Investing in Health: An Economic Assessment

Dean T. Jamison
University of California, San Francisco

Semana de la Innovación en Salud
Ciudad de Mexico
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Overview

• The returns to investing in health

• Implications for Mexico

• Implications for pandemic preparedness
HEALTH INVESTMENTS BOOST PERSONAL AND NATIONAL INCOME
HEALTH INVESTMENTS BOOST PERSONAL AND NATIONAL INCOME

Investment

- Productivity
- Availability of Resources
- Education
- Demographics

GDP
HEALTH’S CONTRIBUTION TO GNI: FOUR CONVERGING LINES OF EVIDENCE

<table>
<thead>
<tr>
<th>Historical</th>
<th>Microeconomic</th>
</tr>
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<tbody>
<tr>
<td>E.g., health improvements were estimated to have contributed 30% (or 1.15% per year) to Britain’s economic growth, 1780 – 1979.</td>
<td>E.g., In Indonesia a 1% increase in adult height was estimated to result in a 5% increase in income</td>
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<tr>
<th>Macroeconomic</th>
<th>Benefit-cost analyses</th>
</tr>
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<tbody>
<tr>
<td>E.g., A typical study estimated that about 11% of economic growth in low- and middle-income countries, 1970 – 2000, resulted from reductions in adult mortality</td>
<td>E.g., The Copenhagen Consensus 2012 ranked the 30 most cost beneficial ways of addressing global poverty. 10 of the top 15 were in health or nutrition.</td>
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</tbody>
</table>
INADEQUATE FINANCIAL ARCHITECTURE & PATHWAYS TO POVERTY

Ongoing out-of-pocket payments
Catastrophic health events/expenditures
Income loss

Reduction in savings
Asset sales
Borrowing (at high rates)
Time costs to household members

Impoverishment
Inadequate medical care
Life filled with uncertainty

Red: Health finance policy determines size of impact
Blue: Social insurance policy determines size of impact
“The Lancet Commission on Investing in Health provides further proof that improvements in human survival have economic value well beyond their direct links to GDP”

Jim Kim

World Bank President
“A country whose citizen enjoys long and healthy lives clearly outperforms another with the same GDP per capita but whose citizens suffer much illness and die sooner”

-Bloom et al, 2004
THE VALUE OF HEALTH GOES BEYOND GDP


Source: Global Health 2035
Overview

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FIRST LAW OF HEALTH ECONOMICS

Health Care Spending per Capita (percent of GDP)

LN(GDP per Capita) (2000 $)
Mexico’s path towards the Sustainable Development Goal for health: an assessment of the feasibility of reducing premature mortality by 40% by 2030

Eduardo González-Pier, Mariana Barraza-Lloréns, Naomi Beyeler, Dean Jamison, Felicia Knaul, Rafael Lozano, Gavin Yamey, Jaime Sepúlveda
WHEN WILL MEXICO CONVERGE?
UNDER-5 MORTALITY

Under-five mortality

Probability of dying before age 5, per 1000 live births

Year

0 50 100 150 200

United States
Mexico

WHEN WILL MEXICO CONVERGE?
UNDER-5 MORTALITY

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United States
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WHEN WILL MEXICO CONVERGE?
LIFE EXPECTANCY

Female life expectancy at birth

- Frontier
- (1) United States
- (2) Mexico

United States
Mexico

Year

VALUE OF MORTALITY DECLINE AS % OF CHANGE IN FULL INCOME IN MEXICO

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Percent of Change</th>
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<tbody>
<tr>
<td>1992-1997</td>
<td>62%</td>
</tr>
<tr>
<td>1997-2002</td>
<td>61%</td>
</tr>
<tr>
<td>2002-2007</td>
<td>31%</td>
</tr>
<tr>
<td>2007-2012</td>
<td>53%</td>
</tr>
</tbody>
</table>
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ESTIMATING PANDEMIC RISK IN MEXICO
RISK EXPRESSED AS RETURN TIME
INCLUSIVE ESTIMATES OF PANDEMIC LOSS

The Inclusive Loss from Pandemic Risk
Victoria Y. Fan, Dean T. Jamison, Lawrence H. Summers
NBER Working Paper 22137, April 2016

Expected Annual Loss from Pandemic Influenza Risk
(subject to substantial uncertainty)

<table>
<thead>
<tr>
<th>Country Type</th>
<th>Percentage of GNI</th>
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<tbody>
<tr>
<td>Lower-middle income countries</td>
<td>1.6%</td>
</tr>
<tr>
<td>MEXICO</td>
<td>1%</td>
</tr>
<tr>
<td>High-income countries</td>
<td>0.3 – 0.4%</td>
</tr>
</tbody>
</table>
THANK YOU