



EUROPE

RESEARCH  
BRIEF

European Edition

# Testing the Connection Between Social Spending and Better Health

**E**conomic pressures are forcing many countries to trim social welfare spending. Amid these changes, new RAND research has strengthened the link between social expenditure and population health. These new findings may give policymakers reason to rethink budget priorities.

# A different path to better

**Many European countries are implementing policies of fiscal austerity, and social welfare programmes are popular targets for spending cuts. The United Kingdom is scaling back disability benefits, and Greece, Spain, and Portugal have shrunk welfare provisions. Might these cuts affect the health of their citizens?**

**Related to that question, a fascinating line of inquiry has emerged: whether spending more on healthcare alone is the best way to improve population health. Research has shown a positive association between social spending and better health. Are policymakers passing up an effective lever to improve health? Or are they risking higher future healthcare costs by reducing social welfare programmes today?**

## **A deeper, broader look**

In a research report titled *Are Better Health Outcomes Related to Social Expenditure? A Cross-National Empirical Analysis of Social Expenditure and Population Health Measures*, RAND researchers tested the link between social spending and health across the 34 member countries of the Organisation for Economic Co-operation and Development (OECD). They also examined whether different types of social spending are associated with better health outcomes. The researchers expanded on previous cross-national analysis with three decades of data and pulled in new sources. They considered social factors—including income inequality and a measure of how much people trust each other in a society—for the first time alongside social expenditure. They also explored for the first time whether the connections between social spending and health hold when looking at detailed data across one country, the United States.

The research team's findings confirm that higher levels of social spending are strongly associated with better health. They also found that higher spending on different types of social programmes affects population health in different ways. With regard to income inequality, they found that the link between social spending and better health is strongest where inequality is greatest.

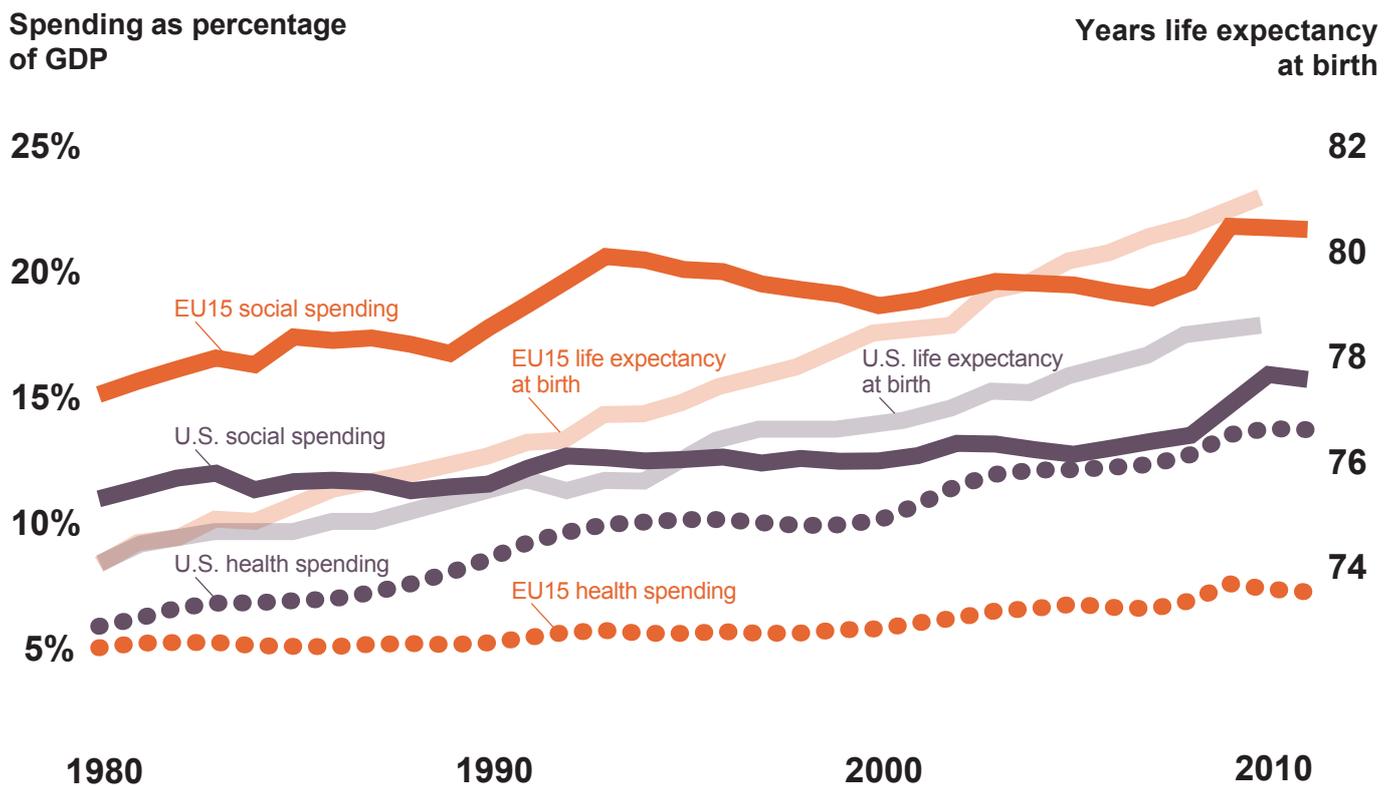
These conclusions are, of course, bound by the limitations of the study. And, at best, the relationships observed are correlations, not causal effects. Still, the breadth of this study—30 years of data across 34 countries—lends weight to the relationships observed. Given that the balance of spending between healthcare and social programmes may affect health outcomes, it seems sensible for policymakers to reconsider where they make their population health investments.

health?

OECD member countries tend to rank higher than the United States in many health outcomes, notably low infant birth weight and life expectancy.



## Different approaches, different results



While health expenditures in the United States have risen significantly more than those in the EU15, life expectancies in these European countries have consistently stayed higher. One difference between the U.S. and the EU15 is found in expenditure on social programmes, with EU15 countries spending significantly more than the United States over the 30 years covered in this study. (EU15 refers to the 15 countries that have been members of the European Union since before its May 2004 enlargement.) NOTE: OECD spending figures include public, mandatory private and voluntary private expenditures. These figures do not include exclusively private spending with no social component. Social spending has been defined as the total of all of these expenditures in all spending categories with the exception of health. Source: OECD SOCX database.

### A case study



## Income inequality

RAND researchers chose to examine the role of income inequality in social spending and health results in part based on other researchers' observations that there is a growing case for a causal relationship between inequality and health. The research team found that the association of social spending with health outcomes may differ depending on the level of income inequality. The role of social spending may be magnified in less equal societies. This imbalance may imply that societies with higher inequality would get more pronounced health returns on social investments.



## What if?

So what would it mean to policymakers if the association between higher social spending was shown to be causal, meaning that more expenditure on social programmes yields better health outcomes?

The major policy implication would be that spending on social programmes should be increased relative to healthcare spending. The path to implementation, however, may be challenging. In many countries, healthcare spending tends to be more protected than social spending. Likewise, income inequality may disempower groups who would stand to benefit from—and might advocate for—a rebalancing of spending.

Still, if the effects of social spending on better health were found to be causal, that finding would bolster the argument that expenditures on social programmes might give governments a better return on their investments in terms of population health. It also might mitigate some of the adverse impacts of income inequality.

## About this study

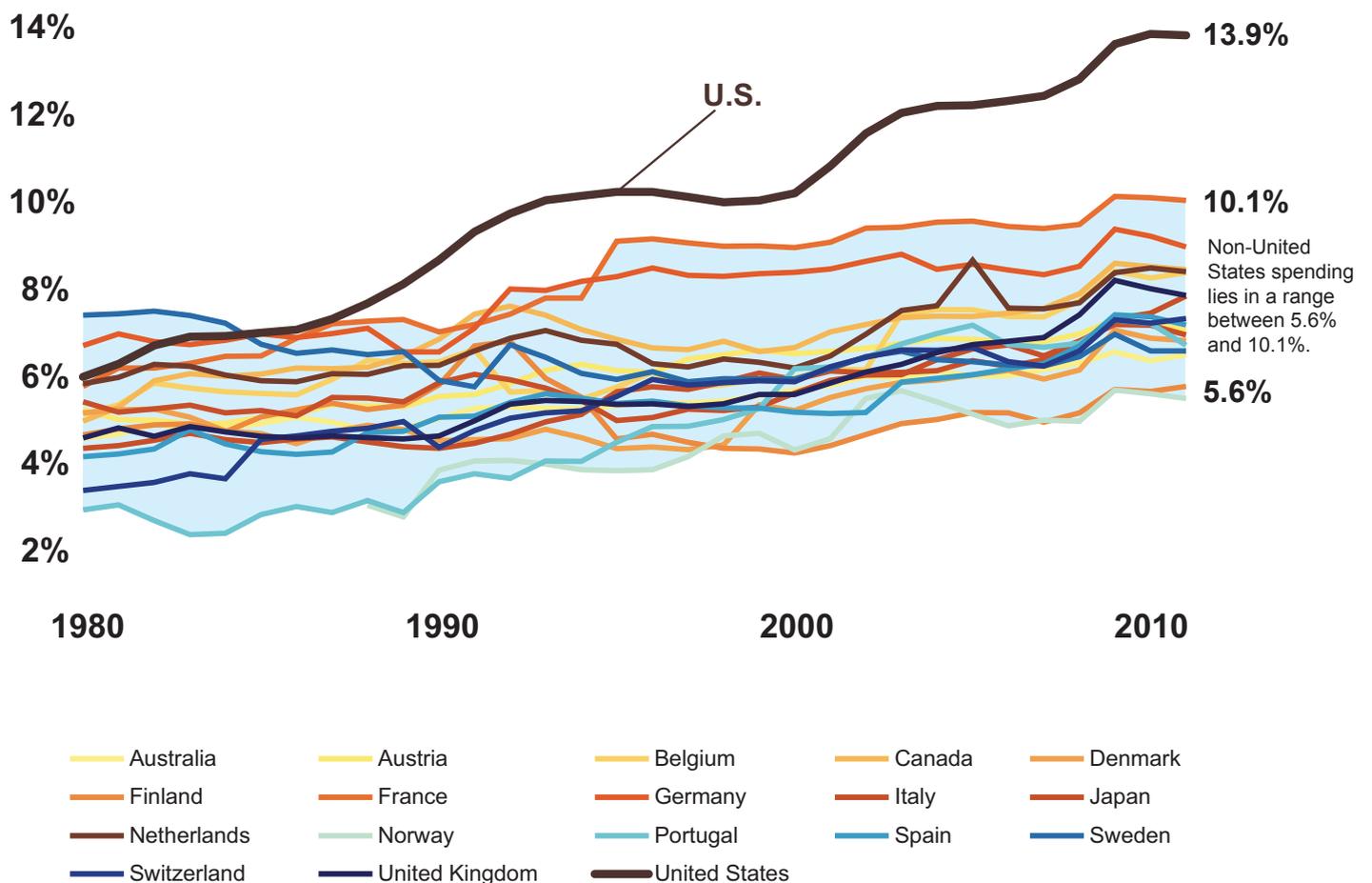
Cross-national research by Bradley et al. (2011) and Bradley and Taylor (2013) found that higher levels of social spending were associated with better health outcomes for OECD countries. Building on that work, this study included additional countries and health indicators and expanded the period of observations to 31 years. RAND researchers explored the effect of time lags between social spending and population health outcomes. They also looked at the impacts of different types of social expenditures. Their analysis factored in social capital (a measure of interpersonal trust) and two measures of income inequality (the Gini coefficient—a standard measure of income inequality—and the Palma ratio—a more recent measure based on the ratio of the cumulative income of the highest-earning 10 percent of the population to that of the lowest 40 percent). Finally, they explored whether the relationship between social expenditure and health outcomes holds when looking at variations within one country—the United States—using state-level data.

Elizabeth H. Bradley, Benjamin R. Elkins, Jeph Herrin, and Brian Elbel, "Health and Social Services Expenditures: Associations with Health Outcomes," *BMJ Quality & Safety*, Vol. 20, No. 10, 2011, pp. 826–831.

Elizabeth H. Bradley and Lauren A. Taylor, *The American Health Care Paradox: Why Spending More Is Getting Us Less*, Philadelphia: Public Affairs, 2013.

# U.S. healthcare costs far outstrip peers

Health spending as % of GDP



The United States may spend far more on healthcare than its OECD peers, but that hasn't always been the case. In the early 1980s, its spending on healthcare wasn't much greater than the rest of the cohort. Starting in the late 1980s, U.S. healthcare spending began accelerating much faster than other OECD countries. Today, the United States is a high-spending outlier. The fact that U.S. spending hasn't always been so high may indicate the existence of policy levers to bring spending back down. The shaded area above shows the range of healthcare spending as a percentage of GDP by non-U.S. OECD countries. While in 1980, U.S. spending was within that range, by 2011 its spending, as measured by the OECD SOCX database, had hit 13.9%. That's significantly higher than the other OECD countries, which spent between the high of 10.1% set by France and the low of 5.6% set by Norway.



Higher levels of social spending are strongly associated with better health.

# What the data tell us

- ▶ Higher levels of social spending are strongly associated with better health.
- ▶ The association is particularly strong for public, as opposed to private, social spending.
- ▶ Spending on old age programmes demonstrated the strongest association with better health outcomes, including in unexpected areas, such as infant mortality and low birth weight.
- ▶ The association between social spending and better health strengthens over time.
- ▶ Social factors, such as income inequality and social capital (a measure of how much people trust each other in a population), are associated with health outcomes.
- ▶ The association between social spending and health outcomes is strongest where income inequality is greatest. In other words, social protection may be more important for health outcomes in more unequal societies.
- ▶ The associations observed across countries hold across regions of a single country, the United States.



This summary describes research done by RAND Europe documented in *Are better health outcomes related to social expenditure? A cross-national empirical analysis of social expenditure and population health measures*, by Jennifer Rubin, Jirka Taylor, Joachim Krapels, Alex Sutherland, Melissa Felician, Jodi L. Liu, Lois M. Davis, and Charlene Rohr, RR-1252-RC, 2016 (available at [www.rand.org/t/RR1252](http://www.rand.org/t/RR1252)). To view this brief online, visit [www.rand.org/t/RB9900z1](http://www.rand.org/t/RB9900z1). Funding for this study was provided by philanthropic contributions from RAND supporters and income from operations. RAND Europe is a not-for-profit organisation whose mission is to help improve policy and decisionmaking through research and analysis. RAND Europe's publications do not necessarily reflect the opinions of its research clients and sponsors. Photo credits: cover, iStock: Steve Debenport; p. 3, iStock: Jason Doiy; p. 4, iStock: Photographee.eu; p. 5, iStock: Steve Debenport; p. 7, iStock: PeopleImages. RAND® is a registered trademark. © RAND 2016

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