement Group:

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