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The Impact of Epidemics on the Economy



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Throughout history Emerging Infectious Diseases (EID) have shaped the course of human history and have caused incalculable misery and death. New advances in science, technology and medicine have helped us gain ground against certain infectious diseases. However, even in the twenty-first century infectious diseases continue to emerge at a rapid pace.¹

Economics and epidemics are linked. Severe acute respiratory syndrome (SARS), an illness first detected in China, led analysts to cut growth forecasts by half for Asian economies. The main impact was on tourism. Few want to travel and risk catching SARS or being quarantined when they return. Consumer spending also falls as people shun public places such as department stores and restaurants. Many workers may stay at home, causing output and exports to be affected. All this comes on top of the medical costs of treating victims and implementing disease controls. **The full cost of an outbreak depends on how long it lasts and how far it spreads.** Foreign Direct Investment (FDI) in Hong Kong at the height of the SARS crisis fell by 62% in one quarter².

In the gallery of human pestilence, SARS remained a minor character. The 1918 flu epidemic killed 40m worldwide. It

is also minor when compared with AIDS. It is also tiny when compared with the Black Death (bubonic plague), which killed about one-quarter of Europe's population in the 14th century (that has hastened the end of feudalism, by making labor scarce).

Nevertheless, compared with other catastrophes, such as war, the economics of disease outbreaks is remarkably under-researched. However, economies do recover and it remains difficult to calculate the long-term economic effects of epidemics³.

An epidemic is categorized as a fast growing outbreak that affects many people almost instantly, usually within a city. If the epidemic is not sufficiently contained it can become a pandemic outbreak, that has no social or geographical boundaries. EIDs pose a major risk to the economy as well as on the health and welfare of global human and animal populations. The risks associated with food supply include the economic losses related to the culling (killing) of animals. An epidemic's impact on the economy can vary based on its imminent and long-term severity. This is influenced by the rate of hospitalizations, insurance premiums, outpatient visits and the largest contributor, death. Most economic models agree that death causes the greatest economic decline with a yearly cost of billions on the economy. According to the Centers for Disease Control (CDC) seasonal flu outbreaks cost US employers an estimate of \$10.4 billion in direct costs of hospitalization and outpatient visits, not including the indirect costs related to lost productivity and worker absenteeism.

A worldwide influenza pandemic could have a major effect on the global economy including travel, trade, tourism, food, consumption and eventually, investment and financial markets⁴. Planning for pandemic influenza by business and industry is essential to minimize a pandemic's impact.

¹ Sharon Lili Elhadad and Dana Elhadad, M.Sc; "The economic and social implications of epidemics"

² Tam, J (2003). "SARS slashes FDI inflows by 62 per cent." The Standard: Greater China's Business Newspaper. 1 October.

³ Measuring the economic effects of disease is anything but straightforward http://www.economist.com/node/1698814

⁴ Emily Eshleman; "The Economic Impact of Epidemics"

In addition to newly emerging infectious agents, certain viruses can re-emerge in the human population overtime. A most recent example of this would be the re-emergence of the Ebola virus.

Pandemics have accompanied human evolution from ancient times to modern civilization. Today, despite our advances in laboratory science, the basic means of addressing infectious diseases remain the same as those nearly a century ago. Public health education, isolation, sanitation, lessening congestion, closures, and surveillance are essential tools. Leading the surveillance and control measures are the International Health Regulations (IHR) mandated by the World Health Organization in 2005. Lebanon has agreed to endorse and enforce these important regulations. Moreover, appropriate use of vaccines. antiviral drugs and pandemic preparedness plans would greatly reduce the impact caused by the disease. Given our highly mobile and connected society any future pandemic is likely to be more severe in its reach and perhaps in its virulence.

EIDs are not preventable, however mitigating its impact on the operational integrity of critical national infrastructure. private industry, and global trade is possible. Mitigating will require social, political, and economic commitments across governments and industries, as well as through unique public-private partnerships⁵. No country is immune to epidemics and their impact on the economy therefore prevention and policy go a long way⁶.

The effect of an epidemic disease on the economy is complex and depends upon many factors. These include what group of individuals is most at risk for contracting the disease, the natural history of the illness (e.g., how long the epidemic lasts), and how the disease is transmitted (via airborne vs. blood-borne pathogen)⁷. One of the sources of the panic created by some epidemics is their unpredictability.

Epidemics, however, pose different challenges than other health problems. The speed and unpredictability of their spread mean that policymakers have to strike a fine new epidemics emerge and old ones reemerge.



balance between acting swiftly (and without complete information) and guarding against the undue haste that may make matters many times worse. Presenting facts in a clear and measured way and having the patience not to begin drug treatment programs until correct adherence is at least probable, for example, can help contain both the health and economic impacts of an epidemic. Strengthening health systems and the populations they protect can help fend off disease outbreaks and limit the impacts of those that do emerge.

International cooperation is also vital for preventing and containing epidemics. Globalization can facilitate the spread of new diseases, but it also offers opportunities for tackling them. International collaboration in epidemiological surveillance, scientific investigation, and public health and medical efforts to tackle and treat disease has already proved effective in dealing with diseases such as SARS. It is likely to become increasingly important as



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⁵ http://www.newsrecord.co/economic-social-implications-epidemics/

⁶ http://www.david-campbell.org/visual-hivaids/

⁷ David E. Bloom and David Canning; "Epidemics and Economics"; Program on the Global Demography of Aging Working Paper No. 9: http://www.hsph.harvard.edu/pgda/working.htm