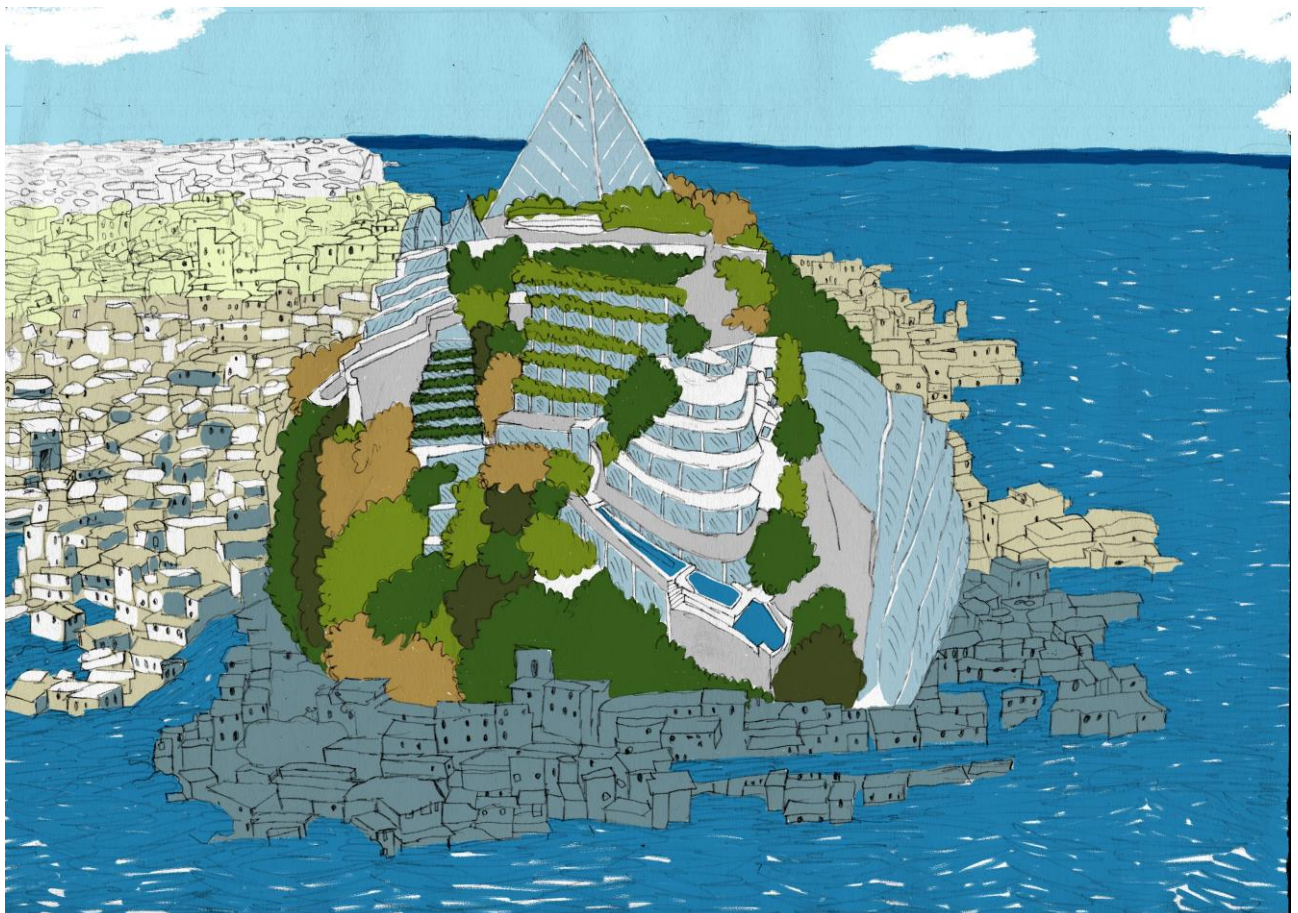


FRESHER

FORESIGHT AND MODELLING FOR EUROPEAN HEALTH POLICY AND REGULATION

FRESHER Health Scenarios

Scenario “Desolation health”



Today's health priority is to maintain basic health care services available to citizens. The decline of the European model started three decades ago when nationalist movements took over by promising to bring back wealth and security. It didn't happen but European governance, shared values and the common market were destroyed in the attempt. Now, **European countries, regions and cities face different challenges:** while some have managed economic recovery, others have lost their competitiveness in international trade and show very unstable patterns of growth. **To gain some legitimacy, national governments cooperate with different stakeholders for policies that are short-sighted as the time frame is generally set for the next election.** Economic stagnation has led many countries to gradually reduce **number of people that can avail public services, increase user charges for services and limit the number of public health providers.** These measures, especially in times of high unemployment and low income, create "health shocks", defined as unpredictable illnesses that diminish health status, to which citizens got costumed. Innovative medicines and treatments remain hardly affordable for European states and citizens. The high unemployment rates coupled with the deterioration of living standards undermine the community values and lead to tensions among citizens and mistrust in policies. **Moreover, citizens suffer the consequences of climate change as international agreements are stalled since decades.** There is a rise in the frequency and length of heat waves, as well as extreme events, especially in vulnerable regions, from where people increasingly emigrate. Mortality due to these events, as well as communicable diseases and pandemics related to them, drain resources, which are already scarce, from national healthcare systems.

Snapshots – Desolation health - Oliver

- ✓ Every morning I wake up very early to check in on my company app, so that I can get assigned as many deliveries as possible.
- ✓ I am a delivery boy for a food app, but I am thinking to migrate because I cannot make a living out of this job.
- ✓ I have little time between one delivery and the other, so I stop in fast food restaurants to eat, which is always packed with unemployed people.
- ✓ Getting around the cities is becoming more and more dangerous because of the road conditions and rising criminality.
- ✓ The waiting list in the public healthcare system is always too long and I never manage to get a visit. When I get sick I search on the internet for information to get well, but it is very hard for me to find reliable websites without advertisements.

| Trends | Evolution* | Snapshot 2050 |
|--|---|--|
| Equity |  | European society is highly unequal due to the collapse of social policies, ever-lasting economic stagnation, the inadequate organisation of public authorities and widespread corruption. |
| Technological change and economic innovation |  | Technological change has continued in terms of digitalisation but most EU countries have failed to take advantage to create new jobs and re-organise economic activities . EU countries have lost their competitive advantage in the world market. |
| Innovation in medicine |  | No significant discovery in medicine . Investments in R&D are stagnating and undertaken only by big pharma in partnership with insurance companies. These actors focus on expensive quick-fix health solutions and drugs. |
| Citizen empowerment |  | Internet is used to escape reality . More than before citizens need to live in a 'second life' on the internet and are willing to sacrifice social interactions to maintain their on-line "status". Furthermore, a black market ruled by hackers is flourishing which gives people access to services and materials that are usually too expensive or hard to find in the formal economy. There is an increase of the use of on-line games in the health sector to help promote and test medicine and treatments . |
| Climate change and decarbonisation |  | Environmental break down and economic war over resources . Environmental resources are scarce and cause conflicts worldwide. Climate change is worsening, causing continuous environmental emergencies and threatening human survival in many areas. |
| Demographic Change and migration |  | The European population has aged without taking any precautions with regards to health insurance, relying on the existing but failing European social security of previous decades. The public healthcare sector is collapsing in most countries . Europe is no longer an attractive place for migrants with a wave of migration of European citizens underway. |
| Urbanisation |  | Cities are constantly engulfed in financial crises due to the impoverishment of the population and persistent corruption. As a consequence, the provision of essential services is reduced . People live in polluted, chaotic cities that are characterised by insecurity and violence. |
| Agriculture and global food chains |  | Proliferation of global food chains . Few big corporations have monopolies and commercialise highly processed food. The intake of nutrients is highly unbalanced and the variety of food is low. |

Please note: These arrows reflect the possible change of each trend in the scenario, in comparison to the *status quo* of the trends **in Europe**. You can click on the trend name for a quick link to the trend description in this scenario.

Scenario “Desolation health” – Storyline

Europeans are unequal in wealth and health. EU countries have strongly limited their social policies due to economic stagnation. The gap between wealthy and low-income groups grows with more people falling below the poverty line. Inadequate organisation of public authorities, as well as widespread corruption reduce the effective delivery of public services further. Public goods, such as education and healthcare, are exclusively provided by the private sector with the award of contracts being undermined by a lack of transparency and accountability which, in turn, fuel allegations of corruption. In turn, the private provision of healthcare services is more extensive and readily available in economically more developed areas, with poorer areas being neglected as a result. Access to public services is therefore very limited with the number of citizens contracting diseases and unable to afford treatment rising. **Internal migration is on the rise** and governments have **enacted rules to limit the circulations of workers between European countries and regions**. More and more **resources are allocated to strengthen security** to protect the remaining rich regions against the rise of criminality due to inequality and poverty.

The Gini Index has worsened for all European countries reaching values close to one and in any case above 0.5. Inequalities in socio-economic conditions are reflected in inequalities in health conditions, given the difference in lifestyles, education, living and working conditions.

Technological change leads to poorer Europeans and unfavourable working conditions. Technological advancement has proceeded but has, at the same time, been concentrated in **only certain sectors** of the economy. Along with the digitalisation of the economy, technological unemployment has risen. **Economic stagnation characterises most EU regions**. The trade balance is about to turn negative and the overall macroeconomic situation is very unstable in Europe. The lack of coordinated innovation policy has failed to restructure the economy, create new sectors and generate new economic patterns. Only few large companies manage to surf the new wave of technological change and increase revenues, but, being highly computerised, do not create jobs or do so abroad, where labour is cheaper, through fully developed global production chains thanks to digitalisation. **As a result, most European firms perish in the global market under the cost-based competition of emerging countries.**

Economic stagnation coupled with the unregulated technology transformation has led to a very high level of structural unemployment and underemployment and to the diffusion of informal labour. Almost all routinized tasks are undertaken by computers whilst **most workers lack the competences to run high-skill non-routinized tasks**. On the one hand, a skill shortage creates bottlenecks and hinders economic development. On the other hand, many **workers are pushed outside the formal labour market, into backward sectors that are characterised by low productivity and low salary**. Social dialogue has broken down amid decreasing work conditions which, in turn, make citizens more vulnerable. An increase in labour insecurity – with more work hours and less protection – leads to citizens being more vulnerable to issues of stress, whilst also having less guarantees in the form of stable contracts and adequate remuneration. Following this employment pattern, social security is very sketched and on the way to disappear. Thus very few workers can afford it to have private insurance and private retirement schemes, subscribed to on a voluntary basis. Low income and shortage of leisure time prevent people from conducting healthy lifestyles. Stress and life-long instability increase mental illnesses¹.

European medicine is lagging behind Investment in R&D is below 3% of GDP in Europe, both in the private and public sector. As public health research has significantly declined, innovation in medicine is led by private companies, through a partnership between insurance and pharma companies. These actors control health data of the population. Given economic stagnation in most European countries, health R&D investments are

¹ WHO, 2010 b.

low and this sector has not seen significant innovations nor significant medical breakthroughs in the last two decades. General public health is taken into little consideration when investing in R&D, while medical innovation has proceeded to find high-tech quick fix solutions to face health emergencies. These solutions are accessible to people who are already sick but only to those who can afford it. The returns in terms of human lives are very limited. For example, advances in personalized medicine have slowed down, due to uncertain monetary returns to investments. Big pharma companies make money thanks to existing blockbuster drugs or slightly improved drugs to treat chronic diseases. Public healthcare provides free treatment to patients in only very limited cases². Financial constraints and the monopoly on health data have hindered organisational and disruptive innovation in the healthcare system, which increases the prevalence of diseases.

There are low and uncertain monetary returns to investments in medical innovation, hindering progresses in this field. Also when limited progress is made, its returns in terms of human life and the overall impact on public health is low due to a lack of access of the majority of the population.

Internet as an escape from reality. Information and communication technologies have progressed considerably but Europe lags behind. Infrastructures are not updated and most of citizens don't have the money to continuously update their technological devices and required skills to handle them. More than before, however, citizens need to live in a 'second life' via the internet and are willing to sacrifice aspects of social life to maintain their on-line "status". The internet is used to escape reality. Thus, a black market is flourishing which is ruled by hackers to give access to those services and materials that are usually too expensive or hard to find in the formal economy.

In this scenario, online games have taken over a large part of online activities and are increasingly used not only to provide enjoyable entertainment but to transport and spread information of various kinds, especially for the less educated population. In the health sector, online computer games allow players to undergo virtual health checks by providing health information and health parameters as part of the game. For the poor, this is often the only possibility to get a vague idea about their current health status. Often, these games are owned by private companies that use them to sponsor and sell their products

Europe and the World are melting down. Political instability, economic struggle, social unrest and conflicts have dampened the enthusiasm for sustainable development that characterised the beginning of the century. This has happened in the international agenda as well as in people's attitudes and lifestyles. **Instead of preserving natural resources, countries, enterprises and individuals try to grab higher shares** of the remaining resources to the maximum possible extent. Water and land are increasingly polluted and thus scarce, with significant regional differences in accessibility to these resources. **Economic stagnation in Europe has prevented transitions to industrial processes and the introduction of green technologies.** Since R&D activities are hampered by slow growth and uncertainty for investments, the transport sector has not been interested by significant innovations to make electric vehicles affordable and widespread. While steadily diminishing, **fossil fuels are still the prevalent energy source**, because energy generation from renewables has not manifested itself as a valid alternative, due to limited investments in this field, both from public and private sources. Economic war over natural resources leads to geopolitical instability and particularly exacerbates conflicts in oil-rich regions. The weakening of EU institutions has led to the **abandonment of the EU environmental policy and decarbonisation objectives.** International cooperation focuses on military agreements, whereas initiatives to halt climate change have failed.

Within this framework, the consequences of climate change on human health are dramatic and start to threaten human survival. Extreme events worldwide and in Europe cause more deaths than ever before. These events cause pandemics that rapidly spread worldwide through unregulated migration waves, leading

² The Economist Intelligence Unit, 2011.

to new global health emergencies that should be, but are not, faced globally. The number of heat waves multiply and the effects in cities are hardly bearable, so cardiovascular diseases increase consequently in Europe and other affected world regions³.

Europe has grown old and got sick. The number of **healthy years throughout life has declined as well as the overall quality of life. EU social security schemes have collapsed** due to decreasing birth rates that have led to a decline of the working population to support retirement schemes. Many citizens start getting sick or suffering from reduced mobility due to their unhealthy behaviours, the constant living in unhealthy stressful environments and the complete lack of preventive measures⁴. Many workers are forced to an early retirement as they are not physically fit enough for the strains of work or suffer from burn-out syndromes or depression. With low retirement pay, advanced age is characterised by illness, physical problems and social and economic poverty⁵. Having social values evolved towards individualism, **there is no or little sense of community, thus the elderly are left by themselves and cannot even rely on informal care or safety nets.** Changes in family structures that have evolved for the last decades, resulting in one-child families or even single households add to this social misery. Most of the elderly, who cannot care for themselves any more, are therefore dependent on alternative ways of living such as flat sharing communities, to secure a minimum of social care. Such shared flats may help to overcome the sense of loneliness, however, there is lack of professional care and supervision.

Europe is not anymore an attractive place for migrants, and Europeans are migrating again in search of better working and living conditions.

The decline of European cities. In a time of economic stagnation, European cities have lost their economic status and lag behind in terms of technological and social innovation. **Smaller cities have been abandoned whereas major cities have expanded despite the lack of a coherent plan.** With few exceptions, **local authorities of metropolitan areas implement scattered, short-sighted and sectoral policies and are generally unable to respond to needs resulting from increased internal migration.** Cities are consistently put under pressure due to ongoing financial crises resulting in the impoverishment of the population which, in turn, is exacerbated by corruption. Consequently, the provision of essential **services such as waste disposal or transport is suspended or reduced.** Cities are sprawling especially because of the increasing numbers of internal migrants. In these new areas, living conditions are deplorable, due to inadequate housing, poor sanitation and waste disposal infrastructure, including limited drinking water⁶. To reach amenities, citizens embark on exhaustive trips by private fuelled cars or motorbikes on badly maintained roads, often congested by traffic jams. The potential of ICT solutions, such as car-sharing, is hindered by unclear regulation, lack of people's interest and rises in crime. Walking or cycling is almost impossible, given long distances and unsafe roads. Here, life and economic activities are characterised by informal jobs and criminal activities that generate social unrest and threaten security. Richer residential neighbourhoods develop in the absence of coherent planning, following uniquely market-driven logics. Speculation is high on land and property markets and the open land owned by the community, such as parks and other green space has been gradually reclassified and sold to brokers.

Air pollution in cities increases considerably and physical activity is very limited⁷. Traffic congestion and a lack of green areas and cultural spaces for leisure time increase the level of stress and insecurity in cities.

³ Whitmee et al., 2015.

⁴ Chaytor and Staiger, 2012.

⁵ UK Government Office of Science, 2016.

⁶ EEA, 2006.

⁷ OECD, 2016.

Consumerism and unawareness of healthy lifestyles, as well as unregulated business, drive people to spend their spare time in night life districts.

European food security and safety are threatened. The European agricultural sector has evolved towards industrial production but has stagnated over the last decades, pressured by the competition of **free trade agreements, like CETA and TTIP**⁸. The Common Agriculture Policy (CAP) has collapsed due to the weakening of EU institutions and the exit of some countries from the EU⁹. Only big agricultural industries have survived in the market, deploying **intense agriculture and animal breeding with high greenhouse gas emissions**. While the fertile arable land is intensively farmed by agro-corporations, the less fertile land is dedicated to the agro-processing industry, as well as high-tech and low-labour agricultural towers for livestock production and greenhouse complexes. **Fertility is low because systematic soil and humus management has been ignored** for decades. Large farms cope through the **systematic use of chemicals, synthetic fertilisers and the widespread application of broad-spectrum herbicides**, which, in turn, contribute to soil pollution and put further pressure on the environment. Thus, the entire agricultural practice is not sustainable and seriously undermines biodiversity in food production and in general in the ecosystem. As a result, food security is at risk in many European countries. Under the constraint of low income, **most Europeans have a limited diet and consume mostly cheap food and drinks provided by few Transnational Food Corporations**, which constitute a world oligopoly and control the entire market. These companies manage to avoid the introduction of regulations on products' labels and ingredients percentages in the European market, through intense lobbying activities. Therefore, **it is hard to discern the origin of these products and what they are made from**. Overall, they consist only to a small extent of natural ingredients, while abounding in sugar, salt, colouring and other chemicals. As a result, food safety is also very low. To cope with high food price volatility and increase their resilience, poor people engage in **informal urban gardening and subsistence farming**, where possible. There is some form of subsistence agriculture to cope with poverty and scarcity of resources. As the poor usually do not own farming land, and urban green space is scarce, people must resort to using alternative planting areas such as balconies, to cultivate vegetables or fruits. This is often the only means of getting access to unprocessed food. Most Europeans have unhealthy and unbalanced diets, based on highly processed food and drinks, exceeding the recommended levels of sugar and salt and whilst not covering the necessary amount of natural nutrients. With most people unaware about the importance of healthy diets, alcohol and tobacco consumption is high and uncontrolled. All this delivers long-term negative effects on the population's health¹⁰.

⁸ More information at: <http://ec.europa.eu/trade/policy/in-focus/ceta/ceta-explained/> and <http://ec.europa.eu/trade/policy/in-focus/ttip/about-ttip/>

⁹ EU SCAR, 2015.

¹⁰ Stuckler, 2008.

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