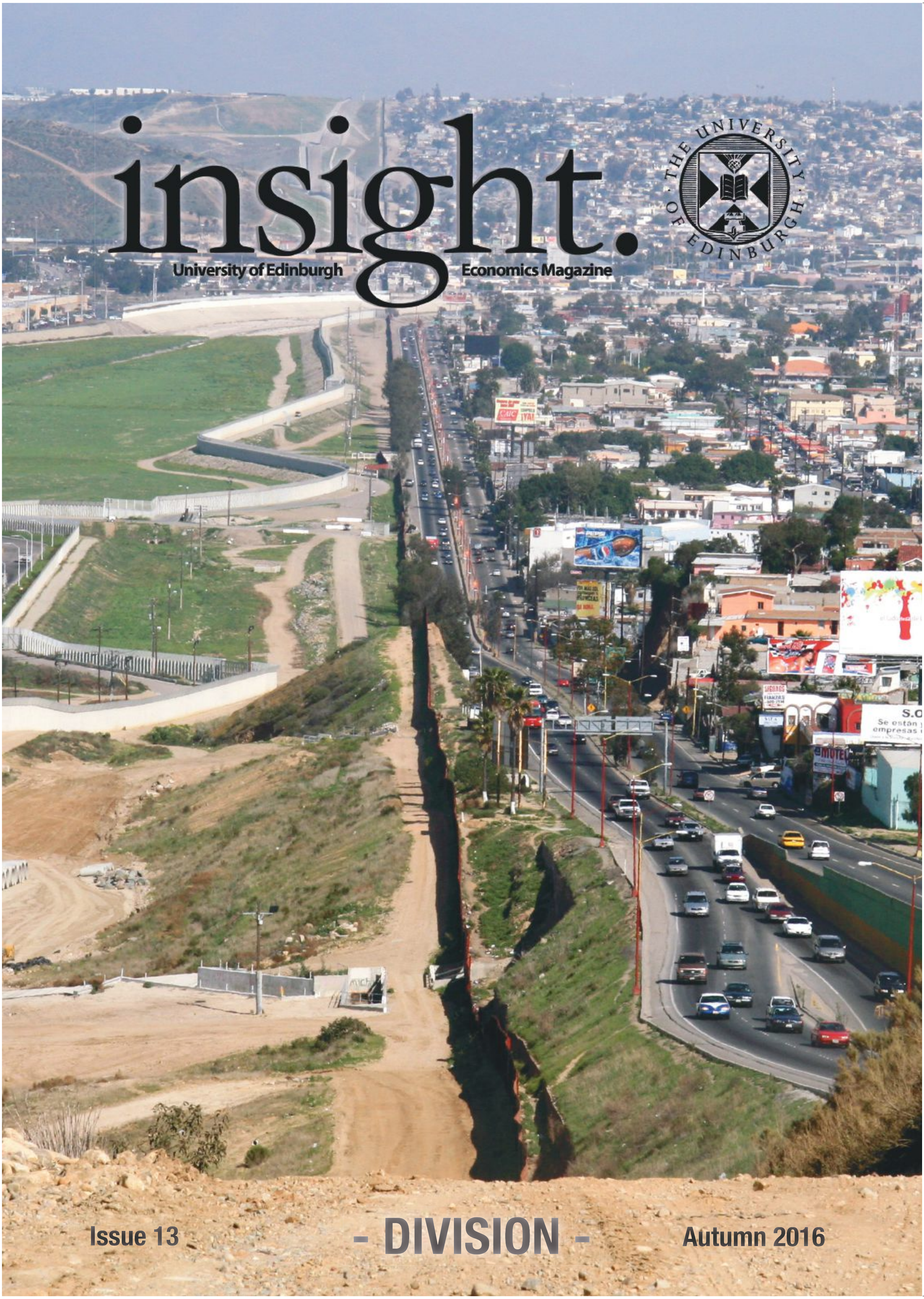

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University of Edinburgh Economics Magazine

Issue 13

- DIVISION -

Autumn 2016

Insight is the School of Economics' biannual magazine, produced entirely by students. Insight is the perfect platform for you to express your opinions, and to demonstrate your writing skills on any economics-related topics. Our magazine has brought together its readership — which includes not only our members, but also academic staff and students outside of the University.

We welcome writers of all backgrounds! Typically we accept proposals for articles at the beginning of each semester, after which writers are assigned one of our editing team who work with them to produce articles. If you see yourself as more of an editor, or have design flair to join the production team, let us know!

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Previous issues of Insight can be found here - *issuu.com/insightedinburgh*

We are very grateful to the School of Economics, which generously sponsors the magazine, including our Writing Prizes! Particular thanks go to Christina Napier (the School's Student Experience Officer) who has been an indispensable source of support and advice.

School of Economics
The University School of Economics staff make up one of the leading groups of economic theorists in Europe and the base for the Scottish Graduate Programme in Economics, receiving invariably high ratings for academic standards, teaching and learning resources. The University of Edinburgh has consistently been ranked as one of the top 25 universities in the world.

Student Support Officers (SSOs) - The first point of call for students, offering support and guidance on administrative and pastoral matters.
Karen Davidson and Jill Timmins - economics.sso@ed.ac.uk

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Letter from the Editor-in-Chief

Welcome to the 13th issue of Insight!

This issue we have chosen the theme of 'Division'. We live in a world where Brexit and a Trump presidency represent the divisions societies are facing. This theme has allowed our writers to explore the divisive nature of politics, academia, and more through an economic lens. We have taken great care to select a variety of articles which focus around all that may, and does, divide us. We hope the issue will stimulate conversation on both the divisions we are facing today, as well as how we can potentially bridge these gaps and move beyond them.

I would like to take the chance to thank the writers, the editing team, and the School of Economics, without whom this publication would not be possible.

I hope you enjoy our issue,

Melissa Parlour
November 2016

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School of Economics

Cover photo credit: U.S Department of Defense

Divide and Prosper

Alec Edgecliffe-Johnson examines how commercial data collection functions and explores issues surrounding the rapidly-growing information industry.

Over the past two decades the digital advertising industry has exploded in both profitability and complexity. What started as a few companies with unorthodox business models has developed into a massive global industry worth close to $200B. The industry involves thousands of companies by capturing, selling and otherwise monitising our personal information.

While it is no secret that companies are monitoring individuals' digital activity, the public is largely unaware of the complicated mechanics of this process or the types of players involved. This lack of awareness and the novelty of the commercial data industry has left worrying gaps in regulation and justified concerns about privacy and security in an increasingly digital world.

THE BUSINESS

The most common forms of data collection fueling this industry occur online and can be divided into first and third-party data. First-party data are collected by companies on their own sites, whereas third-party data are gathered by independent organisations with a relationship to other websites. By some estimates, the top 100 most-used websites have relationships with over 1,300 of these organisations. They build extensive profiles of users by tracking them as they navigate the web and by sharing insights with similar companies.

In addition to online data, companies use mobile data to gain deeper and often more revealing insight into their consumers. Instead of relying on cookies and e-tags to track users, mobile applications recognise the ID numbers of individual devices. Data from multiple devices and online data can then be integrated directly from account logins on different devices, or through various indirect means including analysis of shared wifi logins.

Data brokers are at the heart of all of this activity, advising organisations on monetisation strategies and selling them additional data when necessary. These companies are also often involved in making inferences based on available data. Given a zip code, for example, they can make probabilistic inferences about the value of a consumer's house, corresponding income level, and demographic data.

PRIVACY AND REGULATION

Even if we accept the scope of monitoring and monitisation, data collection and storage raises serious practical and philosophical questions about privacy, security, and usage. While nearly all companies cite data anonymity as a key privacy feature, studies have shown that de-anonymisation is possible with only a few data points. Furthermore, many companies keep our private messages/emails on servers, sometimes unencrypted or with encryptions that can be bypassed.

The scale and regularity of security breaches at organisations like T-Mobile, JP Morgan Chase, and even the FBI, further underscores the insubstantiality of "guarantees" of privacy. Data breaches often involve the theft of names, credit card data and social security numbers, sufficient information to steal identities and commit criminal acts under their guise.

In 2013 "whistleblower", Edward Snowden, exposed the extent to which certain government agencies monitor the world, forcing us to confront the realities of surveillance and data collection in the 21st century. A worrying amount of the surveillance insight came from data collected by commercial companies/services like Google Maps, free email providers, and even the popular game mobile game, Angry Birds. He also highlighted a curious double standard - we have strong negative reactions to government monitoring, but are broadly willing to accept certain kinds of monitoring for commercial purposes. Admittedly the extent and use of the monitoring by the two parties is different, but clearly we as a public cannot rationally claim to have an issue with the *principle* of being monitored.

Perhaps cultural sensitivity to commercial data collection has not yet evolved because we have not witnessed widescale misuse of commercial data in the same way we have with information collected by governments. However, without proper security, encryption, and anonymisation, the original intention of data collection is inconsequential. Imagine the potential consequences of the recent breach at the healthcare insurance company, Anthem, which involved the medical IDs of millions of Americans. When we consider the possibility that thousands of companies hold dozens of points of valuable information on us, the potential for harm becomes uncomfortably clear.

Despite security concerns and the potential for misuse of data, information collection remains relatively lightly regulated. Although the EU recently passed its progressive General Data Protection Regulation, the effectiveness of regional regulation in a globally-connected digital environment is unclear. Until the global public demands coordinated approaches to regulation on privacy, use and security of commercial data, we will see continued development of techniques to collect data without guarantees of appropriate security measures to protect it. ■

How Your Language Can Affect Your Smoking Habits

Paulina Szymczak, winner of the Autumn 2016 Insight Writing Prize, explores the potential of language to change the way we think about the future.

Have you ever wondered what makes some people better at keeping their New Year's resolutions than others? Why are some of us able to stick to our diet while others give up after a couple of days? Intertemporal choices have long been the subject of economic studies but interpretations differ among scholars when it comes to what it is that affects future-oriented behaviour. Conventional factors usually include culture or personal disposition. For instance, American propensity to consume a large number of goods 'now' at the cost of preparing for the future could be tied directly to 'keeping up appearances'. Other studies have focused on an innate ability to delay gratification, illustrated by the Stanford marshmallow experiment, which found that children capable of waiting longer for their candy were more likely to take responsible future-oriented decisions. However, recent research by Keith Chen of UCLA School of Management offers a new perspective. Chen's findings suggest it is the language we speak that is of primary importance for our judgements and economic decisions about the future.

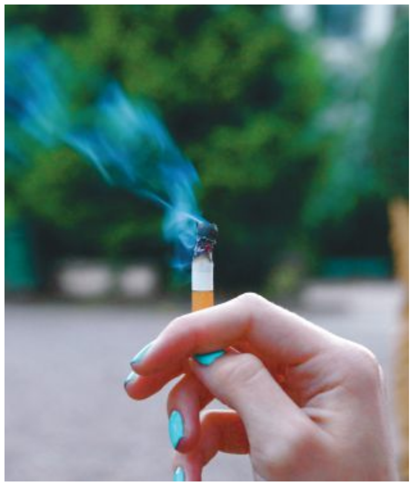
COGNITIVE RELEVANCE

Language is a relatively new arrival in explanations of economic behaviour, with cognitive science and linguistics both linking one's mother tongue and the way we think. A number of studies reveal some intriguing patterns. For example, why do members of Pormpuraaw, a small Aboriginal community in Australia, have much better navigational ability than the British? The answer is simple: they use different concepts to define space. A British person will usually refer to relative reference frames such as left or right while Pormpuraaw people will speak of north, south, west or east instead ("You have a butterfly on your northeast arm"). A substantial body of research has been devoted to the subject of linguistic relativity, but only now is it being included in the context of intertemporal choices.

ECONOMICS OF LANGUAGE

So, what does Chen actually say about the correlation between languages and the ability to take wise economic decisions? The main linguistic difference between those capable and incapable of saving a larger share of their income or those leading healthy and unhealthy lifestyles is whether the language they speak is futured or futureless. In other words, some languages strongly distinguish between the present and the future while others make the distinction much weaker. English is an example of the former with its requirement to refer to the future explicitly using markers such as "will" or "going to". Many other European and world languages follow a similar path. However, the Chinese, Japanese or Germans can talk about future events as if they talked about the present drawing meaning from the context. For instance, a German speaker forecasting a freeze can naturally do so in the present tense, saying: "Morgen ist es kalt" which translates to "It is cold tomorrow". The implication is that future feels much closer for German than English speakers, which makes it easier to resist current temptations and invest in one's future.

Chen supports his argument with data: speakers with weak future tenses are 30% more likely to save, 24% more likely to avoid smoking, 29% more likely to exercise regularly and 13 % less likely to be obese. The findings were based on a study in 76 developed and developing countries. Although it could be argued that such comparisons are necessarily flawed due to the influence of other factors such as culture, a second strand of the study not only compares speakers born and raised within the same (multilingual) countries but also includes factors such as age, sex, number of children, income and education. Interestingly, the results are still the same. For example, considerable differences in retirement savings were spotted between two types of families living in Brussels, identical on every dimension except that some of them speak futured French while others use futureless Flemish.



Liisa Maria

What does it mean for people around the globe? If further research confirms those findings and digs even deeper into the ways in which subtle linguistic differences can shape our mindsets, we might be able to design solutions to consciously make ourselves better savers or healthier people. The capacity of language to move future back and forth in our mental space may turn out to be a powerful tool for effective decision-making. ■

Adam Smith on the Kardashian Empire

Sophie Mellor examines Adam Smiths 'Theory of Moral Sentiments' on the current role of the Kardashians in our culture

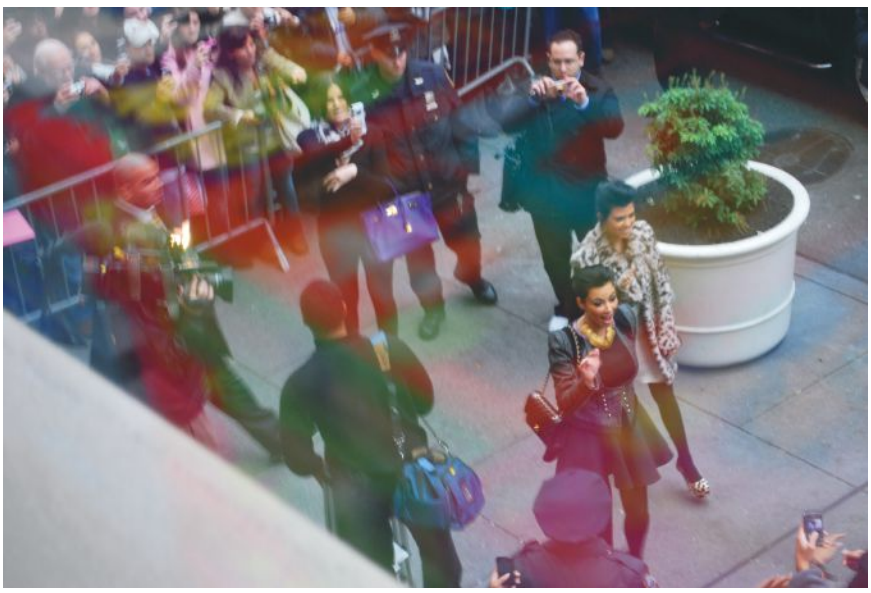
The population of individuals unaware of the Kardashian Empire is a rare and dying breed. A household name of that magnitude, which still confuses onlookers as to how they became so well known, should, in consequence, lead us to assess our economic condition. Fortunately, Adam Smith has already illustrated the manifestation of income inequality on our distorted sympathies, 257 years ago. What Adam Smith referred to as "the great and most universal cause of corruption of our moral sentiments", has gifted us with the illustrious concept of *reality television.* And who better to exemplify Adam Smith's 'Theory of Moral Sentiment' and rise from the intellectually barren television programming but the author and protagonist of 'Selfish', wife of Yeezus, and mother of a cardinal direction, Kim Kardashian.

WORSHIPPING AFFLUENCE

Let us first consider the exemplary person most deserving of our sympathy. Adam Smith describes the perfection of human nature as a man who restrains from his selfish actions and indulges his benevolent ones. He or she has gentle, likable virtues while also being the source of awe-inspiring and respect worthy virtues. We imagine ourselves in the circumstances of this person as we give them our sympathy.

Adam Smith refers to sympathy as an empathetic emotion, working as a "social glue", binding us together with our mutual desire for others to show sympathy towards us. However, this social responsibility comes concurrently with the power to withhold our sympathy when we find something disagreeable.

If Kim Kardashian is famous, then, semantically, we must say she is closer to the perfection of human nature than either you or me. However, if we conclude that she is not Adam Smith's idea of perfection, then why is she so agreeable as to deserve our sympathy?



There is an argument where we can say her strides in fashion, socializing, and homemade audio-visual media starring 2000s singer, songwriter, Ray J, have given us a reason admire her as a person. However, I believe Adam Smith's understanding does our society a bit more justice. The presence of income inequality brings a "disposition to admire and almost to worship, the rich and the powerful, and to despise, or, at least, to neglect persons of poor and mean condition." The United States' growing income division, with the top 1 percent of people owning more wealth than the bottom 90 percent, allows it to be the perfect breeding ground for "the great mob of mankind" of "admirers and worshippers."

We are not judging Kim for who she is, but rather her affluence. A woman with a net worth of $150 million through TV, fragrances, apps, merchandise, endorsements, lawsuits, and divorces puts her in a position where her virtues are not regarded alongside her sympathy. She does not need to behave morally in order to earn the approval of others, most of whom are blinded by her extravagant opulence.

JUDGEMENT OF THE IMPARTIAL SPECTATOR

When you hear someone is religiously caught up on the activities of the Kardashians, one might be inclined to look down on them. Their sentiments deviate from your own making it easy to credit them with bad judgement or taste. However, our minds do not trace back to the root

Faye Harris

of our sentiments. Adam Smith compared the agreeableness of a prison and a palace to demonstrate our paradoxical sympathies.

A prison is considerably more useful to society than a palace. Made with patriotism towards the public, it is used to house disagreeable people; however, the confinement of criminals is disagreeable. The better a prison is at being a prison, the more disagreeable it will be. On the contrary, a palace, which has no discernible effect on society besides its stature and luxury, will always be agreeable. We are subject to “the gaiety of the people who live in it, being all agreeable, and suggesting to the imagination a thousand agreeable ideas, that faculty generally rests upon them, and seldom goes further in tracing its more distant consequences.”

When we make judgements towards other people around us, it is akin to making judgement between a palace and a prison. Our innate desire to receive sympathy from others gives the average man the responsibility to test our judgement. The impartial spectator, as Adam Smith portrays, “rejects all fellow feelings with the selfishness of his motives, and he is proper object of the highest disapprobation.” It is because we are disposed to sympathize with opulence, rather than with poverty, that we parade our riches and conceal our poverty. This leads to a significant portion of the Kardashian Empire’s fame arising as a result of the way we as humans assimilate wealth.

As we regard wealth, we see the nature of vanity. With wealth comes designer fashion, elite parties, fuller lips, better eyebrows, and a face contoured so well, it creates angles in a face that I did not know could exist on mine. I would never admit that I am jealous of a Kardashian, but I might also be too proud to unveil my own vanity. Who does not wish to be the object of attention and approbation? We are all bounded to our own vanity, even if it is not as apparent as Kim’s.

Luis Pratts

“To be observed, to be attended to, to be taken notice of with sympathy, complacency, and approbation, are all the advantages which we can propose to derive from it. It is the vanity, not the ease, or the pleasure, which interests us.”

THE EXTENT OF THE DISTORTION

As for the readers who went into this article unaware of who Adam Smith is, I emphasize the notion that you should not feel imprudent of your lack of knowledge. For Adam Smith was aware of his own obscurity and predicted being overshadowed in prominence.

Much like the neglect on the poor, he found that the respectful attention of the world was more attracted to the rich than the wise. The wealthy, characterized by their proud ambition and ostentatious avidity, flaunt on social media, “forcing itself upon the notice of every wandering eye.” Conversely, the scholarly are humble and equitably justice, “attracting the attention of scarce anybody but the most studious and careful observer.”

We might be inclined to blame Smith if he managed to predict the distorting effect our sympathies suffer as a result of the invisible hand of the market. He saw income inequality as the inevitable by-product of a successful capitalistic society. As the founding father of laissez-faire economics, he instigated the greed and the vanity of income inequality and advocated for the desire to seek wealth above and beyond the necessities of nature.

However, I severely doubt he could have predicted the extent of the inequality we live in today. The six Walmart heirs are worth more than the bottom 41% of American households combined. The top six hedge fund managers and traders averaged $2 billion each in earnings in 2014. And the Kardashian family net worth is $340 million and counting.

When we witness affluence of this magnitude, excessive wealth is no longer considered a moral issue but an elite club, diminishing in size but growing in worth. The Kardashians, indulgent they may be, are only capitalising on the circumstances of the world we live in. And despite his reputation, Adam Smith would argue more in opposition to inequality than in its defence. So the next time someone asks “Why is Kim Kardashian even famous?” we should collectively hang our heads and admit to ourselves that it is because of us. ■

City Sayonara

Isy East explores the development of the city-state phenomenon and its consequences

It is no secret that urbanisation is on the rise. Over half the world's population lives in towns and cities with the global urban population growing by 65 million people annually. Fostering urbanisation is seen as a fast one-way ticket to high levels of economic growth and development. This has been encouraged by the results seen in China where urbanisation has dragged many millions out of poverty. However, this promotion and pursuance of urbanisation has resulted in some cities consistently outperforming their country, thus breaking away from the rest of their economy. These economic heavyweights are above city status - they are city-states.

City-states are so economically powerful that the number of jobs they produce and the GDP they can generate, account for almost half of their nation's output, if not more. Classic city-states such as Singapore and Hong Kong, where the city is essentially the country, obviously lead the way. Yet some cities in larger economies are also approaching city-state status. Members of this exclusive club include Brussels (59% GDP), Tel Aviv (54% GDP) and Buenos Aires (48% GDP). These huge economic powerhouses are also accountable for a large proportion of jobs in their respective economies at 54%, 51% and 50% accordingly.

City-states are followed by so-called 'second-tier' cities. Second-tier cities are non-capital cities whose economic and social performance is sufficiently important to affect the performance of the national economy. Although they are currently trailing city-states in terms of economic performance, a McKinsey report cites that the top performing second-tier cities will outperform most city-states in terms of household growth and household income by 2025. However, this is just a prediction and in the meantime the rest of the economy is left behind by city-states, generating a great divergence in economic performance.

THE FORTUITOUS CYCLE

City-states have a very different economic structure to their national economy. Highly digitalised and fast-growing industries are a substantial portion of a city-state economy. Consequently, relative sector performance is a critical driver of relative geographic performance and could explain city-states' superior performance. In 2015, 16% of London's gross value added (GVA) was accounted for by Financial Services and Insurance, 13% by Professional Services, with Information and Communications contributing 11%. For the UK as a whole, the shares were 7%, 8% and 6% respectively. The large fast-growing sectors in city-states will ensure their strong future performance whilst the rest of the economy and subsequently the country, falls behind.

City-states benefit from an advantageous system that reinforces their economic status. Being a large, prosperous city means that they attract the best performing firms. These firms then cluster in the city-state and benefit from the resulting economies of scale, enabling industry and service sectors to improve productivity and therefore increase profit margins. Combined with the fact that it is cheaper to provide goods and services to these concentrated population centres than in second-tier cities; this boosts the area's economic growth above national averages. Resultantly, more high-performing firms are attracted to the city-state and the cycle continues, constantly propelling the city-states ahead of their economy.

It is not just this fortuitous cycle that makes the performance of city-states outstanding, but the types of firms involved. Jason Furman and Peter Orszag highlight that firms' performance is also diverging and be-

Melissa Parlour

Barnyz

coming increasingly unequal. The best firms gain market power and pay higher wages than their competitors. Furman and Orszag see this as the central driver of wage inequality rather than the differences between individuals' talent. Just think of Apple's seemingly endless success and increasing market share. As the highest performing firms choose to locate in city-states, they will exacerbate the income inequality between the city-state and the rest of the economy through their wage differentials. Additionally, these wage differentials are further exaggerated as very large cities attract the best talent spurring economic growth and productivity leaving other cities to attract those less qualified, further exacerbating inequality.

CATCH ME IF YOU CAN

It is imperative that policymakers address the imbalance between national economies and city-states before it becomes irreconcilable. Additionally, the continued focus on city-states means that second-tier cities are becoming an increasingly neglected source of sustainable economic growth. Raising the economic performance of second-tier cities up to the same or better level as city-states is key to addressing the divide.

One approach is attracting investment to second-tier cities. As city-states start exhausting their economies of scale, second-tier cities hold more economic potential for the national economy than a concentration of all the resources in the city-states. Governments ought to attract domestic and foreign investors' attention to second-tier cities by promoting policies to strengthen the attractiveness of those areas, such as devolving decision-making powers and supporting industry. This would boost the growth rates of second tier cities to similar levels of city-states and allow them to play catch up.

Emulating the characteristics of city-states may prove successful in reducing the inequality too. For instance, increasing the share of the fast-growing sectors across the whole economy and not just in city-states. This may be achieved by providing tax breaks in second-tier cities or regions to attract high performing firms; improving transport links to second-tier cities to improve labour mobility and cut transportation costs and encourage clusters near universities so growing sectors can take advantage of knowledge spillovers. Restructuring second-tier cities would allow them to enjoy the strong economic performance of city-states with a similar composition.

Governance will also play an integral role to help national economic performance catch up to the city-states. The golden example is the Greater Manchester Centralised Authority (GMCA) - the first statutory metropolitan government outside of London. The GMCA integrated local authorities in 2011 to co-ordinate governance of a territory based on a functional economic area as opposed to political or administrative representation. Therefore, policy operated at an extended city-region scale allowing strong leadership and targeted economic policy to boost growth. Manchester's GVA is now only 0.5 percentage points behind London's. Institutional and financial decentralisation of national government to regional and local levels reduces the costs of over-concentration on city-states and maximises the contribution of second-tier cities to national competitiveness and welfare. Hence, growth would rebalance and lessen the power of the city state.

Inaction by policymakers will cause the gap between the city-states and less successful cities to widen due to the intensified competition between places for limited private and public investments. Facing an uncertain future, investors will continue to focus on already successful cities with better economic prospects, namely city-states, if nothing is done.

McKinsey's Urban world: Mapping the economic power of cities has a more optimistic view. It forecasts that second-tier cities will expand rapidly between 2007 and 2025, fueled by above-average growth in population and GDP per capita. Many city-state governments are unprepared to cope with the rate at which their populations are growing. Without skillful planning and management, city-states run the risk of diseconomies - e.g. congestion and pollution - starting to outweigh scale benefits leading to a loss of economic dynamism. Consequently, McKinsey predicts that over the next 15 years, half of worldwide GDP is likely to come from second-tier cities with a current population of less than 10 million.

Despite this, the city-state phenomenon is far from over. While it has been responsible for pulling scores of people out of poverty, it has exacerbated economic inequality as city-states continually outperform everyone else. As the world's city-states further cement their leading position, there will be a great challenge to policymakers to address this divergence and its consequences before it is too late. ■

The Economics of Slums

Elsa Kyander explains why slum areas in developing countries are seperate from the formal economy and why the future of slums might be prosperity rather than poverty

Urbanisation in developing countries is increasing at an unprecedented rate, bringing with it rapid growth of informal settlements. Across the globe, approximately one billion people are living in slums in the outskirts of new mega-cities in the developing world. In 2030, the figure is estimated to be twice as high. As a result, the gap between the formal sector outside of the slum and the informal sector within it is increasing. Not only is the border between the slum and the rest of the city marked by physical barriers such as walls and gates but also by invisible means of division. Lack of access to public goods such as proper roads and health care in addition to limited access to formal financial services creates a significant disparity between the formal and informal society. But why has this difference within the same city emerged and are these divisions bound to remain?

SAME CITY, DIFFERENT WORLDS

In sub-Saharan Africa approximately 65% of the urban population is living in slum areas surrounding cities. Even though they represent a significant part of the total population, most inhabitants are excluded from basic state services such as education and health care. At the core, the main issue is that slums are informal settlements where very few occupants have formal property rights, through ownership or legal rental. Consequently, the state regards them as squatters and therefore ineligible to receive state services.

Due to these limitations, a separate economy has emerged in the slums. The slum economy is a complex system consisting of similar components as the official sector and existing in parallel with the official national economy. Though the exact components of the economy vary depending on the size and characteristics of the particular settlement, the slum economy is typically based on businesses where slum citizens employ fellow slum residents. Approximately 50% of people living in slums are self-employed in informal businesses. This sector has a particularly difficult time accessing capital and skills, which consequently dampens growth. Even though the importance of the slum economy as a source of employment in urban areas is expected to increase, slums are often neglected by the central government. Due to a combination of ignorance regarding the economic potential of the slums and decisions based on corruption, local governments frequently implement policies that deliberately counteract economic development in the slums.

PROPERTY-A KEY ISSUE

Urban migration is driven by diverse motives, but a common reason is the hope of a more prosperous future in the city. However, local governments are often ill-equipped to handle the large influx of people to urban areas, causing severe housing shortages. Due to a lack of sufficient housing opportunities, many urban migrants are left with the slums as their only option. One of the most important divisions between the formal and informal societies is the question of property rights. The slums often emerge when people settle down on unused land and are therefore not legally eligible to the property. Only 7% of the inhabitants of Kibera in Nairobi, the largest slum in the world, have a formal right to the property they are living on.

The low degree of property ownership has severe implications for slum inhabitants. For example, people living in the slum often lack incentives to invest in upgrades of properties. The threat of being evicted is omnipresent, making housing investments risky. UN Habitat, the United Nations' program for sustainable human settlements, emphasises the importance of housing upgrades in order to

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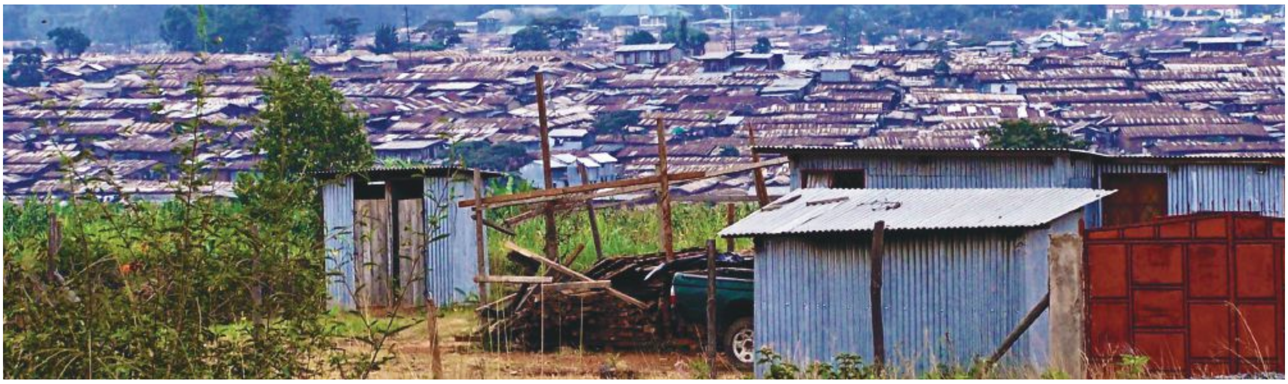

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achieve economic development. According to UN Habitat, upgraded slums would increase urban mobility and level out key differences between the slum and the rest of the city, facilitating economic development. However, the UN Habitat does not propose any solutions for how property rights should be distributed, consequently leaving one of the main questions for the development of slums unanswered.

FINANCE IN THE SLUMS

City economies are heavily dependent on the labour, goods and services provided by informal businesses in the slums. Slum inhabitants often provide services with approximately 20% of motorised transportation in India's largest cities and between 50-100% of waste collection in developing countries provided by slum dwellers. The economic potential of the slum is high, but access to capital is crucial in order for slum dwellers to realise this potential. However, the barriers to accessing capital through formal financial institutions such as banks might be insurmountable. Banks often require customers to provide collateral such as a property to apply for a loan. Since few people in the slum have formal rights to the land they live on, many are excluded from formal financial services. The few who are fortunate enough to be eligible for a loan are often faced by sky-high interest rates. While the issue of access to financial services applies to the majority of developing countries inhabitants, it emphasises the extra layer of difficulty for slum dwellers to move to legal housing.

Due to increasing rents caused by the large influx of rural migrants, rents in slums are on the rise. Rent is often a larger share of income in slums compared to rural settings, where 90% of people living in rural parts of Kenya do not pay rent at all. The demand for capital and consequently financial services thus differ between rural and urban parts of the country, making the limitations that much more important.

As a result, alternative financial institutions arise in developing countries. Saving clubs such as ROSCAs (rotating savings and credit associations) function as informal ways of acquiring the necessary capital. Furthermore, due to the absence of proper banks, telephone companies often act as financial institutes by offering their customers the ability to deposit money via their mobile phones. The emergence of micro-finance institutions, which offer small loans with alternative types of collateral to low-income households, is increasingly an option for slum dwellers to be able to access formal financial institutions. Not only are micro-loans a way to finance major investments, they are also an opportunity for slum dwellers to reduce volatility in incomes and consequently decrease their financial uncertainty.

POVERTY TRAP OR PROSPERITY?

The economic situation in the slums is sometimes referred to as a "poverty trap". Jeffrey Sachs is one of the most prominent advocates of this standpoint, arguing that citizens in informal settlements are destined for a life in poverty with little or no chance of improvement of their economic situation. The key idea of the poverty traps theory is that poor countries need massive investments in areas such as infrastructure and education in order to achieve an increase in productivity and efficiency. However, developing countries are rarely able to afford these investments limiting their potential for growth. We can apply the same theory to the economy of slum cities. Due to a lack of financial instruments and investments, slum inhabitants are unable to raise the necessary means to pull themselves out of poverty.

However, due to the lack of formal services and markets, citizens in informal settlements are incentivised to provide these services themselves. Urban areas attract talented people from rural regions who leave their home villages to seek a more prosperous future in the city. Despite the harsh conditions the economies of the slum cities still manage to thrive, with new businesses emerging at an unprecedented rate.

The state is arguably the most important player in the development of slums and has the power to create either positive or negative incentives for the slum economy. Without sufficient infrastructure, investments and financial instruments, businesses in the slums will not be able flourish and fulfil their potential. If the future for today's mega-slums entails such a development is difficult to say but the economic potential of the slums clearly should not be neglected. ■

Racing up the Property Ladder

Matt Oddy looks at the disparity in home ownership rates between the UK and Germany

When working in an estate agent's a few years ago, I was taught a lot of what they call *'agent's jargon'*. This was their mock guide to the stereotypical language they'd use in a sales brochure. The phrase that stuck with me the most, however, was *'Ideal for first-time buyer'*, which was defined as a property that *'Can only be sold to people who don't know what a real house is supposed to look like'*. Although clearly humorous, there appears to be an underlying reality.

Within the UK, there is a presupposition that one will strive to join the 'property ladder' as soon as possible, with many shifting from rental to ownership not long after leaving formal education. Homeownership rates among 25-29 year olds are 59% across the UK, only marginally increasing to 63.5% when considering the entire population. This is in stark contrast to the German housing market, where 11% of 25-29 year olds and 52.5% of the entire population own their house. So why do the British feel the need to become homeowners so early in their lifetime?

A CUP OF TEA VS EIN BIER

Cultural expectations in regards to the way property is viewed have heightened a virtuous cycle. While climbing the property ladder is a widespread lifecycle strategy in the UK, German households tend to buy one property for the rest of their lives (their likelihood of transition to a second owned home is 10.89%). Studies show that intra-urban mobility and regional migration are less likely among homeowners, whilst children who grow up in owned homes have a greater chance of becoming homeowners themselves, giving rise to a self-fulfilling cycle. Whether this is a knock-on effect of the cultural expectations of social mobility, however, is a question for another time.

TO OWN OR TO RENT?

The cost of owning vs. renting has been widely assessed throughout, but key factors such as the design of domestic social housing, homeownership subsidies and real house prices have been relatively consistent. In contrast to the UK, Germany's rental and homeownership markets have seemed to co-exist on an equal footing, with little regulation or subsidies from the government for homeownership. With a relatively insignificant tax wedge (nominal mortgage rates vs. effective after-tax interest rates) and a particularly liberal social housing program, put in place after the Second World War, there was little financial benefit to owning a property. This has also increased the quality of rental accommodation, eliminating the tenant stigmatization found elsewhere. Although the UK injects similarly large sums of money into their social housing programs, the quality of property is inferior as the funds were granted to local governments and caps put on their costs and rents.

André P. Meyer-Vitali

A PROPERTY FOR LIFE...NOT JUST FOR CHRISTMAS

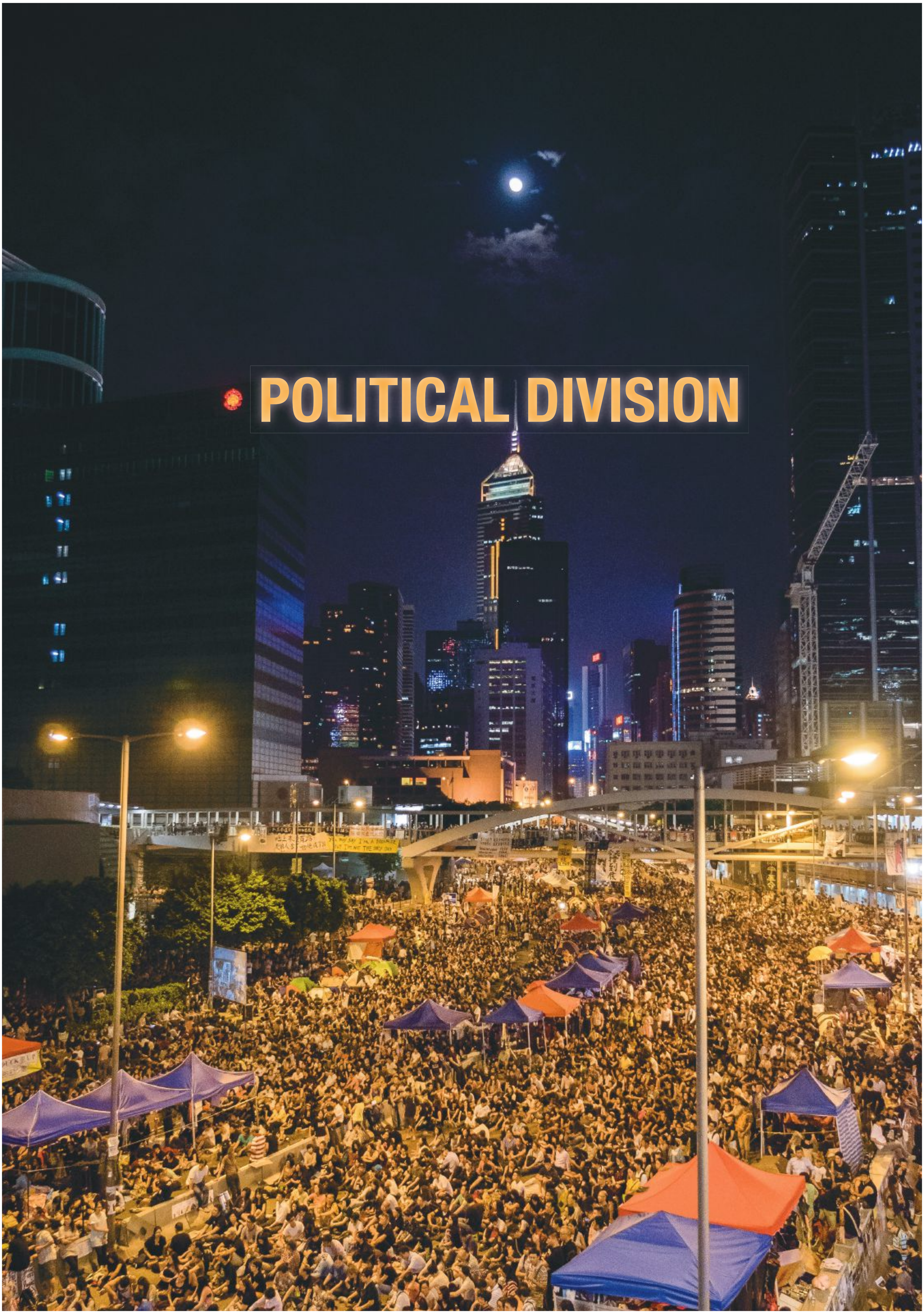
Homeowners treat property as both a consumption and investment good, 'consuming' the roof above their head and increasing their wealth through mortgage repayments & potential house-price increases. Studies have illustrated that homeownership is also used as a form of insurance, guaranteeing the owner knowledge of their future housing costs, hedging against what could be a volatile rental market. With real house prices having risen significantly more across the UK relative to Germany, where they remained relatively stable until 2010, it may come as no surprise that the ownership rates remain so significantly different.

The 'elephant in the room' is the contrast in mortgage systems, as many studies point towards property financing being a pertinent barrier to home-ownership.

Loan-to-value ratios in Germany are significantly lower than that of the UK, with banks typically only financing 60-80% of the lending value of a property. The ongoing debate, however, surrounds the cause and effect of the mortgage offers in relation to homeownership rates. Are people with little equity and irregular income not demanding the loans, hence they haven't been created, or is the German mortgage market an obstacle to homeownership?

Homeownership rates are already beginning to converge as the UK begins to liberalize its rental market and German house prices pick up traction, but whether or not this shift is beneficial remains to be seen. ■

POLITICAL DIVISION



The WTO: A Dying Beast

Conan Phimister explores the future of trade deals

"Trade Wars aren't started by countries appealing to respected, independent trade authorities."

After 15 years of unsuccessful trade negotiations in the Doha round, many are worried that stagnating global multilateralism will bring an end to expanding world trade. The failure of the World Trade Organisations (WTO) to reach a deal has been seen by many to represent a wider rejection of globalisation. This argument is clearly palpable when considering the rising tide of protectionism within the West, coupled with a growing politicisation of the Multilateral stage. History however, shows reversing the beast of free trade may be painfully unrealistic and the current blip represents a reorganisation of the dynamics of negotiations. The history of the WTO is one which until recently was of success so it is important to ask: What has changed?

THE GATT/WTO

The WTO has not always been embroiled in discussions surrounding its usefulness – the founding organization the General Agreement on Trade and Tariffs (GATT) was widely viewed as having facilitated the reduction of tariffs and the subsequent ballooning of world trade. Since its creation in 1948, there has been a consistent fall in the Effective Tariff Rates in High-income countries of around 80%.

The success of the GATT is a consequence of a range of factors, but the strong institutional backbone underlying their negotiations has long been highly regarded. The five founding principles that create an environment for agreement are: nondiscrimination, transparency, reciprocity, safety valves (for countries facing domestic pressure to raise tariffs), and consensus decision-making. These principles ensure a fair playing field for all members and encourage them to join the table.

Although these rules are stated clearly by the WTO there have been some very important exceptions which fostered their early victories – most notably the Special and Differential Treatment (SDT) rule which exempt developing nations from the Reciprocity principle allowing them essentially a free ride. This core notion of flexibility is at the heart of the GATTs early success – they pursued a facilitation of disagreements, something they could not keep up for long.

It is the way that these 5 founding principles reacted with the state of the global economy, which allowed the GATT to be a success – and is now condemning the WTO to become a failure.

BUILDING A JUGGERNAUT

A system of tariffs is commonly said to be the consequence of a political economy process – reflecting the relative strength of the protectionist and free trade interests within the country. Grossman and Helpman have formalized this idea into a two player game which shows why the GATT was such a success. They argued that a trade agreement creates a movement from a non-cooperative to a cooperative outcome creating snowballing towards a free trade equilibrium. The initial trade agreement creates a one-time significant lowering of the tariffs. This is the followed by a shift in the political equilibrium towards free trade as the free trade interests become relatively stronger as they gain the benefits of trade. Their newfound strength is reflected in the quality of their lobbying efforts leading to further tariff cuts. This self-perpetuating cycle creates a 'Juggernaut' that established consistent liberalisation, which, coupled with the principles of reciprocity and non-discrimination, led to what some call an "unstoppable beast".

It takes looking into the Tariff Wars and subsequent Great Depression of the 1930s in the United States to see how quickly this Juggernaut can slip into reverse - with horrendous economic ramifications. Furthermore, it is important that those within the WTO start to ask the question of what has stopped this "unstoppable beast"?

A NEW GLOBAL DYNAMIC?

The lack of consensus within the Doha Round has been one of the main stumbling blocks. The admission of China in 2001, as well as the emergence of developing nations as a political force within the WTO, have arguably made it harder to come to an agreement. In the past the Special and Differential Treatment rule coupled with the Non-Discrimination

Catspy Jamasnz

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principle worked by allowing developing nations to benefit from the negotiations without having to reciprocate in exchange for unconditional agreement. However, with many nations now unwilling to lie down and accept these 'free riders' the system has become untenable.

Furthermore, in the early post-war period developing markets were of relative insignificance to high-income economies, but this is no longer the case. The emergence of low-cost economies makes the negative consequences of free trade much more tangible in terms of job loss. This is reflected in the political discourse in the Western world – where complaints about China have become synonymous with complaints about free trade. As a consequence, the flexibility allowed in the SDT rule has become a political impossibility. Additionally, as much as political cynicism is rife, the masses do sway elections in a much more tangible way then Grossman and Helpmann's two player game ever will.

The admission and rise of developing nations could have led to greater demand and supply of market access but instead; they have formed defensive coalitions to protect their politically sensitive markets. These coalitions and counter coalitions are worrying for those who fear an irreversible over-politicisation of the WTO.

A MOVEMENT TOWARDS REGIONALISM?

Although the multilateral negotiations have been painstakingly slow, there has been a resurgence in bilateral and regional trade deals. These regional trade agreements offer a glimmer of hope that this breakdown at the multilateral level is just a resetting rather than a movement away from free trade altogether. NAFTA, TTIP, and similar deals manage to skirt around the issues of conflicting interests that have plagued the Doha Round whilst providing hope that we are not entering an age of protectionism.

The nature of negotiations has inherently become deeper and more complicated as they venture into the few remaining areas of agricultural subsidies, labour standards, and the environment which currently aren't fully covered by trade agreeements. Since the apolitical negotiations have already been agreed it may be argued that the future of trade agreements must not be held up by an obsession with Global multilateralism but instead by regional agreements which allow countries with similar politically protected industries to come together.

It is because the WTO has moved away from an institution of flexibility concerning disagreements that the Doha Round is doomed to be a failure. However, the future of truly global trade agreements may not be lost forever. There is hope for a new form of negotiations if these regional blocs – such as the EU – come together in a WTO-like fashion but with fewer more harmonious voices.?

THE DEATH OF FREE TRADE?

The failure of the Doha Round should not be taken as representative of a movement away from free trade in general. World merchandise exports have grown by 70% since the round began regardless of the negotiations perceived failure, and appetite for trade deals within the developing world has not dampened.

Further, this is not the first time that doomsayers have predicted a creeping "new protectionism" in the West. These fears also emerged 30 years ago, when Japan was the trade bogeyman and stagflation in advanced economies was the driving force of concern. However, anyone familiar with the subsequent years saw that there was not a reverse Juggernaut effect but instead (with the temporary Voluntary Export Restrictions (VERs) placed on Japan) the letting off of political steam. What followed the imposition of these VERs has been a form of hyper-globalisation which no one had predicted. This represents a historical form of regime maintenance rather than regime destruction – similar to which will be experienced today. ■

Catalonian Independence: Gauging the Potential Economic Effect

Sam Jones evaluates what a vote in favor of Catalonian independence could mean for the region

Despite being a part of Spain since the 15th century, Catalonia has always been a region that has been proud of having its own language and identity. In 1979 the region was given a statute of autonomy and was recognised as a nationality, with Catalan becoming the joint official language alongside Spanish. This was welcomed by the Catalan people after decades of suppression of the Catalan language, autonomy and culture under the reign of General Franco.

The movement to gain independence from Spain began in earnest in December 2012 when centre right party, Convergence and Union, and centre-left party, ERC, put aside their traditional differences to form a ruling party. This was thanks mainly to both parties sharing a pro-independence stance, uniting to set plans in motion for a referendum on secession from Spain in 2014. However, during March of 2014 the Spanish Constitutional Court declared it was unconstitutional to hold a Catalan independence referendum in November 2014. A non-binding informal vote still went ahead though, with two million out of 5.4 million eligible voters voting, 80% of those for Independence.

Until recently few Catalans were concerned with full independence from Spain. This changed during the Spanish economic crisis with the focal point being the region paying more to the Spanish Government than it receives back, and argument that was mirrored as one of the main talking points in the recent Scottish independence referendum. The deficit of taxes paid and funds received by Catalonia is a cause of dispute between the Spanish Government and the Generalitat of Catalonia.

Many Catalans believed they were getting a raw deal from the Spanish Government in Madrid. They believed they were paying more in taxes to the capital than they were getting back. This was confirmed in recently released figures by the Spanish Government from 2011 which showed the Catalans paid €8.5bn more in taxes than it received back from Madrid. This however is disputed by the Catalan government, who believe the figure is closer to €11.1bn. This factor is the main driving force behind the push for Independence, with many of the Catalan population believing they are not being treated fairly by the Spanish Government, who are using their Catalan taxes to prop up other failing regions.

THE ARGUMENT FOR INDEPENDENCE

The sense that Catalonia would be better off without Spain is also reflected in the GDP per capita figures for the region, €28,181 for Catalonia compared to €22,800 for Spain as a whole. Catalans know they are one of the most economically prosperous regions in Spain and are looking to take back control of their own finances. Having full fiscal autonomy would mean taxes raised in Catalonia would remain in the region, not be taken by the Spanish Government and distributed across the rest of Spain as they see fit.

In comparison to the Scottish referendum, Catalonia is in a much stronger economic position to gain independence. This is down to the percentage of GDP Catalonia contributes to Spain, just under 20%. The total figure of €209bn from 2014 puts Catalonia in the ballpark of Greece, Denmark, Ireland and Por-

Paco Riviére

Paco Riviére

tugal, showing that the region has the economy and revenue to become an independent nation.

Aside from the economic factors, there are a plethora of cultural reasons for Catalan Independence. In 2010, Catalonia was the first mainland Spanish region to ban bullfighting. It is a region with its own flag, history, language and is home to one of the world's most famous football teams. It has remained resolute despite years of hardship, surviving General Franco's attempts to supress the region during his reign after the Spanish civil war. Many supporters of independence believe the Catalan language and culture does not garner enough respect from the Spanish Government, and without independence the region will start to lose its identity and be absorbed into the Spanish culture. In the most polls, the majority is for independence, so a formal referendum is the next logical step to let the Catalan people choose the future of their nation.

THE ARGUMENT AGAINST INDEPENDENCE

If Catalonia were to gain Independence, it could have a devastating effect on the Spanish economy. As already stated the region contributes nearly 20% of Spain's GDP. This lack of revenue for the Spanish Government, in both taxes and production could be disastrous. This is especially true for regions such as Andalucía which are the beneficiaries of the tax redistribution of the Spanish Government. In addition to this, Spain is the main region that Catalonia exports to. With 45.7% of Catalan exports going to Spain in 2012. A Spanish economic downturn coupled with no EU membership could be troublesome for the region and reduce its ability to export goods.

Another worrying aspect for Catalonia is their debt level. Catalonia is in around €42bn worth of debt, which would need to be serviced independently of the Spanish Government if it were to stand alone. This figure doesn't take into account the fraction of the debt it would have to inherit from Spain. While the level of debt inherited would not be determined until any negotiation for potential independence takes place, it is likely to be one of 3 figures: 19% - the proportion Catalonia is contributing to GDP, 16% - the proportion of the population or 11% - the proportion of national expenditure on the region. A high debt inheritance would be bad for Catalonia and good for Spain, while low debt inheritance would have the opposite effect.

Being an independent state would mean Catalonia is not part of the EU. This would mean an arduous, long and costly process to regain membership. During the membership application process exporting companies would be likely to suffer, perhaps forcing them to move into Spain, causing economic downturn in the region. Furthermore, being an independent state will likely mean Catalonia would need to apply to the EU bailout mechanism, which would mean asking for help from the EU when they themselves were not willing to help the other Spanish regions. Meanwhile, Catalonia would have to establish its own institutions such as a full Government and courts of law to comply with EU legislations. These would come at a large cost, further increasing the deficit the region is already running

The tremors of Catalan independence could be felt across Europe. Other regions in Europe including Flanders in Belgium, Padania in Italy, Madeira in Portugal, Bavaria in Germany and Scania in Sweden may see growing support for independence. This could lead to fractures in major European countries, exacerbating the evident disharmony and uncertainty in Europe and the EU caused by Brexit.

CONCLUSIONS

While Independence may be seen as the only solution for disgruntled Catalans, the economic ramifications it could have not only to Catalonia and the rest of Spain, but to the whole of the EU seem a risk not worth taking. The Nationalistic views of the Catalan people may be narrowing their vision, with separation from the Spanish Government being the prime and only concern. This may be jeopardising any hope of both a Spanish and Catalan economic recovery. ■

The Troubled Establishment: What Needs to Change

Akal Bains explores global income inequality and the resulting divisions.

Recent events, such as the UK's vote to leave the EU, have prompted a number of observers to suggest that the new division in politics might not be between left and right, but between those favouring open and closed societies. It might be more worthwhile, however to define the new division in public opinion as pro- versus anti-establishment. What Jeremy Corbyn, Brexit, Trump and Bernie Sanders have in common is that they all represent 'change'. Historically, periods of economic crisis have fuelled disillusionment with incumbent institutions. However, the recession is almost eight years old, and most countries have since recovered. So why now are so many anti-establishment trends on the rise?

The answer: income inequality. Though the recession is over, the increase in inequality is not. The wealthiest 0.1% of Americans now own almost the same share of U.S wealth as the bottom 90%. The graph below shows how people at different levels of global income have fared over 30 years and a striking finding is the dip in the curve around the 70-95 percentile of global income. These 'losers' during the 1988-2008 correspond closely to the lower-middle classes of the developed world. It is no wonder that these are the people who think the current political system does not work for them, and are hence voting against it.

Governments, especially in the US and UK, have failed to put in place policies that could alleviate the adverse effects globalisation has on certain groups. Moreover, across the Western world, fiscal austerity in response to the 2008 financial crisis gained significant political popularity, and it has often been the case that such measures have disproportionately affected the poor. This was particularly true in countries where austerity came in the form of regressive tax hikes and cuts to benefits, as was the case in the UK. This has contributed to a larger trend identified by Thomas Piketty as the main driver of inequality — the rate of return on capital (R) is bigger than the rate of economic growth (G). Essentially this means that those who own the majority of capital see faster rates of growth than many economies are growing as a whole. Simply put, the rich are becoming richer.

WHAT NEEDS TO BE DONE

In light of the evidence on inequality, we should not be surprised that the UK voted to leave the EU or that Donald Trump eased to success in the Republican Primaries. Nor should we disregard supporters of such movements as a 'basket of deplorables'. Rather, we should be sympathetic to the fact that the current political system has left certain groups behind, whilst being sceptical of 'quick fix solutions' that anti-establishment movements offer.

Given the enormous benefits of globalisation, it seems better to welcome the liberalisation of global markets whilst acknowledging and responding to the negative effects that that can have rather than shutting ourselves off from the outside world altogether. When we examine the data on income growth we see that though the lower-middle class of the developed world has seen weak relative growth in income on aggregate, this isn't the case within all nations and the data isn't as striking as it appears on first inspection. The Resolution Foundation found that within certain nations, for example Spain, Italy and South Korea, the lower-middle class has seen stronger growth in income than the wealthiest 10% from 1988 to 2008. Such data shows that with the right policies in place, the lower-middle class need not suffer from globalization.

With regard to austerity, governments need to put more emphasis on fiscal stimulation through targeted initiatives that benefit those who have not done as well from globalisation. As a balance, governments need to exercise fiscal restraint in 'normal' times in order for stimulus to be economically and politically viable in response to downturns.

Regarding the issue of R being larger than G, the most effective response could be a more progressive tax system. Picketty argues that such a tax system needs to be implemented multilaterally, as otherwise the rich will be able to move money into tax havens. I concede that this will be politically challenging, however, we should remember that the top bracket of income tax was 92% in the US in the 1950s, in contrast, today the top rate of tax is just under 40%. It should also be remembered that these high tax rates in the US in the 1950s were coupled with strong economic growth. Indeed, the period is sometimes referred to as the 'decade of prosperity'. And so, a return to more progressive taxation policy should not be seen as off limits. ■

Brexit from the Eyes of the Netherlands

Sameeran Khamamkar explores how Brexit will affect the Netherlands from an economic and political standpoint

Pieter Musterd

If you're an international student living in the UK, the question 'What do you think about Brexit'? must have come up in just about every conversation you had when you returned home over the summer holiday. While there are few things more entertaining than sharing ones thoughts the future of the UK with people looking in from the outside, one often forgets the consequences this vote could — and indeed already has — had on other countries within the EU. The most heavily effected of all these however, might be the Netherlands.

Brexit has been causing serious problems for The Dutch economy, and does not show any signs of letting up. In the short run, renegotiations of trade agreements between the UK and the EU nearly guarantee that the Dutch economy to be worse off than before, assuming the negotiations are successfully completed at all. Chemicals, plastics and rubber, electronics, motor vehicles, food processing, and metals and minerals sectors account for 12% of the Dutch economy. Those industries suffered 5% losses pre-referendum, and a new free trade agreement would likely only diminish those losses by, at best, 40%. A lot will depend on whether the EU decides to punish the UK and discourage countries from leaving the EU in the future, or aims to minimize losses for all involved, however in either scenario, the Dutch economy will likely face decline. The Dutch government's leading forecaster states that the total cost for Brexit may reach 10 billion euros. From the perspective of the Dutch, that's 1.2% of their economy gone by 2030. The Netherlands Bureau for Economic Policy Analysis (CPB) states that the reason for such heavy losses is primarily due to the loss of greater trade with Britain.

THE ROTTERDAM EFFECT

The economic hardships could be even greater when one considers the Rotterdam Effect — named for the city of Rotterdam, the busiest port in the EU and 10th busiest in the world. The theory of the Rotterdam Effect holds that trade goods that pass through the port of Rotterdam — or for that matter, any similar 'gateway' port, elsewhere — are artificially inflated regardless of their place of origin or destination. In 2013, between 46.1% and 50.4% of UK exports went to the EU and between 49.1% and 53.3% of UK imports came from the EU. Most of these goods are passed through Rotterdam and, thus inflated from the Rotterdam effect. These goods are then reshipped to other parts of the EU and the world, allowing the merchants — and the local government — to make a handy profit. Britain leaving the EU will not only stunt trade, it will reduce the extent of the Rotterdam effect, which could have major implications on the Dutch economy.

AN UNBALANCED UNION

Brexit has also hurt the Netherlands' political position within the EU. Britain and the Netherlands are similar when compared to many other European countries. Primarily, they are maritime countries. They thrive from free trade with the rest of the world. Continental powers such as Germany and France think differently, and often the influence of a like-minded Britain has helped keep the Dutch agenda from being railroaded. For now, the issue remains with trade, but in the future, this could allow the EU to make decisions that might not be favorable for the Dutch.

A Netherlands-exit (Nexit) may seem unlikely, but until recently, so did Brexit, and with a drastic shift in the balance of power in the EU, it could very well become a possibility. Geert Wilders, the leader of the populist, right-wing PVV, heavily supports Brexit, and told the Dutch parliament, "I think it will be a good thing if people from the UK vote to leave this political project. I believe it will mean that other countries, like perhaps my own, will find it an enormous incentive to regain their national sovereignty." The PVV is currently a minority party, but like UKIP, it could be large enough to influence the wider political system. With an unhealthy economy, and political upheaval in the EU, Nexit is a much more real possibility than some realise. ■

Anti-Social Media

Rachel Forshaw, runner-up for the Autumn 2016 Insight Writer Prize, discusses whether social media is dividing us politically.

Politics is becoming more divided. For example, in the UK Brexit came as shock to many voters, nationalism is growing in popularity in continental Europe, and in the US the Republican candidate's views appeal most to a group known as the 'Alt-Right', a fringe group previously ignored by politicians. This trend has emerged in conjunction with a rapid change in how we access news; a 2014 Pew Research study documents that a majority of US adults (62%) now get their news on social media, and in the same year OFCOM reports the figure for the UK at 41%. This raises the question: to what extent is the rise of social media driving our political divisions?

VOTING THEORIES & ICE CREAM STALLLS

The textbook thinking about voting in economics is done in the context of the median voter theorem, which says that politicians will all fight for the vote of the median viewpoint, or that which that sits right in the middle of public opinion. In practice, this generally means a rush to the centre-grounds of politics. A nice analogy is the scenario of two ice-cream stalls competing for business on a beach: if the stalls start at opposite ends of the beach, one canny seller will realise he can sell more ice-creams if he moves his stall slightly towards his rival (customers don't like walking so far on a hot day). But his rival realises this too and so the only stable equilibrium is that both pitch their stalls back-to-back, right in the centre of the beach - each fighting over the business of the median ice-cream eater. The problem with this theory is that it assumes individuals have a single preferred policy, and that they grow less satisfied as a candidate proposes policies further away from this point. In our example, the ice-cream stores can only differ in one dimension - how far a customer has to walk along the beach to reach it - but are otherwise identical. In the real world, this is often too simplistic to capture voter preferences.

A fruitful area to look at is a related theory: Probabilistic Voting. The name 'probabilistic' refers to the point of view of the candidate, who gets each citizen's vote with a certain probability. This theory is a great improvement because it can cope with the sort of multidimensional policies that we see in the real world; in ice-cream terms, politicians can offer a raft of different flavours for different customers' tastes. It breaks voters into different groups, across which voters differ in their ideology. This is intuitive; people tend to form groups with people with they share a similar political end, or have shared ideology. Look, for example, at trade unions or 'Women for Trump' (which, admittedly, is a relatively small group). Unlike the median voter theorem, politicians propose policies which balance the desires of all the different groups, putting more weight on large groups, and those with very concentrated (or similar) preferences. The former gives the candidate more votes in absolute number while the latter allows the candidate to attract many votes with just a small change in policy.

> On social media, a self-reinforcing mechanism is almost guaranteed

This theory could help explain why, in the recent election, the UK Independence Party (UKIP) managed to get votes from both typically right-wing Southern English voters and left-wing Northern English voters, and why immigration has now become an issue of the centre-ground. The North was always expected to vote for Labour, and the South the Conservatives, and so neither party focused on wooing them with policies. UKIP proposed a policy that appealed to both, regardless of political persuasion: curtailing immigration. Centrist parties see this and have now adapted their policies accordingly, so immigration is no longer a right-wing fringe issue. While this theory represents a great improvement in realism, in its current form, it cannot explain the persistently polarised platforms of modern political parties. Think, for example, about the Republicans' pro-life versus Democrats' pro-choice platforms in the US: these paradoxical policies divide us. In ice-cream terms, now beach-goers would likely only ever visit one stall or the other.

THE ROLE OF INFORMATION

Let's assume that within each group only a fraction can observe a politician's proposals, while the remaining voters are totally uninformed. Furthermore, the informed voters are better informed about the candidate or political party that they like; this is the setup of Glaeser, Ponzetto and Shapiro (2005). Their two slight modifications to the basic Probabilistic Voting model have some really nice implications: firstly, candidates propose different policies because when a politician deviates from the centre, his or her own supporters are more aware of the deviation than the opponent's supporters. Secondly, there is an endogenous, or self-reinforcing, element: people will listen

European Parliament

more carefully to the politician that they like, and because of this the politician will cater more to their needs.

On social media, this self-reinforcing mechanism is almost guaranteed: the news that you see is determined by the types of groups that you belong to, the people that you associate with, and the feeds that you subscribe to on platforms such as Facebook and Twitter. Pew Research found that those who identify as consistently conservative are twice as likely than the average to view opinions on Facebook that are similar to their own views, and around 40% of consistent liberals have blocked or defriended someone because they disagreed on politics. In a time where the opinions of YouTube stars get more viewers than handfuls of respectable news organisations put together, we should be concerned about this trend because it is too easy for us to become blinded to the opinions of 'out-groups' and wider societal opinion in general. Furthermore, studies show that when individuals only speak with those who share their political persuasion they can develop much more extreme viewpoints, a phenomenon known as '*group polarisation*'. If the theory is correct, the rise of social media could be exacerbating our political divisions.

IN DEFENSE OF SOCIAL MEDIA

But is it all bad? Social media provides low-cost, easy-to-access information, which can increase participation and engagement in politics. For example, Oberholzer and Waldfogel (2009)showed that access to Spanish-language local TV news increases Hispanic turnout in US elections. Gerber, Karlan and Bergan (2009) undertook an experiment in which they provided either a left-wing or a right-wing newspaper to voters. Regardless of the newspaper received, they found greater support for Democratic candidates and higher turnout - suggesting that exposure to news matters more than news bias. Critics may argue that the content of many social media sites is less informative or more biased than newspapers, meaning we cannot apply the results of this study to the context of social media. However, the rise of free news on social media has also forced reputable news organisations to provide informative content for free in order to compete. Many now post online articles, videos and tweet about breaking news. We know that exposure to news affects the policies that politicians propose, but this can be a positive force for change. For example, when an earlier form of new media was introduced - the radio – Strömberg (2004) showed that US counties with greater levels of radio ownership received more New Deal unemployment relief funds during the Great Depression. Because the voters in those counties were better informed, they got more help from politicians during difficult economic times.

With this in mind, what can we do to maximise the benefits and minimise the costs of social media? We must actively strive to be fully informed by seeking out a varied diet of news sources: don't just passively listen to views that you like, or you may well end up with policies that you don't. ■

Northern Powerhouse?

Matthew Borman explores the economic divide between the North and South of England

Earlier this year Theresa May stated that she was 'absolutely committed' to balancing the U.K. economy, reiterating former Chancellor George Osborne's 'Northern Powerhouse' rhetoric. Osborne's efforts to rejuvenate Northern economies though, were met with cynicism throughout Northern England, and as governments have faced London's disproportionately large influence for decades, how can May succeed where others have continually failed?

The economic divide in the U.K. between London and the rest, is well documented. Since 2004 a pattern has held wherein twelve jobs are created in the South for each one in the North, whilst the economic value of Londoners is estimated at twice that of those in the North. This split hinders Northern prosperity, while also straining London itself, as those working less well paid jobs are priced out of living in the capital. This has necessitated government intervention to those in careers of societal importance, such as nurses and teachers, so they can afford a life in London. It has also worsened gentrification and social cleansing, as people are priced further and further out of the city. While this issue is being dealt with by creating more housing in and around London, a solution to this housing crisis is possible not through increasing supply, but rather by reducing demand.

HOW DID WE GET HERE?

The plight of the North can be largely traced to the fall of industry in the U.K. Competition from abroad, amongst other factors, has removed the primary source of employment in many areas, with no replacement forthcoming. There is also a school of thought that suggests London's proximity to central Europe is a geographical advantage, making inequality inevitable. Greater levels of prosperity in Northern Italy, Eastern Ireland, and Northern Spain compared to the rest of their respective nations supports this. Though close ties to central Europe and other firms are seen as advantageous to many setting up business in the U.K., this theory cannot account for the huge, current economic division.

Regardless of external factors, government failure has prolonged and worsened the economic struggle in the North. Focussing on recent failure, George Osborne's terminology was flawed from the start. To treat the North as a homogenous unit is simplistic and naïve. Different towns and cities have different strengths and selling points, information best known to the residents themselves. Arguably, Osborne's failure was because his plan was one of oration rather than action. This was evidenced best by the moving of a government office assigned to the project from Sheffield to London.

INFRASTRUCTURAL SOLUTIONS

A focal point of the Northern Powerhouse project is undoubtedly HS2. Improvement of travel infrastructure should be an integral part of any policy going forward, but is tying the North more closely to London the answer? The billions spent on HS2 may bring short-term economic growth and aid the housing issue in London as commutes become more feasible, however, funds would be better placed improving connections between and within major Northern cities. This would improve labour mobility, and breed efficiency through inter-city collaboration. Infrastructure projects could involve the introduction of Transport for London style bodies, with an Oyster Card style system a simple and practical proposal already made by government that would begin to modernise the largely dated Northern transport system.

Infrastructural inequality has hindered the growth of the North for decades. A study by the University of Sheffield shows that investment into London's infrastructure per head is twelve times that of the North East. Also, as all Northern cities bar York have a higher share of low-skilled workers than the European average, human capital improvements must be made to attract firms to the region. Investment should be focussed on areas with potential for future growth, such as law, finance and marketing. Investment in these areas can be carried out much more efficiently if accompanied by devolution of power away from Westminster. As mentioned earlier, cities know their own strengths and potential selling points far better than a London-centric government. Left to determine their own future, prosperity for these towns and cities is much more likely than if the current nationalistic system is maintained.

While an entirely even spread of economic growth is impossible, improving and interconnecting Northern cities could create a hub capable of competing with London whilst the wider areas of Northern England reap the benefits of economically prosperous nearby cities. ■

From One Generation to the Next: The Lineage of Inequality

Angus Phimister examines some of the causes of recent increases in intergenerational inequality

If you were born after 1960, for the first time since World War II, on average you will be earning less than the generation born ten years before. Furthermore, if you're under 40 you'll have half the net worth of your older peers, and will have to contribute more to your pension. Intergenerational inequality - both across time and in terms of relative wealth today - has been on the increase for decades, and has been accelerated by the 2008 financial crisis. The reasons behind this trend, and the appropriate policies to deal with it, are multifaceted.

A BAD TIME TO GRADUATE

The great recession was a prominent cause in the relative reductions of young people's wages. Recessions tend to hit youngest workers the hardest - starting a career whilst the economy is in a downturn effects earnings for possibly decades into the future. The easiest salaries and jobs to cut are those ones for workers who have not even started yet, and employment growth slowdown drives down starting wages as well as increasing youth unemployment. The dynamic aspect of the great recession on wages and wage growth has driven pay down to the point where under 30s are worse off than their relative older peers. Furthermore, particularly for less educated workers, the pattern of employment has changed. The shift from stable manufacturing jobs into a more volatile service sector, has been accompanied by diminishing opportunities for wage progression, again showing up in a lower average.

> Renters born in the 1980s spend 28% of their income on housing

RENTING FOR LIFE

These effects are coupled with longer term trends in home ownership. As house prices have rocketed in real terms (and relative to incomes) over the past few decades, it has become increasingly difficult to put down the deposit for a house – a fact that is reflected in lower home ownership rates amongst younger generations. This becomes a problem as the cost of renting increases faster than the cost of a mortgage, with renters born in the 1980s on average spending 28% of their income on housing costs compared to only 15% for those who have a mortgage. Renting is also more expensive the younger you are, with renters born in the 1960s only spending 22% of their income on housing, close to the level for homeowners. The increased difficulty of buying your own home, coupled with the importance of real estate as a form of savings, means that inheritance may become an increasing determinant of later life net wealth, acting as a drag on social mobility for years to come.

Over this period government policy has also definitively shifted to support older citizens. Back in the early 1990s it was the retired who were deemed to be among the most at risk of poverty, today it is young families. This dramatic turnaround was accompanied by a shift in government policies, starting in the early 2000s. The political disaster of the 75p rise in pensions (in line with inflation) in 1999 under new labour lead to public outrage, and policies such as the winter fuel payment and the triple lock of pension increases were put in place to avoid such political fallouts. The political calculation, which yields that the most transfers should go to those who are most likely to vote, is not going to change unless younger generations start to turn out to vote in greater numbers.

Trends in intergenerational inequality have both long and short term drivers, so seeing what happens next depends on a variety of factors. Primarily, the extent to which the wages of working age adults' recover over the next few years will be vitally important. Housing prices, and the relative cost of renting, will have important implications on young people's ability to save. In any case intergenerational inequality is going to be a trend that will need to be paid attention to in years to come. ■

A UNION DIVIDED

Andrew Womer examines the failures of the Eurozone as a currency area and its impact on the economic divisions within Europe.

The European project began following WWII as a way to stem the nationalism and war that had sent the continent of the Enlightenment into ruin. Initially this meant political union; a means to bring Europe together through increased cooperation and communication. But with the Treaty of Rome in 1957, which established the European Economic Community, the European project became a de facto politico-economic union, culminating with the creation of the euro in 1999. Following the 2008 financial crisis, the euro area came under severe strain; and while countries like Germany have bounced back, many of the weaker countries in the Eurozone are still enduring painful recession. Why, under the umbrella of the same currency, have the Eurozone economies been performing so differently since 2008? The shortcomings of the Eurozone as an optimum currency area (OCA) have exacerbated the recessions in the weaker Eurozone countries and boosted the stronger.

MEANS OF ADJUSTMENT

When economists contemplate the benefits of a region joining together as a single currency, they look for characteristics for which the currency area can respond to asymmetric shocks— i.e. changes in economic conditions that affect at least one of the countries in the currency area differently. Let's say that the financial crisis had happened to a Europe with all different currencies, as before the euro. There is no doubt that countries like Greece, Spain and Portugal would've suffered more than the stronger Eurozone countries, but their *adjustment*—or response—to the recession would've been different and likely better. If a weak country is suffering a recession, it can recover through a change in its exchange rate. With a lower exchange rate the price of production in that country decreases, its exports become more competitive and growth can recover. Without the exchange rate mechanism, such as in the Eurozone, countries in a currency area are forced to respond via *internal devaluation*. Internal devaluation theoretically works in a similar way; the price of production in a country decreases in order for its goods to become competitive and revive the economy. But instead of prices adjusting through a change in the exchange rate, prices adjust through a decline in wages.

WHAT'S WRONG WITH THE EUROZONE

However, internal devaluation has not happened because the Eurozone lacks two fundamental characteristics of an OCA: wage flexibility and labour mobility. Wages have been relatively inflexible in countries like Greece and Spain and consequently we've seen the unemployment rate hover above 20% for the past four years coupled with stagnant growth. In contrast, Germany, considered the strongest economy in the Eurozone, has actually had a declining unemployment rate since 2009, peaking at just 7.7%. The culprit? Many point to the presence of unions—which allow for labour bargaining power—and government programs which stymie the suffering of unemployment and therefore disincentivise seeking a job at a lower wage. Further, in an OCA where labour is mobile, unemployed people will move to places where there is low unemployment (e.g. Germany). While there are always hurdles to labour mobility even within individual countries, the Eurozone's situation is particularly severe because it's composed of countries with a wide range of linguistic and cultural constitution. This impedes the movement of labour in response to market forces and keeps unemployment high in recession countries which in turn puts a further weight on the economy. Whereas, in the stronger Eurozone countries this keeps their real exchange rate artificially low and their labour asymmetrically competitive.

REFORM

So if the Eurozone isn't an OCA, is it doomed to go through sustained economic division every time a shock hits? Not necessarily. One way many economists believe the Eurozone could diminish its disparities is through fiscal union. One option would be to go to a more federalised state in which there is a large central budget—like the US. This would allow for surplus states to contribute through taxes, and deficit states to receive funding through federal unemployment and welfare benefits. For those who think this option isn't feasible, other fiscal transfer systems have been suggested such as Eurobonds or a European Debt Redemption Fund. In any case, the Eurozone must change or this problem will persist, and the continuity of the euro will come into question if it only benefits a few of its members. ■

Divided by Age

Matthew Cao analyses the impact of age demographics on contemporary politics, and the knock on effects on the economy

The UK economy is going through a downward spiral with no visible end in sight. Yet, this is only the beginning of our country's problems. We face a long and arduous journey to even see the light at the end of tunnel, if such a light even exists.

The impact will be dire for us all: our real incomes will be lower, our job opportunities will fall, and our overall future prospects will be diminished, compared to that of previous generations at least. The driver behind these grievances is tied to Brexit, but the referendum itself cannot be to blame. A particular demographic of voters, who made such an idea a reality, are the true perpetrators of this crime. The ones responsible are part of the population that may never experience this grief: the "grey" voter.

LEAVING THE PARTY EARLY

If someone put their terrible playlist on the speakers and left the party half way through, you would feel irritated. This draws parallels to the current voting demographics, with 61% of all over 65s voted to leave the EU. We have a minimum voting age so people can make an "informed voting decision"; by this logic, surely we require a maximum age too.

There exists a clear correlation between voter preferences and age. Voter preferences for the conservative party increases by 0.38% per year, a trend that shows no signs of declining. With the International Monetary Fund lowering the predicted growth rate of the UK for the third time, from 1.9% to 1.1% for 2017, one must wonder; what causes the elderly to vote in such a manner that damages the economy for the rest of the population?

One explanation for the rationale behind elderly voting patterns is the timeline for their realisation of payoffs compared to the rest of society. Regardless of the vote they cast, disutility is restricted by the timeline of life, and so they often fail to live through the realities that follow.

ELDERLY INVOLVEMENT

The impact of elderly voting patterns is compounded by the fact that the highest voter participation of any election is always from the above 65+ demographic, regularly boasting a turnout upwards of 80%. This simply provides the government with too great of an enticement to think in the short-term, to cater to those who care only for themselves.

Though the government is only responding to incentives, or sections of it. They capitalise on the demand for these narrow and damaging policies. The root of the problem exists because of the discrepancy in voters. This is why a maximum voting age is needed; to reduce the impact of the moral hazard that exists between generations. Perhaps the grey voters are proportionally more risk-seeking, fuelled by the knowledge that in many cases, they will not experience the long-term consequences of their decisions. Instead, the burden of risk is placed upon the young. The grey votes necessarily focus on a short-term gain, heavily discounting the long-term development of an economy. This can be seen from the decrease in spending on education, while both healthcare and pension spending are increasing.

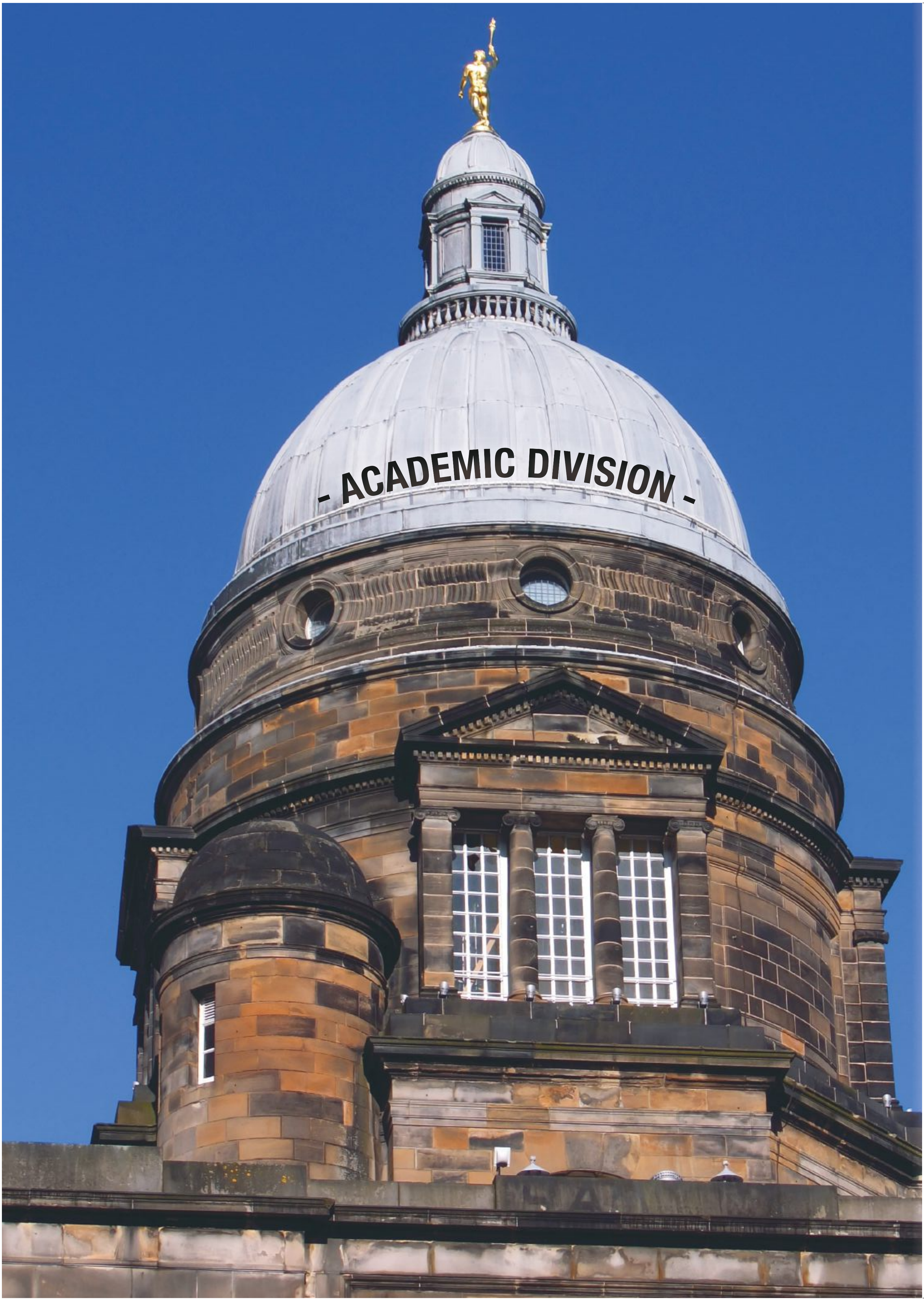
The grey voter is the root of the latest uncertainty facing our economy. Their myopic view not only damages our future but also erodes the effectiveness of our democratic system. The need for a maximum voting age is crucial if we wish to preserve the prospects of our country.

Tomek Nacho

DOES AGE REALLY MATTER?

The facts presented here may insight contempt for the power held in the collective action of the elderly. Indeed, it will hopefully lead more to consider the need for a maximum voting age. However, is it *really* age that is causing this division within a population, or is it how something is portrayed to us; for example, how the media represents dividing issues like immigration or crime?

There is a myriad of other factors that affect what people vote for, like educational levels, demographics and backgrounds. Yet, this article has intentionally put such great emphasis on age that it must seem like the definitive issue. Perhaps, instead, the role of how information is presented and interpreted by a population has the greatest impact on what we vote for. ■


- ACADEMIC DIVISION -

Fresh Faces

Four new members of the University's Economics faculty share a bit about themselves and their research.

SINEAD ASHE
SENIOR TEACHING FELLOW

I completed my Bachelor of Commerce, Master of Economics and Ph.D. at the National University of Ireland, Galway. My PhD examined the interactions between the real and financial economy, particularly in the context of financialisation.

My current research involves an examination of the relationships between the business and financial cycle. I am also involved in research looking at the economic and social costs of violence against women and girls in developing country contexts.

In my spare time, I love baking, going to the cinema, watching terrible TV (shhh…don't tell anyone!) and travelling.

SERGEI PLEKHANOV
SENIOR TEACHING FELLOW

I completed my undergraduate studies in Economics at Saint-Petersburg State University in Russia after which I moved to Edinburgh for MSc and PhD. I loved it here and joined the school as a member of staff in September 2016.

My current research focuses on wage arrears. On the empirical side of things, I analyse how the experience of wage arrears affects the workers' future. On the theory side, I develop a model that explains why employees may want to keep working despite not being paid.

I like various sports (both watching and playing) from basketball and football to F1 and competitive ballroom dancing; I never turn down an opportunity to travel to an interesting place and I enjoy playing my

ANDREI POTLOGEA
LECTURER

I completed a BSc in Finance at the Bucharest University of Economics in Romania. I then moved to Spain where I obtained my MSc and PhD in Economics at the Pompeu Fabra University in Barcelona. I joined Edinburgh in August 2016.

My current research focuses on the interplay between economic geography and international trade. In particular, I am interested in the effect of the removal of international trade frictions on the location of economic activity within countries. For example, when China entered the WTO, a lot of population and economic activity moved to the trading hubs in the coastal regions. Similarly, when my home country of Romania joined the European Union, there was a big shift of economic activity to the West of the country caused by the improved access to Western European markets.

I like reading, going on long walks and playing tennis. But most of all I like clever and witty conversation, and try to engage in it as often as possible, preferably over a nice, strong coffee.

RAFAEL LOPES DE MELO
LECTURER

I did my undergraduate in Economics at the Catholic Universtiy of Rio de Janeiro, in Brazil. Upon completing my BA, I moved to the US to work on my PhD at Yale University, which I completed in 2009. After finishing my PhD I was hired as an assistant professor at University of Chicago, which is where I was until I joined Edinburgh in the summer of 2016.

My research lies on the intersection of labor economics and macroeconomics. In general, I use both economic theory as well as econometric methods to draw insights of how labor markets work, with an emphasis on the interplay between heterogeneity both at the labor supply side, as well on the labor demand side.

I am a big fan of movies, and here in Edinburgh I like the Cameo and the filmhouse. I also enjoy traveling very much, and also eating out and cooking. Now that I live in a city with an interesting topography I am getting into hiking as well.

Normalised Instability and the Fight Against It

Melissa Parlour shares her experiences in Argentina with Go Abroad Economics

Annie Brown

Go Abroad Economics took us to Buenos Aires in the weeks leading up to the first term of the 2016-2017 academic year. 19 students and 3 academic staff arrived armed with economics knowledge and preconceived notions regarding the economic past and future of Argentina. We started the trip with a general historical tour and attempted to get our bearings in a city of nearly 3 million people. In the pouring rain we saw the legendary Evita's grave adorned with flowers and letters. We ventured across the widest avenue in the world with 20 lanes, 9 de Julio, which you can only do in one crossing if you run (trust me, I barely made it). Over the economic journey we explored the various *barrios* (neighborhoods), and ate at amazing *parillas* (grills). We sampled Argentina's culture through tango and toured the street art. Throughout the cultural exploration we also looked at the economics of the city and country through visits with Grimoldi (an Argentinian shoe manufacturer and distributor), the British embassy, Toyota, a steel manufacturer, ICBC, HSBC, and CBRE. These visits provided us with in depth economic analysis in particular markets as well as a general understanding of what it is like to be a business in turbulent economic conditions.

To gain a good baseline of understanding we started at the University of Buenos Aires' Economics School where we talked with some of their professors about the current status of the Argentine economy and where they see it heading in the near future. Later we used their facilities to hold our own presentations. Here we discussed the research we had all done, covering a range of topics from the many economic crises and the role of politics in Argentina's economy, to the market for beef in a country covered in cattle. These student-led presentations provided us with more in depth insight into the economy from an outsider's perspective. For the rest of the trip we would hear this information from the view of Argentinians and adopted Argentinians. We would hear how inflation and these crises had shaped the people and their expectations and how the new leadership, with Macri as president, is providing hope for a new economic situation.

LIVING ON A FAULT LINE

As we completed our price comparison activity across the city, we became acutely aware that all prices were written in, on menus, in shops, every price had a flexible system of advertisement. The high levels of inflation synonymous with Argentine economic history have made it difficult to commit to one price for anything for long.

One of the most interesting parts of talking with firms and people across the metropolitan area of Buenos Aires was asking them how they lived with this uncertainty. Those from the FAS who gave us the talk on culture said they dealt with uncertainty on a day-by-day basis. They said many hope to own a home but never get there due to the uncertain economic conditions and poor savings vehicles offered to them. With the uncertain and ever fluctuating value of the peso, it is hard to provide mortgages or loans of definite value.

At Grimoldi, a shoe manufacturer and distributor on the outskirts of Buenos Aires, an executive said they put their money in futures to ensure they have the right amount to pay their workers at the end of the month. He also said that inflation today was very manageable (approximately 20% per year). He recalled times where everyday your money became less and less valuable. They did what they could to mitigate this as a firm, but admitted being a worker was quite hard in these times, as wages did not adjust nearly as fast as prices.

SAVINGS SOLUTIONS

In a report by the U.S. Federal Reserve, there is an estimated 60 billion USD in cash, essentially hidden under mattresses across Argentina. In periods of high inflation and economic instability, U.S. dollars became the only safe way to store wealth, opening up a black market for the 'blue dollar' across the country where you would pay a premium for exchange so you could gather more dollars. Only recently did the government eliminate this black market by allowing the value of the peso against the dollar to float. This made our *cambios* (exchanges) on *Avenida de Florida* slightly less profitable but is a good sign for the country and its economy moving forward.

MACRO HOPE FOR MACRI

As we met with the team at the British Embassy, and firms across the city, there was an overwhelming sense of hope that the new government was the economic solution they have been waiting for. The embassy stressed the importance this new government has for the British, and foreigners more generally, who hope to do business in or with Argentina. Since the Perón's came to power in 1946 the country essentially closed itself off to global markets. However, with Macri we see them opening back up again. This has instilled hope in many business leaders both in and out of Argentina as

Macri prioritizes getting the economy stable and growing, something that has seemed to be a second thought for many recent populist governments.

LIMITATIONS OF CHANGE

As Macri seeks to change the course of history in Argentina, there are important limitations that need to be considered. Firstly, the economy has been heavily protected with import barriers prevalent across industries. This has lead to many inefficient firms, as they have not needed to compete properly in global markets. As Macri opens up the markets, many firms, and potentially industries, will not be able to keep up.

Additionally, the country faces many important social divisions that will prevent any radical changes politically. For example, the current poverty rate is around 20%, as Macri seeks to dismantle the system of economically inefficient transfers, those at the bottom will be hurt the most, limiting the practical scope of change.

PROTESTING THE FUTURE

As we sat in our meeting with executives at HSBC in the center of Buenos Aires, fireworks and chants against the new government echoed up to the 8th floor from the protests on the street below. Here we met with the COO and Chief Economist of the Southern Cone who walked us through the 'persistent underperformance' of Argentina compared to its neighbors, and the painful normalization that will have to occur under the new government to get the country back on the right track. The people on the streets below us were already feeling these painful changes as they voiced their opinions peacefully in the cities main protest square in front of *Casa Rosada* (the pink house).

The social welfare systems in Argentina are vast and run deep. With its populist history, leaders such as Perón were focused on the love and admiration of the people rather than the economic limitations of social welfare. With tickets to ride the metro for 4 pesos (about 30p), the subsidies on everyday life are common and prevalent. As Macri attempts to balance the books, decreasing these subsidies so that costs are more balanced would be the sensible place to start. However, there are social limitations that make this difficult. Will Macri be able to pacify the people enough to make theses difficult changes to get the economy back on track? If our two weeks in Buenos Aires taught us anything, it is that even hope is uncertain and only time will tell. ■

Melissa Parlour

Evaluating Divisions Within Academia

Wan Adzhar Adzlan investigates the polarisations which permeate the academic sphere.

Social psychology explains how divisions stem from prejudice and discrimination amongst groups, resulting in the formation of ingroups and outgroups. An ingroup is a social group where an individual psychologically identifies as being a member, while an outgroup is a social group where an individual does not. This dynamic helps explain the many conflicts that arise amongst different schools of thought.

Evidence from Marko Tervio's research paper "Divisions within Academia: Evidence from Faculty Hiring and Placement" points to this dynamic. The study used cross-sectional analysis and was conducted amongst 294 PhD-granting departments from Economics, Mathematics and Comparative Literature. They analysed hiring patterns to find clusters or "cliques"; subsets of departments with unexpectedly little hiring across the cluster lines.

The data suggests a division in Economics fitting with the anecdotal evidence about departments from Chicago to Rochester forming a "Freshwater" school of thought, where research methodology (and possibly ideology) is on average different from that prevalent at the "Saltwater" departments from Berkeley to Harvard. Mathematics does not suggest an easily interpretable pattern. Comparative Literature is also mostly consistent with perceived notions of departments that are closer to Yale, i.e. more "theoretical" as opposed to "traditional" in their approach.

DEPARTMENTALISATION

An interesting explanation for this clustering could be departmentalisation, rather than vertical differentiation, caused by a complementarity in methodology or "research style" within departments. This potentially resulting in the formation of the ingroup-outgroup dynamic, where those outside of the specialisation are excluded. We can observe that this explanation is largely consistent. Mathematics seems to lack cluster bias as it does not have a dimension of departmentalisation, at least in the sense that would be subject to complementarities between faculty members. Moreover, it seems clear that ideology may hardly be a factor in mathematics, which places objectivity above all else.

Further supporting this explanation is evidence for departmentalisation between departments in Colander (2005) who found that students at Chicago (the only Freshwater department in the survey) held significantly different policy opinions compared to students at other schools. For example, they had the least confidence in the stabilizing potential of fiscal policy, and the most concern in minimum wages increasing unemployment. In terms of rating the importance of economic assumptions Chicago students were again different marginally (having the highest percentage of students who checked "the neoclassical assumption of rational behavior" and "price rigidities" as unimportant). Hence, we can identify how ideology could affect hiring in certain departments, particularly where there exists such ideological preferences, potentially making it more likely to reject "outgroup" applicants.

Nonetheless, it would be unwise of us to disregard alternative explanations. Geography conditions could also explain clustering in academic labour markets. Notably, all four within-metro-area pairs of departments in economics are in the same cluster (Harvard/ MIT and Berkeley/Stanford in the Saltwater, and Chicago/ Northwestern and Caltech/UCLA in the Freshwater cluster). It is plausible that the costs of hiring are increasing in geographic distance, resulting in disparities. However, the lack of a significant division within mathematics seems to rule out distance as a sufficient explanation for clustering.

Moreover, it may be harder to objectively assess a job candidate's quality in economics than in mathematics, so personal contacts may be more important in selecting interviewees and in evaluating job candidates. The informational advantage from personal connections would then work to strengthen existing connections, because departments that are more connected by past movements of faculty are better informed of each other's job candidates and of the level of bias in their letters of recommendation. Hence, there may not necessarily be anything insidious about such cluster bias in hiring as it could be coincidental and an optimal response to the information structure in this labour market.

Nonetheless, the apparent cluster bias points to how deeply divided economists seem to be. The recent debate over the appropriate policy response to the financial crisis of 2008 has indeed brought to surface old divisions among economists, which may have further prompted the cluster bias. Perhaps, the old quip, attributed to George Bernard Shaw, that if all the economists were laid end to end, they would never reach a conclusion, will forever characterise the profession. ■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FINANCE

It's In Our Interest

Helen Hayes evaluates the changing relationship between interest rates and saving, and possible harmful economic consequences of the 'Global Savings Glut'.

Economic theory tells us that people are impatient and prefer consumption today over consumption tomorrow and must be paid interest to forego present consumption. Based on this is the feeling that people who scrimp and save should be rewarded with the "sweet simplicity of the three per cents", as former British Prime Minister, Disraeli, put in *Endymion*. He was referring to the interest rate paid in perpetuity on 'consols', the consolidated debt of the British Government, which in Victorian times was the ultimate safe investment (a bedrock of support for the elderly, widows and orphans who were living on what we would today call 'pensions'). As well as the financial security this interest provided, there was a moral dimension to saving. Hard work and diligence was rewarded. Saving amassed capital which could be used for noble causes like building British industry or supporting the government. A decent interest rate for savings was just and the natural order of things.

> China has one of the highest levels of saving in the world:
>
> 49% of GDP

THE NEW NORMAL

However, in the aftermath of Brexit we see this relationship breaking down as interest rates are slashed to 0.25% and yet people are continuing to save as the global savings glut persists. China has one of the highest levels of saving in the world — 49% of GDP on World Bank figures, compared to 18% in North America and 12% in the UK — but deposit rates there are seriously negative and have been for many years. The idea of negative time preference to many economists is absurd. However, in wealthier societies where life expectancy is longer it is easier to see how this is not such a crazy notion compared to poorer societies where individuals don't earn much beyond their subsistence level and do not on average live as long into their retirement years. In these richer societies, it seems to be the case that people prefer to save in order to provide for themselves in their old age and hence could justify low or even negative interest rates. Time preference isn't quite as simple as economics textbooks would have it. People have a need to save for the future- distant or short- especially with people living longer, and there is nothing normal about interest. Irish potato farmers in the 19th century didn't expect to see more potatoes when they opened the potato pits, they were just pleased to see that most of them were still edible. Similarly, as children we didn't crack open our piggy bank with the discovery that our pennies had multiplied (much to our dismay). Today an ironic consequence of low interest rates is that people are actually saving more to provide for their old age.

WHO'S TO BLAME?

When it comes to low interest rates, Central Banks and Quantitative Easing are cast as the villains of the piece. If they would only stop printing money everything would go back to the way it always has been. This feeling of resentment is amplified by the fact that while debtors are thrilled with such low interest rates, savers are on the other hand growing increasingly unhappy. However, there are other forces at play influencing interest rates other than the central banks, one of which being demography. Tidjane Thiam, CEO of credit Suisse, in a recent interview said "there is a clear link between demography and what's happening to interest rates, it's not just central bank policy. There has been a glut of savings which has impacted the real interest rates, so you have demography on one hand and that is not going to go away". As the proportion of the 'non-productive' section of the population rises, income for this group can only come from one of two sources. This can be dividing the returns on capital, or by the government redistributing income from the 'productive' element; either directly in the form of welfare payments and pensions, or indirectly by interest payment on government debt. There are serious political limits to the amount of redistribution possible. Thus, the consequences of an aging population could be a reduction in the percentage of the productive workforce and more people dependent on savings, wanting to divide up the returns on a relatively fixed pot of capital and government debt and thereby driving down the yields on those assets.

This wouldn't be such a problem if it was only happening in the developed countries and a possible solution might be immigration from developing countries to reshape the age pyramid, thereby increasing the productive proportion of the population. However, this problem seems to be happening everywhere. Between 1950 and 2008 the per capita GDP of the US and constant prices increased by a factor of 3.26, and the UK by 3.42, and Western Europe by 4.72, but Asia increased by a factor of 7.84 and the rest of the developing world is following not far behind. Accompanying increased wealth, fertility rates are falling across the world with global fertility projected to decline to 2.2 children per woman by 2050. Thus, encouraging immigration of working age individuals is only a short-term solution to this, and additionally not a politically attractive one. The consequence of international development assisted by globalisation is an increase in pensioners around the world, an increase in global savings to support them in retirement, and the chase for income producing assets. Timothy Geithner, former Treasury Secretary and Chair of the New York fed during the financial Crisis, attributed part of that problem to a 'Global Savings Glut' and the pursuit of yield in the subprime market. The Global Savings Glut has not gone away since the Crisis but has gotten worse. Savings seek out investment opportunities across the world and magnify the problem. However, if you cut back on globalisation you cut back on capital savings flows but negatively affect productivity, one of the only three answers to the problem.

> Fertility rates areprojected to decline to 2.2 children/woman by 2050

WHAT ARE THE OPTIONS?

According to Ian Naismith of Scottish Widows the 'age of anger'; the age at which people are still angry to be working, is 66.5 years old and has not moved over the last few years. However, the UK average age of death is currently 81.5 years. How are we expected to fund those years with increased saving no longer a viable option? The three solutions in the model are to save more (but that doesn't help if everyone else is saving), to work longer or continually increase productivity. While we can turn to the government for solutions, in such uncertain markets it may be best to focus on what we can do for ourselves. Defined benefit schemes whereby employers guarantee a specified pension payment based on number of years in the scheme and earnings history, will soon be obsolete. Furthermore, defined contribution schemes where a percentage of an employee's salary is paid into a pension fund will generally meet with lower and lower returns. The 'big company' solution of relying on corporations to secure pensions that worked for previous generations won't keep working. We must invest in ourselves. Taking care of our health to ensure a later working age can be achieved and so too becoming more entrepreneurial so as to become financially self-sufficient. ■

Omar Parada

Permission to Develop or License to Dump?

Feiyang Shi explains the importance of China's potential market economy status and the significance it has on causing division in the global market

December 11, 2016 is the 15th anniversary of China's accession to the WTO. Whilst this date commemorates the start of trade liberalisation in the biggest economy in the world by PPP adjusted GDP, it also marks the expiration of a 15-year protocol commitment that defines China as a non-market economy, which allowed stronger protections against the dumping of Chinese exports. The expiration of this protocol gives China a chance to become more active in global trade with a market economy status (MES). However, many member states in the WTO are concerned about the implications of a more open China.

POWERHOUSE IN THE GLOBAL ECONOMY?

While the Chinese MES is contentious, some members of the G20, like Brazil and Australia, have already sounded support for Chinese MES in the belief that China can boost trade and promote mutual growth. Indeed, China's market reforms have already helped it to become the world's top exporter - its close trading relationship with the EU worth 1 billion euros a day. It also is the largest developing country in terms of outward foreign direct investment with the Yuan now a global reserve currency with 10.92% weighting in IMF's benchmark Special Drawing Right currency basket, an international reserve asset to supplement IMF member states' official reserves.

However, Chinese exports are often subject to high anti-dumping duties due to the accession protocol commitment. In 2013 alone, $100 billion worth of exports, around a third of China's total exports, were subject to such duties. If China's MES is permitted in December, then anti-dumping duties may have to be loosened and Chinese exports volume may increase. The potential growth resulted from trade expansion may also attract and benefit foreign investors.

... OR A LION UNLEASHED?

Despite the benefits Chinese MES can potentially bring, some countries are worried about its consequences. Among these countries, the EU holds particular significance. In February 2016, thousands of industrial workers protested in Brussels against MES for China, which the industry alliance AEGIS Europe called a "license to dump". As China's largest trading partner, the EU is reserved over granting China the MES mainly due to concerns over European industries' stability, especially for steel production. According to Dr. Robert E. Scott, a senior Economist and Director of Trade and Manufacturing Policy Research, granting of MES to China can potentially cost the EU 1.7-3.5 million jobs and 114.1-228 billion euro annually. Thus, instead of seeing the ending of protocol as an automatic change of market status, the EU refer to their original five criteria of accession to examine China's eligibility for MES and to make it easier to reject. The EU also proposed an alternative suggested by the European Trade Commissioner Mrs. Malmstrom called "country neutral methodology", which protects the EU's non-discriminatory trading image and allows them to set new rules concerning dumping which applies to all states. Yet, the "country neutral" alternative requires the abolishment of the old five MES-defining criteria, giving China the opportunity to challenge. It also requires the European Council's approval, which has been pending since 2013 due to lack of consensus and incompatible interests. Furthermore, rejecting China's MES after the protocol expires gives China the right to file formal complaint and a chance to impose its own retaliatory duties.

STABLE TRANSITION, BETTER COOPERATION

China is determined to obtain MES and has countermeasures at hand in case of rejection. However, the situation may not be as intimidating as it appears. Anti-dumping duty is not the only protection measure states acquire. With countervailing duties and anti-dumping duties imposed simultaneously, even if China has the MES, the EU is still entitled to take actions in case of unfair trade.

Since the TTIP with the US is failing expectation and the MES policies are stagnated due to internal division, revision of its trading policies may be the EU's best chance to stabilise its trade ties. Granting MES to China and further formalising trading deals may benefit China's economy and protect global market integration simultaneously. ■

Pressing “Refresh” on the Financial Service Industry

Eric Östring examines how the status quo of the Financial Service Industry is disrupted by Financial Technology

The phenomena of new technologies ousting old systems, known as ”Creative Destruction”, is a frequent one. From the historical take-over of the cloth industry by the steam powered loom to the more recent obstruction of the disc rental industry by Netflix, it is evident that most industries are susceptible to disruption. The established banks and funds in the Financial Service industry are next in succession to be challenged by new entrants of fast growing start-ups from the Financial Technology — sometimes called FinTech — industry. As traditional banks depend of legacy IT systems, FinTech companies have the ability to capitalise on weaknesses and gaps left by the incumbents. However, the budding technology is prone to be hindered by regulators, who are concerned about the threats of hackers and data breaches towards the new industry.

COMPETITIVE ADVANTAGES

Financial technologies have recently become a hot topic due to their ability to cater to the digitally native generation X and Y demographics, by providing a seamless digital experience and slashed prices. Savvy FinTech companies are typically extremely competitive on price, often because of using automised systems instead of expensive labour. In addition to lowering operational costs, financial technologies are able to better utilise information technology for more efficient use of data, which is exemplified companies such as Kabbage and OnDeck. These small business lenders asses credit score by smart data analytics and by using unconventional methods, such as examining social media reviews to evaluate risk more accurately when lending to a company.

The aforementioned characteristics are especially attractive to the emerging “Facebook generation”, which expects user friendly and a sleek user interfaces. This digitally active generation will further push the trend as generation Y and X’s share of financial assets will jump from 36% in 2010 to 70% in 2030.

Worried regulators will have a significant impact on the future of FinTech. The main concerns of regulators include data security, the need to secure sensitive corporate and consumer financial data. However, regulators misgivings with regard to these issues are outweighed by the concern of overregulating and stifling development in a promising industry. Relative to the traditional financial service sector, financial technology is less regulated as governments hope to enable banks to catch the FinTech wave. For instance, Japan’s biggest banks are looking to invest hundreds of millions of dollars in FinTech startups after the abolition of a law that prevented them from owning more than a 5% stake.

Other competitive advantages include the ability of financial technology startups to innovate and adapt, due to the lack of old IT systems which would require upgrades to improve and maintain.

NEXT STEPS FOR INCUMBENTS

Most established banks have chosen one of two strategies in reacting to the rise of financial tech. Some banks have been reluctant to embrace it and have adpted a ‘wait and see’ approach to preserve resources until a clear technological winner emerges. However his runs the risk of leaving them unprepared once the threat towards their business has become imminent.

On the other hand, some banks have opted to pursue their own technology solutions with in-house teams. However, this approach is inideal, as these teams are typically fragmented and complicated by old IT systems.

Established banks and funds should adopt and support financial technologies by partnering with or acquiring start-ups instead. Integrating start-ups seamlessly into an established business models is challenging, thus established incumbents should asses potential third party providers not only on what they have to offer, but how well they are able to partner with these. Companies should focus on what they does best, for instance assessing credit exposure or executing and settling financial transactions, and tap to the FinTech pool to integrate supporting start-ups.

It is clear that traditional methods of banking relying on legacy technology will not suffice in a competitive industry getting crowded with technologically acute start-ups. Banks and funds can either adopt the passive spectator strategy and the in-house mimicry approach and perish by “death of a thousand cuts”, or they can choose to ride the financial technology wave by embracing the industry. ■

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