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Economic Effect of a Government Shutdown

ADAM NOBLE

From December 22nd to January 25th, the United States experienced the longest government shutdown in the country's history. This resulted in nine executive departments to shutdown partially or fully causing about 800,000 government employees to be furloughed or work without pay.

Although there is an overall consensus that the US economy took a hit due to shutdown, the exact economic effects of a shutdown of this magnitude are still being evaluated. The Trump administration estimated that for every week the government is shutdown the US quarterly economic growth decreased by .13%. Some investment firms such as Merrill Lynch estimated that the shutdown could have affected the US GDP quarterly growth rate by 2%, while other firms such as JP Morgan estimated the effect to be closer to 0.5%.

This slow down in the US economy is due to the fact that government employees were compensated less, and the government purchase of products and services decreased significantly.

The effects of a government shutdown extend past the workers themselves. For example, industries that are paid by federal workers lose income as well, from the shop that is next to the government offices to the nanny that babysits the children of the employers. Without a monthly paycheck coming in, those affected have to make decisions to decrease their cost of living.

A partial government shutdown also leads to decreased in overall completed work. For example, Zillow estimates that about 39,000 mortgages could have not been reviewed leading to a slowdown in home purchases in the US.

Continued on page 2

Financing an Emerging Health Crisis: An Insufficient Global Response to the Burden of Noncommunicable Diseases

CAROLINE KASMAN

As a result of global economic development, noncommunicable diseases, also known as NCDs, have become an emerging pandemic and wide scale economic burden. Caused by complex genetic, environmental, behavioral, and physiological factors, NCDs include conditions such as cardiovascular disease, cancer, diabetes, and chronic pulmonary disease.

Typically, residents of low-income countries incur higher rates of infectious diseases, such as malaria or cholera. As their economies have developed and initiated basic healthcare, infectious diseases have become easier to control.

Unfortunately, this same economic development is associated with behavioral changes, and environmental and market factors, which expose populations to risk factors for NCDs, such as air pollution, tobacco use, physical inactivity, unhealthy diets, and abuse of alcohol.



Continued on page 3

Economics Advising Office's Blog: http://uwecon.wordpress.com

Continued: Economic Effect of a Government Shutdown

Continued from Page 1

Mergers and acquisitions were also slowed down due to the fact that the Federal Trade Commission must approve the deals.

During a shutdown, The Small Business Administration stops approving small-business loans, which can cause business owners to stop their business expansion and repairs, or find a more costly alternative of financing. Lastly, with national parks being forced to close down, communities that rely on the tourism are impacted heavily. During the month of the 2013 Government shutdown, the towns outside Acadia National Park experienced a 76% decline in tourism.

A surprising effect of a government shutdown is the loss of data that is collected that helps policymakers make decisions that affect the US economy. The Federal Reserve Bank of New York's "Nowcast" model which attempts to model the US GDP was missing nineteen of its thirty-seven macroeconomic inputs during the shutdown.

This data includes a wide range of macroeconomic indicators such as exports, construction spending and home sales. Unfortunately, the longer a shutdown persists, the less informed our policymakers are.

Although many economists expect the GDP growth of Q4 of 2018 and Q1 of 2019 to be diminished due to the shutdown, experts believe that the economy will bounce back in the coming quarters due to workers receiving back pay.

However, some believe that this last shutdown could have a lasting negative impact on the US economy. As businesses and consumers could begin to expect a shutdown to become more routine, US growth expectations could decrease for years to come.



Sources for information in this article can be provided upon request

Continued: Financing an Emerging Health Crisis:

Continued from Page 1

Historically high-income countries, such as the United States, have already experienced this shift in disease burden and have developed the healthcare infrastructure to start to curb NCDs. However, states in economic transition lack the health system and government framework to address the NCDs pandemic, sometimes with the double burden of still experiencing infectious disease crises.

In 2018, the World Health Organization stated that NCDs are responsible for 70% of all global deaths, disproportionately affecting people in low- and middle-income countries. In fact, three quarters of global NCD deaths now occur in the developing world. Moreover, the healthcare costs and lost productivity due to NCDs are projected to lead to a cumulative output loss of roughly US \$47 trillion over the next two decades. For context, this loss is equal to three quarters of total world GDP in 2010.

To address this emerging health crisis, developing countries require major external financing. However, despite the burden of NCDs, the majority of development assistance for health (DAH) goes towards other health issues, such as infectious diseases. In 2007, while external donors provid-

ed only about \$0.78/disability-adjusted life year (DALY) for NCDs, \$23.9/DALY went to HIV, TB, and malaria. According to the University of Washington's Institute for Health Metrics and Evaluation, NCDs received only 2% of total global health financing in 2017 despite causing 67% of global deaths.

This significant lack of alignment between disease burden and funding is attributed to donor groups lacking awareness of the impact of NCDs in low and middle income countries. In addition, curbing NCDs on a mass scale requires highly complex responses in line with the more proven and evidence-based approaches for many infectious diseases. However, there is currently limited quantitative research on how organizations allocate foreign aid for global health issues, especially for NCDs. Further studies investigating political, health, and socioeconomic factors are necessary to understand the discrepancy between disease burden and DAH levels. Research that provides transparency into how organizations allocate funding will improve policymaking to better address the emerging NCD pandemic.

Sources for information in this article can be provided upon request

Climate Change: The Biggest, Yet Ignored Threat to **Southeast Asian Economies**

NICHOLAS IE

Roughly two years ago the US and more than 180 states had just agreed upon and signed the Paris Climate Agreement – a landmark achievement in environmentalism. Less than a year later, President Trump decided to pull the US – viewed as a leader in every aspect to countless countries – out of the agreement. As a result of that decision, in recent months, global players like China are already questioning the "fairness" of the deal. What these groups fail to acknowledge is that climate change is already damaging the world, especially Southeast Asia and its economy.

The ASEAN region is comprised of 10 countries and is home to over 650 million people, many of whom are in the agricultural business. Taken as a single entity, ASEAN represents the world's third largest market and the fifth largest economy in terms of nominal GDP. As such, the region is a major player globally and could grow even further. However, the region's growing reliance on coal and oil, coupled with greenhouse gases emitted over decades by more advanced economies has slowed its momentum.

According to the Global Climate Risk Index, since 1960, average temperatures in Southeast Asia have risen every decade and the apparent economic impact could be disastrous. The Asian Development Bank (ADB) predicts that

Sources for information in this article can be provided

climate change could cut 11% off GDP by 2100. This is because vital sectors such as agriculture & fishing, among others, will be adversely affected by the heat stress and rising sea levels associated with climate change.

A study by Verisk Maplecroft found that labor capacity could fall by 16% by 2050 due to the increasing rate of heat stress, which causes dehydration and fatigue. As a result, we expect output to fall, which could lead to a loss of US\$78 billion in Southeast Asia's export revenue and hence GDP. This is significant because export is a large part of many economies in Southeast Asia – around 70% of GDP for Malaysia and Thailand. In addition, Jakarta, has been dubbed the "fastest-sinking city in the world" by BBC Indonesia. The BBC found that Jakarta is sinking at an average rate of about 10 cm a year and more surprisingly, half of the city currently sits below sea level.

Nevertheless, despite the seemingly inevitable drawbacks climate change brings with it, there is still time. Currently, Earth is locked into at least a one-degree Celsius warming by 2050 and with every passing moment, the challenge becomes more complicated. Therefore, it is as important as ever that we inform others about the dangers of climate change and implore them to do something about, as time is running out for ASEAN and its' members.

Rational vs. Fair: Lessons from Ultimatum Games

KIANA RAHNI

The formal origins of the Ultimatum Game date back to the 1982 paper by Güth, Werner, Schmittberger, and Schwarze entitled "An Experimental Analysis of Ultimatum Bargaining."

The premise of the experiment is based upon a simple two-person game that allows for offering and acceptance or rejection of a given currency or prize. The focus of this game revolves around understanding the ways in which humans follow along or deviate from the rationality principles of "homo economicus."

In the game itself, two players divide a fixed amount of utility. Player 1 offers an amount to Player 2. P2 decides whether to accept or reject this amount. If P2 accepts, P2 receives the amount and P1 keeps the remainder. If rejected, P1 & P2 both receive nothing. If both players play rationally, P1 will only offer the minimum amount possible to P2. P2 would accept the amount offered since P2 is better off gaining some utility than nothing.

Empirical studies of this game, however, report a high occurrence of "non-rational" behavior demonstrated by P1s, who offer more than the minimum amount possible and P2 who reject their offered proportions.

This lack of adherence to rational modes of gameplay, showcases that players are influenced by a sense of social responsibility and seek to signal non-monetary considerations when proposing and accepting utility.

The takeaways from this game can play out in the real world as well. An example includes the Greek bail-out. To save the Euro and avoid economic crisis, Greece was offered an international bail-out by European leaders to escape debt under conditions of strict regulations over Greek pensions and taxes. However, Greek

voters found the terms of the bail-out unfair and rejected the bailout in a referendum in July of 2015.

The Greece/EU deal was often labeled as unfair by Greek citizens, but what exactly is this concept of "fairness"? Fairness is a spectrum of players' valuation of what they "deserve" in comparison to the other player. Thus, fair could (and most commonly does) mean equal monetary payoffs. In game play, the payoffs for both rejection (0,0) and acceptance of equal payments (5,5) give the players equal amounts of money. The highest among these even distributions of money results in a pareto optimal point of payoff (5,5).

The high frequency of rejection observed in empirical Ultimatum gameplay may seem to be an irrational decision at first glance, but highlights the fact that although payoffs may be measured in dollars, our society values equality and fairness which causes many people's utility payoffs to be different than their monetary payoffs.

In the case of the Greek bail-out, the majority of Greek voters evidently had higher utility in keeping their financial independence than they would have monetarily if they had accepted the bail-out.

The Ultimatum Game is an interesting model that allows game theorists, economists, politicians, and everyday individuals to examine seemingly counterintuitive human behavior in rational, non-dilemma situations. By asking why people act a certain way, we can learn how people sometimes value abstract concepts such as fairness above money.

Sources for information in this article can be provided upon request

UPCOMING EVENTS:

Math/Stats Review: In early Spring quarter the EUB will be hosting a Math and Statistics Review Seminar to help students brush up on the math used in ECON 200/201, as well as ECON 300/301.

Economics Tutoring: The EUB offers free tutoring every weekday at various times every quarter! Check the schedule on the EUB website to see tutoring times. If you need help with an upper level class, however, make sure you check the website to see which tutor can help.

Economizer Submissions: The Economizer will be seeking guest writers for our Spring Quarter issue. Interested writers should check their emails from the department in early Winter quarter for submission instructions.

The Economizer is a quarterly newsletter published by the Economics Undergraduate Board.

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