Candidate 1

To what extent would the UK economy benefit from going cashless?

Word Count: 4,395

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Contents

Introduction

Word count: 374

Cash transactions represented 56% of all payments in the UK in 2010, but by 2015 they had fallen to just 45%. Furthermore, by 2020 only 17% of all transactions used cash[1] - the rest were implemented through credit and debit cards, contactless payments, digital wallets, and other cashless transaction methods[2]. Since the introduction of debit card payments as an alternative to cash in the late 1960's[3] there have been rapid advancements in the technology and usage of cashless payments, to make them now commonplace in the modern UK economy. From the first contactless cards, to some of the biggest technology companies offering their own online wallet services such as ApplePay or Google Pay, and with the ease of online payment offered by modern fintech companies like Paypal or Klarna, cashless payments have become a staple for the modern consumer.

While there is little doubt that cashless transactions are popular and a cashless UK economy is highly likely in future, there remains the pressing economic impacts to consider. It's important to study the impacts of going cashless in the UK as not only has the recent pandemic restrictions encouraged a cashless economy, the government is implementing policies to make cashless payments more popular among consumers, making the eventual transition more definite. On the 15th of October 2021 the national limit for contactless payment more than doubled from £45 to £100[4]. Chancellor Rishi Sunak justified this change: *'Increasing the contactless limit will make it easier than ever to pay safely and securely - whether that's at the local shops, or your favourite pub and restaurant. As people get back to the high street, millions of payments will be made simpler, providing a welcome boost for*

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[1] "UK Payment Markets Summary 2021". Published in June 2021. UK Finance. Accessed on 05/10/2021. Available at: https://www.ukfinance.org.uk/sites/default/files/uploads/SUMMARY-UK-Payment-Markets-2021-FINAL.pdf

[2] Vicky Shaw. "Are We Moving Towards A Cashless Society In The Near Future?". Published on 28/06/2021. The Independent. Accessed on 03/10/2021. Available at: https://www.independent.co.uk/life-style/uk-finance-uk-government-paragon-bank-covid-b1873807.html

[3] "The History Of Payments In The UK". Published on 16/02/2009. BBC. Accessed on 05/10/2021. Available at: http://news.bbc.co.uk/1/hi/business/7839823.stm#:~:text=1966%3A%20FIRST%20UK%20CREDIT%20CARD&text=On%2029%20June%201966%20Barclays%20issued%20the%20UK's%20first%20credit%20card

[4] Rupert Jones. "UK Contactless Limit Is Rising To £100 - Should You Be Worried?". Published on 09/10/2021. The Guardian. Accessed on 10/10/2021. Available at: https://www.theguardian.com/money/2021/oct/09/uk-contactless-payments-limit-is-rising-to-100-should-you-be-worried

retailers and shoppers.'[5] The Chancellor certainly believes a cashless UK would have a positive impact on a post-pandemic economy.

The purpose of this project is to determine if and how a cashless UK would positively impact the economy by examining the link between cashless payments and economic growth through looking at consumer behaviour, affected industries and economic trends; how other countries internationally have been affected by the use of cash and cashless payments and how this compares to the UK; and the associated socio-economic costs that a cashless UK would be faced with.

[5] "Contactless Limit To Increase To £100 from 15 October". UK Finance. Accessed on 20/10/2021. Available at: https://www.ukfinance.org.uk/press/press-releases/contactless-limit-increase-100-15-october#notes

Chapter 1: Potential benefits of electronic payments which may contribute to higher economic growth

Word count: 2,145

Introduction

The rate of economic growth is arguably the most important factor when evaluating the stability and success of an economy. By analysing the impact of the UK's transition to a fully cashless society on different factors contributing to economic growth, such as consumer spending and government spending, an accurate measure of cashless payments' impact on economic growth can be estimated. As the reality of being cashless becomes a greater possibility for multiple countries, the link between cashless payments and positive impacts on the economy is being researched with promising preliminary data. Analysis of macro economic data from 70 countries found electronic payments added nearly $296 billion in "real" terms to their GDP in the course of 4 years[6]. Furthermore, countries with the largest increases in card usage experienced the largest contributions to economic growth[7], suggesting that overall, *'the expansion of electronic payments could have a significant, positive effect on future economic growth'*[8]. There are a number of contributing factors for this potential growth in the UK economy, particularly exacerbated by the economic changes brought on by the pandemic.

The rise of e-commerce

The pandemic has been a recent, drastic shock to the economy which has furthered the case for a cashless UK. Throughout a period of lockdowns and restrictions, physical shops became unreliable and unsafe, so consumers turned to the next best alternative - one already increasingly popular: online shopping, a form of electronic commerce which relies entirely on cashless, electronic payments. An OECD report found that in the UK, *'the share of e-commerce in retail rose from 17.3% to 20.3% between the first quarter of 2018 and the first quarter of 2020, to then rise significantly to 31.3% between the first and second quarter of*

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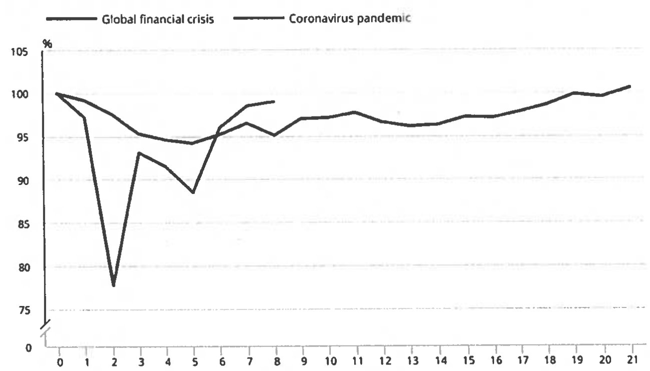
[6] Mark Zandi, Sophia Koropeckyj, Virendra Singh, Paul Matsiras. "The Impact of Electronic Payments on Economic Growth". Published in February 2016. Moody's Analytics. Accessed on 22/10/2021. Available at: https://usa.visa.com/content/dam/VCOM/download/visa-everywhere/global-impact/impact-of-electronic-payments-on-economic-growth.pdf
[7] Ibid
[8] Ibid

2020'[9]. This raises two important changes in consumer behaviour indicating a preference for online retail. First, the share of e-commerce in retail was already increasing, by a steady 3%, over the 2 year[10] period prior to any coronavirus restrictions which were only enforced near the end of Q1 of 2020. This shows that consumers' increasing preference for online retail and its need for cashless payments was a development independent to the impact of coronavirus initially. Second, the rise in the market share of e-commerce was unprecedented and extreme, sharply increasing by 11%[11] in just one quarter compared to such steady previous growth. E-commerce was one of the 'winners' of the pandemic, growing when many industries experienced setbacks. As a result, the use of cashless payments has grown significantly, since this is the primary payment method for e-commerce which now accounts for nearly a third of all retail transactions. E-commerce often causes consumers to spend more as they are more likely to make repeat purchases, and in the UK consumers on average spent *'4.8 times as much online'*[12] for groceries. This trend of a greater propensity to consume shown by higher spending, and resulting in greater aggregate demand, is relevant to other methods of cashless payments as well as e-commerce. This has become highly relevant to the UK's recovering rate of economic growth as compared to the 2008 financial crisis, consumer spending has recovered at a faster rate despite a far greater fall initially:



[13]

[9] "E-commerce in the time of COVID-19". Published 2/10/2020. OECD. Accessed on 22/10/2021. Available at: https://www.oecd.org/coronavirus/policy-responses/e-commerce-in-the-time-of-covid-19-3a2b78e8/
[10] Ibid
[11] Ibid
[12] "UK consumers spend 5 times more online". Published in 2020. Adeo. Accessed on 19/12/2021. Available at: https://www.adeogroup.co.uk/uk-consumers-spend-five-times-more-online/#:~:text=In%20UK%2C%20shoppers%20will%20spend,opportunity%20rather%20than%20a%20threat.
[13] "Coronavirus (COVID-19) and its effects on household consumption, UK January 2020 to December 2021". Published on 6/4/2022. Office for National Statistics. Accessed on 7/4/2022. Available at: https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/articles/coronaviruscovid19anditseffectsonhouseholdconsumptionuk/january2020todecember2021

One considerable change in consumer behaviour since the 2008 financial crisis has been the rise of e-commerce, and this evidence illustrates the positive impact this change has had on the propensity of consumers to spend; boosting consumer spending while there remains uncertainty after an economic crisis is one way to encourage a quicker recovery and shows the positive impact of cashless payments in e-commerce during the most recent UK economic crisis.

Propensity to consume

There are psychological factors which drive individual consumer's propensity to consume and motivate this increased spending through cashless payments; when operating on a mass scale as with the popularity of cashless payments, these factors can be highly influential to the level of aggregate demand as individuals' propensity to consume adds up. Regarding one method of cashless payment, *'a leading hypothesis is that credit cards reduce the pain of payment and so 'release the brakes' that hold expenditures in check. Alternatively, credit cards could provide a 'step on the gas,' increasing motivation to spend.'*[14] These findings are similar to the psychological prompting of nudge theory, showing the credibility of small individual decisions, such as 'step on the gas' spending, when multiplied to make a broader economic trend in consumer behaviour. Furthermore, additional research has found, '*the psychological cost of spending a dollar on a credit card is only 50 cents'*[15], which altogether creates a highly persuasive nudge towards consumers spending more on cashless payments, thus changing the balance of saving and consuming towards a greater propensity to consume through cashless transactions. Overall, this theory would suggest that cashless payments stimulate spending, and even by a small margin there would be a positive impact on the UK aggregate demand and economic growth. This can also encourage debt and nudge individuals to disregard their budget as "tapping" a debit or credit card is so quick and painless, and although a debit card is limited to £100 per transaction there is no limit on the number of transactions up to a person's current account limit.

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[14] Sachin Banker, Derek Dunfield, Alex Huang, Drazen Prelec. "Neural mechanisms of credit card spending". Published on 18/02/2021. Accessed on 19/12/2021. Available at: https://www.nature.com/articles/s41598-021-83488-3#Sec2
[15] Lu-Hai Laing. "Does e-money make you spend more?" Published on 5/12/2019. BBC Future. Accessed on 27/1/2022. Available at: https://www.bbc.com/future/article/20191204-does-e-money-make-you-spend-more

Motivation for businesses

Businesses are greatly impacted by the rise of cashless payments as well as consumers - there's the potential for added revenue by consumers' greater propensity to spend, and businesses' adoption of cashless payments could be promising for economic growth. Initially, the change was associated with unnecessary transaction costs, '*the British Retail Consortium estimated that in 2016, the average retail cash transaction cost 0.15% of turnover, compared with 0.31% across all payment types*'[16], showing that cash was the most cost effective transaction method. However, the popularity of cashless transactions now means that businesses risk losing out on potential revenue for not adopting it, outweighing the transaction cost. A 2019 survey confirmed the overall preference as '*1 in 4 consumers avoid cash only businesses*'[17] - evidence showing the necessity of cashless payments for businesses to attract consumers. Moreover, *'retailers are being discouraged by the banks from taking cash'*, as large banks such as HSBC and Lloyds increase charges for business customers' cash handling.[18] Supporting this, research shows that, *'estimated annual lost sales for cash-only businesses: £23,145 per SME business.'*[19] The evidence shows that there is a mutual benefit to both consumers and businesses for adopting cashless payments as consumers prefer businesses with cashless options, and businesses should be motivated by the potential increased revenue. As a result cashless payments are now widely acceptable, and the benefits of a higher propensity to consume are spread in a positive multiplier from consumers spending more to businesses selling more and so on, which positively impacts the UK's economic growth.

Productive efficiency

More so than potentially higher revenue, businesses should be motivated to adopt cashless payments as they have potential to increase their productive efficiency, creating a greater profit margin for them. Using case studies from the US, large to small businesses have found cashless payments to be quicker and easier, presumably resulting in more revenue over time.

[16] Emily Sorensen. "Why cash-only is more expensive than accepting cards". Published on 19/3/2019. Mobile Transaction. Accessed on 29/1/2022. Available at: https://www.mobiletransaction.org/cash-payments-costs-businesses/#:~:text=The%20British%20Retail%20Consortium%20estimated,0.31%25%20across%20all%20payment%20types.
[17] Ibid
[18] Toby Walne. "Why do banks charge shops simply for paying cash into their own accounts? We meet the traders hit by the cashless push". Published on 7/9/2019. This Is Money. Accessed on 4/4/2022. Available at: https://www.thisismoney.co.uk/money/saving/article-7438265/How-banks-charge-shops-simply-paying-cash-accounts.html
[19] Ibid

The Mercedes-Benz Stadium in Atlanta has become fully cashless as *'eliminating the need to make change allows for quicker transaction times and lower wait times'* and finding that *'the cashless model allows the stadium to operate more efficiently and effectively'*[20]. With less staff and less errors, the tens of thousands of consumers in the stadium use cashless payments which improves the productive efficiency in transactions, presumably resulting in more output per input, and therefore higher profit margins which is positive for the business. This service method has trickled down to smaller businesses such as the Tender Greens salad bar chain, also fully cashless, *'estimates cash transactions take, on average, four to five seconds longer than card transactions.'*[21] For small businesses or branches this can be equally as crucial in terms of efficiency and profit maximisation during busy periods such as a lunchtime rush for a salad bar. These individual case studies present the qualitative, direct impact on businesses of cashless payments improving their productive efficiency. This is not only a transferable conclusion for UK businesses operating similarly, it can be inferred that on a large scale - for example, nationwide - the collective increase in productive efficiency would be highly beneficial for the UK economy as a key factor in economic growth.

Financial regulation

The UK government would directly benefit from a cashless society in tackling white collar crimes, where money operates in the shadow economy rather than contributing to tax revenue which the government could inject back into the economy. There is often suspicion around cash reliant businesses because cash can be difficult to trace, which can make the payment option more attractive to these types of crimes and the shadow economy[22]. A 2019 UK treasury survey comparing cash and digital payments found: *'Most members of the public who responded to this question were of the view that cash is used in some circumstances to evade tax. Many of these respondents believed that traders or businesses who only take cash may be doing so to evade tax.'*[23] Agreeing, a paper published by the European Money and

[20] "Card and mobile payment frequently asked questions". Mercedes-Benz Stadium. Accessed on 10/3/2022. Available at:
https://mercedesbenzstadium.com/card-mobile-payment/
[21] David Wagner. "Why more and more LA businesses are refusing your cash" Published on 4/4/2018. KKPC. Accessed on 10/3/2022. Available at:
https://archive.kpcc.org/news/2018/04/04/82075/why-more-and-more-la-businesses-are-refusing-your/
[22] Friedrich Schneider. "Restricting or abolishing cash". Published in August 2019. SUERF The European Money and Finance Forum. Accessed on 10/3/2022. Available at:
https://www.suerf.org/policynotes/6951/restricting-or-abolishing-cash-an-effective-instrument-for-eliminating-the-shadow-economy-corruption-and-terrorism#:~:text=Shadow%20economy%20refers%20to%20business,labor%20market%20and%20other%20regulations.
[23] "Cash and digital payments in the new economy: summary of responses." Published in May 2019. HM Treasury. Accessed on 10/3/2022. Available at:

Finance Forum offered analysis on the relationship between cash and illegal activities: *'The share of cash payments has an influence on the size and development of the shadow economy and is statistically significant; the more cash, the larger the shadow economy, ceteris paribus.'*[24] This 'statistical significance' could be paramount to accurately calculating GDP, setting government policies and generating tax revenue for public services. The paper trail recorded from cashless payments offers clarity and less scope for illegal activities than cash. The report also estimates *'when the share of cash payments decreases by 10% the shadow economy decreases just by 2%. If we make the assumption that no cash is available anymore, the shadow economy would decrease by 20%.'*[25] This assumption is significant to the UK government in regulating the economy, especially in the context that *'the shadow economy constitutes approximately 10 per cent of GDP in the UK'*[26], quantifying the significant positive impact on public finances, the budget deficit, and issues of fairness and equality which cashless payments offer.

Role of Monetary Policy

Accurate understanding of economic growth informs the Monetary Policy Committee (MPC) of policies that would benefit the UK economy - reduced uncertainty from the shadow economy better informs them, and a cashless society provides greater awareness and control over the state of the UK economy. Expertise from the Boston Consulting Group remarks that *'electronic payments enable more comprehensive oversight and monitoring and can inform central banks' monetary and economic policies'*[27], showing how a cashless UK would benefit the MPC in making informed decisions from overviews of the public's spending. The larger amount of control a fully cashless UK would grant the MPC is also beneficial as it could create a more stable economy when the flow of money is entirely controlled by the MPC without individual or group private reserves of cash. This is particularly important in times of economic crisis, such as a case study of the EU sovereign debt crisis as the Boston Consulting Group commented: *'during the European sovereign debt crisis in 2012, some*

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/799548/CfE_-_Cash___Digital_Payments_Response_020519_vf_digicomms.pdf

[24] See reference 18

[25] Ibid

[26] Friedrich Schneider, Colin C Williams. "The shadow economy." Published in 2013. Institute of Economic Affairs. Accessed on 10/3/2022. Available at: http://www.iea.org.uk/sites/default/files/publications/files/IEA%20Shadow%20Economy%20web%20rev%207.6.13.pdf

[27] Markus Massi, Godfrey Sullivan, Michael Strauß, Mohammad Khan. "How cashless payments help economies grow." Published on 28/5/2019. Boston Consulting Group. Accessed on 10/3/2022. Available at: https://www.bcg.com/en-gb/publications/2019/cashless-payments-help-economies-grow

economists argued that moves by central banks to cut interest rates to below zero would be ineffective without a concurrent ban on cash.' [28] In theory, making it more expensive to save and deposit money into a bank could incentivise cash hoarding from fear and lack of consumer confidence rather than increased spending and borrowing. However, this may not be highly impactful as UK individuals have a low propensity to save. Though the shift to a cashless economy would still provide a higher degree of control and stability from the MPC, they have stated they are *'neutral to method of payment - our objective is to maintain confidence in the currency.'* [29] They remain unswayed by recent discourse around cashless payments as the MPC focuses on a balance of cash and electronic payments *'in a way that maintains financial stability and meets the demands of the public efficiently and effectively.'* [30]

Conclusion to Chapter 1

Overall, though discourse around cashless payments is recent in the UK, there are promising initial links between the increased use of cashless payments and economic growth. Domestically, cashless payments offer ease and convenience for consumers (the majority of which prefer cashless systems) and it supports higher revenue with greater efficiency for firms. Furthermore, the UK government could potentially benefit from a decrease in illegal activity and the leaked cash flow associated with it to add to economic growth. Lastly, the change would benefit the MPC in having greater knowledge and control over the flow of money, though the group does not appear to fully support a completely cashless UK. Other countries have shown some of these benefits, and generally it's considered that *'there is a positive and significant relationship between cashless payment and economic growth in OECD countries. In particular, debit card payment is found to enhance economic growth.'* [31]

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[28] Ibid
[29] Sarah John. "Less-cash, but not cashless." Published on 8/4/2019. Bank of England, Currency Conference 2019. Accessed on 10/3/2022. Available at: https://www.bankofengland.co.uk/-/media/boe/files/speech/2019/less-cash-but-not-cashless-speech-by-sarah-john.pdf?la=en&hash=06D9ECD78A88F0D5B6B4C6B8BA6687B44FF5E0D5
[30] Ibid
[31] Teck-Lee Wong, Wee-Yeap Lau, Tien-Ming Yip. "Cashless payments and economic growth: evidence from selected OECD countries." Published on 16/7/2020. Sciendo. Accessed on 10/3/2022. Available at: https://sciendo.com/article/10.2478/jcbtp-2020-0028

Chapter Two: Costs of going cashless

Word count: 1,482

Introduction

Economic growth is a quantifiable but not a comprehensive measure of economic success; the main criticisms of a cashless society do not debate the extent to which economic growth may increase but the inequality of it and the widening of the UK's wealth gap - both significant examples of market failure within the UK economy. For firms, there are security concerns and barriers which disproportionately impact small businesses. The negative multiplier effect from inequality between individuals' social classes, or between small and large firms, will impede any of the benefits an increase in the rate of economic growth would have, so to justifiably evaluate the case for a cashless UK the benefits of withdrawing cash from the economy must outweigh the costs and burdens of it. There are a number of costs to consider if transitioning to a cashless UK.

Barriers for consumers

The consumer choice charity 'Which?' of the Consumers' Association aims to protect consumers' right to pay with cash. Their research into the issue found that in 2021, *'one in five people reported being unable to pay with notes and coins when trying to buy something between April and July. This was most likely to happen while shopping for groceries.'*[32] This supports previously presented figures[33] as businesses prefer cashless payments, but the perspective raises a new economic concern: groceries are a basic necessity which should be available and affordable to consumers - particularly in a developed economy such as the UK. This could be seen as a market failure in allocating basic goods to consumers willing but unable to pay. The 'Cash Census' is a report by the RSA which found cash is still essential despite the increase of cashless payments: 48% of the public would find a fully cashless UK problematic, of which 10 million consumers would struggle to cope and 15 million would find it a major inconvenience[34]. This also shows a new perspective of a cashless UK: cashless

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[32] "Freedom to pay." Which? Company. Accessed on 11/3/2022. Available at: https://campaigns.which.co.uk/freedom-to-pay/
[33] Pages 3-4
[34] Mark Hall, Asheem Singh, James Morrison, Aofie O'Doherty. "The Cash Census Report". Published in March 2022. The Royal Society for Arts. Accessed on 10/4/2022. Available at:

payments have become more common, but they aren't becoming the only way of paying as cash is still wanted by consumers. As the evidence shows cashlessness would be an inconvenience to consumers, they would likely respond reluctantly in their spending which negatively impacts the positive economic changes of increased consumer spending detailed in Chapter 1 in a cashless UK. The costs of a fully cashless society extends past inconvenience, as economically vulnerable groups who would 'struggle to cope' should be able to access the economy and cashlessness creates barriers for them. The 2020-21 Financial Inclusion Report from the treasury highlights this:

> *'Access to cash, banking and bank accounts are the three key pillars of financial inclusion which support people as they go about their day-to-day lives. These services help them pay for goods and services and receive an income whether that be a salary, benefits, tax credits or a pension.'*[35]

Cash is a 'pillar' allowing individuals to function in the economy, and it's essential when the other necessities of banking are increasingly unavailable in a cashless economy for the 1.3 million UK residents who are 'unbanked'[36]. Ensuring that economic participation is accessible to all citizens is fundamental to the UK economy, and a cashless economy could not immediately do so.

Inequality

Another economic drawback of a cashless UK is the inequality of these barriers facing consumers in becoming cashless, given that extremes of inequality is a market failure and any widening of the UK's drastic economic disparity would be a considerably negative outcome. A large group at risk from the rise of cashless payments is those in poverty: *'people who earn less than £10,000 are 14 times more likely to be dependent on cash than those who earn more than £30,000 a year.'*[37] This shows that the trend towards cashless payments is directly economically discriminatory against those in extreme poverty, hence it is not a trend which should continue while poverty remains a pressing economic concern in the UK. As well as

https://www.thersa.org/globalassets/_foundation/new-site-blocks-and-images/reports/2022/03/the-cash-census-report_v3.pdf

[35] "Financial Inclusion Report 2020-21". Published in December 2021. HM Treasury and Department for Work and Pensions. Accessed on 11/4/2022. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1038537/Financial_Inclusion_Report_2020-21.pdf

[36] "Access to Cash Review". Published in March 2019. Accessed on 11/4/2022. Available at: https://www.accesstocash.org.uk/media/1087/final-report-final-web.pdf

[37] Rupert Jones. "Britons without a bank account 'pay a £485 poverty premium". Published on 22/4/2019. The Guardian. Accessed on 15/4/2022. Available at: https://www.theguardian.com/money/2019/apr/22/britons-without-bank-account-pay-poverty-premium

the most economically disadvantaged, the previously mentioned unbanked individuals who rely on cash payments alone are also discriminated against with *'a "banking poverty premium" because they are missing out on preferential deals and discounts on utility bills, mobile phone contracts, broadband and personal loans'* which can add up to £485 anually.[38] This 'poverty premium' is often not a choice as bank accounts are not completely accessible: *'people who have found it difficult to open a bank account include some migrants, those who cannot provide proof of a UK address, and individuals with poor credit histories.'*[39] These factors are often correlated with poverty and poor living standards, so the evidence shows a trend of cash-reliant individuals being already economically disadvantaged prior to their ostracism from a potential, cashless economy. This is a considerable drawback as the ostracism would isolate this group and worsen existing economic inequalities. Furthermore, throughout the pandemic as cash withdrawals declined with the associated rise of cashless payments, there was a regional disparity closely linked to economic inequalities. On average areas of higher deprivation had a lesser fall in cash withdrawals during the pandemic, showing that areas such as Liverpool and South Bradford are more reliant on access to cash with a lesser fall in cash withdrawals than the more affluent areas in London and South England:

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Regional inequalities are another economic drawback as the benefits of a cashless UK would be focussed in the areas least reliant on cash, suggesting that more affluent areas would disproportionately benefit and deprived areas would become relatively more disadvantaged.

[38] Ibid
[39] Ibid
[40] Mark Hall, Asheem Singh, James Morrison, Aofie O'Doherty. "The Cash Census Report". Published in March 2022. The Royal Society for Arts. Accessed on 10/4/2022. Available at: https://www.thersa.org/globalassets/_foundation/new-site-blocks-and-images/reports/2022/03/the-cash-census-report_v3.pdf

Furthermore, regional inequalities also impact rural areas which are another group likely to be left behind from a cashless society as technological developments are slower to spread to rural areas from urban ones, and existing banking systems are limited in rural areas already: '*bank and ATM closures in rural areas – at least 3,303 have closed in the past five years – disproportionately affect older people.*'[41] This evidence raises two important drawbacks: the poor accessibility to banking and so too alternatives to cash, and the difficulty to older consumers cashlessness poses. This shows that the inequality of a cashless UK would be widespread across many different groups - regional, social and age - with far reaching economic impacts as existing inequalities widen. This is a considerable cost of transitioning to a cashless society as any economic benefit promised by a cashless UK would be impeded by the worsened inequalities.

Barriers for businesses

There are also risks for firms in going cashless as though it can result in greater efficiency and higher revenues, as detailed in Chapter 1, there are considerable costs with switching to a cashless system. This concern mostly impacts SMEs as large and multinational companies have usually already adopted cashless transaction options, and their cost is simply increasing the proportion of cashless transactions, from which they can benefit from their economies of scale. SMEs, on the other hand, may have to invest proportionally more in training staff and buying equipment which may even result in short term losses and loss of competitiveness during the transition. Once a cashless payment system is functional, businesses have to pay interchange and merchant service fees, and from January 2018 the UK government effected a ban on businesses charging extra for card payments to pass the burden to the consumer.[42] This means that businesses must absorb the cost of cashless payments entirely, which further shows the trend of SMEs being at risk from the change to a cashless society as they may be unable to operate with additional costs as compared to larger firms. Additionally, comparison site Cardswitcher claims that SMEs currently using their bank for merchant services could save 40% by 'shopping around' and switching providers[43], this is evidence suggesting there is

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[41] Rupert Jones. "Britons without a bank account 'pay a £485 poverty premium". Published on 22/4/2019. The Guardian. Accessed on 15/4/2022. Available at: https://www.theguardian.com/money/2019/apr/22/britons-without-bank-account-pay-poverty-premium
[42] David Prosser. "The cost to small businesses of going cashless". Published on 21/6/2017. Money Week. Accessed on 16/4/2022. Available at: https://moneyweek.com/470145/the-cost-to-small-businesses-of-going-cashless
[43] Ibid

a knowledge gap which negatively impacts SMEs to a considerable extent regarding the fees of cashless payments.

Conclusion to Chapter 2

Overall, the costs of a cashless UK are widespread and impact the economy extensively for both consumers and businesses. The costs can be summarised as problems of economic inequality. For consumers, this means that the transition to a cashless UK could be beneficial or detrimental, depending on the individual's range of social factors such as region, age and level of poverty. This would worsen the economic disparity in the UK as the proven link between economically disadvantaged groups preferring cash and economically affluent groups more often using cashless payment methods shows the discrimination of the trend. This could result in a negative multiplier of increased poverty as a result of the market failure. For businesses, though, cashless payments create a competitive inequality as SMEs are more likely to struggle internalising the additional costs from the fees of cashless transactions than larger firms, which may result in UK SMEs becoming less competitive compared to larger firms who may be able to dominate the market as a result. Worsening inequalities is a considerable economic problem which should be avoided when possible, and is a considerable drawback as a feature of a cashless society.

Overall Conclusion

Word count: 394

It is clear that the UK economy relies considerably on cashless payments to complete the majority of its transactions - this is a long-term trend which has been exacerbated by the pandemic. It would be highly beneficial to the UK economy for the use of cashless payments to continue to grow at a stable rate similar to pre-pandemic levels as the economic benefits are considerable in the long term. As evident from the research in Chapter 1, cashless payments can stimulate consumer spending and improve businesses efficiency, two factors which are highly conducive to economic growth. Furthermore, the benefit to the government of improved financial regulation and to the Monetary Policy Committee of greater influence would create a more stable and measured UK economy. These conclusive benefits are based only on an increase in cashless payments - their impact may not be as extensive as in a hypothetically completely cashless UK, as presented in Chapter 1. This is because it is prudent to minimise the costs which would impede these economic benefits as detailed in Chapter 2. A fully cashless UK would deteriorate economic inequalities to extremes for a number of economically vulnerable groups, as well as risk SMEs becoming uncompetitive and dominated by larger firms. So, retaining cash as an accessible payment option is essential for the current economic climate, if to a slightly lesser extent than cash is used now.

In the long term for the UK economy though, recommendations can be made to encourage a slow and measured transition to a less cash reliant economy. The government would be recommended to maintain cash accessible infrastructure such as non-fee charging ATMs for all areas of the UK and high-street banking services in post offices. This would improve the issues of cash being inaccessible at present. The government would also be recommended to support the public with the digital transition by investing in digital banking courses to specialise with at-risk groups such as the elderly or those in poverty, as well as basic digital banking education for young people to form more informed consumers in the long run. Digital and online banking accessibility could also be improved by recommendations to the government to ensure widespread 4G access and fast, reliable broadband throughout the UK, ensuring no area is left behind. Recommendations for the FCA would encourage regulation to maintain cash acceptance in commerce at present.

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[Footnotes referenced: 43, 44]

Candidate 2

Does the UK have a productivity issue? If so, what policies should be introduced to fix the UK's productivity issue?

Name:

Centre:

Word Count: 4363

Contents Page

Introduction

In 1960, the UK had the highest level of Productivity in Europe, however, since then productivity has been increasing at a slower rate than its competitors.

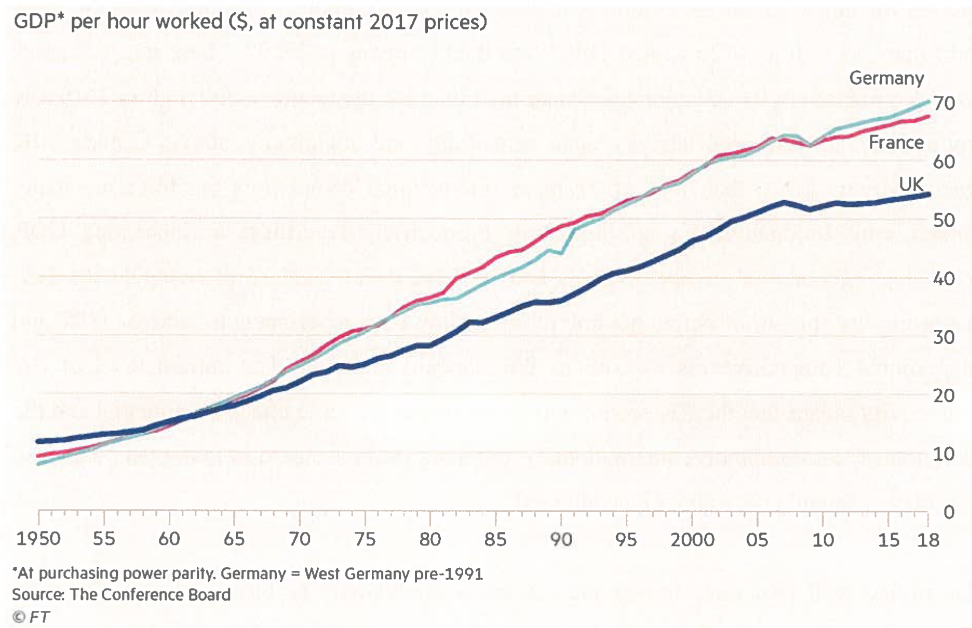

Figure 1[1]

Figure 1 shows that before the 2008 financial crash, the UK had a sustained rate of 2%[2] productivity growth. Figure 1 also shows that since the 1970s the UK has been falling behind, but the productivity gap has increased further since the financial crash of 2008. In the third quarter of 2021, the UK output per hour worked percentage changer per annum was -4.5% [3],

[1] Chris Giles. (2018). *Britain's productivity crisis in eight charts*. [online], Financial Times. Available at: https://www.ft.com/content/6ada0002-9a57-11e8-9702-5946bae86e6d [Accessed 22nd December 2021].

[2] Daniel Harari. (2020). Productivity: Key Economic Indicators. *commons library.parliament.uk*. [online], Commons Library. Available at: https://commonslibrary.parliament.uk/research-briefings/sn02791/. [Accessed 29th January 2022].

[3] ONS. (2022). *UK Whole Economy: Output per hour worked % change per annum SA - Office for National Statistics*. [online] Available

the lowest ever recorded. However, with the UK economic recovery well underway there is still hope that UK productivity will increase gradually as the economy opens up after the harsh recession.

In 2019 the Uk ranked fourth out of the G7 countries for productivity with France and US ranking top and Japan at the bottom. UK productivity was around 15% lower than the USA and France as well as an estimated 10% lower than Germany in 2019 [4]. These statistics show that Uk productivity is considerably worse than its main competitors, although in 2019 UK productivity is still well above Japan and Italy and marginally above Canada. UK productivity is lower than that of its main international competitors but there are many reasons why Productivity is so important. Productivity is critical to increasing GDP, improving international competitiveness and improving the standard of living in the UK. Increasing the amount of output per unit of input allows the government to increase GDP and international competitiveness as well as the standard of living. The current level of UK productivity means that the UK economy is increasing at the same rate as its potential and the UK remains less competitive internationally and has a lower standard of living than what can be achieved should productivity be addressed.

This project will first look at why the UK has a productivity problem and what the main causes of the issue are. Some of the issues this project will explore are the impact of BREXIT, Labour hoarding, Zombie companies and the lack of investment by firms. This project also aims to look at how productivity influences other key economic aims of the UK government such as the rate of inflation, unemployment and economic growth. Finally, I would like to discuss how the UK economy could alter its economic policies to improve productivity and how increasing productivity should become a major priority for the Government.

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at:https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/timeseries/lzvd/prdy [Accessed 29th January 2022].

[4] Daniel Harari. (2020). Productivity: Key Economic Indicators. *commons library.parliament.uk*. [online], Commons LIbrary. Available at: https://commonslibrary.parliament.uk/research-briefings/sn02791/ [Accessed 29th January 2022].

Chapter 1

Section 1 - Current UK Economic Issues and Their Effect On Productivity

Link Between GDP and Productivity

One reason for low UK productivity is the current economic situation of the UK economy.

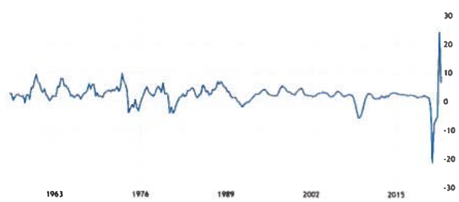

Figure 2 [5]

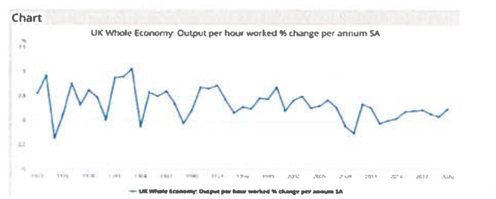

Figure 3 [6]

GDP is the total value of goods and services produced by an economy over a period of time and figure 2 demonstrates the percentage change in GDP over time. Figure 3 demonstrates the percentage change in output per hour per year. The consistent trend between the two graphs highlights that when the total value of goods and services produced increases, output per hour improves. Therefore when UK GDP is improving, UK productivity is higher. The pandemic has affected all countries around the world but the UK has arguably been one of the worst affected due to the harsher lockdowns, as well as this, the UK is a service-based economy. With many services being closed throughout the pandemic the UK's GDP has

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[5] J Ferreira. (2019). *UK Q4 GDP Annual Growth Revised Slightly Higher to 1.4%.* [online] Tradingeconomics.com. Available at: https://tradingeconomics.com/united-kingdom/gdp-growth-annual. [Accessed 28th December 2021].

[6] www.ons.gov.uk. (2022). *UK Whole Economy: Output per hour worked % change per annum SA - Office for National Statistics*. [online] Available at: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/timeseries/lzvd/prdy [Accessed 29th January 2022].

suffered as demonstrated by the graph below from the BBC which compares the GDP of countries from the final quarter of 2019 to the first quarter of 2021.

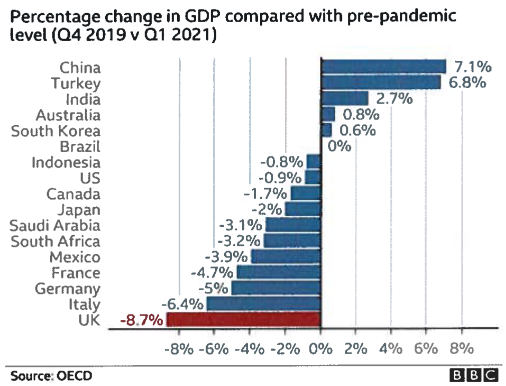

Figure 4 [7]

Figure 4 compares the GDP of countries from the final quarter of 2019 to the first quarter of 2021 and illustrates the drastic impact that the pandemic has had on the UK as GDP was 8.7% below pre-pandemic levels in the first quarter of 2021. As established earlier, the link between Productivity and GDP has meant that the recent events of the pandemic have Negatively affected GDP. GDP harms UK productivity and perhaps the drastic effect of the pandemic is one of the main reasons behind the UK's low productivity problem. However, the UK has had a productivity problem since the financial crash in 2008 and this issue has not just arisen since the start of the pandemic.

[7] BBC News.(2021) *UK economy lags behind other countries in Covid recovery*. [online] 10 Jun. Available at: https://www.bbc.co.uk/news/business-57427997. [Accessed 22nd December 2021].

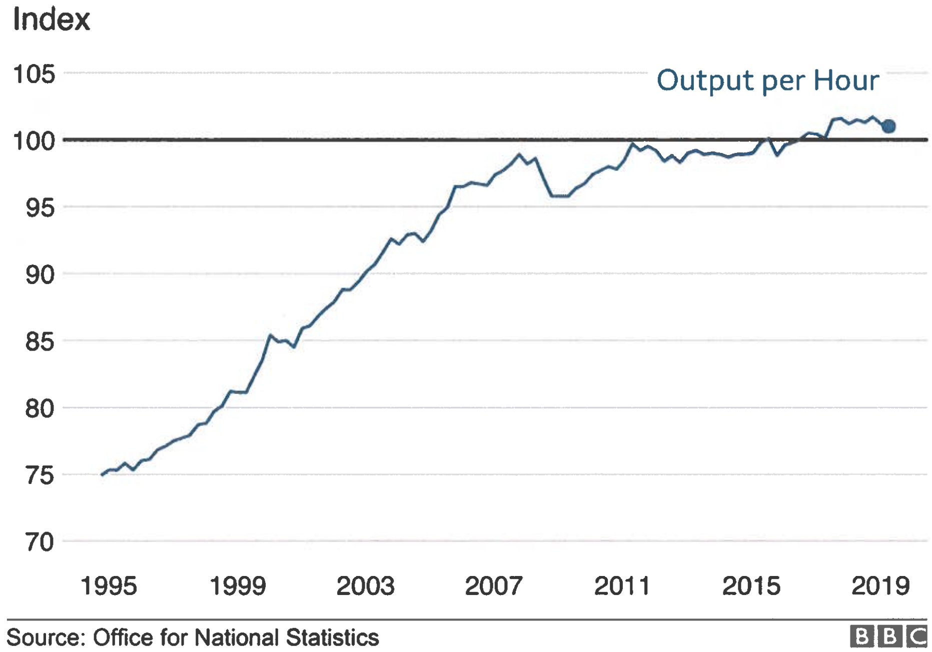

Figure 5 [8]

Figure 5 demonstrates that since 2008 UK productivity has stagnated and the trend before 2008 shows that productivity had been increasing at a steady and sufficient rate. Although UK productivity has been badly affected by the pandemic, perhaps to some extent more negatively than other countries. Therefore it is fair to argue that whilst the pandemic has further damaged productivity through the global recession, the UK's productivity issue has been apparent since the financial crash. This long term issue of productivity is not only down to the UK's recession but also several other factors.

[8] Opentextbc.ca. (2009). *20.2 Labour Productivity and Economic Growth – Principles of Economics*. [online] Available at: https://opentextbc.ca/principlesofeconomics/chapter/20-2-labor-productivity-and-economic-growth/. [Accessed 22nd December 2022].

UK Low Wages

A large incentive for workers to increase their output is higher wages. The real living wage is defined as the minimum wage currently, required to cover the cost of living. In the UK 1 in 6 jobs pays below the real living wage [9]. The Government has set about increasing the real living wage demonstrating the understanding of the government that the current pay isn't enough to live off. However, perhaps targeting the minimum wage may be more effective as this is a legal requirement rather than an optional choice for firms.

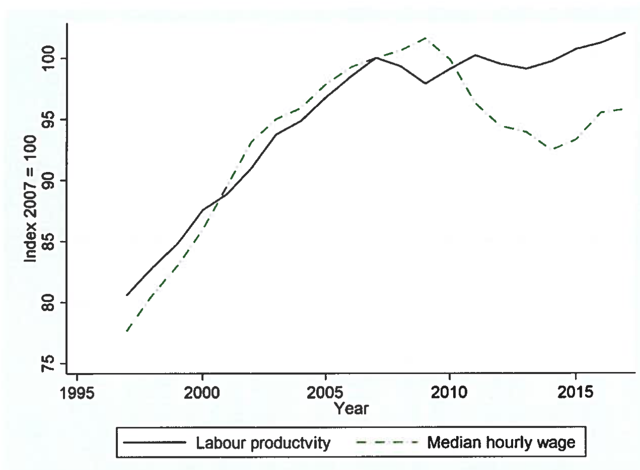

Figure 6 [10]

Figure 6 shows that there is a direct link between wages and labour productivity as when the median hourly wage was increasing so too was labour productivity. In recent years the UK's median hourly wage has fallen and therefore productivity has plateaued, this further highlights that the UK's low wages are a large factor affecting UK productivity. As well as

[9] Living Wage Foundation. (n.d.). *4.8 million jobs in the UK pay below the real Living Wage.* [online] Available at: https://www.livingwage.org.uk/news/4.8-million-jobs-uk-pay-below-real-living-wage. [Accessed 30th January 2022)].

[10] F. of A, Institute. (2019). *Is the link between labour productivity and wage growth still alive in the UK?* [online] FAI. Available at: https://fraserofallander.org/link-labour-productivity-wage-growth-uk/#:~:text=As%20 productivity%20 rises%20it%20takes [Accessed 19th March. 2022].

this the UK average salary is also well below the US. The US tops the G7 charts for productivity. The average US salary in July 2021 was $56 310 [11] which is equivalent to £41 500 whereas the UK average salary is only £31 772 [12]. This highlights the difference in wages between the US and the UK and could be one of the major reasons for the productivity gap between the two countries. However, it is also important to take into account the inflation rates in each country as the US inflation rate in January 2022 was 7.5% [13] compared to the UK inflation rate in January 2022 of 5.4% [14]. It is always important to compare countries' statistics in real terms which means adjusting statistics for inflation. Considering that the US inflation rate is more than 2% higher than the UK inflation rate it would make more sense that American wages are higher than British wages. In America prices on average are increasing at a quicker rate in the US compared to the UK and this would mean that the general level of prices will be higher in the US compared to the UK. Therefore the higher wages in the US are perhaps not as much higher as many originally anticipated due to the US inflation rate being much higher than the UK inflation rate.

Section Conclusion

Overall, the recent economic issues and recovery of the economy have hindered the progress of wage growth in the UK. The effect of the pandemic has resulted in the UK economy being badly affected and that also includes wage growth. The effect of the pandemic alone has slowed UK productivity growth as highlighted above, but the pandemic has also damaged

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[11] MintLife Blog. (2021) *What Is a Good Salary? And How Do You Compare?* [online] 21 Jul. Available at: https://mint.intuit.com/blog/salary/what-is-a-good-salary/. [Accessed 1st February 2022].

[12] Olive, Pometsey. (2019). *Average UK salary: Ever wondered how you stack up?* [online] British GQ. Available at: https://www.gq-magazine.co.uk/article/average-uk-salary. [Accessed 3rd February 2022].

[13] Statista (2021). *United States - monthly inflation rate December 2019/20*. [online] Statista. Available at: https://www.statista.com/statistics/273418/unadjusted-monthly-inflation-rate-in-the-us/. [Accessed 3rd February 2022].

[14] Rate Inflation (2021). *UK Inflation Rate*. [online] www.rateinflation.com. Available at: https://www.rateinflation.com/inflation-rate/uk-inflation-rate/. [Accessed 3rd February 2022].

wages which has further damaged UK productivity [15]. UK wages throughout the pandemic have stagnated due to numerous reasons such as the harsh lockdown restrictions as well as many people only receiving 80% of their wages due to the furlough scheme. Therefore the combined effect of the pandemic on productivity and the effect of the pandemic on wages has damaged UK productivity. Due to these reasons the UK[16] still lags behind the US[17] in terms of productivity and the combination of these factors is one of the main reasons behind the UK productivity problem.

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[15] House of Commons Library. (n.d.). *House of Commons Library*. [online] Available at: https://commonslibrary.parliament.uk. [Accessed 21st March 2022].

[16] Tradingeconomics.com. (n.d.). *United Kingdom Productivity | 1971-2020 Data | 2021-2023 Forecast | Calendar*. [online] Available at: https://tradingeconomics.com/united-kingdom/productivity. [Accessed 3rd february 2022].

[17] Tradingeconomics.com. (2019). [online] Available at: https://tradingeconomics.com/united-states/productivity. [Accessed 3rd February 2022].

Section 2

UK Skills Shortage and the Impact Of BREXIT On UK Labour Market

Another reason for low productivity in the UK is the decreasing number of workers in the workforce. Productivity decreases when there fewer workers are producing lower output and this can be currently seen in the UK. In the UK at the moment the number of job vacancies in the UK rose between December 2021 and February 2022 to 1'318'000 [18] as well as there being 1.3 million individuals unemployed in the UK [19]. The clear number of vacancies as well as there being many individuals unemployed suggests that the UK labour market has a skills shortage and there are not the required workers to fill the roles available. As well as this, many workers have left the UK labour market due to BREXIT. Since BREXIT occurred in 2020 the UK has seen many EU citizens return home and therefore leave the UK workforce. In 2020 more than 200'000 EU citizens left the UK due to BREXIT and the effects of the coronavirus pandemic [20]. The decrease in the number of EU workers has meant that the UK labour market has suffered and those that are required to fill certain roles are not fully trained and capable of so. This can be seen by the lack of UK lorry drivers which began at the end of 2021 [21]. The shortage was partially due to COVID and the lack of tests for new drivers to begin on the roads, however, many EU workers decided to find jobs elsewhere or return home. When the UK was previously part of the EU single market workers could come and go when they liked however due to BREXIT the UK has seen a lack of a skilled

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[18] www.ons.gov.uk. (2022). *Labour market overview, UK - Office for National Statistics*. [online] Available at: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/march2022. [Accessed 20th March 2022].

[19] Statista. (n.d.). *Unemployment figures UK 2022*. [online] Available at: https://www.statista.com/statistics/280383/unemployment-figures-in-the-united-kingdom-uk/. [Accessed 21 March 2022].

[20] Andrew Atkinson. (2021). U.K. Lost 200,000 EU Nationals as Brexit and the Pandemic Struck. *Bloomberg.com*. [online] 17 Sep. Available at: https://www.bloomberg.com/news/articles/2021-09-17/u-k-lost-200-000-eu-nationals-as-brexit-and-the-pandemic-struck. [Accessed 10th February 2022].

[21] BBC News (2021). How Serious Is the Shortage of HGV drivers? *BBC News*. [online] 15 Oct. Available at: https://www.bbc.co.uk/news/57810729. [Accessed 19 March 2022]

workforce. The theory behind having a more skilled workforce is that they will be able to complete tasks more efficiently and to a higher standard. Therefore output per hour may increase with the same input and therefore there would be an increase in productivity. Currently, in the UK we are seeing an unskilled workforce which leads to lower productivity.

Labour Hoarding

Due to the pandemic, UK productivity may be suffering due to labour hoarding from UK firms. Labour hoarding refers to the occasion when firms choose to retain their workers, rather than lay them off, during a period of uncertain economic growth or a recession. This has happened throughout the Coronavirus pandemic due to the furlough job retention scheme set out by the UK government. As of July 2021, there were 1.6 million people across the UK furloughed and due to this firms chose to retain their labour as the scheme meant that the government would pay up to 80% of worker's wages. [22]. Furlough has resulted in there being less labour available to firms because workers are no longer moving jobs or re-allocating to growing sectors. Due to workers not moving between roles, there are also many workers who are not being employed in their most productive roles. Labour hoarding throughout the pandemic has affected productivity as the inputs to production have stayed the same but output has fallen. Throughout the pandemic, there has been a fall in aggregate demand due to the harsh lockdown as well as the UK economy's recession. Due to this the amount of output produced by firms has fallen whilst the amount of workers they have had has stayed the same. Therefore UK productivity has decreased due to labour hoarding by UK firms which was caused by the furlough scheme.

Section Conclusion

Due to the combined effects of labour hoarding and BREXIT the UK currently doesn't have enough workers to fill the current job vacancies. The combination of BREXIT and labour hoarding is harming UK productivity. Due to BREXIT, fewer workers are coming into the UK from the EU and there are many leaving to return home, as well as this the current UK

[22] Employers For Childcare. (2021). *Furlough scheme comes to an end on 30 September 2021*. [online] Available at: https://www.employersforchildcare.org/news-item/furlough-scheme-comes-to-an-end-on-30-september-2021/ [Accessed 10th February 2022].

workforce is being deployed effectively and therefore without the help of foreign workers the UK economy has seen an increase in vacancies and a decrease in productivity

Section 3 - Lack Of Investment From The Government And Firms

UK Lack of R&D Investment

Another reason for low UK productivity is the UK government's lack of spending on research and development. Spending on research and development allows for new technological procedures to be discovered and makes firms and the economy as a whole more competitive and efficient. In April 2021, Uk spending on R&D was at 1.7% of GDP, well below the likes of Germany and the USA who spend 3.1% and 2.8% respectively [23]. This shows that spending on R&D is a major way to improve productivity as the US had 113 productivity points in the final quarter of 2021[24] compared to the UK which had 102.5 points in the final quarter of 2021[25]. The difference between the two countries' productivity highlights that R&D investment is a crucial aspect of productivity as the US invests much more in this area than the UK and as a result has a much higher level of productivity. However, whilst the current levels of UK R&D investment are low the Uk government has stated to increase R&D spending to 2.4% of GDP by 2027[26]. Although this is an important step for the government to take and is not something that can be completed quickly, 2.4% of GDP only brings the UK in line with the OECD average which emphasises further the extremely low levels of R&D investment the Uk currently has. As well as this, whilst this target has been set to achieve by 2027 but many new policies don't come into full effect until at least a year after their introduction. For example, it is estimated that interest rates take up to 18 months before any

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[23] British Politics and Policy at LSE. (2021). *Britain's productivity problem reaches well beyond the plans set out by either Labour or the Conservatives*. [online] Available at: https://blogs.lse.ac.uk/politicsandpolicy/productivity-crisis-labour-conservatives/ [Accessed 19th February 2022].

[24] Tradingeconomics.com. (2019). [online] Available at: https://tradingeconomics.com/united-states/productivity. [Accessed 3rd february 2022]

[25] Richard Jones. (2021). *On the £22 billion target for UK government R&D – Soft Machines*. [online] Available at: http://www.softmachines.org/wordpress/?p=2608 [Accessed 27th February 2022].

[26] Richard Jones, (2021). *On the £22 billion target for UK government R&D – Soft Machines*. [online] Available at: http://www.softmachines.org/wordpress/?p=2608 [Accessed 27th February 2022].

sign of economic change is evident [27]. This means that while the government may increase R&D investment by 2027, productivity improvements may not become apparent until 2029.

Government Infrastructure Development

Development of infrastructure is also a way of improving productivity as it encourages firms to invest in the economy. Better infrastructure also increases the efficiency that goods can be transported. This also reduces the cost which encourages FDI into the UK economy. In 2019 the United Kingdom ranked 7th in the world for road infrastructure spending [28]. Although this may seem above average, the UK spent 8.3% of what the US spent on road infrastructure. The US tops the G7 charts for productivity and therefore there is a clear link between infrastructure development and higher productivity. Therefore one of the reasons for low UK productivity is the lack of infrastructural developments by the government.

Zombie Companies

Labour Productivity is a key aspect of the Uk economy and allows for international comparisons between countries and allows firms to try and optimise efficiency and increase international competitiveness. One of the reasons for low UK labour productivity is the large number of 'Zombie Companies' in the UK economy. Zombie companies are firms that make just enough to survive and fail to pay off their debt. Zombie firms are often kept alive by low-interest rates as seen in the UK in March 2020 when the base interest rate was set to 0.1%, before changing in December 2021 to 0.25%. The Institute Of Chartered Accountants in England and Wales (ICAEW) now thinks that the number of Zombified companies in the UK is now above 20% [29]. Zombie companies decrease productivity as they are unwilling to

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[27] Sapling. (n.d.). *What Is the Time Lag in Monetary or Fiscal Policy?*[online] Available at: https://www.sapling.com/8087404/time-lag-monetary-fiscal-policy. [Accessed 13 March 2022].

[28] NationMaster. (n.d.). *Top countries for Road Infrastructure Spending*. [online] Available at: https://www.nationmaster.com/nmx/ranking/road-infrastructure-spending [Accessed 19 Apr. 2022].

[29] Icaew.com. (2022). *Business rescue: are zombie companies on the rise?*[online] Available at: https://www.icaew.com/insights/viewpoints-on-the-news/2021/april-2021/business-rescue-are-zombie-companies-on-the-rise [Accessed 1st March 2022].

invest and therefore their technology and capital tend to be outdated resulting in less output per worker and output per hour worked. This is causing major issues for the UK economy as had these firms failed, then their unemployed resources could have been put to much more efficient use, therefore without Zombie Companies the Uk could be much more productive. The ICAEW thinks that if the problem of Zombie companies isn't tackled then this could reduce business investment by £42 billion a year, as well as having 400'000 fewer jobs each year. However, whilst the short term issue of Zombie companies is apparent it is estimated that around two-thirds of Zombie Companies do recover [30]. This shows that in the long run many of these zombie firms will recover and potentially invest and improve the skills of labour and the quality of their capital. Zombie Companies recovering into profitable businesses will result in more output per hour and output per worker which in the long run could have a positive effect on productivity and the economy as a whole.

Section Conclusion

In conclusion, Zombie companies and the lack of government R&D and infrastructure investment has meant that the UK economy's production techniques have become outdated and overtaken by many of its competitors. Zombie companies make up 20% of the UK's firms and are unable to invest in new training, combined with the lack of government investment in recent years the UK's productivity is getting worse. Should the government decide to change the timeline for increasing R&D investment to 2023 the issue of Zombie companies could be tackled in the next few years. Instead, Zombie companies will continue to damage productivity until action is taken and better infrastructure and production techniques are introduced to eliminate Zombie companies.

[30] LSE Business Review. (2020). *An autopsy of zombie firms reveals growing and recovering companies*. [online] Available at: https://blogs.lse.ac.uk/businessreview/2020/10/09/an-autopsy-of-zombie-firms-reveals-growing-and-recovering-companies/. [Accessed 1st March 2022].

Chapter 2 - How Can UK Productivity Be Improved

Section 1

Increase Business Investment

As the Uk has a productivity issue this project will now go on to highlight some of the key areas that should be addressed to improve the productivity issue. One way for the UK to improve productivity is for firms to invest more capital and technology. Investment is spending by firms on long term capital that can be used to improve the production process of a good or service. In September 2021 UK investment accounted for 17.3% of GDP[31] compared to the US investment which accounted for 22.2% of GDP in December 2021[32]. This once again illustrates that the UK is lacking behind its competitors in terms of investment and to fix the current productivity issue the UK must improve this. One of the main ways to encourage investment is to decrease the interest rates set by the Bank of England's Monetary Policy Committee. By decreasing the base rate the cost of borrowing decreases and therefore in the long-run firms will have to pay back less interest on their loans.[33] This reduces the costs to firms for investment and therefore UK productivity should improve in the long run as new capital is purchased and the new technology improves efficiency. However, the main objective of the Monetary Policy Committee is to set interest rates to meet their target rate of inflation of 2%. Due to current economic issues elsewhere in the world the Uk rate of inflation is anticipated to hit 8% in April 2022 and therefore during this uncertain economic period with the potential for hyperinflation it is unlikely that interest

[31] CEICdata.com. (n.d.). *United Kingdom Investment: % of GDP [1955 - 2020] [Data & Charts]*. [online] Available at: https://www.ceicdata.com/en/indicator/united-kingdom/investment--nominal-gdp. [Accessed 4th March 2022].

[32] CEICdata.com (2018). *United States Investment: % of GDP*. [online] Ceicdata.com. Available at: https://www.ceicdata.com/en/indicator/united-states/investment--nominal-gdp. [Accessed 4th March 2022].

[33] Investopedia. (2019). *Do lower interest rates increase investment spending?* [online] Available at: https://www.investopedia.com/ask/answers/101315/do-lower-interest-rates-increase-investment-spending.asp. [Accessed 4th March 2022]

rates are to fall. It is more likely we will see rates rise in an attempt to control inflation. As well as this due to the potential for hyperinflation the UK economy is unstable, therefore firms are unlikely to invest due to the uncertainty of their returns[34]. Firms will only invest during periods of sustained economic growth whilst the economy is stable and investment returns are more predictable and profitable. Due to this, decreasing interest rates may lead to some increased investment from certain firms but would most likely, given the UK's current economic situation, be worse off for the economy as a whole.

Investment In Infrastructure From The UK Government

As well as firms, the UK government can also improve UK productivity through the development of new infrastructure. Investment in infrastructure is another key way of improving UK productivity as in the long run this can result in more efficient and cheaper ways for firms to transport their goods [35]. High Speed 2 (HS2) is an example of government investment in infrastructure and once completed, HS2 allows for goods to be transported more efficiently[36]. The ability to transport goods at a cheaper cost and a faster rate means that the input per unit of output is less than before, therefore increasing productivity. In the long run, productivity improves due to infrastructure improvements however, the cost of large infrastructure projects is very expensive. The expected cost of HS2 is £72 billion and £98 billion as of 2019, compared to the budget of £55.7 billion in 2015[37]. As well as this the UK general government's gross debt was £2,223.0 billion at the end of the financial year ending March 2021, equivalent to 103.6% of gross domestic product (GDP)[38]. This demonstrates that

[34] Economics Observatory. (n.d.). *Why is uncertainty so damaging for the economy?* [online] Available at: https://www.economicsobservatory.com/why-uncertainty-so-damaging-economy. [Accessed 4th `march 2022]

[35] www.itrc.org.uk. (n.d.). *Does infrastructure contribute to economic growth? Micro-level evidence from transportation projects in China | ITRC.* [online] Available at: https://www.itrc.org.uk/itrcpublications/does-infrastructure-contribute-to-economic-growth-micro-level-evidence-from-transportation-projects-in-china/ [Accessed 4th Mar. 2022].

[36] High Speed 2. (2018). *Why HS2* | [online], High Speed 2. Available at: https://www.hs2.org.uk/why/. [Accessed 6th March 2022]

[37] BBC (2017). What do we know about HS2? *BBC News.* [online] 17 Jul. Available at: https://www.bbc.co.uk/news/uk-16473296 [Accessed 6th March 2022]

[38] www.ons.gov.uk. (2021). *UK government debt and deficit - Office for National Statistics.* [online] Available at:

the UK government is not in a place to invest in new infrastructure projects and doing so could create further problems such as intergenerational unfairness and damage to the UK credit rating. Overall whilst investment in infrastructure from the government does help productivity in the long run, the short term consequences are costly and due to the effects of the pandemic, the UK government has borrowed large sums of money in an attempt to keep the economy afloat. Therefore at this point, it is unlikely that the UK government will be improving productivity through the development of new infrastructure projects.

Section Conclusion

Overall, increasing government investment will in the long run attract business investment. Improving infrastructure will encourage new firms to locate in the UK and therefore bring new production techniques that may be more efficient and therefore be more productive. Although this may be costly to the UK government at first the long run benefits would exceed the short-run costs as the UK economy becomes more productive. The improved productivity will also benefit other aspects of the economy such as international competitiveness and the standard of living.

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https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicspending/bulletins/ukgovernmentdebtanddeficitforeurostatmaast/june2021 [Accessed 6th March 2022]

Section 2

Improving the UK's average Wages

Whilst perhaps the UK government is unable to fund new infrastructure and due to the changing nature of the economy business investment is unlikely to occur shortly. Something the government has set out to achieve is a high skill high wage economy [39]. One of the main reasons for the UK productivity issue is the low wages and the large number of skilled workers that have left the workforce due to BREXIT. To achieve a higher wage economy the government has already set about increasing the real living wage across the UK[40] which is coming into effect on 15th May 2022. Increasing the minimum wage would also lead to large benefits for the UK economy as well as increasing productivity. Increasing the minimum wage there is a greater incentive for workers to increase their output, as well as this, the increased income tax revenue gained from the higher wages can allow the government to finance more infrastructure projects. However, the short term effect of increasing the minimum wage could prove problematic as wages are a cost for firms and the current inflation rate in the UK is 6.2% as of February 2022[41]. Increased costs for firms could lead to further inflationary pressures and considering the majority of current inflationary pressures are increasing costs as well, this may only increase prices further. Therefore in the short run, the effect of increasing the minimum wage could prove to create more problems than it solves.

Developing And Improving The UK Skills Of The Uk Workforce

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[39] BBC News. (2021). *PM's conference speech in three minutes.* [online] Available at: https://www.bbc.co.uk/news/av/uk-politics-58814707 [Accessed 14th Mar. 2022].

[40] Joanna Partridge. J (2021). *Real living wage rise puts pressure on the UK government to raise the minimum wage*. [online] The Guardian. Available at: https://www.theguardian.com/society/2021/nov/15/real-living-wage-rise-puts-pressure-on-uk-government-to-raise-minimum-wage. [Accessed 14th March 2022].

[41] Larry Elliot. (2022). *UK inflation hits 6.2%, the highest level in three decades*. [online] Available at: https://www.theguardian.com/business/2022/mar/23/uk-inflation-highest-level-in-three-decades. [Accessed 25th March 2022]

The UK has a skills shortage as identified in my chapter discussing that the UK does have a productivity issue. To improve the skills of the UK workforce the government needs to invest in training. Should the Uk invest in training then the UK workforce will become more skilled as well as allowing for the implementation of new technology which will allow productivity to increase as firms become more efficient [42]. The UK government must also provide more frequent training for those that wish to switch jobs. This makes the UK workforce more adaptable and competitive and will attract innovative firms which will increase productivity. As of April 2022, youth unemployment was 11.3% compared with 3.8% for the rest of the population [43]. Increasing the school leaving age would enable individuals to gain a better quality education and therefore perhaps allow for a better opportunity for employment in the future. This would allow for the UK workforce to become higher skilled and more valued by firms and would lead to improved productivity as workers are more capable and more efficient.

Section Conclusion

Overall, by improving the skills and abilities of the workforce, the short term issue of the UK's inflexible labour market will be solved. As well as this the improved skills of workers should lead to higher pay as the higher-skilled jobs tend to pay better. Overall the area to focus on is improving the skills and qualifications of the workforce as this should lead to improved pay for workers which provides the best incentive to be more productive. Therefore in the short run, the skills of workers and thus improving wages will allow UK productivity to increase.

[42] GOV.UK. (n.d.). *Skills boost to support more people into jobs*. [online],GOV.UK Available at: https://www.gov.uk/government/news/skills-boost-to-support-more-people-into-jobs. [Accessed 14th March 2022]

[43] Tejvan Pettinger (2016). *Should the School Leaving Age be Raised to 18? - Economics Help*. [online] Economics Help. Available at: https://www.economicshelp.org/blog/5097/economics/should-school-leaving-age-be-raised-to-18/. [Accessed 15 March 2022].

Conclusion

In Conclusion, the UK does indeed have a productivity problem and this is due to several factors such as BREXIT exposing the lack of transferable skills in the workforce, the global pandemic which has kept zombie companies alive, led to lower wage growth and caused labour hoarding and the overall lack of investment by both the government and firms. Whilst the UK productivity issue has been apparent for several years many ways can be introduced to improve productivity. The short term issue of Zombie companies and Labour hoarding must be addressed and increasing the minimum wage and improving skills will force Zombie firms out of the market and encourage firms to let go of labour as the cost increases. In the long run, the increased quality of the UK workforce will lead to increased business investment and initiative and more Foreign Direct Investment. This can be further stimulated by the UK government once the UK's economic recovery has been completed as they can improve the UK's infrastructure allowing for the transport of goods to become cheaper and faster in the UK. Overall the contribution of the UK Government, individuals and firms will be needed if UK productivity is to improve and whilst in the short run the effects may not be immediately visible, in the long run, the UK economy will benefit as increased productivity allows for many other aspects of the economy to develop and improve.

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