

Quantitative Easing Oil Prices Eurozone
India Interest Rates Securities Labour
Invisible Hand Marx Asset Prices
Krugman Neutrality Monopoly Debt
Amartya Sen Markets Commodities
Adverse Selection LIBOR
Unemployment Schumpeter Emerging



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Animal Spirits Federal Foreign Direct
Investment Inelastic Homo economicus
Leverage Monetary policy Adam Smith
Cartel OECD Utility

Note from the Journal Exec

Welcome to the Fresher's Week edition of the Durham University Economics Journal (DUEJ)! We are very excited to present to you a taster of what you can expect from DUEJ this year. More importantly, we hope to gauge your interest for DUEJ, and we strongly encourage you to join us. In this edition we have a selection of articles from last year on varied themes from the Internet of Things to oil prices.

We're also debuting what we hope will become a regular feature in the Journal this year- a list of the top 5 headlines in economic and political news this week, to help keep you up to date We hope you find it enjoyable and useful.

-David, Anupurba & Matteo

The Week That Was

Mining giant **Glencore** saw its share value go down by 30% this week only to recover at the end of the week with a net decline of 2.3%. Slowing Chinese demand for commodities is at the heart of the company's woes.

Russia this week began airstrikes in Syria. It claims to be targeting ISIS, but has so far struck out at Sunni rebels opposed to the regime of Bashar al-Assad whom Russia supports.

Royal Dutch Shell announced that it would be abandoning its efforts of oil exploration in the Arctic. Falling oil prices over the last year have made many such high-cost drilling projects unviable.

India's central bank unexpectedly cut its benchmark rate by 50 basis points over fears of slowing global economic growth.

Weak US jobs data released on Friday vindicated the **Federal Reserve's** decision to keep rates on hold.

The Future is Now

March 14, 2015

Anupurba Roy



Driverless cars, artificial intelligence and robots- our world is increasingly beginning to resemble the futuristic universe envisioned by the 1960s cartoon series *The Jetsons*. The latest item to be added to the list of mindboggling new technologies is the 'internet of things' (IoT) sometimes playfully referred to as the 'Thingernet'. It was first in 2008 that the number of internet-connected devices outnumbered the human population. The number stands around 12 billion today and is projected to reach, up to 50 billion by some estimates, by 2020. Devices from parking meters to refrigerators and insulin pumps are being hooked up to the internet. This allows a seamless transmission of information and also allows devices to be remotely

controlled. Smart light-bulbs could collect data about energy consumption and adapt to switch on and off accordingly. An internet connected refrigerator could alert the local supermarket whenever items needed restocking. The ultimate goal of these smart devices is to make life easier and more efficient for people. But unlike the fanciful world of the *Jetsons*, these benefits do not come without a pinch of salt.

The most pressing issue here is privacy. Internet connected devices will most likely be collecting and storing large amounts of data in the cloud. This data could relate to mundane things like a user's tastes in music but also more sensitive areas such as health. Moreover even seemingly uncontroversial information like grocery lists generated by refrigerators could be used to glean information about religion say on the basis of whether the food being ordered was kosher. Companies could also use data collected for ad purposes. Existing laws do not specify whether the data collected would belong to user of the device or the manufacturer. Grey area scenarios such as when a device is owned by a certain company and only rented by the user create further complications.

Anything connected to the internet is also vulnerable to infiltration by hackers. As has already been seen with smartphones- this puts valuable data at risk. But the internet of things adds a further dimension to this problem. Hacking a connected device would not only allow access to data, but also allow hackers to manipulate the device- with dire consequences. Imagine the havoc that could potentially be wreaked by a hacker with access to a connected driverless car, or a smart insulin pump. Manufacturers have to manoeuvre a number of trade-offs in order to ensure security for connected devices- often these devices are not sophisticated enough to handle heavy encryption and security updates, not to mention security features would further squeeze the already wafer-thin margins of the manufacturers of these devices and reduce profitability. Added layers of security might also make these devices less user-friendly.

In addition to being connected to the internet, if devices could be seamlessly inter-connected with each other- it would bring many benefits to consumers in the form of increased functionality. An article in the Economist on the subject envisions a situation where connected smoke alarms could send signals to lights and audio-visual entertainment systems to react in case of a fire and to also unlock doors. The only way to ensure inter-operability would be to establish common standards between manufacturers. Competing industry groups such as the AllSeen Alliance, the IPSO Alliance, and the Industrial Internet Consortium are trying to do just this. However the presence of multiple groups makes the establishment of a single common standard challenging, and it remains to be seen which group(s) emerges victorious, and which are left obsolete.

It is indisputable though that IoT is the next big thing. The two titans of the tech world- Apple and Google have already staked their claims. Google turned heads in 2014 with its \$3.2bn acquisition of Nest labs- makers of smart thermostats and smoke detectors. Earlier this year Apple debuted its Homekit system, which allows users to sync various smart devices in the home from lightbulbs to fridges, at the Worldwide Developers Conference. A new world of possibilities awaits us.

Image from

https://commons.wikimedia.org/wiki/File:Internet_of_things_signed_by_the_author.jpg

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A Look at Differences in Productivity throughout the UK

February 21, 2015
Jamal Abdo

The concept of productivity in an economic context is one of the most critical dimensions to examine when studying the business cycle of any country. It remains one of the major influencing factors, affecting recoveries and downturns of economies. One intuitively suspects that as education, infrastructure, equipment, materials, tools, training, methods and other factors of production improve, so would labour productivity, the amount produced per worker per hour.

This is more or less the case in the UK.



P₃ R₁ O₁ D₂ U₁ C₃ T₁ I₁ V₄ I₁ T₁ Y₄

The Office for National Statistics claims that the centre of London is the most productive

region in the UK. This is no surprise considering that this is where highly paid bankers, accountants, lawyers and multi-million firms assemble to engage in transactions of a volume and value far superior to any other city in the UK. At the other end of the continuum is Cornwall, producing 28% less every hour than the national average, as opposed to London, where workers produce 42% more every hour than the national average. This is a typical gap between a major financial capital in the world, and a remote and rural coastal region, however there are exceptions. North East Scotland doesn't fail to impress, in fact, its productivity is very good considering its remote location. This is largely explained by the North Sea oil reserves and related industries based there, such as state of



the art oil companies and cutting edge engineering firms. Other regions that are not classified as remote are still alarmingly unproductive, for example Staffordshire, West Wales and Lancashire. More rural areas have long been dependent on sectors which struggle to improve efficiency over time, such as agriculture and tourism, contrary to other, more modern sectors, such as oil distillation and banking, where a new drilling rig or computer system can make a large difference in productivity levels.

It is not surprising when looking at many of the regions that have performed lower than average, in terms of productivity, as they are regions that have been reliant on industries, such as manufacture, that have been in long-term decline. This has led to the displacement of skilled jobs, towards more urban and thriving areas. This same shift has also, unfortunately, left behind communities that are in deep need of new and growing firms that are willing to build up the skills of workers and improve the prospects for the families in surrounding towns.

Another factor that is linked to high productivity in London and Aberdeen is the benefits foreign firms bring when they invest here. Sceptics can have a look at the benefits Swindon and Derby are enjoying, as the former is home of Honda's functions in the UK, and the latter is where Toyota (as well as Rolls Royce) are based. This furthers the case to increase worldwide trade and promote the UK as a country of hard working skilled workers that welcomes dynamic business.

Image from <https://www.flickr.com/photos/smemon/4556099850>

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\$49 Per Barrel - The Winners and Losers

February 14, 2015

Charlotte Austin

Global oil prices have plummeted, halving in only seven months. Given that Brent Crude was \$49 per barrel on the 23rd January, it is hard to believe that in June of last year it was around \$115 per barrel.

Quite simply, the forces of supply and demand are to blame. Demand for oil has been tapering globally due to weakened economies and new efficiency measures. At the same time, US and Canadian fracking output has flooded the market. In reaction to this, OPEC's strategy is to maintain its output of oil, ensuring it maintains market share. Consequently, supply is outstripping demand, thus lowering the price of oil. Predictions as to when prices will rise vary drastically, from several years according to the boss of BP, to within months as predicted by some OPEC members.



Below I very briefly outline a few of the winners and losers over the past few months of this oil price crash.

Winners

India is now set to hit its fiscal targets thanks to low oil prices. Commodity imports, largely oil, account for 50% of India's imports, therefore it has suffered years of fiscal deficits due to being heavily dependent on costly oil. Thus the government has recently been able to abandon fuel related subsidies, and increase taxes on petrol and diesel, drastically shrinking its budget deficit as percent of GDP.

China being the world's largest importer of oil is classified as a winner for obvious reasons. However, China's banks may be vulnerable, as net oil exporting nations' ability to repay debt has been dented by falling oil prices.

The United States' booming shale industry may be slowed down by the fall in oil prices, but it leaves hundreds of millions of consumers with extra cash. According to the Financial Times, the US public will have an extra \$75bn to spend this year, that's 0.7% of total consumption.

The Eurozone imports 88% of its oil, so low oil prices have boosted business confidence and increased people's purchasing power. However there is a caveat, low oil prices may become embedded in low wages, thus amplifying the fear that alarmingly low inflation may lead to deflation. Therefore there is a limit on the oil price's impact on purchasing power, as many members are looking to inflationary pressures to alleviate their debt burdens.

Britain's Retail Consortium has reported that food prices in January are down by 0.5% from last year partially thanks to low oil prices reducing supply chain prices, which have been passed onto consumers. More obviously, the average motorist is set to save £146 this year, provided the price stays low. These both exemplify why the oil price has pulled inflation down to 1%, thus boosting confidence and improving prospects for 2015. However, it does impact adversely upon North Sea oil extractors, but the impact is relatively minimal as the oil industry is declining as a percent of the UK's GDP. Interestingly, if this trend of falling oil revenues continues, Scottish Nationalists argument that Scotland will be better off as an independent country will be weakened.

Losers

Russia, a nation heavily dependent on the export of oil, needs the price of oil to be around \$105 per barrel to balance its budgets, as estimated by Deutsche Bank and the IMF. Therefore, the low prices are eating into state budgets at an alarming rate, with rumours of pension pots being used. This, combined with Western sanctions against Russia due to its actions in Ukraine, leaves the nation at 'crisis' point, particularly if the oil price remains low.

Venezuela's economic performance is tied to the price of oil, with the commodity constituting 96% of its export revenues. Moreover, the nation is notoriously inefficient at oil extraction, meaning that Venezuela needs oil to be \$151 per barrel in 2015 to balance its budget according to Citi Research.

Nigeria's economy is not set to fare well with falling oil prices, with oil forming around 15% of its GDP. In the IMF's latest predictions, Nigeria's expected GDP has been cut from 7% to 5%.

Saudi Arabia is the largest member of OPEC, the cartel which controls the supply of its members in order to set the world price of oil. Moreover, it is also the world's largest exporter of oil. In the short term, it can withstand low prices with its \$700bn reserve fund, but in the longer run it needs the price of oil to average around \$85 per barrel.

Image from https://en.wikipedia.org/wiki/Oil_well#/media/File:West_Texas_Pumpjack.JPG

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Corporate Cash: Is Holding Too Much a Problem?

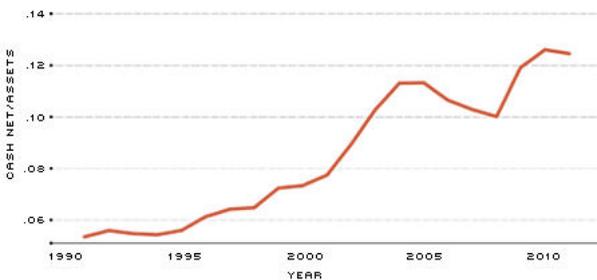
February 7, 2015

Harry Over

Corporate firms are holding record amounts of cash on their balance sheets. Apple, for example, has \$178bn in reserves. That's enough to pay every American \$556, or buy a Big Mac for everyone in China for 47 consecutive days. A recent study carried out by Deloitte in 2014 revealed that 963 non-financial firms were holding \$2.6trn in cash. Separate research carried out by St Louis Fed found that, after adjusting for economic growth and inflation, cash on corporate balance sheets had doubled between 2000 and 2010. Is this a problem? What can this tell us about the current economic climate?

Firstly, the evidence: in order to take into account the increase in inflation and the total number of firms, we use a ratio of cash to net assets. The evidence in the graph below shows that the ratio has doubled since 1990. This essentially shows that companies are holding more cash on their balance sheets as a proportion of their assets than ever before.

Ratio of Cash to Net Assets



SOURCE: Compustat.

NOTE: Sample includes all U.S. firms in the data set except financial and utility companies. Cash-to-net assets ratio is found by dividing aggregate cash and equivalent assets by aggregate total assets minus cash and equivalent assets.

According to economic theory, each firm should hold an appropriate level of cash to cover interest, expenses, capital expenditure, and simply as a precaution or in case of emergency; any spare cash should be returned to the shareholders through dividends or buybacks.

However, there needs to be an explanation for this increase in cash on companies' balance sheets. The first is in keeping with the theory: Firms may be holding precautionary reserves because of economic or fiscal uncertainty. Examples of this include the US government shutdown, the Scottish vote on independence, and the upcoming UK election. These political events lead companies to postpone investment until the uncertainties about fiscal policies are resolved, thereby building up cash reserves.

The second explanation is tax. US corporations have built up a cash pile of up to \$2trn overseas which would be taxed at 35% if it were repatriated back to America. In short, they are hoarding it from the US government.

So, is this a problem?

For governments, the cash piles represent lost taxes. Companies are not only holding cash overseas that would otherwise be taxed if it were repatriated, but they are also withholding investment, which means potential jobs, and therefore tax receipts, are not being created.

Lower investment in human and physical capital also means slower productivity gains, which hampers the economic recovery. If companies put these cash reserves to use by investing in increasing their capacity, such as a dockyard buying more machinery, then this could spur on economic growth. Instead, the cash is simply being held in the bank.

Furthermore, there is an opportunity cost that is incurred by holding this money as cash. In an era of record low interest rates, the return on holding cash has decreased as the interest on bank deposits and yields on government bonds have also fallen. This means that as the return on cash has fallen, the opportunity cost has risen.

But what should these companies do with their money?

The last five years have seen the rise of activist investors who call upon companies to return cash to shareholders. In 2013, hedge fund manager David Einhorn went as far as filing a lawsuit against Apple after the company decreased the amount of cash it would return to shareholders. This has



been happening on a wider scale too and is perhaps why almost \$914bn was returned to investors in the form of dividends and share buybacks in 2014.

However, there are two problems with this. Firstly, because multinational corporations have cash reserves overseas, they are funding these buybacks through debt not cash so as to avoid tax. Secondly, and most importantly, it shows that the current world economy does not offer good enough investment opportunities. This implies that the overseas cash reserves will simply continue to sit in the bank. Maybe they should start handing out free Big Macs in China after all.

Cover image from <http://thewhizzer.blogspot.co.uk/2006/04/weird-news.html>

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An End To The American Dream?

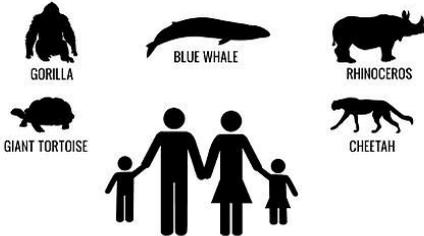
February 7, 2015
Ann Bandolik

Over the last decade, it has become clear that a tide is rising in the United States. One that does not stand for progress or change, one that does not lift all the boats, but rather a tide that clearly has an agenda of its own. This tide is supporting an increasingly smaller proportion of American society, not for the people or by the people, and is leaving the working class behind.

You may argue, yes, the stock market is soaring, unemployment is at 5.8% (down from nearly double that in 2009), and GDP is steadily regaining its pre-Recession levels, but what has this growth done to improve the lives of the average American worker, the working middle class that

accounts for over a third of the US population? It is clear that economic improvements can be seen all across the spectrum, but for the median income earner, this picture is anything but flourishing.

ENDANGERED SPECIES



MIDDLE-CLASS FAMILY

Is this an end to the middle class?

According to recent figures, after adjusting for inflation, “today’s US average hourly wage has just about the same purchasing power as it did in 1979.” What compensation have median workers seen? An increase of “just 5 percent between 1979 and 2012, despite productivity growth of 74.5

percent – while the 20th percentile worker saw wage erosion of 0.4 percent and the 80th percentile worker saw wage growth of just 17.5 percent.”

It is evident that the pie has greatly increased at the hands of typical US workers, but why do they not see an increase to their slice? American workers used to see the fruits of growth and their progress first-hand, but now, a new era of stagnation is here to stay in this post-Recession world.

The US prides itself in 20th century economic policy – an era that needs to be re-looked into in order to return to an age of the “we” economy. Where people such as my grandfather and 2.2 million others by 1956 had used legislation including the G.I. Bill for education benefits in order to attend colleges, universities, and vocational schools, or receive low-cost mortgages and low-interest loans to start a business.

These are post Great Depression New Deal economics that evidently showed the US at its most prosperous. The average job provided health benefits and insurance, was well paid, and allowed creature comforts: a car, refrigerators, and a yearly vacation. Under the Great Society in the 1960’s, average household income doubled from the previous decade and poverty levels halved. Programmes such as Social Security and Medicaid thrived and the United States became the largest and most powerful economy in the world.

Today, it appears we are entering a second Gilded Age with inequality levels staggering back to pre-Depression era figures.

When did this trouble begin?

Most ideology comes from the beginning of the 1980’s where excessive deregulation, globalisation, weaker unions, lower labour standards, and tax breaks now govern the redistribution knock-on effects we see today.

However, “the shrinking of the middle class is not a failure of capitalism. It’s a failure of government. Capitalism has been doing exactly what it was designed to do: concentrating wealth in the ownership class, while providing the mass of workers with just enough wages to feed, house and clothe themselves” (Salon).

In this new age of subsistence life, government cannot just sit on the side-lines. I urge the nation to realise what it was responsible for half a century ago and that can still be made possible under its strong leadership today: build the US economy from the middle out. But until the dawn of a new populist era, for most Americans, the American Dream is just that, a dream.

Image from <https://www.flickr.com/photos/owsposters/6270937787>

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