



University
of Glasgow

Adam Smith
Business School

WORKING PAPER SERIES



Persistent States: lessons for Scottish devolution
and independence

Anton Muscatelli, Graeme Roy and Alex Trew

January 2022

Paper no. 2022-02

Persistent States: lessons for Scottish devolution and independence¹

Anton Muscatelli, Graeme Roy and Alex Trew

University of Glasgow

January 2022

Abstract

The equilibrium size of a nation state is, in part, the result of a trade-off between the gains from scale economies in the provision of public services and the costs of applying uniform policy to heterogeneous cultural, institutional, and geographical fundamentals. Changes in such fundamentals can thus place pressure on states to reform over time. We consider this dynamic state formation process in the context of Scotland within the UK. First, we review the recent research in economic history on the persistence and evolution of such fundamentals. Second, we consider the history of Scotland both before and after the 1707 Act of Union in the light of that broader economic history literature. We conclude with some implications of fundamental persistence for current debates on the place of Scotland within the UK.

Keywords: Scotland, persistence, state formation.

JEL classification: H77, N43, N44.

1. Introduction

The economic analysis of state formation has focused on the trade-off between the economic gains of union and the costs that arise from within-country heterogeneity in fundamentals such as institutions and culture.² In particular, it is argued that while a union of nations can yield scale economies in public good provision or embed access to larger markets, such benefits can come at the expense of accommodating heterogeneity in the

¹ We would like to thank participants at the NIER workshop on 'The Political Economy of Devolution in, and Secession from, the UK' for helpful comments. The usual disclaimer applies.

² This tension is explored in Alesina and Spolaore (1997, 2003) and Bolton and Roland (1997). Desmet et al. (2011) provides a quantitative analysis for Europe. Desmet et al. find that a small increase in the cost associated with heterogeneity would lead to first an independent Basque Country and then an independent Scotland.

institutional and cultural preferences of each constituent region or nation. The equilibrium size of nations then reflects this trade-off.

The evolution or persistence of those gains and those fundamentals both suggest ways of thinking about tensions that arise in existing countries and unions, and offer implications for the consequences of future changes. A focus on the equilibrium of that trade-off suggests that where those gains and costs are unchanged, the arrangement of states is stable. In reality, however, we often observe dynamics in both the economic gains and the fundamentals without leading to changes in the size of nations. Economic gains can evolve with the internal distribution of surplus from scale efficiencies, or where the external gains to each part of a country diverges as a result of structural transformation. Fundamental heterogeneities are more typically considered to be deeply-rooted and highly persistent, as a large economic history literature documents.³ More recent analysis has pointed to ways to understand the evolution of these fundamentals. As an example, institutions and culture have been shown to dynamically interact, and the identity of a nation, in the form of historical memory of conflict or shared endeavours against a common enemy, can strengthen or weaken over time as existential threats arise.

While such dynamics may eventually lead to state formation and destruction, they do not do so continuously; we see instead large, discrete changes and substantial time lags. This suggests that the adjustment process -- the actual creation and destruction of states -- is itself highly costly. As a result, long stretches of time can see what we might call 'unsettled states', those which, in the absence of adjustment costs, would reform themselves into larger or smaller units. Only after persistent or growing tension do unsettled states resolve into new settlements; where the tension resolves before effecting a change, and cease to become unsettled, they retain the status quo.⁴

There are many historical examples of the slow process of state formation and disintegration as a result of periods of tension between the gains and costs of union. The

³ For a survey see Nunn (2014) and the further references in section 3 below.

⁴ Put another way, a standing joke related in Devine (2017) has it that devolution is just like evolution, only it takes longer. The obverse, that union formation is a slow process, would also hold.

independence of the Dutch republic arose out of the revolt which began when Philip II looked to tax the Netherlands at the same time as repressing its religious freedoms; a process that took the Eighty Years War to conclude.⁵ The Iberian union fell apart after two decades in which Philip III began to treat Portugal as a province of Spain. The union between Sweden and Norway survived for half a century but slowly diminished after the mid-nineteenth century when diverging economic interests led to the demand to have separate Norwegian representation in foreign matters. Of course, even where underlying determinants of a union can be slow to change, ultimately the events that then unfold in changing national structures can be rapid. The experiences of parts of Europe, most notably the 'Velvet Divorce' between the Czech Republic and Slovakia and the disintegration of Yugoslavia, toward the end of the 20th century are a case in point.

This process of state formation and disintegration is not always irreversible, however. Switzerland persists as a federation despite its extensive internal heterogeneity, with power highly decentralized to the cantons. The United States has persisted as a union partly because its federal system permits substantial heterogeneity in the cultural and institutional fundamentals to be manifested at state level, and partly because it has a constitution that evolved over time in response to threats to its integrity.

We focus in this paper on the fundamental heterogeneities that can influence both the likelihood of state formation and the prospects for change, drawing on recent research in economics on the persistence and evolution of institutions, culture, and other outcomes.⁶ Fundamentals can be highly persistent, and so suggest ways of thinking about the future consequences of devolution or secession⁷. Such fundamentals can also evolve over time in ways that can interact with the political settlement, as, for example, the location of and distance to decision making changes. Moreover, even where the underlying heterogeneities remain stable, different systems of state government can give rise to different *costs* of the same underlying heterogeneity.

⁵ The modern parallel with Catalonia has been pointed out in Voth (2012).

⁶ For perspectives from international relations and political science literatures, see Schlichte (2005, ed.), and Doornbos (2006).

⁷ We use the term "secession" to be consistent with the academic literature and with the title of this special issue.

With this focus on the fundamentals, we somewhat neglect the evolution of the economic gains to parts of a nation. These are more commonly understood where a process of structural transformation leads to geographically-heterogeneous gains and losses (as in the industrialization and de-industrialization of parts of England; see Trew, 2014; Heblich et al., 2021b) or where natural resource discoveries strengthen or weaken the economic viability of independent nations.

The case of Scotland as part of the United Kingdom provides a useful setting to consider these ideas. For three centuries, a range of different administrative and political arrangements have interacted with elements of underlying fundamentals of institutions, culture and geography to produce varying levels of tension between the nations and the union. By considering whether the United Kingdom is today an 'unsettled state', we can look to the prospects for and consequences of future changes by considering the nature of persistent fundamentals.

In section 2 we present a survey of the economics literature on historical persistence and evolution in fundamentals. Section 3 briefly reviews the Scottish history of political union, including its formation, its persistence, its evolution and recent challenges. In concluding, we offer some thoughts on how persistence in fundamental heterogeneities could shape the likelihood of and outcomes that result from further devolution or secession in the future.

2. Persistence in economic history

The study of persistence in economics has grown in the last few decades. A large range of contemporary outcomes -- from differences in incomes per capita, to types of legal institutions and attitudes to trust -- have been found to relate to sometimes very distant historical antecedents. Naturally, finding evidence of such historical persistence is more straightforward than understanding the underlying mechanisms and so the literature is weighted more toward the former at present. We survey first a number of examples of

persistence in different dimensions and consider some of the mechanisms that have been found to operate to underpin that persistence. Second, we look at the more recent consideration of the evolution of fundamentals. While each of these may have parallels in the Scottish context, we leave that history to section 3, and make more explicit connections between the persistence literature and the Scottish context in our concluding remarks.

2.1. Examples of persistence

The examples below are by no means intended to be thorough surveys of each type of persistence, but rather to show that persistence exists in many forms; we refer the interested reader to the excellent surveys such as Nunn (2014, 2020) and Voth (2021).⁸

Income and technology

We know that per capita incomes and relative technology levels are highly persistent over short time horizons, but they have also persisted over the centuries since the global divergence brought about in the first industrial revolution -- those countries that went through the industrial revolution the earliest are today still among the most wealthy. Direct evidence on the persistence of differences in technology and per capita incomes over longer time horizons is complicated by the difficulties of measurement in pre-modern economies, but there is evidence using archaeological data. For example, evidence on the timing and location of the first independent instances of the Neolithic revolution (see Diamond, 1997; Olsson and Hibbs, 2005) suggests that those areas that first settled agriculture had a head start, leading to the superior weapons, diseases and technologies (the *Guns, Germs and Steel*) which meant the dominance of Europe over the rest of the world after the year 1500. Comin et al. (2010) finds persistence in directly-measured levels of technology starting in the year 1000 BC. Ashraf and Galor (2013) go even further and find a connection between the migratory path of anatomically modern humans out of Africa and modern variations in incomes per capita.⁹

⁸ See also the recent methodological critique in Kelly (2019) along with the discussion in Voth (2021).

⁹ For a critique of this analysis see Rosenberg and Kang (2015), and the response in Ashraf et al. (2018a). Ashraf et al. (2018b) discuss a range of other issues related to this research.

A natural question when we observe persistence in *proximate* measures of development such as incomes and technology is whether that persistence is because an outcome propagates itself -- previous high income generates the ability to generate current income -- or whether an additional factor that caused that historical difference is itself persistent, and so causing the impression of persistence in an outcome variable. The more recent evidence supports the argument in Voth (2021) that what causes persistence is not simple propagation, but that the determinants of historical relative performance still operate and so continue to induce similar relative performance today. Along those lines, a range of additional, and potentially more fundamental, factors have been found to be persistent.

Institutions

An early contribution on legal institutions, surveyed in La Porta et al. (2008), rests on the high persistence of legal traditions and identified sources of variation in order to study the economic consequences of different legal systems. By focusing on countries that were formerly colonized, they show that the identity of the colonizing country can matter for the current legal system. In particular, whether former colonies today have common law or civil law traditions can depend on whether it was colonized by Britain or by another country, respectively. Other aspects of institutional variation have also been found to be persistent. Acemoglu et al. (2001) found that the nature of the country being colonized -- in particular its original population density and the mortality rate of the indigenous population -- can explain some of the variation in how 'extractive' institutions are today, in terms of the constraint on the executive and the risk of expropriation of private property.

A related recent study, which finds even longer persistence, is Mayshar et al. (2020). In this analysis, a location's dependence on cereals following the Neolithic revolution had an impact on persistent differences in how hierarchical institutions are today. In this analysis, the appropriability of the agricultural surplus generated by settled farming is what mattered. Cereals can be stored for long periods in a way that, for example, tubers cannot; as a result, a society that emerged with cereals as a more dominant cultivar did so along with the need for protection of the stored good and a measurable output that could be taxed more readily.

In a recent analysis of political hierarchy over 1,000 years in China, Bai and Jia (2021) find that the location of the seat of regional government, the provincial capital, has had an impact on the relative strength of different prefectures (in terms of population and urbanization). The mechanism is not only through the public employment that comes with administration, but also through the development of transportation infrastructure. Persistent effects are limited, however -- where a regional capital lost its status, its economic advantages did not continue. Becker et al. (2021) look at the impact of the move of the seat of the West German government to Bonn after WWII. The impact of the growth in public employment resulted in only modest job destruction in private sector industry, with private sector job growth in other sectors.

Culture

The persistence of culture, in the form of preferences, attitudes and beliefs, can take the form of what Voth (2021) calls "pure cultural persistence", where cultural traits are directly intergenerational transmitted, either by imitation, socialization or genetic inheritance. Alternatively, cultural persistence can arise where economic or political systems emerge to generate or reinforce certain cultural traits.

Among the evidence of direct intergenerational transmission is Dohman et al. (2011) which uses a panel of German individuals, finding a connection between generations of a family of attitudes to risk and trust. Chowdhury et al. (2018) use data from Bangladesh and find persistence in attitudes to risk, patience and social preferences (whether altruistic, selfish, etc.). Brenøe and Epper (2019) find transmission of levels of patience across generations of Danish families, with evidence suggestive of socialization as the mechanism at work. A remarkable example of the resilience of values and socioeconomic outcomes is found in Alesina et al. (2020), which finds persistence in incomes, education and values across generations in 20th century China. That persistence is resilient even to the revolutionary efforts in that country aimed specifically at overturning the pre-revolutionary elite.

The strength of these connections is limited in the sense that only a small portion of the variation in preferences and outcomes are explained by intergenerational transmission. While the mechanisms at work are not completely clear, some persistence in preferences by

direct intergenerational transmission is consistently found. Such forms of direct intergeneration transmission can explain some of the long-run persistence in preferences at the level of a population.

An alternative form of cultural persistence is that which arises indirectly via the environment or as the result of policy differences. A classic example of the interaction between the environment and beliefs is Alesina et al. (2010), which considers the determinants of beliefs about gender roles. Following the Boserup (1970) hypothesis, that gender roles originate in traditional forms of plough-based agriculture, where upper body strength mattered, Alesina et al. find that societies that traditionally practiced plough agriculture are today characterized by less gender equality and lower female participation in the labour market. Nunn and Wantchekon (2011) finds that differences in levels of trust within Africa today can be partly explained by the intensity of slave trading at different locations.

In terms of policy effects, a striking study is Voigtländer and Voth (2015) which shows that exposure to Nazi indoctrination, in the form of anti-Semitic material in school, had long-lasting effects on attitudes. In surveys at the turn of the 21st century, the share of individuals holding anti-Semitic views was 2-3 times higher for those that had been directly exposed to Nazi education. Becker et al. (2016) study the legacy of the Habsburg Empire by tracing the path of its former border as it cuts through modern countries. That paper finds a lasting impact of the Empire on culture nearly a century after its fall -- locations that were inside the Empire have, to this day, significantly more trust in institutions, and have lower perceived bureaucratic corruption.

Geography

Another form of persistence can arise in a spatial setting with the relative strength of different regions, the location and growth rates of cities, or even in the internal structure of cities.¹⁰ We may think of a set of stable locational fundamentals, such as the natural resource endowment, the local climate, access to navigable waterways, or even

¹⁰ A recent survey on geography and path dependence is Lin and Rauch (2020).

topographical 'ruggedness', as having an influence on economic geography. Such fundamentals point to the existence of a stable long-run spatial equilibrium where those persistent fundamentals still matter. There are a number of examples, however, of geographical persistence where such underlying locational fundamentals stop being important, or where large shocks can change economic geography in the absence of fundamental change, thus pointing to the potential existence of multiple equilibria and path dependence.

An example of apparently unique equilibrium persistence is Davis and Weinstein (2002), who study the urban system in Japan. That analysis shows that the relative size of cities in Japan has persisted over the course of 8,000 years, and is resilient even to the shock of WWII. Redding et al. (2011) presents a case that suggests the existence of multiple equilibria, however. Following partition after WWII, the main German airport moved from Berlin in the East to Frankfurt in the West. Following re-unification, and despite the locational fundamentals being largely unchanged, the main German airport by passenger share remained Frankfurt. In a study of the location of US towns, Bleakley and Lin (2012) is another example of path dependence. Geological breaks, such as waterfalls, determine points where portage (the hauling of a boat's load over land) occurs. These points were important in the early settlement of the US, since they became focal points for trade and services. Indeed, the paper found that such portage points were more likely to form cities, and that those cities remain important long after the functional advantage of portage had disappeared.

Michaels and Rauch (2018) found some evidence that town locations can re-optimize, however. That paper studies the fall of the Western Roman Empire, in which many towns in Britain emptied, but those in France did not. Town populations remained closer to that determined by the Roman system in France, while those in Britain could relocate to places that served them better for production and trade (closer to waterways). Additional instances of -- sometimes non-persistent -- geographical change are those noted above in relation to the impact of public employment.

Recent research has also found both within- and between-city differences to be persistent. Beginning with the observation that in many formerly industrial cities, the eastern sides are often the poorest, Heblich et al. (2021) show that the dispersion of pollution at the height of the industrial revolution, driven eastwards by prevailing winds, can explain a portion of the historical within-city variation in the share of low-skilled workers. They show further that even after that pollution abated, that past pollution continued to explain up to 20% of the observed neighbourhood segregation in 2011. Patterns of trade across cities have also been found to be persistent. Flückiger, et al. (2021) use archaeological data to show that connectivity within the Roman transport network can predict modern trade networks. They argue that the mechanism driving this persistence is the social and cultural convergence that occurs as a result of interaction.

2.2. Evolution of fundamentals

We have seen a number of examples of persistence, and by considering their origins we can infer that they are, even if at very long horizons and with a sometimes glacial pace of change, to some extent endogenous. More recent efforts to formalize the mechanics of fundamental change in culture and institutions have emerged. In the political economy approach to understanding fundamental changes, institutions are the result of collective choices by groups of elites or by citizen-representatives. In this setting, a co-ordinated and planned change takes place where equilibrium payoffs lead agents -- authorities, elites, representatives -- to change institutions and, to a lesser extent, culture. An alternative to the political economy approach is one that uses evolutionary game theory in which individual agents engage in decentralized interactions over time. In this setting, culture and institutions -- whether egalitarian or extractive, for example -- are the stable equilibrium interactions among locally-optimizing agents.

From the political economy perspective, Acemoglu et al. (2021) compares persistence that might be understood as simple institutional stasis -- power begets power -- with persistence and change that occurs when there is incongruence between political and economic arrangements. Persistence in institutions can occur where the elite has a gain to be made from maintaining the status quo, or if the elite expects a sufficiently negative reaction from

the non-elite under some change (e.g., to democratization). Acemoglu et al. make the point that incongruence need not always lead to change, however; an elite may refrain from making a change in the presence of 'strategic stability' in fear of future 'slippery-slope' dynamics. There is also a connection between social mobility and persistence: with enough mobility (into and out of the elite), it is more likely that the existing institutions persist.

Persson and Tabellini (2021) describe how the interaction between culture and institutions can manifest in political and economic outcomes that are persistently bad or good. They show how dynamic complementarities between the quality of institutions and a culture of civic engagement can explain the observed persistence in economic outcomes. An implication of this analysis is that shocks that occur at critical junctures can cause a society to jump to a different, but then similarly persistent, outcome. One particular version of such backsliding has been found where the popularity of radical or populist politician grows following financial crises (see Funke et al., 2016).

Bowles et al. (2021) surveys the evolutionary game theory perspective. A stable equilibrium is a convention (a configuration of culture and institutions) where each agent type behaves according to their mutual best responses. Changes to conventions occur as a result of transitions among such conventions. In a given setting, multiple stable equilibria can exist depending on the environment -- for example, in a farming economy, Bowles et al. show that the decline in climate volatility could be responsible for the timing of the Neolithic revolution. A more recent example they consider is that of the 20th century evolution of collective bargaining in the US and its inverse relationship with inequality.

2.3. Two perspectives

A pessimistic interpretation of the economic literature on persistence is that it also places hard limits on the ability to change what might currently be an undesirable fundamental-driven outcome. An alternative perspective would seek to understand what causes that persistence, in order to better understand how to cause fundamental change. Of course, the mechanisms at work are considerably harder to isolate than the persistence itself. As a result many of the examples of persistence cited above necessarily leave the mechanism as a black box, presenting only tentative rationalization of the results. The more recent work

on the evolution of fundamentals has begun to move from the specific cases of persistence and change to understanding the general concepts at work in the evolution of fundamentals. Further work in this area will improve our ability to know what about fundamentals can and cannot be changed.

3. Scotland before and after the union

The literature introduced above presents the many dimensions in which the fundamentals of institutions, culture and geography are highly persistent, sometimes in ways not fully understood. The history of Scotland before and after the union with England is partly a history of those fundamental differences, and the ways in which political settlement has operated to accommodate them to a greater or lesser extent.

The political union of 1707 partly emerged from, and looked to accommodate the protection of, the pre-existing religious, legal and educational differences of Scotland. Indeed, such fundamentals are a good example of the long persistence in institutions and culture, and can be traced back many centuries. As an example, David I (1124--1153) established a form of independent administrative and ecclesiastical order that resisted deference to Rome. This independence was later underlined in the Declaration of Arbroath (1320) that Scotland should be free to govern itself. Modern appeals to justify further devolution often invoke such historical memory, but there are also real differences in institutions and culture that predate and have survived union. The survival of the union itself has rested partly on consideration, real or not, being given to the distinctive heterogeneities within the framework of the union. Where those underlying fundamentals have come under threat, pressure has more often been placed on the political settlement to accommodate differences, not on those underlying differences to converge.

3.1. The union of 1707

The union settlement itself is a good example of the long and costly process of state formation. At the time of the regal union in 1603, James VI and I sought further integration,

including of legal and ecclesiastical institutions, but met resistance from both nations. Even Cromwell's enforced union of the 1650s was promptly reversed at the Restoration in 1660.

The eventual political and economic joining of England and Scotland was a slow process, and was a product of both the fundamental heterogeneity and economic gains to be had. At the turn of the eighteenth century, an independent Scottish Parliament challenged the economic and political independence of England. The continuation of the regal union presented a problem: the Hanoverian succession had little support in Scotland, absent assurances on the ability of Scotland to continue to determine its own religious and trading arrangements. Moreover, trade embargoes in force between England and France were weakened by merchants permitted to trade out of Scotland. The English parliament responded by enacting the Aliens Act of 1705, which threatened all trade in staples from Scotland to England and, by treating in law Scots as aliens, in the process endangering Scottish property held in England.

Out of such tension, between the economic interests and the different institutional and cultural fundamentals, emerged a union that has survived for over three centuries. For England, the union was a response to the prospect on Queen Anne's death of an ever-growing distance between England and a Jacobite, Francophile Scotland (Coward and Gaunt, 2017). For Scotland's parliament, union was favoured out of practical economic necessity by a "tiny patrician elite" (Devine, 2017) in the wake of successive famines at the end of the seventeenth century and misadventures abroad. The eventual political union was also to be an economic one, but did not, in the end, merge legal or ecclesiastical institutions.

3.2. Survival and evolution of the union

The longevity of the union was not at first secure. The Westminster parliament rapidly administered the rigorous collection of excise and duties from Scottish trade in staples (malts, salt and linen). While much of the revenue generated was retained in Scotland, the perception of such taxation as a form of 'tribute' intended to pay down the debts of the English war against France generated tension. It also became clear that the protections of the independence of the Kirk that were written into the union treaty were not robust to

minority representation in a London parliament. As early as 1713, members who previously supported the union brought measures for its dissolution to the House of Lords (Devine, 2017).

We see in the eventual persistence of the union the evolution in the size and distribution of economic gains, as well as in the fundamental heterogeneities. The early economic gains of the union, while initially unclear in the administrative vacuum that followed the transfer of power, emerged out of the "cement of patronage" that Archibald Campbell, the Earl of Islay, was permitted to deploy in the late 1720s to reconcile competing groups in Scotland. Islay was so trusted by Walpole – the UK's first de-facto Prime Minister – that Scotland was governed "almost as a separate polity within the Union" (op. cit., p. 48).

The gains from the economic union came more slowly, but accelerated toward the end of the eighteenth century. The English market was an order of magnitude larger than Scotland alone. Scotland also became tied to the strong 'fiscal-military' state (op. cit., p.77) that had emerged in England after the financial revolution in the late seventeenth century, and which provided a global scope for trade. Like many of the domestic profits of empire, however, these came about as part of the Atlantic 'triangle trade' in African slaves, raw materials that were sometimes grown on plantations (particularly tobacco traded through Glasgow), and manufactured goods produced for domestic consumption or export.¹¹ The expansion of the British empire further stimulated a trade-oriented structural transformation and urbanization that underpinned a rapid increase in average standards of living for those in Scotland. The combination of state capacity, global trading opportunities, and the ready diffusion of frontier technologies, generated what was the most substantial and rapid economic transformation seen up to the late 18th century.

The place of Scotland in the union and in the empire is an example of cultural change as the conception of the nation evolved. In an influential early analysis, Renan (1882) concluded that rather than common language, religion, or geography alone, what makes a nation is "A

¹¹ Slow progress is made in accounting for the consequences of these aspects of this history. As an example, the University of Glasgow itself has recently come to consider its role -- both good and bad -- in this history more explicitly; see Mullen and Newman (2018).

great aggregation of men, in sane mind and warm heart, [creating] a moral conscience that calls itself a nation." Combined efforts, collective sentiment, shared histories -- the accumulation of experience *as* a union went into securing the union of nations as a whole. In this sense, a significant characteristic of the empire was the disproportionate involvement of Scottish-born administrators (Devine, 2003). That involvement provided economic benefits through employment and capital via repatriated profits, but it also contributed to the conception of Scots as a significant part of the success of the whole, forming a British identity alongside the Scottish and English.

Participation in wars, from the reputation earned by the Highland regiment against Napoleon to the disproportionate numbers that volunteered to fight in World War I, further solidified a joint Scottish and British identity within the union. As Devine (2017, p.94) writes, the "Highland warrior clad in tartan ... was recognizably Scottish but at the same time an imperial warrior of the British state." As the union forged ever closer bonds, so symbols of 'Highlandism' became more appealing as markers of distinctiveness. For Devine, without the threat of being subsumed into an English identity, the adoption of such distinctiveness would not have been so popular. The conversion of what was previously the existential threat of Jacobitism into part of the romantic history of the nation, through the poetry of Burns and the novels of Scott, took place in the context of a union that threatened over time to blur the differences in fundamentals. Sir Walter Scott took the opportunity of the visit in 1822 to Scotland of George IV to orchestrate an array of pageantry and parade by Highlanders before the King, himself fully dressed in tartan and kilt. In this sense, aspects of underlying differences that were previously left as intangibly different cultures or customs can, under threat of being lost to political hegemony, be made more external and explicit.

We can also see an evolution of public institutions over time, and this has interacted with tensions over the allocation of public spending. Since the nineteenth century, the role of a state has morphed from being more narrowly focused on external matters related with trade and international relations into a welfare state with growing taxation and public spending. The rise of the welfare state, the division of that spending across regions and constituencies, and the geographical location of power to allocate it, put focus on the underlying heterogeneity in the preferences of the nations. Following the growth of the

state in the late nineteenth century, with expanding educational provision and extension of the franchise, the creation of the Scottish Office in 1885 appeared, at first, to interfere with the administration of Scottish institutions as part of a further centralization of power in London. It was not until 1937, when the Scottish Office was physically relocated to Edinburgh, that the devolution of administration was considered an adequate response to Scottish demands for distinct consideration as part of a larger welfare state. This relocation had "immense symbolic value, making Edinburgh once again a seat of government, truly a capital, rather than just the headquarters of the Kirk and Judiciary."¹²

3.3. An unsettled union?

In the second half of the twentieth century, two major developments created tension in the union by changing the economic gains that arose from it. First, with the progress of deindustrialization in the mid-twentieth century came spatially-uneven pressures on the economic geography of the whole United Kingdom. Those regions that specialized in heavy industry, mining and production for export had experienced great economic success during the industrial revolution and in supplying the World Wars. These were now the regions to experience absolute decline within the United Kingdom and relative decline within the world (Crafts, 2018). Many parts of Scotland, particularly Glasgow and central Scotland, suffered as a result. With ultimate power resident at Westminster, appeals for policy to address deindustrialization, or to at least mitigate its impact, were to be sent there. The second change was North Sea oil discoveries in the late 1960s, which further shifted the economic status quo since ownership of those assets fell to the union as a whole.

While those economic gains evolved (both positively and negatively), many of the fundamental heterogeneities, in terms of legal, cultural and geographical difference, persisted. Out of such tension emerged a viable Scottish home rule political movement. The Scottish Covenant, a petition requesting a Scottish legislature within the UK, received over two million signatures by 1950. Ultimately this movement culminated in a 1979

¹² Fry (1987, pp.184-5), cited in Devine (op.cit., p. 120).

referendum on devolution that failed when only a minority of the registered electorate favoured it.

Later changes made, if anything, the costliness of the fundamental heterogeneity greater. First, the continuation of a Conservative majority at Westminster -- one which did not rely on Scottish MPs -- created the perception of a 'democratic deficit'. The treatment of Scotland as a regional problem in the Margaret Thatcher government rubbed up against Scotland's "sense of nationhood and pride in a special status within the Union state" (Devine, 2017; p.287). While the Thatcher government introduced policies that left many deindustrializing areas all across the UK to be reshaped by market forces, the intended adjustment for Scotland was more intense since it did not have a particularly diversified economy. In the 1987 election, the Conservatives in Scotland fell to represent only 10 of the 72 seats in Scotland. The subsequent introduction of the Community Charge in 1989/90, as a measure brought first to Scotland, did more than anything else to convince "many Scots that they were being ruled by an alien government." (op cit.). Other policies eroded some of the fundamental cultural changes that accrued during the 19th and early 20th centuries, in particular the identification of Scots as part of the union. As an example, the number of Scottish regiments went from 11 in 1957 to 1 today.

Devolution since 1999 has created new dynamics in the evolution of Scotland's place in the Union. In 1995, Labour politician Lord Robertson (then Shadow Secretary of State for Scotland and future Defence Secretary in the Blair Government) argued that "Devolution will kill Nationalism stone dead". If anything however, recent years of devolution have been characterised by growing support for Scottish independence, sparked by the election of the first SNP Government in 2007. To combat this, a strategy of Unionist politicians – through both the Calman Commission and the Smith Commission – has been to confer further powers on Holyrood from Westminster. Of total public spending for Scotland, over 60% is now devolved, with 35% of revenues raised in Scotland now devolved or assigned to Holyrood. These reforms do not appear to have blocked the rise in support for independence, with opinion polls tracking around 50:50 on a consistent basis.

Despite fundamental heterogeneity in some institutions, recent surveys on social attitudes suggest only small differences in policy preferences across a range of areas. For example, in terms of attitudes to immigration, Curtice and Montagu (2018) find that the proportion of people thinking that immigration is good for the economy is 46% in Scotland, and 47% in England & Wales. The share that think immigration is culturally enriching is 43% both in Scotland and in England & Wales. In terms of views on public spending, differences do exist within the UK but they are not so great as the differences between Scotland and the Nordic countries. Deeming (2021) finds that while a larger share of people in Scotland disfavour private education and healthcare (46 and 42% compared with 34 and 32% in England), the gap to Nordic country preferences is greater (e.g., in Norway, Finland and Denmark, respectively 70, 62 and 60% feel that private education is wrong). Even the most market-friendly Nordic country, by this measure, is further from the preferences of Scotland than England is.

As Bell and Eiser (2015) point out, even where preferences over policies are aligned, the location of the decision making can matter to voters. The incongruent results of the 2016 referendum on EU membership, with Scotland voting to remain and the UK as a whole voting to leave, may suggest a difference in attitudes but could also reflect an unwillingness to let powers drift toward being again centralized at Westminster. Subsequent legislative changes suggest at least the potential for such concerns to be realised. Following the transition period after Brexit, the UK government and the devolved administrations are no longer bound to EU law. As a result, the UK government introduced the Internal Market Act 2020, which looks to ensure continued free trade within the UK. While much attention relates to the impact on unfettered trade with Northern Ireland, the Act also effectively reasserts Westminster's primacy over devolved institutions. In particular, requirements around mutual recognition means that if a good, service or professional qualification is accepted in one part of the UK it must be accepted in the other parts, thus limiting the ability of Scottish and Welsh Governments to apply their rules to incoming goods and services from England. The Scottish Government labelled the Act an "assault on devolution"¹³, the Scottish Parliament withheld its consent, and the Welsh Government

¹³ <https://www.gov.scot/news/uk-internal-market-bill/>

sought a judicial review. Such tensions only further the impression that Scotland within the union is unsettled and there is evidence that Brexit as an issue is increasing support for full independence (Curtice and Montagu, 2020) among Scottish voters. There is somewhat of an irony that independence is now effectively painted by many as swapping one union for another, albeit a union of Member States. With Brexit this has led to new questions around all manner of issues from currency choice through to the location of external economic borders all of which will themselves have their own persistent effects (see Hepburn et al. 2021 for a discussion).

5. Concluding remarks

What does the literature on persistence in economic history mean for the future of devolution or secession in the Scottish case? Two caveats are worth noting. First, nothing that is wholly deterministic should be inferred from empirical evidence on persistent fundamentals. Where we describe findings of historical persistence, we mean that a portion of modern variation is correlated to the historical variation. It may even be that a majority of the modern variation may be attributed to other factors, or may be random, but some non-negligible portion of historical persistence is statistically meaningful. Second, even where the historical persistence in the data is a large portion of modern variation, our understanding of the mechanisms underpinning that persistence may be limited. That has implications for the impact of any potential institutional change.

Nevertheless, we may point to some implications of the economic history literature in the Scottish context of future devolution or secession. It is clear that the history of Scotland before and after the Act of Union supports the presence of substantial persistence in legal and educational institutions, as well as in many aspects of culture. The historical geographical concentration in the central belt of Scotland has, aside from the impact of natural resource discoveries, also been highly persistent. In this sense, both the unionist concerns and the nationalist promises in regard to future transformation in the outcomes and character of a more independent Scotland would appear to be constrained. In any new settlement, Scotland would remain part of an island joined to the rest of the UK with a common language, family ties, similar attitudes and skills base and a shared history from three centuries of union.

Such a conclusion has implications for how any debate on Scottish independence will be framed in the next few years. Back in 2014, the Yes campaign was underpinned by two principles of 'competence', and crucially, 'moderation'. An independent Scotland, the Scottish Government argued, would retain close ties with the UK, including remaining within 'five unions' – from a monetary union through to a social union of shared family ties and union of crowns. But if the very argument for a second referendum is predicated on Scotland taking a different path to post-Brexit UK then this requires pro-independence supporters to put forward a much more radical case that seeks to overturn historical persistence. It also increases the scale of transition costs from seeking to unwind much more rapidly persistent ties with the UK to (presumably) establish closer ties with the EU. In terms of prospects for evolution in fundamentals, the alignment in survey-measured policy preferences between England and Scotland point, from the evolutionary game theory perspective, to limits on any decentralized shift in social conventions that may emerge. The political economy perspective on evolution may point to more significant change, however. Evidence for incongruence between economic and political arrangements -- such as the tensions over the internal working of the UK market post Brexit -- suggest that the conditions for more fundamental evolution in culture and institutions may exist. Where identity and the location of decision making matters, even the perception of a centralization of power in Westminster can support claims of a democratic deficit and evoke memories of the Conservative government of the 1980s. Potential evolution of national identities of the sort pointed to in Renan (1882) is also at work in the context of Covid-19. While the 'defence' against its impact could solidify a British identity -- since the response is UK-based, with regulation and resources at the UK level, and substantial alignment in lockdown responses and vaccine takeup -- the public perception of the performance of leaders in Edinburgh and Westminster has diverged. Equally, there are forces that may bolster a British identity and weaken external ties. Outside of the EU, Scotland will naturally be less connected to debates about the evolution of governance in the EU whilst the replacement of arguably the most visible elements of EU policymaking – structural funds and farm subsidies – with UK equivalent schemes provides an opportunity for supporters of the union to seek to strengthen their arguments about the benefits of 'pooling and sharing'.

The presence of tensions over the distribution of economic gains of a union, combined with a heightened awareness of heterogeneities across it, suggests that Scotland is indeed part of an unsettled union. This is not to say that independence is inevitable within anything that could be considered the short-term from an economic history perspective. The creation of the Scottish Parliament following the 1999 referendum, and the further devolution of powers following the 2014 referendum, has not resolved underlying tensions. After 1707, the 'cement of patronage', access to an expanding empire and UK-wide efforts against external threats solidified what was initially a shaky union brought about by a small elite for transitory reasons. It remains to be seen what future changes, economic, political, or cultural, may emerge to maintain the place of Scotland within the UK.

References

- Acemoglu, Daron, Georgy Egorov and Konstantin Sonin (2021), 'Institutional Change and institutional persistence', chapter 13 in Bisin, Alberto and Giovanni Federico (eds.) *Handbook of Historical Economics*.
- Alesina, Alberto, Marlon Seror, David Y. Yang, Yang You and Weihong Zeng (2020), 'Persistence through Revolutions', NBER Working Paper Series, No. 27053.
- Alesina, Alberto and Enrico Spolaore (1997), 'On the Number and Size of Nations', *Quarterly Journal of Economics*, 112, 1027-56.
- Alesina, Alberto, Paola Giuliano and Nathan Nunn (2013), 'On the Origins of Gender Roles: Women and the Plough', *Quarterly Journal of Economics*, 128(2), 469--530.
- Alesina, Alberto and Enrico Spolaore (2003), *The Size of Nations*, Cambridge.
- Ashraf, Quamrul H. and Oded Galor (2013), 'The 'out of Africa' hypothesis, human genetic diversity, and comparative economic development', *American Economic Review*, 103(1), 1--46.
- Ashraf, Quamrul H., Oded Galor and Marc Klemp (2018), 'Interpersonal Diversity and Socioeconomic Disparities Across Populations: A Reply to Rosenberg and Kang,' Working Papers 2018-14, Brown University, Department of Economics.
- Bai and Jia, 'The Economic Consequences of Political Hierarchy: Evidence from Regime Changes in China, 1000-2000 C.E.', *Review of Economics and Statistics*, forthcoming.

- Becker, Sascha O., Katrin Boeckh, Christa Hainz and Ludger Woessmann (2016), 'The Empire is Dead, Long Live the Empire! Long-Run Persistence of Trust and Corruption in the Bureaucracy', *Economic Journal*.
- Becker, Sascha O., Stephan Heblich and Daniel M. Sturm (2021), 'The impact of public employment: Evidence from Bonn', *Journal of Urban Economics*, 122.
- Bell, D., and Eiser, D., (2015), 'The economic case for further fiscal decentralisation to Scotland: theoretical and empirical perspectives', National Institute Economic Review No. 233.
- Bisin, Alberto and Thierry Verdier (2021), chapter 17 in Bisin, Alberto and Giovanni Federico (eds.) *Handbook of Historical Economics*.
- Bleakely, Hoyt and Jeffrey Lin (2012), 'Portage and Path Dependence', *Quarterly Journal of Economics*, 127(2), pp. 587--644.
- Bolton, Patrick and Gérard Roland, 'The Breakup of Nations: A Political Economy Analysis', *Quarterly Journal of Economics*, 112, 1057-90.
- Boserup, Ester (1970), *Woman's Role in Economic Development*, George Allen and Unwin Ltd.
- Bowles, Samuel, Jung-Kyoo Choi, Sung-Ha Hwang, and Suresh Naidu, (2021), 'How institutions and cultures change: an evolutionary perspective', chapter 14 in Bisin, Alberto and Giovanni Federico (eds.) *Handbook of Historical Economics*.
- Brenøe, Anne Ardila and Thomas Epper, (2019) 'Parenting Values Moderate the Intergenerational Transmission of Time Preferences Across Four Decades', IZA Discussion Paper 12710.
- Chowdhury, Shyamal, Matthias Sutter, and Klaus F. Zimmermann (2018), 'Evaluating intergenerational persistence of economic preferences: A large scale experiment with families in Bangladesh,' IZA Discussion Paper 11337.
- Comin, Diego A., Bill Easterly, and Erick Gong (2010), 'Was the Wealth of Nations Determined in 1000 B.C.?', *American Economic Journal: Macroeconomics*, 2(3), 65-97.
- Coward, Barry and Peter Gaunt, *The Stuart Age: England, 1603--1714*, 2017, 5th edition, Routledge.
- Crafts, Nicholas (2018), *Forging Ahead, Falling Behind and Fighting Back: British Economic Growth from the Industrial Revolution to the Financial Crisis*, Cambridge University Press.

Curtice, John and Ian Montagu (2018), 'Do Scotland and England & Wales Have Different Views About Immigration?', chapter in *British Social Attitudes 38*, The National Centre for Social Research.

Curtice, John and Ian Montagu (2020), 'Is Brexit fuelling support for independence?', The National Centre for Social Research.

Davis, Donald R. and David E. Weinstein (2002), 'Bones, Bombs, and Break Points: The Geography of Economic Activity', *American Economic Review*, 92(5), 1269--89.

Deeming, Chris (2021), 'Social inequality: Is Scotland more Nordic than liberal?', The National Centre for Social Research.

Desmet, Klaus, Michel Le Breton, Ignacio Ortuño-Ortín and Shlomo Weber (2011), 'The stability and breakup of nations: A quantitative analysis', *Journal of Economic Growth*.

Devine, Thomas M. (2003), *Scotland's Empire, 1600--1815*, Penguin.

Devine, Thomas M. (2017), *Independence or Union: Scotland's Past and Scotland's Present*, Penguin.

Dohmen, Thomas, Armin Falk, David Huffman, and Uwe Sunde (2011), 'The Intergenerational Transmission of Risk and Trust Attitudes', *Review of Economic Studies*, 79(2), 645--77.

Doornbos, Martin (2006), *Global Forces and State Restructuring: Dynamics of State Formation and Collapse*, Palgrave Macmillan.

Flückiger, Matthias, Erik Hornung, Mario Larch, Markus Ludwig, Allard Mees (2021), 'Roman Transport Network Connectivity and Economic Integration', forthcoming *ReStud*.

Fry, Michael (1987), *Patronage and Principle*, Aberdeen.

Funke, Manuel, Moritz Schularick and Christoph Trebesch (2016), 'Going to extremes: Politics after financial crises, 1870--2014', *European Economic Review*, 88, pp. 227--60.

Giuliano, Paola and Nathan Nunn (2021), 'Understanding Cultural Persistence and Change', *Review of Economics Studies*, 88(4), 1541--81.

Heblich, Stephan, Alex Trew and Yanos Zylberberg (2021a), 'East Side Story: Historical Pollution and Persistent Neighborhood Sorting', *Journal of Political Economy*, 129(5), 1508-52.

Heblich, Stephan, David Nagy, Alex Trew and Yanos Zylberberg (2021b), 'The Death and Life of Great British Cities', mimeo.

Hepburn, Eve, Michael Keating and Nicola McEwen (2021), 'Scotland's new choice Independence after Brexit', Centre on Constitutional Change, Edinburgh.

Kelly, Morgan (2019), 'The Standard Errors of Persistence', University College Dublin, WP19/13.

La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer (2008), 'The Economic Consequences of Legal Origins', *Journal of Economic Literature*, 46(2), pp.285--332.

Lin, Jeffrey and Ferdinand Rauch (2020), 'What Future for History Dependence in Spatial Economics?', *Regional Science and Urban Economics*, forthcoming.

Mayshar, Joram, Omer Moav and Luigi Pascali (2020), 'The Origin of the State: Land Productivity or Appropriability'.

Michaels, Guy and Ferdinand Rauch (2018), 'Resetting the Urban Network: 117-2012', *Economic Journal*, 128, 378--412.

Mullen, Stephen and Simon Newman (2018), 'Slavery, Abolition and the University of Glasgow', report and recommendations of the University of Glasgow History of Slavery Steering Committee.

Nunn, Nathan (2014), 'Historical Development', chapter 7 in Bisin, Alberto and Giovanni Federico (eds.) *Handbook of Economic Growth Volume 2A*.

Nunn, Nathan (2020), 'The Historical Roots of Economic Development', *Science*, 367, eaaz9986.

Nunn, Nathan and Leonard Wantchekon (2011), 'The Slave Trade and the Origins of Mistrust in Africa', *American Economic Review*, 101(7), 3221--52.

Persson, Torsten and Guido Tabellini (2021), 'Culture, institutions, and policy', chapter 16 in Bisin, Alberto and Giovanni Federico (eds.) *Handbook of Historical Economics*.

Redding, Stephen J, Daniel M. Sturm and Nikolaus Wolf (2011), 'History and Industry Location: Evidence from German Airports', *Review of Economics and Statistics*, 93(3), 814--31.

Renan, Ernest (1882), 'Qu'est-ce qu'une nation?', Paris, Presses-Pocket, 1992. (translated by Ethan Rundell).

Rosenberg, Noah A., and Jonathan T. L. Kang (2015), 'Genetic Diversity and Societally Important Disparities', *Genetics*, 201(1): 1--12.

Schlichte, Klaus, editor (2005), *The Dynamics of States: The Formation and Crises of State Domination*, Routledge.

Trew, Alex (2014), 'Spatial Takeoff in the First Industrial Revolution', *Review of Economic Dynamics*, 17, 707-25.

Voigtländer, Nico and Hans-Joachim Voth (2015), 'Nazi indoctrination and anti-semitic beliefs in Germany', *Proceedings of the National Academy of Sciences*, 112(26), 7931--6.

Voth, Hans-Joachim (2012), 'Catalonia's fight for independence: Are there lessons from the Dutch revolt?', CNN online, <https://edition.cnn.com/2012/11/21/business/catalonia-dutch-revolt-lessons>.

Voth, Hans-Joachim (2021), 'Persistence -- myth and mystery', chapter 9 in Bisin, Alberto and Giovanni Federico (eds.) *Handbook of Historical Economics*.