

The Next Start-Up Nation?

A Manifesto for an Independent,
Entrepreneurial and Ambitious Scotland

Professor Ross Brown

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Foreword

There's an awful lot of thought given to *how* and *when* Scotland could become independent, but not much credible analysis of *what* would then have to be done to make a go of independence. To put it mildly, this seems something of an oversight.

It's clear that an independent Scotland would have to fight for its place in the world – no more blaming Westminster for every wrinkle, no more “we could do better, if only...” There would be hard truths to face, tough decisions to take, and the kind of naked challenges from which devolution has largely protected us.

Whatever your view on the nation's constitutional future, it is certainly possible that Scotland could choose to leave the UK. The lack of preparation for this eventuality is therefore verging on irresponsible – just look at the reality of Brexit compared to the pre-referendum boasts and predictions made by its advocates.

For this reason, Reform Scotland is delighted to publish this paper by Professor Ross Brown of the University of St Andrews. Ross is an expert on entrepreneurship and small business finance, both of which would be central to helping the new state succeed. Just as importantly, much of what he proposes could be pursued under the existing devolved settlement.

I know that some of his findings will meet with broad agreement across the business community – for example, the existing enterprise structure is generally regarded as outdated, muddled and feeble. Likewise, his call for experienced entrepreneurs, investors and financial institutions to be given a greater role in advising on government policy seems like basic common sense. The paper poses a basic and urgent question to the First Minister and the governing party: what are you waiting for?

Scottish politics must somehow make its peace with private-sector innovation, wealth creation and the world-class talent that exists on these shores. After all, these are the people and firms that create the jobs and pay the taxes that support our public services, and that in the event of independence would bear the brunt of the economic challenge. Time, then, to grow up, and to build a *Start-Up Nation*.

**Chris Deerin,
Director
Reform Scotland**

Precis

This debate article aims to demonstrate the ways in which Scotland could potentially become a much more entrepreneurial and ambitious nation if it were to choose independence over the current constitutional status quo. The primary aim of the paper is to move the sterile debate on Scottish independence away from a static “numbers game” largely conducted by economists to a more rounded and enlightened view on how the country can potentially re-shape its economic future in the event of more decision-making powers being transferred to Scotland.

I argue herein that to become economically successful, the country will have to embark on an entrepreneurial revolution to make it a prosperous and dynamic “start-up” nation. I outline the types of new, imaginative and creative policy frameworks which could enable Scotland to make this transition possible. The scale of Scotland’s entrepreneurial deficit is such that only experimental, innovative and comprehensive changes will engender substantive change. As the country emerges from the devastating consequences of the Covid-19 crisis (and deals with the chronic problems caused by Brexit), addressing weaknesses in our entrepreneurial ecosystem are crucial to aid the recovery, especially given the profound changes enveloping the economy. Importantly this conversation is not a hypothetical one, as many of the policies outlined are actionable under the current devolved constitutional regime.

Given the fact the vast majority of young Scots (roughly three in four aged 16-34) favour independence, our young people appear to have a positive belief an independent Scotland will be economically viable and successful. To secure future economic prosperity for Scotland, irrespective of the constitutional situation, policy makers will have to think radically to enact fundamental policy and societal change to achieve this goal.

1. Introduction

During the last referendum on Scottish independence in 2014 nearly all the economic debate regarding the viability of independence hinged on static discussions around the impact this would have on the macroeconomic environment, especially the impact on public sector expenditure and the currency (Armstrong and Ebell, 2014; Bell, 2014). The result was a narrow focus on calculable financial outcomes predicated on the continuation of institutions and unchanging behaviour, and the question of currency arrangements that assumes the status quo is *de facto* the optimal outcome (Dow et al, 2014)¹. Disappointingly, albeit predictably, the current debate around the possibility of another independence referendum seems to be heading in a similar direction (see Huang et al, 2020; Roy and Eiser, 2021; Institute for Government, 2021). This situation is often compounded by the somewhat crude and negative reporting in the mainstream media towards independence². Whilst clearly the macroeconomic impact is of importance, this narrow focus fails to examine how independence could potentially enable the Scottish economy to embark on a different economic trajectory in the longer term via recalibrated and innovative policy frameworks to stimulate enterprise.

This debate article is primarily designed to stimulate discussion in the aftermath of the May 2021 Scottish Parliament elections around the viability of Scottish independence. There is an urgent need to commence a national conversation on the direction Scotland should take to help improve the economic conditions and life opportunities for the people of the country going forward into the 21st Century. This has been strongly magnified by the tremendous economic damage being done to the economy and small business sector instigated by the Covid-19 crisis (Brown, 2020a), a problem magnified by the negative impact of Brexit-related uncertainty in SMEs (Brown et al, 2020a).

Recent contributions such as the Hunter Centre-commissioned report by consultants provide a useful starting point by illustrating some of the entrenched economic problems facing the Scottish economy, especially its well known, endemically low productivity (Oxford Economics, 2021). However, these findings come as little surprise and are common knowledge or “stylised facts” which scholars have acknowledged for decades while producing little in the way of a coherent response from a policy perspective. Plus, their calls for tax cuts, deregulation and more expenditure on transport infrastructure seem deeply unimaginative and woefully inadequate policy solutions given the scale of the problem (Oxford Economics, 2021). Indeed, by and large the consultants fail to provide a proper roadmap of the types of policy innovations which could enable radical changes to our economic situation, especially in terms of addressing the chronic “low productivity, low innovation equilibrium” in Scotland (Brown, 2020b, p.15). Nor do they address the “entrepreneurship deficit” in Scotland.

Despite the central role of “entrepreneurship” in determining economic growth, Scotland historically has had an uneasy relationship with the word. The famous Scottish political economist Adam Smith himself originally downplayed the role of the

¹ This is all the more concerning given a lot of economic forecasting and financial projections are often determined by the underlying assumptions underpinning most economic models (Kaldor, 1957).

² [The push for independence is turning off Scots business | Financial Times \(ft.com\)](https://www.ft.com/content/2021/05/20/scots-business-independence)

entrepreneur in furthering economic growth despite them being central in guiding the so-called “invisible hand” (Brown and Thornton, 2013). However, a cursory glance into the expansive literature on the nature and causes of the wealth of nations demonstrates that entrepreneurial activity plays a pivotal role in shaping the economic success of countries (Audretsch et al, 2006). Indeed, there is now a growing literature attesting to a strong positive causal link between the levels of economic development and the strength and buoyancy of privately- owned business sector (van Stel et al, 2005; Baumol and Strom, 2007). A central driver of new entrepreneurial activity comes in the form of new venture formation by *de novo* start-ups but also the number and dynamism of high-growth firms, often referred to as scale-ups (Mason and Brown, 2013; Brown et al, 2017). Crucially, research also reveals that institutions are strongly linked to entrepreneurship, which opens further questions about what institutional factors are most conducive to entrepreneurship, which in turn spurs economic growth (Bosma et al, 2018; Urbano et al, 2019).

Over the last 20 years or so, Israel has become a major centre for entrepreneurial activity and has famously been labelled the “start-up nation” (Senor and Singer, 2011). As such it is instructive to assess countries such as Israel to illustrate the salience of entrepreneurship and economic dynamism, especially as it had a very anti-entrepreneurial culture until the 1990s. Such has been success of the country’s high-tech entrepreneurial ecosystem, it now boasts the highest rate of start-ups in the world and attracts 2.5 times the volume of venture capital (VC) per capita than the US (Senor and Singer, 2011). Since 1972, over 160 Israeli ventures have been listed on NASDAQ, more than any other country outside of the U.S. and Canada, and hundreds of tech ventures have been acquired³. A large body of work reveals that strategically targeted public policies have played a central determining factor in shaping the massive growth and success of the high-tech sector in Israel (Wonglimpiyarat, 2016).

It would be patently invidious to attempt directly replicating the policies deployed in one spatial context to another. Indeed, “health warnings” around such policy isomorphism seem particularly important given the varied and socially embedded nature of different local economies (Brown and Mawson, 2019). However, there are undoubtedly salient lessons to be learnt from this type of concerted governmental intervention to help improve the entrepreneurial dynamism of Scotland. Indeed, the manner in which Israel has become such an entrepreneurial hotbed reveals that the trajectory of a country’s economy is not purely some kind of path-dependent process but something that can be altered with strategic and sophisticated governmental intervention (Isenberg, 2010).

Closer to home the example of Ireland is also instructive. Having been independent from the UK for over a century Ireland provides a useful benchmark for Scotland. Despite having a much weaker economy than the rest of the UK and having a large reliance on the agricultural sector up until the 1960s and 1970s, Ireland now has a GDP per capita far in excess of the UK’s. This primarily owes to the country’s ability to implement its own policy mix to enhance economic development. According to

³ <https://www.forbes.com/sites/danisenberg/2011/02/11/start-up-notions-where-israeli-entrepreneurship-really-came-from/?sh=4feaa497557a>

economic historians, Ireland's ability to implement strategic policy initiatives, such as very low corporation tax coupled with a strategic policy of attracting foreign direct investment, enabled the country to embark on a different economic trajectory than it would have been able to do had it remained a mere region of the UK (O'Rourke, 2017). Central to Ireland's huge economic success especially since joining the EU in 1973 has been the tripartite coalition between industry, government and trade unions which has created a consensual and pro-business environment.

Ireland is also heavily invested in promoting entrepreneurship. Indeed, the lack of debate about the role of entrepreneurship and small business in Scotland contrasts starkly with the situation in Ireland which has just published a national SME and Entrepreneurship Growth Plan (DETE, 2021). Similarly, Finland has just launched an inclusive entrepreneurship strategy and is investigating restructuring its social security system to reduce disincentives to self-employment (OECD, 2020). This would include simplifying and clarifying the benefits system to reduce uncertainty for people changing regimes as well as identifying and bridging "incentive gaps" hindering employment. Finland's new entrepreneurship strategy is also targeting under-represented groups (i.e. youth, women, older people, the unemployed, people with disabilities and immigrants) to increase entrepreneurial opportunities (OECD, 2020). The recent Rose Review of female entrepreneurship in the UK notes that Canada and the Netherlands have dramatically reduced their entrepreneurial gender gap – the proportion of women running businesses compared to men – by about one-third over the past 10 years. By contrast the gender entrepreneurship gap in the UK has increased since 2013. If women in the UK started businesses at the same rate as women in the Netherlands, relative to men, the number of female-owned enterprises would almost double, with a dramatic effect on UK economic growth.

There is a well-established political science literature showing how other small European countries have been able to respond nimbly and flexibly to changing economic market conditions, in ways larger countries have found much more problematic (Katzenstein, 1985). There also seems suggestive evidence that smaller countries are more adept and nimble at responding to economic changes (Streeten, 1993; Kónya, 2018). From the Nordic countries to Singapore and New Zealand, small economies frequently top international rankings on a wide range of social outcome measures (Skilling, 2018). Given this backdrop, the primary aim of the paper is therefore to move the sterile debate on Scottish independence away from a static "numbers game" largely conducted by economists to a more rounded and enlightened view on how we can potentially re-shape the country's economic future in the event of more economic decision-making powers being transferred to Scotland. This paper therefore aims to demonstrate the ways in which Scotland could become a much more entrepreneurial and ambitious nation if it were to choose independence over the current constitutional status quo.

The remainder of this paper is structured as follows. First, it will examine and critique Scotland's entrepreneurial performance and context. Second, it will explore four key policy levers which could help re-shape the economy by focusing on and prioritising entrepreneurship within Scotland, namely innovation, people, access to finance and international trade. Third, the paper concludes with some reflections on how these

types of innovative policies could be embedded within the Scottish political system to create a bold and ambitious “start-up nation”.

2. A Critique of Scotland’s Entrepreneurial Ecosystem

Before assessing some potential solutions to help transform Scotland into a more entrepreneurial and ambitious nation, we now wish to turn our attention to some of the endemic problems confronting the Scottish economy which need to be tackled by future politicians and policy makers. Given the central importance of entrepreneurial dynamism for increasing economic growth it will be vital for a newly-independent country to try to become more focused on wealth creation, especially as independence is likely to result in quite stringent restrictions on public expenditure during the formative years as an independent country (Bell, 2014; Roy and Eiser, 2021).

In recent years, entrepreneurship scholars have intensively investigated the concept of entrepreneurial ecosystems (henceforth EEs) as a lens for understanding entrepreneurship. Given the centrality of place-specific factors in shaping and mediating entrepreneurship in different spatial contexts (Brown and Mason, 2017; Roundy et al, 2018), EEs are not only a hot academic topic but also key policy focus in enterprise and regional policies (Brown and Mawson, 2019; Wurth et al, 2021)⁴. In essence, EEs are viewed as the systemic constellation of “interconnected organizations, institutions, actors and actions” facilitating entrepreneurial activity within a localised spatial context (Haarhaus et al, 2020, p.1). As a consequence of powerful centripetal forces, “entrepreneurs are drawn to and inextricably bound together with other core entrepreneurial actors in close geographic, institutional and relational proximity” (Brown and Mason, 2017, p.11). Indeed, a dense myriad of external connections and social capital is considered to be crucial for start-up firms seeking to rapidly grow (Noelia and Rosalia, 2020).

In other words, the process of entrepreneurship is not merely a result of the individual actions of actors such as entrepreneurs. Moreover, the construction of successful entrepreneurial regions is not simply a function of individual or firm-specific attributes but is mediated by the wider context within which ventures operate (Mason and Brown, 2014). As one of the pioneering scholars of EEs states, “innovative businesses can’t evolve in a vacuum” (Moore, 1993 p. 75). Emphasising the relational and institutional foundations (and synergies) of economic success within localised contexts suggests that the dynamic interactions between actors produces more than the “sum of their parts” (Brown and Mason, 2017, p. 13). The crucial aspect of ecosystems are the actors, processes and institutions which are not indirectly related to the entrepreneurial process, including *inter alia*: culture, human and social capital, networks, universities, public sector support bodies, educational systems, banks, investors and stock markets (Isenberg, 2010; Mason and Brown, 2014). The roles played by each of these actors and processes is pivotal in configuring the nature of a local entrepreneurial context but tend to be overlooked by policy makers. However, one of the earliest pioneers of the concept

⁴ Indeed, it was the OECD who originally espoused the concept of EEs as a key method for promoting local economic development (see Mason and Brown, 2014).

states emphatically it takes an entire entrepreneurial ecosystem to “foment an entrepreneurial revolution” as shown by places such as Israel over recent times (Isenberg, 2010, p.45).

We shall now examine the nature of Scotland’s EE to ascertain the types of systemic problems which policy makers will need to help resolve in the future⁵. A crucial ingredient underpinning entrepreneurship is the cultural environment within a specific context and the degree to which it is conducive towards entrepreneurial behaviours. Dating back to research conducted by the Business Birth Rate strategy undertaken by Scottish Enterprise thirty years ago, it has been well recognised that the culture towards entrepreneurship in Scotland is poor (Brown and Mason, 2012). Owing to the country’s weak levels of entrepreneurship (van Stel et al, 2005; Ross et al, 2015) the country lacks sufficient role models which are vital for stimulating entrepreneurial activity across the population. This also manifests itself in the fact that the willingness to commence a new business venture is below the UK average and has remained so for over 30 years (Brown and Mason, 2012)⁶. The total early-stage Entrepreneurial Activity (or TEA) is 7.2% in Scotland, significantly below the level in England (i.e. 10.5%) (Hart et al, 2020). Indeed, the propensity to form a new venture by Scots seems to have been particularly adversely impacted by the 2008 global financial crisis (GFC) (Hart et al, 2020). This then translates into fewer firms per capita in Scotland. In 2019 (pre-pandemic), Scotland had around 900 business per 10,000 adults compared to a UK average of 1,100 (Oxford Economics, 2021). In sum, the country’s population has a below-average desire and propensity to engage in new venture formation which undoubtedly contributes to the entrepreneurial deficit facing the country.

While culture is vital for shaping different EEs, so is the nature of a country’s educational system. While Scotland has a strong primary and secondary education system most of the brightest school leavers often opt to study medicine, dentistry, law and accounting. These subjects tend not to result in careers conducive to new venture formation. By contrast there is much less interest among the most able school leavers in entering so-called science, technology, engineering and mathematics (STEM) subjects. Scottish females are particularly underrepresented in STEM fields of study which has further negative consequences for later labour market outcomes (the gender wage gap being the most prominent) and for broader society, considering that science, technology, and engineering are regarded as key drivers of future economic growth (Jacob et al, 2020).

There is also a stark dichotomy in terms of the innovative performance of Scotland’s higher educational system. Despite having less than 9% of the UK’s population, in 2010/11 Scottish universities attracted almost 14% of total UK external research grants (Brown, 2016). Indeed, Scotland has one of the highest levels of higher education R&D (HERD) expressed as a percentage of GDP in the entire OECD. In contrast, Scotland performs extremely poorly in terms of business expenditure on R&D (BERD). With just 3.9% of the UK total, it ranks in the bottom quartile of the OECD (Brown, 2016). Indeed, compared to many small European economies Scotland seriously

⁵⁵ Typically, urban locations and city regions are the main focus of research on EEs but in this paper we examine Scotland in its entirety. We do acknowledge however that different parts of the country are highly varied on a number of counts.

⁶ In this respect, Scotland is broadly similar to Wales and Northern Ireland (Hart et al, 2020).

underperforms in terms of BERD (Skilling, 2018). Given this somewhat unique dichotomous situation, the so-called “Scottish conundrum”, it seems little wonder policy makers look to universities as a source of economic salvation.

To this end, Scottish universities have developed one of the most comprehensive supportive frameworks to help commercialise research from the higher education sector via university spin-offs (USOs) and technology-transfer initiatives. Consequently, Scottish universities regularly out-perform their UK counterparts on the levels of USOs generated, producing almost 20% of all UK USOs over the last decade (Brown, 2016). However, the overwhelming majority of evidence suggests that Scottish USOs tend to “start and remain small” (Harrison and Leitch, 2010, p. 1256). Indeed, despite the significant level of public resources dedicated towards this goal there have been very few entrepreneurial “blockbusters” emanating from Scotland’s universities. Since the 1980s, Scotland has produced one major success story of note, Wolfson Microelectronics. Owing to their inability to grow and upscale, these businesses are often acquired by larger corporate entities. Ironically, Wolfson itself was acquired by the US firm Cirrus Logic in 2014. In short, Scottish universities seem incapable of compensating for Scotland’s weak culture of entrepreneurship and propensity to establish *de novo* ventures.

Finally, another critical component of Scotland’s EE is the financial landscape facing entrepreneurs in terms of the sources and availability of finance for both new start-ups and existing SMEs. The vast majority of SMEs rely on traditional bank finance to finance their day-to-day operations and to fund expansion activities such as new capital investment (Brown and Lee, 2019). However, there are a number of systemic features of the credit market facing Scottish SMEs which mean that obtaining access to finance can be extremely problematic. This is especially important for innovative and growth-oriented SMEs as they often face much more acute funding constraints (Lee and Brown, 2017; Brown and Lee, 2019). There are numerous reasons accounting for this situation such as a lack of competition within the main UK banks for SME lending. In the UK, the big four banks in the UK (Barclays, HSBC, Lloyds and RBS) account for almost 80% of SME lending. This situation is even worse in Scotland because just two banks dominate, namely RBS and Lloyds (owner of Bank of Scotland), effectively produce an oligopoly by dominating the lending market. According to the Scottish Government, together they account for 65% of all SME lending in Scotland⁷. For this reason, SMEs in Scotland are more likely to face credit constraints and high levels of “borrower discouragement” than other less peripherally located SMEs and this is most prevalent in innovative Scottish SMEs (Lee and Brown, 2017)⁸.

Access to other forms of entrepreneurial finance in Scotland are equally problematic. Innovative high-growth start-ups are often unable to obtain bank finance, so they instead seek entrepreneurial sources of finance such as venture capital (VC), business angel funding and equity crowdfunding (Hall and Lerner, 2010). However, Scotland along with the majority of other northern locations suffers from weak levels of

⁷ <https://www.gov.scot/publications/sme-access-finance-survey-2019/pages/6/>

⁸ Borrower discouragement is the technical term used for SMEs who abstain from applying for bank finance for fear of rejection.

entrepreneurial finance. We can see from Table 1 below that there is marked spatial unevenness in the distribution of these equity investments within the UK. The most notable aspect of this geographical picture is the overwhelming dominance of London as an investment location, which alone attracts two-thirds of all UK equity investments by value (see Table 1 below). Despite having only 19% of the SME business population, London dominates its investment scene due to the vast and sophisticated start-up ecosystem located in the UK capital. Within London's EE there is a dense network of VCs, business angels and crowdfunding platforms. By contrast, the North-East, North-West, Wales, Scotland and Northern Ireland all have less than 5% of all UK deals by investment share. In terms of number of deals, Scotland appears as a slight outlier but these deals are largely concentrated in small seed-stage investments. This skewed spatial distribution is a long-standing and enduring feature of the geographical composition of this type of entrepreneurial finance in the UK (Martin et al, 2005).

Table 1: Equity Deals and Business Population by Region

REGION	UK DEAL SHARE (2019)	UK INVESTMENT SHARE (2019)	UK SME SHARE (2019) ⁹
LONDON	48%	66%	19%
SOUTH EAST	9%	9%	16%
SOUTH WEST	5%	2%	10%
EAST OF ENGLAND	2%	1%	6%
MIDLANDS	6%	2%	8%
YORKSHIRE & HUMBERSIDE	3%	11%	10%
NORTH EAST	3%	1%	3%
NORTH WEST	6%	4%	10%
NORTHERN IRELAND	1%	<1%	2%
WALES	4%	1%	4%
SCOTLAND	12%	3%	6%
UK (EXCLUDING LONDON)	52%	34%	81%
UK (TOTAL)	100%	100%	100%

Source: Adapted from British Business Bank (2020)

⁹ [Business population estimates 2019 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/business-population-estimates-2019)

The overwhelming concentration of this form of entrepreneurial finance is found in Edinburgh and Glasgow. Despite their apparent similarities, the two Scottish cities have quite different levels of equity investor diversity. Table 2 below reveals all the equity investments made by investors in both Edinburgh and Glasgow over the three years between 2018-2020. As we can see in terms of overall equity deal volumes, Edinburgh has a much greater number of deals than Glasgow. During the time period there were roughly four times as many equity deals in Edinburgh compared to Glasgow. This difference is even more remarkable when examining the value of deals, with Edinburgh obtaining roughly five times the amount of investment compared to Glasgow.

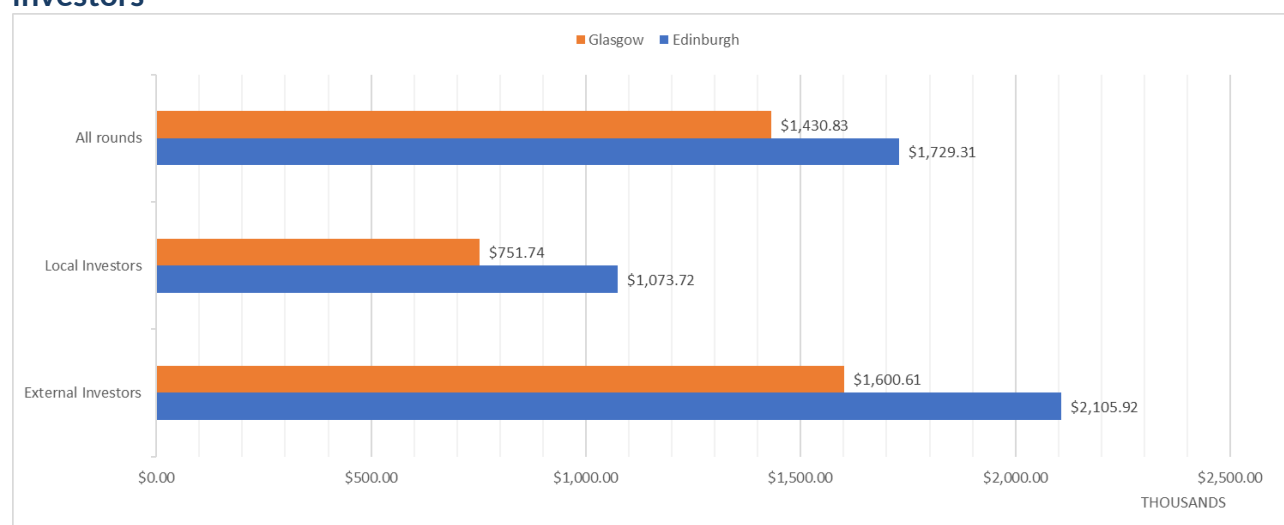
Table 2 - Funding rounds, money raised and lead investor HQ location for Edinburgh and Glasgow (2018-2020)

	EDINBURGH		GLASGOW	
	(# transactions)	Money raised (USD)	(# transactions)	Money raised (USD)
ASIA	5	\$34,491,445.00		
CHINA	2	\$14,822,453.00		
KUWAIT	1	\$1,668,992.00		
SINGAPORE	1	\$18,000,000.00		
UAE	1	-		
AUSTRALIA	1	\$387,284.00		
AUSTRALIA	1	\$387,284.00		
EUROPE	131	\$164,868,336.00	33	\$46,105,236.00
BELGIUM			1	\$61,678.00
CZECH REP.	1	\$1,835,100.00		
ESTONIA	1	\$24,831.00	1	\$493,420.00
FRANCE	1	-		
GERMANY	4	\$3,553,805.00		
GUERNSEY			1	\$319,875.00
LUXEMBOURG	1	-		
SPAIN	2	-		
SWEDEN	1	\$112,315.00		
UK	120	\$159,342,285.00	30	\$45,230,263.00
NORTH AMERICA	11	\$56,190,704.00	7	\$11,128,109.00
USA	11	\$56,190,704.00	7	\$11,128,109.00
GRAND TOTAL	148	\$255,937,769.00	40	\$57,233,345.00

We can see from Table 2 that there are also quite stark differences in terms of the degree of overseas investors between the two cities. On this metric, Edinburgh had three times the volume of overseas equity investors during the period between 2018-2020. We can see from Table 2 that the proportion of investors who are non-UK is relatively small in both Edinburgh (28) and Glasgow (10). In other words, overseas investors are only involved in around 15-20% of investment deals in both these EEs.

This is important because as noted previously, local equity investors in Scotland tend to be concentrated in the small seed-stage market which typically involves smaller-scale levels of funding. Indeed, as Figure 1 vividly illustrates, purely local investors in both cities have much lower average investment levels compared to overseas investors. This is true for both Edinburgh and Glasgow. As shown in Figure 1, non-local investors in Edinburgh have an average investment level roughly double the size of purely local equity investors.

Figure 1 - Average investment per round, including averages for local and external investors



3. Transforming Scotland into a Start-Up Nation

Before elucidating some of the micro-level policies that could potentially be enacted by an independent Scotland, first we wish to outline the transformation that would be required to place entrepreneurship at the centre of governmental policy. It is fair to say that the Scottish Government under the leadership of the ruling Scottish National Party over the last decade or more has been fairly ambivalent about the plight of Scottish entrepreneurs and SMEs in general (Brown, 2020b). This rings true for all of Scotland's main political parties. This negligence was reflected in the recent Higgins Report in response to the Covid-19 pandemic produced by the Scottish Government, which mentioned the term SME once (Scottish Government, 2020a). However, there does seem some tentative evidence to suggest that attitudes of current Ministers are moving towards a more pro-entrepreneurial and pro-small-business stance within the Scottish Government, as signified by the recent Logan Report examining the country's high-tech ecosystem, commissioned by the Cabinet Secretary for Finance, Kate Forbes, MSP (Scottish Government, 2020b).

Moving forward, this indifference is going to have to change radically if Scotland is to emulate countries like Israel and become an entrepreneurial and ambitious nation. This

will require concerted political action but will also require a clarion call to ensure that the rest of society is made aware of the importance of this re-orientation towards making the country a more entrepreneurial and successful nation. To help make this transformation possible Scotland will arguably have to embark on a new focus and ethos in public policy; adopt a new cultural outlook across society; and finally construct new institutions to help reinforce these new entrepreneurial behaviours and cognitive mindsets.

Beginning with the first of these, embedding a new focus within public policy around the centrality of entrepreneurship and private-sector wealth creation is critical in order to make this transition. In order to ensure the twin objectives of new venture formation and business growth are embedded within an independent Scotland, the country will need to embrace the huge societal significance of entrepreneurship and SMEs. Plus, entrepreneurship is not purely about starting a new firm but encapsulates a creative “can-do” mindset in a person’s DNA to tackle the challenges in adopting an entrepreneurial approach. Entrepreneurship in existing organizations has gained relevance in research as well as in practice. These behaviours are often linked to the concept of “intrapreneurship”, which denotes the crucial role of entrepreneurial employees with regards to enabling innovation and competitive advantage (Blanka, 2019). Research shows that the source of many successful high-growth firms comes from entrepreneurial employees leaving existing firms to begin their new ventures (Mason and Brown, 2013). Indeed, a good example of this is the rapidly growing and hugely successful telecommunications firm Calnex Solutions, led by the entrepreneur Tommy Cook, which was the last Scottish firm to undertake an Initial Public Offering (IPO)¹⁰.

To generate more of these entrepreneurial success stories, another important step is for the Scottish Government to create a dedicated Minister for Enterprise, with sole ministerial responsibility for fostering start-ups, SME growth and promoting scale-ups. To underline the centrality of entrepreneurship, a future independent Scotland should scrap the Council of Economic Advisors. Academic economists who sit on the Council of Economic Advisors simply don’t understand how businesses function and operate, especially the crucial and complex issues confronting start-ups and SMEs. This should be replaced with a “National Entrepreneurship Council” composed primarily of successful entrepreneurs¹¹, investors, financial institutions, key business angels, and entrepreneurship policy experts etc. This body can hold the Scottish Government to account to ensure it is proactively pursuing an entrepreneurial agenda within all its policy realms and have independent responsibility to instruct analysis on key issues pertinent to growing the private sector. Consideration should also be given to a policy initiative in Ireland called the ‘Think Small First’ Principle, which requires SMEs’ interests to be taken into account at a very early stage of policy making (DETE, 2021).

To ensure that entrepreneurship is a core rather than a marginal focus of the Government’s activities, a future independent Scottish Government should use its

¹⁰ [Linlithgow telecoms firm Calnex Solutions to float on stock market - BBC News](#)

¹¹ This should include entrepreneurs’ operating in other EEs given their exposure to the entrepreneurial process in other more dynamic environments.

sizeable public procurement budget as a strategic tool to foster the SME sector. The Scottish Government is a vast purchaser of goods and services across the Scottish economy. Through expenditure on vital public sector services like schools, hospitals, prisons, local authorities and public sector infrastructure, the government has the ability to have a huge impact in terms of its procurement budget. However, often it is large remotely-owned firms who benefit the most from these public sector contracts owing to the fact smaller firms have less ability to compete on cost with big firms or lack access to the tendering process of these public sector bodies.

Take catering, for example. All public bodies spend a vast sum on catering but most contracts are fulfilled by large UK or multinational firms. Giving SMEs greater access to these public sector contracts could provide a vital lifeline for smaller food, drink and hospitality firms. Therefore, a future independent Scottish Government should commission work to see how these tendering procedures could be better accessed (and signposted) for Scottish SMEs, perhaps giving incentives to local authorities to commit more expenditure to buying locally from SMEs. Plus, it could also look to replicate a highly successful US initiative, the Small Business Innovation Research (SBIR) programme, designed to assist innovative start-ups. Created through the Small Business Innovation Development Act of 1982, the federal legislation currently requires federal agencies with annual R&D budgets to set aside a proportion of their funds to provide financial resources for small businesses engaged in early-stage R&D activity (Lanahan and Feldman, 2015). This has been shown to be a crucial way of using public procurement to help develop research-intensive start-ups and SMEs (Keller and Block, 2013).

To change the cultural attitudes towards entrepreneurship and help Scotland becoming a more entrepreneurial and ambitious nation, significant changes will need to be made. Indeed, probably the trickiest “nut to crack” to reach this goal is to bring the country on board and persuade it to adopt a much more positive and receptive cultural outlook towards entrepreneurs themselves and their overall societal importance. This will require a concerted effort to effect change and will probably take place over the medium to long term.

Integral to this is education. Going forward the Scottish Government should undertake a radical overhaul of the educational curriculum to help promote a more entrepreneurial mindset in future schoolchildren. For over two decades there have been numerous and disparate programmes run to embed enterprise education in various educational institutions. Most of this activity has occurred in Higher Education institutions, but in recent times this has included primary and secondary schools. This growth has been based on the implicit premise that entrepreneurship education can contribute to the development of students’ entrepreneurial attitudes, self-efficacy, abilities, and skills, and hence enhance their intentions to launch new ventures. Indeed, scholars have offered valuable insights into how entrepreneurship education can make a difference (Fayolle, 2018).

However, it is fair to say the evidence on the efficacy of enterprise and education initiatives is mixed (Byrne et al, 2014). In order to help increase the usefulness of these activities the Scottish Government should provide a more systematic and experiential

framework to help expose Scottish schoolchildren to entrepreneurs and small businesses. This could be done by getting close to the real-life world of entrepreneurs, by observing them, regularly meeting them and discussing key issues confronting them. Given that “role models” are increasingly seen as important for determining career choice and outcomes, educational institutes around the globe often involve ‘icon’ entrepreneurs in their educational programmes to motivate, inspire and support entrepreneurship among pupils and students. Research shows that almost half of new entrepreneurs have a role model both pre- and post-start-up, with the majority drawing on the same role model in these two different stages (Bosma et al, 2012). In order to enact this kind of entrepreneurial learning and role modelling, each secondary pupil should undertake short-term placements within the local small business community for at least a week. During the placements the pupils could undertake a mini research project to help examine how the firm could grow (e.g. new product development, expansion strategy, diversification plan, export development etc).

Given the increasing digitalisation of so many parts of the economy, in the future there is also going to be an increased demand for students who have been trained in STEM subjects. Designing future educational curriculums for Scottish schools will be vital to help promote these technically trained children for the future workforce. Importantly, these subjects tend to be more amenable to business-related careers where the opportunity and propensity to begin a new venture becomes more likely. The aforementioned report on the Scottish high-tech ecosystem strongly advocated a greater focus on computer science within secondary education (Scottish Government, 2020). We strongly re-iterate the suggestion that in future computing science becomes a mandatory subject like maths, English or physics at secondary school level and in further education colleges. We acknowledge that these changes to how schoolchildren are educated are very bold and significant but if we are serious about addressing Scotland’s future in the global technology arena these are the kind of radical changes needed to equip the future generation of workers and entrepreneurs.

And finally, to help embed the objectives above, Scotland will need a new set of support organisations and institutions to allow this to take effect. It is commonly accepted that most entrepreneurship policy support is “bad public policy” and merely randomly tries to increase the number of new start-ups, irrespective of their quality and durability (Shane, 2009). This has been confirmed by a raft of studies on the efficacy of different start-up programmes across the world (Lerner, 2009). One factor behind this is that many entrepreneurship programmes and business development agencies are designed to offer expensive transactional support in the form of grants, loans, subsidies. However, the most recent research shows that just increasing the volume of new entrants via funding expensive programmes does little to increase economic growth (Nightingale and Coad, 2014).

Nowadays, policy makers are increasingly focused on generating more high growth firms (HGFs), also known as scale-ups (Brown et al, 2017). These are the main engines of job-creation and economic dynamism. Owing to this changing policy landscape, the Scottish Government should consider a radical overhaul of its existing enterprise agencies, especially Scottish Enterprise (SE) and Highlands and Islands Enterprise (HIE). Traditionally, these agencies specialise in administering expensive transactional

support packages which have little material benefit for start-ups and rapidly growing SMEs. Plus, the staff have little private-sector or practical experience of either starting or growing a business. Having been established 30 years ago there seems merit in scrapping SE and HIE and instead implementing a different set of institutions which can offer and facilitate the newer types of support most conducive to supporting high-growth ventures. The inward investment attraction and export development agency should be retained, but given a much stronger remit to promote the export potential of Scottish SMEs.

Importantly, the types of support most appropriate for scale-ups are not transactional support such as grants, rather what these firms view as important is relational support such as mentoring, advice, peer networking and customer engagement (Brown et al, 2017). So going forward a future Scottish Government should consider establishing much more nimble, less resource-intensive types of organisations which help connect entrepreneurs with their peers, investors and potential customers. People are the main drivers of high-growth ventures. Therefore, policy-makers must focus business support on the growth and development of people within the process (e.g. founders, senior managers and employees). Plus, it is important to keep in mind that that people come to entrepreneurship with different levels of skills and therefore each entrepreneur requires a different 'game plan' for developing his or her skills (Lichtenstein and Lyons, 2001). Therefore, what is needed is greater access to entrepreneurial schooling, which is evidenced as being highly effective in increasing growth ambitions and activities (Brown et al, 2018; Gonzalez-Urbe and Leatherbee, 2018).

One innovative suggestion would be to partner with major private-sector start-up accelerators as a means of obtaining a greater private-sector focus on growing new start-ups. That way the Government leverages the invaluable types of knowledge and expertise these private sector accelerators have to help grow and nurture start-ups. In recent years accelerators have become key engines of driving the growth of some of the world's most famous start-ups by taking small sums of equity in exchange for advice, mentoring, introduction to investor and customer engagement (Brown et al, 2019). The Government should also encourage the best Scottish start-ups to attend the main start-up accelerator programmes located in the world's leading EEs (such as London and California) to help gain specialist advice/support and funding etc. This could potentially be a pioneering way of ensuring start-ups and growth-oriented SMEs receive the very best commercially focused advice and support. By enacting these types of organisational and policy changes it would also save valuable public expenditure and resources which could be channelled elsewhere to promote entrepreneurship.

4. Key Policy Areas

To help achieve future growth within the Scottish economy and to help build a more dynamic entrepreneurial and innovative EE, policy makers will need to embrace changes across a number of different (but deeply inter-related) policy domains. This is crucial because it is widely recognised, not least by the literature on entrepreneurial

ecosystems, that creating a dynamic entrepreneurial culture needs a more pervasive and wider-focused policy approach from governments than merely promoting entrepreneurship *per se* (Thurik et al, 2013). So in addition to the overarching changes outlined in section 3, an independent Scotland could consider changes in terms of future innovation policy, human capital, access to finance and business internationalisation. Together, these types of changes could make a significant impact in enabling Scotland to undertake a “quantum leap” towards becoming a major entrepreneurial hotspot.

4.1 Innovation Policy Focus

Previously we outlined the huge contrast and disconnect between the very strong innovation performance of the higher education sector coupled with the woeful levels of innovation in the business sector. As a consequence, most of the major policy efforts expended in recent years have attempted to bolster the strong innovative performance of the HE sector via USOs and various (mostly unsuccessful) expensive technology-transfer schemes. Rather than helping bridge this chasm, this has resulted in the continued bifurcation between the highly innovative HE sector and the underperforming corporate sector, which is best exemplified by the sustained and continued innovation underperformance of Scottish SMEs in terms of their very poor innovation and productivity track record (Harris and Moffat 2017; Brown, 2020b).

Productivity is generally recognised as the most important driver of long-run economic growth across the UK and increasing it will be crucial in improving Scotland’s economic position (McCann et al, 2020). Given the indivisibility between productivity and innovation, a key factor in helping address the country’s weak levels of productivity will be improving the innovative capacity of the SME sector in Scotland. Referring to Research and Development (R&D) Andy Haldane (2018, p.7) claims places like Scotland “does R well, as a world-leading innovation hub. But it does D poorly, where the D refers not just to development but the diffusion and dissemination of innovation to the long, lengthening, languishing lower tail’. In other words, the country’s productivity gap is largely a ‘diffusion’ rather than an ‘innovation’ problem. Importantly, innovation policy needs to be fundamentally re-calibrated away from USOs, and universities as a whole, towards a much stronger focus on addressing the “long tail” of low productivity growth in Scotland (see Brown, 2021b)¹². Indeed, research shows that the economic returns from university-focused initiatives are one of the lowest in terms of different innovation policies (Bloom et al, 2019).

Going forward Scottish innovation policy should be fundamentally re-calibrated towards becoming much more focused on improving the innovation performance in these poorly-performing SMEs. There seems strong suggestive evidence that a “diffusion orientation” within public policy may be better matched to the needs of the Scottish economy, especially given the need to rectify the chronically low levels of business innovation and associated productivity outcomes in Scotland outlined earlier (Brown, 2020b). Under this model, the types of firms which could be targeted for support are more conventional SMEs (not R&D-intensive high-tech start-ups) with unmet innovation requirements across a range of different manufacturing and service

¹² In Scotland, this long tail of SMEs is particularly stark with total factor productivity (TFP) 16% below the rest of the UK (Harris and Moffat, 2017).

sectors, which often constitute the majority of SMEs. Many firms targeted under this diffusion approach will be focused on more prosaic types of process innovation rather than purely product innovators.

In terms of practical steps towards this end, some scholars have noted that oftentimes what is needed is less lumpy, expensive, transactional innovation support (such as that offered by Scottish Enterprise) and instead more market-oriented relational assistance such as advice, support and networking (Brown, 2020a). Some innovation policy scholars point out the unique role that is played by the GTS Institutes in Denmark in aiding innovation and productivity enhancement (Breznitz et al, 2018). This type of customer-focused and industry-led agency is more suited to the needs of SMEs. Instead of viewing the GTS as public agencies, it is better to view them as commercial entities, selling services to individual firms, who define relevant needs and appropriate technologies. The GTS Institutes' close proximity to the private sector and the need to sell services on a commercial basis discourages them from conducting risky, long-term research, or getting involved in the creation of start-ups in new industrial sectors. The institutes are thus heavily embedded within Danish industry, particularly among established firms, which enhances the opportunities for dissemination of new innovative practice across SMEs. A future Scottish Government should consider a similar model to replace the innovation activities funded through Scottish Enterprise.

Relatedly, another market-oriented novel suggestion could see innovation support attach 'competitiveness clauses' (similar to traditional bank covenants) to any funding tranches, which are conditional on productivity improvements within funded businesses. Given innovation is a means to an end rather than a 'goal in itself' (Freel, et al, 2019), indicators of improved productivity and increased competitiveness such as increased exporting could be used to monitor the innovative performance of recipient firms. Another way of ensuring projects are more focused towards a positive outcome for the firm is the use of matched funding. A recent World Bank study of business development initiatives aimed at SMEs reviewed virtually all matching grant projects financed by the Bank Group over the last two decades (World Bank, 2016). Overall, this modus operandi was found to be effective and about three quarters of the reviewed projects received a positive outcome rating. The principle of matched funding needs to be a core principle embedded in any future Scottish innovation policy framework.

4.2 Access to Finance Policy Focus

Earlier, a number of problematic issues concerning the financial landscape facing entrepreneurs were raised, including a lack of access to finance for innovative SMEs, low levels of bank competition, high levels of borrower discouragement in SMEs, weak pools of entrepreneurial finance (i.e. business angel and VC funding) and a lack of sizeable scale-finance VC in the £10-50m bracket. Many of these funding problems are most acute for certain entrepreneurs such as female-led and people from ethnic minorities, so designing initiatives will need to be carefully targeted towards these groups (Marlow and Patton, 2005). Below we set out some important steps towards how policy makers in an independent Scotland could potentially address these weaknesses.

A key policy objective should be to improve access to debt-based finance for firms that are innovative and growth-oriented as they are the firms who contribute

disproportionately to economic growth. A crucial first step towards this end is to improve the very low levels of competition in the Scottish SME credit market. The UK Government has made progress in this direction with the introduction of so-called new challenger banks, such as Starling and Monzo. However, the majority of the new banks have little if any presence in Scotland, Handelsbanken being one exception. To boost competition in the SME finance market a concerted effort will be required to attract more challenger banks to Scotland. For example, the Government could consider offering challenger banks such as Handelsbanken free office space in post-office branches or local public libraries across small Scottish towns, as these are the locations with the lowest levels of bank branches. This is crucial because SMEs in peripheral parts of Scotland often face the greatest problems accessing finance due to a lack of bank branches (Lee and Brown, 2017).

The Scottish Government could also consider providing a free credit-rating service for SMEs. This seems appropriate because considerable evidence suggests that increasing the availability of data on the credit worthiness of SMEs enhances the supply of credit to them (Brown and Lee, 2014). This could help reduce the high levels of borrower discouragement in Scottish SMEs. Indeed, in light of the recent declining levels of demand for bank finance in SMEs, the British Business Bank recently launched a Demand Development Unit to help smaller businesses better understand and identify suitable sources of finance (British Business Bank, 2020). Another approach would be to offer *de novo* start-ups free financial advice on different funding sources and financial products, which are often difficult to comprehend by time-constrained entrepreneurs. Access to information regarding external sources of finance for start-ups and SMEs can be helpful for enabling entrepreneurs to access the right type of financing for their ventures (Wilson, 2015). An additional benefit of such informational support is its inexpensive nature and ease of operation.

Overall, research suggests the need for a greater policy emphasis on alleviating access to bank credit borrower discouragement within innovative SMEs. Going forward, policy makers could pro-actively target these informational initiatives towards the types of innovative SMEs discussed herein. State-owned banks could potentially monitor borrower discouragement on an on-going basis in order to assess how these types of policies are performing over time. Increasing the levels of competition and transparency in the credit for SMEs is a crucial and long-term policy objective. This could be a core function of the newly established Scottish National Investment Bank (SNIB).

In terms of equity finance, there has been a concerted effort during the last 20 years to foster access to seed finance in Scotland via various co-investment schemes, many of which co-invest with local business angels. There is little concrete evidence of the success of these initiatives (Mason, 2009). While this has helped develop a community of equity funders in Scotland the funding ecosystem remains sparse, concentrated on relatively small-scale investments and low levels of diversity in terms of foreign equity investors in Scotland. Going forward a future independent Scottish Government should try and foster a much more ambitious and larger-scale equity investment environment in Scotland. This could be easily targeted at certain types of entrepreneurs who face the highest funding hurdles. Indeed, the recent Rose Review of female entrepreneurship

found that less than 1% of UK venture funding goes to all-female teams and just 4% of deals¹³.

Given the emerging evidence of a growing equity gap (circa £2–10 m) for existing businesses seeking to upscale (Wilson et al, 2018), there could be a strong argument for the new state-owned bank (SNIB) to pro-actively pursue co-investments with larger externally located VCs. While on the rare occasion domestic SMEs can raise finance further afield, most Scottish SMEs lack the ability to tap into external growth finance. The benefit of such external co-investment funding is to ensure recipient firms receive strategic advice from these equity finance investors, which is often labelled ‘smart money’. This owes to the added value VCs confer on firms through their extensive business experience, relational connections and ability to access further sources of growth finance (Kerr et al, 2014).

Such a strategy has been undertaken by countries such as Israel with considerable success via their world renowned Yozma Fund (Wonglimpiyarat 2016). Given that the Fund required involvement of reputable foreign financial institutions (generally a VC company), this triggered effective learning processes and know-how within the local Israeli start-up community whilst spawning more indigenous sources of VC (Brown and Mawson, 2019). A dedicated large-scale policy instrument similar to this type of fund could help leverage the benefits of outside VCs to combat the dearth of follow-on equity finance in the Scottish context, helping upscale innovative SMEs with additional levels of smart money. This is important because there is evidence from VC firms suggesting that firms are much better off in terms of their success with exiting and scale up when they have both domestic and international investors (Cumming et al, 2018).

The upside of this policy approach is that it could also prevent the sell-out mentality in many growth-oriented Scottish firms who frequently opt to be acquired rather than attempt to grow and upscale their business, often owing to a lack of “growth capital” (Mason and Brown, 2013). Accessing major external sources of VC funding could therefore help “anchor” growing Scottish SMEs. These investments don’t have to be restricted purely to high-tech SMEs. Indeed, Brewdog’s tremendous growth and success over the last decade shows that accessing equity finance can help the exponential growth of traditional businesses. The downside of such a fund of course is the considerable risk entailed (i.e. most investments would fail), but only with sizeable levels of growth capital injection will future unicorns such as Scotland’s Skyscanner be able to get funded to upscale and grow (Brown, 2020b)¹⁴. To undertake such a strategic and ambitious Fund, the newly formed SNIB would undoubtedly require significant levels of funding probably over and above its current anticipated expenditure to make these types of large-scale strategic co-investments.

¹³ <https://www.gov.uk/government/publications/the-alison-rose-review-of-female-entrepreneurship>

¹⁴ ‘Unicorns’ are privately-owned firms who are valued at over £1bn dollars which policy makers view as vital drivers of strong entrepreneurial ecosystems (Brown and Mason, 2017).

4.3 Human Capital Policy

A crucial aspect of the entrepreneurial process is people. A future independent Scottish Government is going to have to adopt innovative and imaginative policies to help upskill and equip the country with the human capital endowments necessary to become a more entrepreneurial and ambitious nation. Knowledge-based industry is keenly associated with diversity, entrepreneurial cultures, and talent, thus establishing a link between the attraction, and retention, of talent, creativity and innovation (Cowling and Lee, 2017).

Specifically, cultural diversity has been proven to strongly help promote and trigger entrepreneurship (Nathan and Lee, 2013; Nathan, 2015). Therefore, going forward there are going to be important changes needed to all facets of the education system. Herein I will focus on the adaptations needed primarily for the tertiary education system in Scotland.

In the past, arguably Scotland's Higher Education sector has in many ways "captured" the policy agenda in Scotland, especially in terms of funding and technology-transfer initiatives¹⁵ (Brown, 2016). In future, this needs to be re-thought. Scotland's universities should be seen as an important source of human capital development and talent attraction rather than as sources of firms/technology transfer. Scotland has enjoyed positive net migration from outside of Scotland of around 20,000 per annum over the past two decades (Scottish Government, 2020c). Around two-fifths of these flows represent migration between Scotland and rest of the UK (RUK), with most people arriving in Scotland aged between 18 to 29. Migration from RUK has two peaks: ages 18-20 (related to student migration), and those in their late 20s and early 30s. Attracting more people (especially highly trained students) should be a key priority to help augment the stock of future entrepreneurial human capital in Scotland.

Research shows that the more diverse a population the greater the levels of GDP growth within countries (Nathan and Lee, 2013; Nathan, 2015; Bove and Elia, 2017). This is crucially important as extensive work reveals that migrants have a higher propensity to start a new business than the indigenous population (Wang and Altinay, 2012). Migration may positively select both highly-skilled individuals and those with strong entrepreneurial abilities and motivation (Nathan, 2014). Some studies in the US show that migrants are twice as likely to start a new venture as the indigenous population¹⁶. Indeed, some of the biggest entrepreneurial "blockbusters" in recent years have been formed by migrants, such as Tesla (Elon Musk) and Google (Sergey Brin). Plus, data from the Global Entrepreneurship Monitor (GEM) shows that the vast majority of the 69 countries surveyed reported higher entrepreneurial activity among immigrants than among natives, especially in growth-oriented ventures. Closer to home a good example of this is the recent specialist bakery business established in Rothesay, Helmi's Patisserie. This was opened by a refugee family who fled Syria three years ago and is now expanding with another branch in Bearsden. The MSP Ross Greer said in the Scottish Parliament recently that "Helmi's is a great example of the contribution made to communities and local economies by new Scots who have arrived here as refugees"¹⁷.

¹⁵ A good example of this was the Intermediate Technology Institutes programme which proved to be a massive failure and waste of public resources (Brown et al, 2016).

¹⁶ [Why Are Immigrants More Entrepreneurial? \(hbr.org\)](https://hbr.org/2016/05/why-immigrants-more-entrepreneurial/)

¹⁷ [Syrian refugees' new Bearsden bakery praised in parliament | Milngavie Herald](https://www.milngavieherald.co.uk/news/syrian-refugees-new-bearsden-bakery-praised-in-parliament/12345678)

Therefore, capitalising on the entrepreneurial skillset of migrants is crucial to augment the pool of entrepreneurial human capital in Scotland. There have been previous policy attempts to help attract more students and migrants to Scotland. Because of the perceived demographic problems in Scotland, primarily low fertility rates compared to the rest of the UK coupled with population ageing, programmes such as the 'Fresh Talent Initiative' were inaugurated by the former First Minister, Jack McConnell (Brown and Danson, 2008). This initiative was launched in February 2003 and had three main objectives: to improve the promotion of Scotland abroad as a place to live and work; to work with the Westminster government to promote Scotland as a destination for people applying for UK work permits; and, to encourage students to stay in Scotland after graduation. As part of the Initiative a onestop Re-location Advisory Unit was established.

There seems a lot of merit in re-visiting policies such as the Fresh Talent Initiative to attract students and skilled migrants to Scotland. In Finland, they introduced a start-up permit for immigrant entrepreneurs wishing to move to the country (OECD, 2020). Initiatives such as this that attract skilled migrants who are 'complements to' rather than 'substitutes for' existing workers are more likely to avoid displacement of locals and thereby increases the likelihood that immigration will raise productivity (McCauley, 2021). A future independent Scotland could also pro-actively help retain more students from both the RUK and international students by offering guaranteed workplace visas to remain in Scotland. Furthermore, a future independent Scotland will have to foster an innovative policy-making apparatus to become more pro-active towards attracting talent and the retention of future migrants.

One way of providing a targeting strategy towards people attraction would be to focus on the so-called Scottish diaspora. It is patently hard to calculate the number of people claiming a connection or affinity to Scotland but some estimate it to be in the region of 70-100 million people (Gethins, 2021). Some strongly believe that Scotland should do much more to use the Scottish diaspora as part of its foreign policy toolkit (Gethins, 2021). Countries such as Israel and Ireland have done much to advance their interests by drawing on their diaspora connections. Indeed, the success of Israel's policies like the aforementioned Yozma Fund were closely tied to Israeli connections in the US. Obviously, spatial locations such as Canada, the US, New Zealand and Australia are obvious places to target via focused advertising. Using advanced machine learning and algorithms, the potential exists to identify people in business databases living elsewhere with a Scottish surname. Scottish policy makers could then target these people with start-up visas and other such inducements.

The second main strand of policy development to help augment human capital in Scotland concerns the further education sector, which often receives scant attention from Scottish politicians and policy makers. This is crucial as Scotland, along with the rest of the UK, suffers from a chronic low-skills equilibrium due to a lack of focus on vocational and educational training (Sissons, 2020). In contrast to the growth of students entering universities, in recent years there has been a large reduction in the number of students in the Scottish college sector (McMurray, 2019). There has also been a significant reduction in the number of students aged under 16 and 25 and over

in further education. This is related to a decision to focus on full-time courses for school leavers and to stop funding courses which lead to no recognised qualifications or last less than ten hours. As a consequence of this, many people will be prevented from retraining or upskilling as they are only able to study part-time, especially women and those with caring responsibilities (McMurray, 2019). Given the central role of vocational education and training (VET) in improving productivity and innovation performance, a future Scottish Government should consider allocating much greater funding towards transforming Scotland into a world class vocational education system like Germany.

Further education colleges also play a vital role in linking small businesses with academia. Indeed, many college students operate a system whereby they are employed and attend college a day a week for training. This cross-fertilisation of knowledge and expertise is potentially very generative for improving the innovation potential in SMEs. Despite their importance, there is a total absence of initiatives to help foster these linkages in Scotland which contrasts sharply with the numerous technology transfer schemes between industry and universities. However, many SMEs require bespoke support for basic process innovation rather than complex technology transfer from Scotland leading-edge universities (Brown, 2016). Public policy should therefore be more centred on developing links with SMEs and further educational colleges to aid the flow on knowledge into SMEs. Plus, given further education students often have practical industrial experience in a workplace setting (which contrasts sharply with more university students) they may be more amenable to enterprise education initiatives targeting people to consider new venture formation. In future, the further education sector needs to be seen as being equally important and relevant as the Scottish higher education sector in order to build up the skills and entrepreneurial capabilities of the future Scottish workforce.

4.4 International Policy Focus

A final policy area that will be integral to transform the economic trajectory of Scotland is in the area of international trade and investment. Inevitably, increasing international trade and investment would be a key policy focus for a future independent Scotland. This is crucial because Scotland already has a large “export gap” compared to the rest of the UK in terms of the export propensity and international reach of Scottish exporters (Kalafsky and Brown, 2018). A number of key EU markets and North America account for the vast majority of its exports. This has become of even greater significance owing to the problems created by Brexit for Scottish SMEs (see Brown et al, 2020a). However, enhanced political autonomy would confer Scotland with a new set of tools to help with the internationalisation of the Scottish SME business base. The key benefit from concentrating support towards SME internationalisation is that many externally focused SMEs are often the most growth-focused firms which generate substantial economic benefits for local economies and are not simply competing with other local enterprises.

Obviously, one of the major business benefits independence would confer on a future Scottish Government would be the opportunity to re-join the EU with relative ease given their close harmonisation in terms of regulations, standards and health and safety legislation. In doing so, this would make Scotland a very attractive location for UK firms

to operate within, in order to gain access to the vast European market of 450 million consumers, thereby minimising the non-tariff barriers (NTBs) they are now encumbered with due to Brexit. It is estimated that these NTBs account for as much as a 10% increase in operating costs (UNCTAD, 2012)¹⁸. Obviously, Scotland would encounter these NTBs when trading with the rest of the UK. However, it would seem a safe assumption that any increased trade with the EU when re-joining the EU would possibly mitigate and offset any decline in trade with the rest of the UK due to NTBs.

Without wishing to get into a speculative guessing game, what seems clear is that independence would offer Scotland an important opportunity to help build international trade both with the EU but further afield. As scholars have pointed out, successive Scottish Ministers have already assembled a range of strategic offices and houses across Europe and other vital markets which can aid foreign market penetration by Scottish companies (Gethins, 2021). The export and foreign direct investment (FDI) agency, Scottish Development International, alone has over 30 international offices worldwide across a range of developed and emerging markets. This provides a crucial platform for Scottish companies to enter foreign markets without incurring high international entry-mode costs. An independent Scotland would no doubt wish to build on and expand these types of nodes to help develop its ability to promote international trade and to attract FDI. For diplomatic reasons, it would also have to establish a range of overseas foreign embassies which could be further used to promote international trade and FDI. Indeed, new embassies could become vital “listening posts” for expansion opportunities and links into overseas markets for Scottish firms. Relatedly, they could also be used to attract more foreign students and entrepreneurs to re-locate to Scotland. These nodes could also act as a conduit for attracting international equity finance to help fund the expansion of rapidly-growing Scottish start-ups.

As well as trying to attract FDI, organisations such as SDI should be tasked with trying to attract entrepreneurs to Scotland. Other countries such as Chile through their Start-Up Chile programme have designed specialist accelerators to attract the best entrepreneurs from around the world to join their programmes, with a view of them remaining in the country longer-term (Gonzalez-Urbe and Leatherbee, 2018). Scotland has sectoral locational assets and strengths which make it a strong strategic location for attracting overseas start-ups in a range of different sectors which will experience strong growth in the years to come. Given the massive focus on renewable energy due to the climate crisis, Scotland should position itself as a leading entrepreneurial hub for renewable energy start-ups in the areas of wind and wave energy. In fact, Scotland is already sharing its experience and expertise on renewables with over 70 countries around the world in a kind of a “green foreign policy agenda” (Gethins, 2021, p. 81). This chimes with Alex Salmond’s view that Scotland could become as synonymous with renewables as Saudia Arabia is with oil¹⁹. Scotland already has some vital supply chain infrastructure for the development of renewable energy which could be exploited by emerging entrants to this sector. Given the demise of fossil fuels the country should

¹⁸ UNCTAD (2012) claim there are as many as 16 different types of NTBs, such as pre-shipment inspection and other formalities, sanitary and phytosanitary measures, distribution restrictions and so on.

¹⁹ [Could Scotland ever be 'the Saudi Arabia of renewables'? - BBC News](#)

invest heavily in exploiting and nurturing this sector as a source of future entrepreneurial dynamism.

Another sector which could be heavily promoted to attract international start-ups and SMEs is Fintech. This sector has witnessed very rapid growth over the last decade and Edinburgh and Glasgow have amassed the third highest concentration of all UK Fintech firms²⁰. Edinburgh in particular has established itself as a thriving hub of entrepreneurial activity for this sector and is now host to a growing high-tech scene with a very vibrant entrepreneurial ecosystem (Brown et al, 2020b). This draws upon and augments the large financial services sector based in the city. It also hosts one of the most successful UK business accelerators, Codebase. Establishing dedicated business accelerators such as Codebase in the sectors outlined above could help nurture more new start-ups and could further enhance the country's locational attractiveness to help attract entrepreneurs from further afield.

5. Conclusions

This debate article has sought to propose the types of bold and radical policy innovations which could potentially be enacted by an independent Scotland. There is an urgent need to improve the quality of the sterile economic debate around the possibilities and opportunities independence offers the country's entrepreneurial ecosystem. In this respect, we tend to concur with others that the debate around Scottish independence "is not primarily an economic one" (Dow et al, 2014, p. 612) but more a question of institutional opportunities it offers the country.

The primary aim is to kick off a more nuanced conversation as to the types of new and radical policy innovations which could help make Scotland a more entrepreneurial and ambitious nation. Embedding entrepreneurship into the DNA of the Scottish people is a long-term objective. Making Scotland more entrepreneurial and successful is a temporal process requiring sustained and concerted government action. Indeed, the antecedents of Israel's current entrepreneurial success arguably date as far back as the 1950s/1960s²¹. Plus, we do not profess to having all the answers to unleash more entrepreneurial activity. However, we do believe that making some of the changes discussed herein could help the country embark on a more fruitful economic trajectory than it has taken previously.

Importantly, not all the policy suggestions in this paper require the powers independence confers on Scotland, but key aspects such as control over immigration will be crucial to it becoming a more outward-looking and ambitious nation. Turning Scotland into the next successful "start-up nation" will require huge amounts of political will and buy-in from the Scottish population. Implementing these kind of changes will require a major, concerted effort, but many of the suggestions provided are potentially less resource-intensive and costly than the policies currently enacted in Scotland. By

²⁰ [Kalifa Review of UK Fintech \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/86444/kalifa-review-uk-fintech.pdf)

²¹ <https://www.forbes.com/sites/danisenberg/2011/02/11/start-up-notions-where-israeli-entrepreneurship-really-came-from/?sh=4feaa497557a>

pursuing radical policies, inevitably some will fail, so it's vital we adopt a culture of "failing fast, learning fast".

Importantly, the main objective for exploring these important issues is their tremendous societal significance. The more start-ups that are born, grow and begin to scale-up and employ people and pay more corporation tax revenue, the more schools, hospitals and other vital public services can prosper and thrive. Unlike Adam Smith, the famous Austrian economist Joseph Schumpeter recognised the pivotal importance of entrepreneurship for economic growth and defined entrepreneurship simply as "getting things done". Independence and new innovative policies could give Scotland the opportunity to instigate and unlock fundamental changes to its economic, cultural and policy landscape which will enable the country to get a lot more things done.

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