

# Marginal Utility



**KING'S**  
ECONOMICS

Editorial

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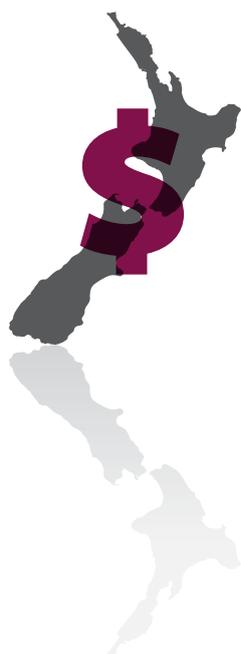
CROSSWORD

2020 has been an interesting year for economic students at King's. Covid-19 has had incredibly destabilising consequences and as a result, we saw the theory we had been learning come to life. Year 12 and 13 economics students spend a considerable amount of time learning about how and why recessions come about; as well as learning about policies to tackle them – all very relevant now that Covid-19 has conquered the world.

Economics students have seen countries use numerous tools available to them to try improve their situations – often to no avail. Countries have been cutting interest rates to levels that have never been seen before. For example, the Bank of England cut interest rates to the lowest rate ever seen at 0.1%. Countries have also been deploying more unconventional policies that would have never been considered 20 years ago such as quantitative easing which involves central banks buying bonds and other financial assets to expand the money supply. It has become clear that the Covid-19 pandemic is a crisis like we have not seen before but with most crisis situations government intervention will be paramount. The articles in this magazine, written by year 13 economics students and teachers, provide an insight into the most relevant economics issues of the present day. There is a particular emphasis on the economic impact of this global pandemic, from international aid to the economics of toilet paper hoarding. Articles also explore the resource curse, and the department recommends some of their favourite economics books and podcasts.

I would like to thank the students and teachers involved in producing this year's edition of *Marginal Utility*. Your hard work and commitment has paid off.

Hugo Gerbich Pais - Averill



# Future of the New Zealand Economy

Cullen White (MAJOR)



We know that New Zealand is going to change after Covid-19. There are also other factors which have been at play even before this current crisis, namely Brexit. So how different is our economy going to look?

The most polarising industry during this crisis has been the tourism industry. In 2019 tourism accounted for more than 5% of GDP in New Zealand and directly employed 180,000 workers. It is reasonable to expect this proportion to shrink as tourism operators attempt to survive off domestic visitors. A New Zealand economist was recently questioned on how the tourism sector would rebound, he answered “like dropping play-dough on the floor.” Yet within a decade we would expect this industry to recover and thrive. Tourism recovered after the 1886 Mt Tarawera eruption, and after the 9/11 attacks. Tourism will surely survive this virus (the natural beauty of New Zealand is not going anywhere) but it will almost certainly be the slowest area to recover.



Over the past month the online industry has been experiencing unprecedented growth. Prior to the lockdown the ICT sector was worth 2% of the GDP. We have in the space of a few short weeks transitioned almost all economic activity online, in the form of Zoom meetings, online shopping, and distance learning. Furthermore with the recent announcement that multi-billion dollar corporation *Microsoft* intends to invest in a new data centre in New Zealand the growth in the ICT sector is not a prediction. It is a current trend that is happening before our eyes. We have also seen growth in certain

healthcare companies e.g. Fisher & Paykel Healthcare and farming companies e.g. A2 Milk.

With regards, to trade there are two key areas to consider. The first is the comments made by Deputy PM Winston Peters. Specifically he has put forward the idea of diversifying New Zealand’s trade. Previously exports to China have made up more than 8% of NZ GDP. Although it always makes sense to diversify, this would only be possible if New Zealand can find other nations to trade with. We already have free trade with Australia, China and Brunei, and are negotiating deals with Peru and Mexico

among others. This leads us on to the second key area to consider, Brexit. When Britain left the EU on the 1st of February 2020 they made themselves much more available to a bilateral free trade agreement with New Zealand. There

appears to be a very strong possibility that New Zealand will pursue more trade with Britain in the future, as well as increasing trade with China.

Overall the only known factor in this economic equation will be change. There are obvious industries such as tourism which are already feeling the change firsthand. Just as some sectors, such as ICT are experiencing a positive change. Furthermore who we trade with could shift dramatically. We are living in very interesting economic times, but there will always be an opportunity for our nation to grow. As Rahm Emanuel once said, “never let a good crisis go to waste”.

# COVID-19 and the airline industry

FREDDIE CLEMENTSON (SELWYN)



With more than 4.5 million people infected and nearly a third of the world in lockdown we have seen the extensive repercussions that Covid-19 has had and will have on the world economy. However, few industries have been hit as hard as the travel industry, with a projected loss of \$2.1 trillion in potential earnings. Over the next few months there really is nothing to do except realign their business strategies to a “new normal”.

With most of the world banning all international flights and restricting domestic travel, the airline industry has fallen into a



very deep hole with a total of 75 million lost jobs worldwide. How will these companies stay afloat? With no private investment and no sales, many of these privately owned billion dollar companies have had to resort to government relief during this time of crisis. Virgin airways has always been criticised as it hasn't paid tax to the British Government in 14 years, due to being situated in the British Virgin Islands, and is asking for government relief

In a post Covid-19 world there will still be the lingering fear of international travel. Furthermore, the virus will see a substantial increase in health checks before travel, social distancing on flights and restrictions in airports - this will add costs for passengers. It is unlikely demand will spring back into life as households will avoid costly holidays for

some time as they find their feet after lockdown and look to rebuild their diminished savings accounts.

As travel bans are lifted there are two potential scenarios.

1) demand surpasses supply due to post-coronavirus travel restraints for example limiting the number of seats per plane or by introducing updated health and safety procedures which would introduce additional costs.

2) supply surpasses demand due to a lack of travel restraints causing surplus supply by airlines who are looking to attract more passengers.

Virgin Australia is the first blue chip company to collapse into voluntary administration with \$5 billion debt and taking with it 16,000 jobs which will likely cost the Australian government \$800 million and cause a large rise in structural unemployment. The fall in supply will cause prices to rise further and Qantas to dominate domestic travel. For large airline companies and those backed by government spending, which manage to survive these tough times, there may be large rewards as smaller carriers leave the industry. But this monopoly will not please consumers as it may result in higher prices and poorer quality experiences with no competition to force an improved service. This harks back to the 1980s where consumer centric companies were introduced to industry and began attacking the larger, more established companies.

In New Zealand, tourism minister, Kelvin Davis, has come out and explained that the industry needed to be rebooted to face new challenges, opportunities and a different way of working. So will this virus see a worldwide shift in the logistics of international travel and tourism?

# Quiz

WHERE ARE THESE FAMOUS BUILDINGS?



1



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3



4



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9

1. New York Stock Exchange. 2. The Gherkin - London. 3. Shanghai Stock Exchange. 4. Petronas Towers Kuala Lumpur. 5. Chicago Stock Exchange. 6. The US Federal Reserve Washington DC. 7. Reserve Bank of NZ Wellington. 8. European Central Bank, Frankfurt. 9. Hong Kong Stock Exchange.

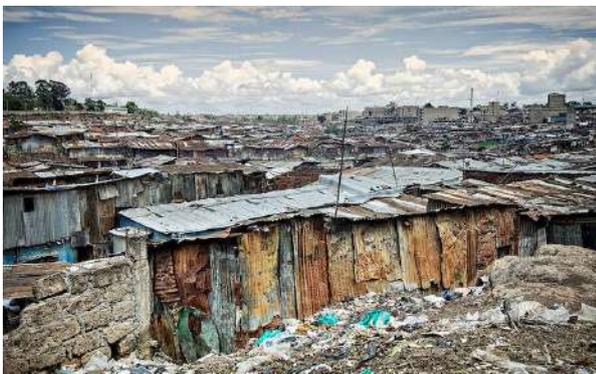
# COVID-19 and developing countries

HUGO GERBICH-PAIS (AVERILL)



Covid-19 has had terrible effects throughout the developed world, and as the disease spreads through less developed countries, its toll will undoubtedly be higher. The result of worse healthcare infrastructure, inequality and the ramifications of Covid-19 on aid.

As many health experts from developing countries have pointed out, a disease spread by the developed world will have the biggest impact on the less developed. The most effective ways of combating the spread of Covid-19, as we have been told time and time again, are social distancing and frequent handwashing. These are far harder for people living in less developed countries. How can one frequently hand wash without running water? How can one be expected to social distance if you live in a slum? Only time will tell how Covid-19 spreads in developing countries, but with lower life expectancies and scarcer healthcare resources already, the impact has the potential to be devastating.



Covid-19 has also resulted in substantial reductions and in many cases a complete halt in international aid programmes. The World Health Organisation has had to suspend vaccination programmes all across the globe and the consequences are already being seen. For example, a new polio outbreak has recently surfaced at the end of April in Niger, weeks after the WHO had to stop their polio vaccination programmes. Further, the Measles

and Rubella Initiative, an NGO that works to vaccinate people in developing countries estimates that 117 million people have already missed their measles vaccine as a result of the pandemic. The WHO also estimate that as many as 769 000 people may die of malaria this year, approximately double the 2018 figures as a result of Covid-19. This would be the result of both the challenges in distributing essential equipment to developing countries such as mosquito nets and less international medical aid – as countries prioritise Covid-19. These issues will no doubt worsen already incredibly weak public health systems in developing countries and make their Covid-19 responses even more difficult.

Covid-19 is also predicted to undo the significant progress we have made in reducing absolute poverty and hunger across the globe. A global economic slowdown will also affect developing countries and their people are often especially vulnerable due to a lack of welfare systems. The UN University World Institute for Development Economics Research predicts that we could see an additional 500 million people in poverty after Covid-19 and the World Food Programme believe that the number of people starving this year may double to 265 million people.

As it becomes increasingly clear that Covid-19 will spread in developing countries it is undeniable that there will be significant harm. It is also undeniable that Covid-19 has the potential to undo the significant progress done to reduce poverty, and preventable disease.

# Options for New Zealand Tourism

Luke Davis (SCHOOL)



As the Covid-19 crisis continues to cripple the New Zealand economy and reduce discretionary spending, the tourist industry in particular seems to be struggling disproportionately. According to Tourism New Zealand, the industry generated a direct contribution to gross domestic product (GDP) of \$16.2 billion, or 5.8 percent of GDP for the year ended March 2019. Tourists generated \$3.8 billion in goods and services tax (GST) revenue, with \$1.8 billion coming from international tourists - all of which now will essentially disappear in the short to medium-term.

As pointed out by economist Cameron Bagrie, the Covid-19 crisis will have a "tectonic" impact on the New Zealand tourism. "This is not a small earthquake for the tourism sector." He said a "recession is inevitable and it will not be a light one.

But we probably don't have a choice given what could happen if coronavirus gets lift off here..."

Economist Shamubeel Eaqub, said the priority for the Government was to focus on the people and businesses of New Zealand. Places like the McKenzie District, Queenstown, and Rotorua would be hit hard, as they relied hugely on tourism. "We need to look after the people - people's health, but also their economic and financial security." The collapse of overseas tourists coming to New Zealand and prospects of a slow recovery has spurred the Government to order a complete re-think of the visitor industry. Tourism Minister Kelvin Davis said today Tourism New Zealand would lead work "re imagining" the way tourism operates in the post-Covid 19 world. Tourism New Zealand would work with MBIE, the Department of Conservation, and with

industry participants, to rethink the way the country governed tourism, how it was marketed domestically and internationally, who the country marketed to, and how visitors were managed when they arrived. "We have an opportunity to rethink the entire way we approach tourism to ensure that it will make New Zealand a more sustainable place, enrich the lives of all our people and deliver a sector which is financially self-sustaining in the longer term," said Davis, "given international travel is likely to be heavily restricted for some time, and features of our tourism industry such as cruise ships are currently banned, this will need to be a phased approach, looking at how we can focus on and promote domestic tourism in

the short term and how we can target an international offering." The industry has been granted a NZ\$11m relief package to attract new travellers from Australia and the US.



However, many argue that the Governments response isn't sufficient, and that it isn't doing enough to support the country's largest export industry and the 229,566 people who are directly employed in tourism. With the tourist towns of Rotorua and Queenstown seemingly bearing the brunt of the economic hardship, can the Government afford to continue stimulating these regional economies? What has been made clear is that there should have been a greater focus on ensuring the long term sustainability of the industry many years ago. The question that needs to be addressed is how, and when, the Government and industry leaders will choose to shape New Zealand tourism in a post-Covid-19 future.

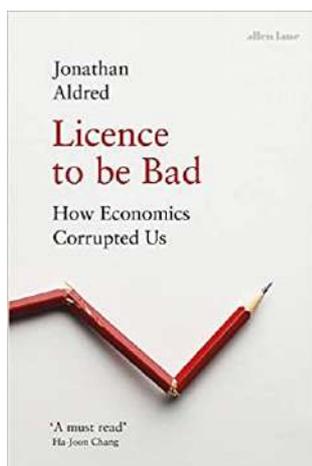
# Economics Bookshelf

HERE ARE THREE POPULAR BOOKS ON ECONOMICS THAT HAVE BEEN PUBLISHED IN 2019/20. REVIEWS ARE FROM AMAZON.



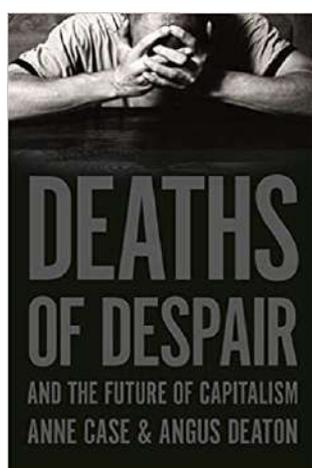
## **Narrative Economics: How Stories Go Viral and Drive Major Economic Events** by Robert Shiller

In a world in which internet troll farms attempt to influence foreign elections, can we afford to ignore the power of viral stories to affect economies? In this groundbreaking book, Nobel Prize-winning economist and New York Times bestselling author Robert Shiller offers a new way to think about the economy and economic change. Using a rich array of historical examples and data, Shiller argues that studying popular stories that affect individual and collective economic behaviour—what he calls “narrative economics”—has the potential to vastly improve our ability to predict, prepare for, and lessen the damage of financial crises, recessions, depressions, and other major economic events.



## **Licence to be Bad: How Economics Corrupted Us** by Jonathan Aldred

Over the past fifty years, the way we value what is ‘good’ and ‘right’ has changed dramatically. Behaviour that to our grandparents’ generation might have seemed stupid, harmful or simply wicked now seems rational, natural, woven into the very logic of things. And, asserts Jonathan Aldred in this revelatory new book, it’s economics that’s to blame. *Licence to be Bad* tells the story of how a group of economics theorists changed our world, and how a handful of key ideas, from free-riding to Nudge, seeped into our decision-making and, indeed, almost all aspects of our lives. Aldred reveals the extraordinary hold of economics on our morals and values. Economics has corrupted us. But if this hidden transformation is so recent, it can be reversed. *Licence to be Bad* shows us where to begin.



## **Deaths of Despair and the Future of Capitalism** by Anne Case and Angus Deaton

Life expectancy in the United States has recently fallen for three years in a row—a reversal not seen since 1918 or in any other wealthy nation in modern times. In the past two decades, deaths of despair from suicide, drug overdose, and alcoholism have risen dramatically, and now claim hundreds of thousands of American lives each year—and they’re still rising. Anne Case and Angus Deaton, known for first sounding the alarm about deaths of despair, explain the overwhelming surge in these deaths and shed light on the social and economic forces that are making life harder for the working class. They demonstrate why, for those who used to prosper in America, capitalism is no longer delivering.

# Toilet Paper Hoarding in COVID-19

NATHANIEL MASFEN-YAN (GREENBANK)

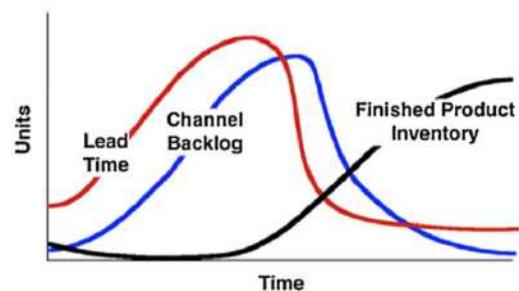


On the 25th of March 2020, New Zealand moved to alert level 4, during perhaps one of the most interesting weeks in New Zealand and modern global history. Supermarkets were inundated with shoppers panic buying, especially toilet paper. Although toilet paper hoarding may seem irrational, selfish and economically unimportant, this behaviour has very real motives and impacts. Instances of phantom buying, such as hoarding toilet paper, can in some ways be seen as rational responses to constrained stock. In order to explain the rationality of hoarding, the Prisoner's Dilemma, a well known Game Theory model acts as a useful tool. The story behind the Prisoner's Dilemma goes like this: two prisoners are involved in a crime and can either incriminate the other in reward for a reduced sentence, or stay quiet. Because there is an inherent lack of trust between the prisoners, they both presume the other will implicate them in the crime, and so they in turn denounce their partner in order to reduce their own sentence.

		PRISONER 2	
		Confess	Lie
PRISONER 1	Confess	-8, -8	0, -10
	Lie	-10, 0	-1, -1

In the case of an economy, individual buyers believe that other consumers are hoarding, either through seeing it first hand or by reading sensational articles, and so no longer trust other consumers to cooperate by limiting their purchases. Instead, rational individuals are pushed to hoard products themselves in order to ensure they are prepared for a lack of availability of that good. However, historically, we have also seen that the fear of scarcity can drive consumers to make irrational and emotional decisions in the face of shortages. In 2012 consumers reaction to the petrol shortages caused by Hurricane Sandy had one driver saying, "I just want to have it, because

you don't know how long this is going to last". As supermarkets expand their orders to reduce shortages, demand decreases just as inventories start to increase, leaving companies with large excesses. Patrick Penfield, a supply management professor at Syracuse University, stated that a large surplus of toilet paper is "absolutely going to happen", reaffirming that even when suppliers are aware that the size of orders are unsustainable, excess stocks are inevitable. Moreover, the 'Bullwhip Effect' illustrates how these inefficiencies increase down the supply chain. As Harvard Business School professor Willy Shih wrote earlier this year, manufacturers of toilet tissue optimise their supply chains based on the assumption that consumption is stable, neither seasonal nor subject to supply spikes. So when faced with large time lags to complete orders, firms further down the chain over-order when there are shortages higher up the chain, so that when the product has finally made it through the supply chain, there will be enough excess to satisfy the month-long backlog of orders. Thus when demand disappears overnight, firms higher up the supply chain cancel their orders, leading overstocked warehouses to be more prevalent at the start of the chain.



Hoarding toilet paper seems to be merely an irrational knee-jerk reaction. Yet our conclusions seem to point towards an understandable practice with harmful effects on the supply chain. Perhaps now as hoarders attempt to return thousands of rolls of toilet paper to supermarkets and online buyers regret paying exorbitant prices for hand sanitiser, we will see a more educated approach being taken towards purchases in the next crisis, or will we?

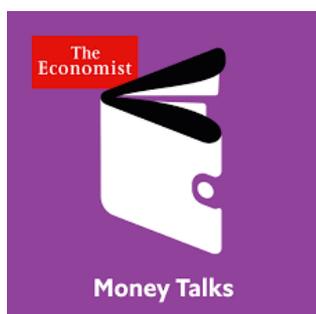
# Economics Podcasts

HERE ARE FIVE POPULAR PODCASTS THAT YOU CAN SUBSCRIBE TO.



## Two Cents' Worth

An excellent weekly podcast from Radio New Zealand. It features stories that make sense of business and the economy... and how they affect your back pocket. Recent episodes looked at the budget and the impact of robots in the workplace and whether we should be worried. Made by RNZ & Newsroom. Hosted by Bernard Hickey, Nikki Mandow and Peter Griffin.



## Money Talks

From *The Economist* magazine a weekly podcast on the markets, the economy and the world of business. COVID-19 has featured in many podcasts as well as the state of small business around the world. Very topical stories from around the world with excellent journalism.



## More or Less: Behind the Statistics

Hosted by Tim Harford (author of *'The Undercover Economist'* and many other books) BBC Radio's More or Less continues to function as an unbeatable view into the relationship between economic issues and the societies in which they exist, all filtered through the perspective of statistics to give things a usefully mathematical spin.



## FT News Briefing

From the *Financial Times* in London - it gives a rundown of the most important global business stories you need to know for the coming day. Hosted by Marc Filippino and available every weekday morning.



## Freakonomics Radio

Stephen Dubner hosts the podcast, which is an extension of his best-selling book *Freakonomics*. On this podcast, you'll find interviews with notable academics, scientists, experts, entrepreneurs, and more with the aim of offering insights into economics and—on a deeper level—human nature.

# The paradox of Norway – fossil fuel giant and leader in renewable energies



MARK JOHNSTON - ECONOMICS DEPARTMENT

In 1969 the discovery of oil off the coast of Norway transformed its economy with it being one of the largest exporters of oil. A lot of countries in similar positions have succumbed to the 'resource curse' in which countries tend to focus on a natural resource like oil. The curse comes in two forms:

With high revenues from the sale of a resource, governments try and seek to control the assets and use the money to maintain a political monopoly. This is where you find that as a result of the sale of your important natural resource there is greater demand for your currency which in turn pushes up its value. This makes other exports less competitive so that when the natural resource runs out the economy has no other good/service to fall back on. However it is the fall in commodity prices that is now hitting these countries that have, in the past, been plagued by the resource curse. As a lot of commodities tend to be inelastic in demand so a drop in price means a fall in total revenue since the proportionate drop in price is greater than the proportionate increase in quantity demanded.



## Norway - has a different approach

In Norway hydrocarbons account for half of its exports and 19% of GDP. Moreover with further oil fields coming on tap Norway could earn an estimated \$100bn over the next 50 years. Nevertheless there is a need to wean the economy off oil and avoid not only the resource curse that has plagued some countries – Venezuela is a good example as approximately 90% of government spending was dependent on oil revenue – but also the impact on climate change. Norwegians have been smart in that the revenue made from oil has been put into a sovereign wealth fund which is now

worth \$1.1trn which equates to \$200,000 for every citizen. This ensures that they have the means to prepare for life after oil.

## What are they doing?

- 98% of electricity is from renewable energies and technologies
- Heating with oil is to be banned this year
- 50% of new cars are to be electric
- Oslo has set a ceiling every year for its greenhouse gas emissions
  - Oslo removed nearly all parking spaces from the city centre – now bicycle docks / benches
  - Norway is hoped to be completely emission-free shipping fleet over the next couple of decades – this accounts for almost all of Norway's oil consumption
- Sovereign wealth fund will sell its shares in companies dedicated to oil and gas exploration

## Norway's challenges

This being said there needs to be more emphasis on the service sector as an earner of GDP – this sector already accounts for 55% of GDP. Norway faces 4 challenges:

- Reduce its focus on gas and oil
- Increase its productivity through the use of technologies
- Reduce carbon emissions to meet the Paris agreement goals on climate change
- Create 25,000 jobs a year so that oil workers can find meaningful employment

# Famous Economists

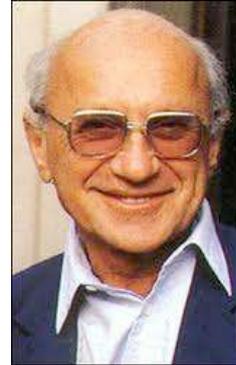
WHO ARE THESE FAMOUS ECONOMISTS?



1



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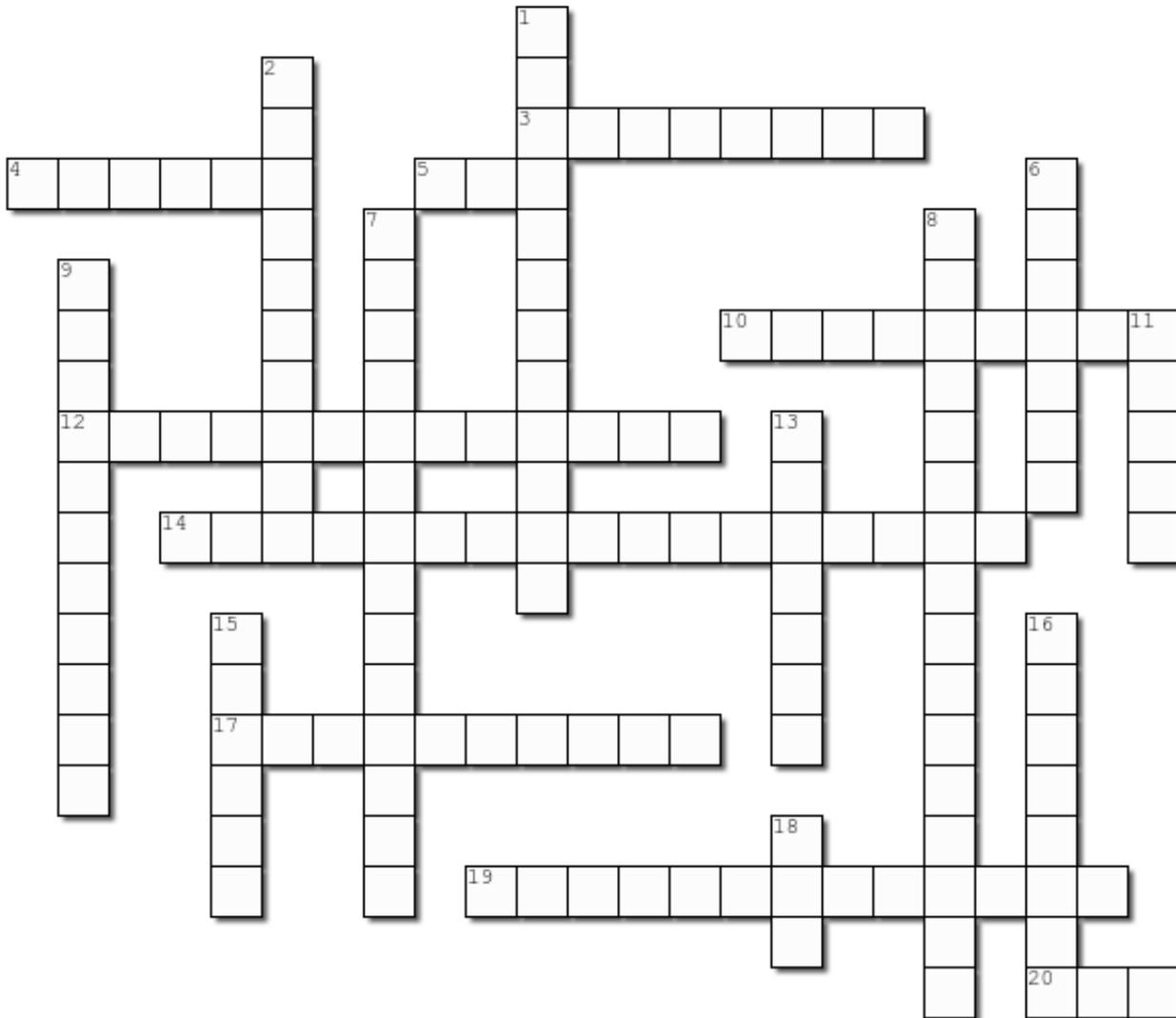
1. Jerome Powell - US Fed Chair 2. Janet Yellen - ex US Fed Chair 3. Milton Friedman. 4. Adrian Orr - RBNZ Governor 5. Jeff Sachs - Development economist 6. Christine Lagarde - Head of ECB. 7. John Maynard Keynes. 8. Adam Smith. 9. Paul Krugman - New York Times columnist

# Crossword



Name: \_\_\_\_\_

Complete the crossword puzzle below



Created using the Crossword Maker on TheTeachersCorner.net

## Across

3. Name of curve developed by NZ economist describing relationship between unemployment and inflation
4. Name of curve describing the rate of tax and the amount of tax revenue that will be received by government
5. Interest rate set by reserve bank
10. General increase in price level
12. External impacts of economic activity
14. Record of transactions between a country and the rest of the world
17. Values that have been Inflation adjusted
19. Government expenditure is greater than revenue
20. Measure of the total output in an economy

## Down

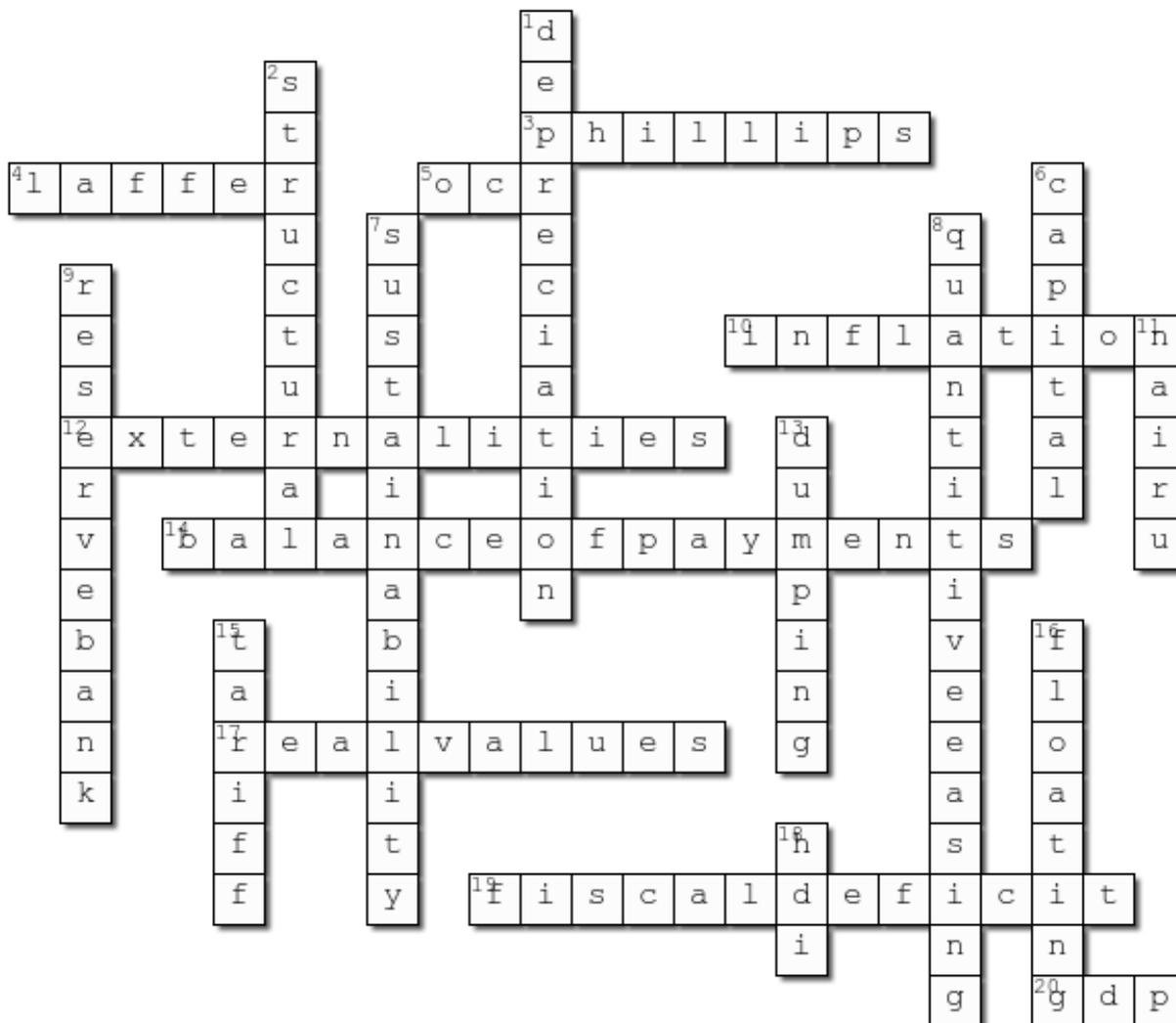
1. Reduction in value of currency
2. Unemployment caused by industries failing
6. Things used to produce goods and services
7. Occurs when the needs of today are met without imposing a burden on future generations
8. Increasing money supply
9. The banks bank
11. Natural rate of unemployment
13. When a producer sells a product in a foreign market for less than the cost of production
15. A tax on imported products
16. Exchange rate set by market forces
18. Index that measures the level of development

# Crossword - Answer



Name: \_\_\_\_\_

Complete the crossword puzzle below



Created using the Crossword Maker on TheTeachersCorner.net

## Across

3. Name of curve developed by NZ economist describing relationship between unemployment and inflation (**phillips**)
4. Name of curve describing the rate of tax and the amount of tax revenue that will be received by government (**laffer**)
5. Interest rate set by reserve bank (**ocr**)
10. General increase in price level (**inflation**)
12. External impacts of economic activity (**externalities**)
14. Record of transactions between a country and the rest of the world (**balanceofpayments**)
17. Values that have been Inflation adjusted (**realvalues**)
19. Government expenditure is greater than revenue (**fiscaldeficit**)
20. Measure of the total output in an economy (**gdp**)

## Down

1. Reduction in value of currency (**depreciation**)
2. Unemployment caused by industries failing (**structural**)
6. Things used to produce goods and services (**capital**)
7. Occurs when the needs of today are met without imposing a burden on future generations (**sustainability**)
8. Increasing money supply (**quantitiveasing**)
9. The banks bank (**reservebank**)
11. Natural rate of unemployment (**nairu**)
13. When a producer sells a product in a foreign market for less than the cost of production (**dumping**)
15. A tax on imported products (**tariff**)
16. Exchange rate set by market forces (**floating**)
18. Index that measures the level of development (**hdi**)



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