UK-SSP3:

Regional Rivalry



Abstract

With growing international tensions leading to barriers to trade and job losses, the UK government lifts environmental regulations to allow access to and exploitation of a wider supply of domestic natural resources. The UK increases its border controls and invests in the manufacturing and defence sectors. Immigration from European and non-European countries decreases, but internal migration increases because people move around the UK in search of job opportunities. The high competition for jobs leads to an exploited workforce with low salaries. With a reduction in personal income and the redistribution of public spending towards the defence sector, investment in social support, education, health and public infrastructure all significantly decline. Around 2040, Scotland becomes independent from the UK, with the other nations following quickly and the UK ceases to exist. With increasing socio-economic barriers, conflicts arise, markets shrink and informal economies increase. Decreases in working and living conditions lead to social unrest within communities and wider society. Towards the end of the century, a return to subsistence lifestyles is widespread across the (former) UK.



Full narrative

Present to 2040

Transnational collaboration between the UK and other countries gradually erodes due to escalating campaigns of disinformation, mounting tensions over trade and the dilution of commitments to international agreements, leading to mistrust and international rivalry. With increasing barriers to trade, many multinational companies struggle to operate effectively and their influence within the UK weakens. This particularly affects the service sector, and although some companies rebrand to fit nationalistic views, the sector deteriorates quickly along with other UK companies that rely on imports. This results in significant job losses. To compensate, the government nationalises and repurposes existing manufacturing and industrial infrastructure and technology from large multinationals that are abandoning their UK operations due to the transaction costs of operating in the UK becoming prohibitive. This leads to an increase in nationallyproduced manufactured goods and a rapid growth in the demand for domestic raw materials and primary resources.

To ease access to a wider supply of resources, the UK government and Devolved Administrations lift environmental regulations. This is accompanied by legal and social measures that restrict NGOs and crackdown on environmental activism groups. Society polarises around environmental issues, with large groups promoting the perception that NGOs are hoarding land that could be used to produce vital food resources that are needed to counter the dramatic decrease in food imports. This tension is particularly apparent in southeast England due to high population densities and strong competition for land.

As the UK increases its border controls in reaction to the intensifying international rivalry, investment in national defence increases substantially. The majority of public expenditure becomes focused on the defence and manufacturing sectors, with funding for research and innovation being drastically cut. In the 2020s and 2030s, universities supplement their funding from private sources by aligning their curricula to corporate interests in manufacturing and technology whilst withdrawing from the arts, humanities and environmental sciences.

Greater border controls lead to increased tensions, which manifest particularly strongly in Northern Ireland where the threat of large-scale conflict emerges over the UK border with the Republic of Ireland. Immigration from European and non-European countries decreases, as does international tourism. Immigration policy further divides and polarises the population, with rural areas in particular becoming more entrenched in traditional and nationalistic values. Internal migration, however, increases because people move around the UK in search of job opportunities, which become concentrated in the major cities. This leads to cuts to services in rural areas and increasing congestion on transport routes between rural areas and cities. The high competition for jobs leads to an exploited workforce with low salaries.

With a reduction in individual incomes and the redistribution of public spending, the National Health Service starts to decline from the 2020s due to lack of financial and human resources. This results in decreasing illness prevention and treatments and increasing death rates from ill health. The UK population ceases to grow by 2040.

Rivalry between the four UK countries for access to natural resources accelerates from the 2030s, with each nation having different policy priorities. For example, Scotland chooses to maintain agricultural subsidies whereas England opts for liberalisation, leading to increasing tensions related to internal trade. Political and social tensions between the UK countries are spearheaded by increasing nationalistic views and propaganda, with politics and values becoming progressively more right-wing in England and left-wing in Scotland and Wales. Full devolution is increasingly sought as new alliances for cooperation emerge, such as unions between Celtic communities.

Urban areas become overpopulated, especially in the southeast of the UK where economic activity is concentrated, leading to urban sprawl due to lack of enforced planning regulations. This adds increasing pressure on land availability. As a result agriculture intensifies to meet the large growth in domestic food demand due to limited food imports. This is supported by large increases in chemical inputs to ensure higher yields, particularly where environmental regulations such as Nitrate Vulnerable Zones disappear. Food safety standards are lifted, allowing producers to use previously restricted chemicals and feeding techniques (e.g. animal growth boosted by hormones) and lower animal welfare standards. Hunting and fishing for food increases to supplement diets in deprived rural communities. The strong prioritisation of land for agriculture and urban areas results in an overall decrease in forestry.

Increases in waste and water pollution severely affect the environment early in the scenario. Although companies initially strive to provide a safe water supply service, in the early 2030s water treatment systems fail due to lack of investment and contribute to poor water quality throughout the UK. Tap water becomes unsafe to drink. Water demand increases up to 2040 due to demand from the agricultural and manufacturing sectors. As regulations limiting water use and abstraction have been weakened in previous decades this leads to severe reductions in river flows, particularly in southeast England.

In an attempt to secure a larger proportion of energy needs from domestic sources, existing energy sources of coal, oil and gas, but also renewable energy such as hydropower in Scotland and wind-farms in Wales, are exploited with increasing intensity. However, failure to maintain the infrastructure and technology associated with renewable energy leads to a decrease in its efficiency and use, and eventually in the 2030s coal mines in England and Wales are reopened. This leads to negative environmental impacts such as air pollution, deforestation, contamination of natural resources (such as drinking water) and the extinction of wildlife populations. Energy distribution networks also deteriorate due to lack of maintenance, so communities exploit other natural resources to provide energy locally, such as by burning peat and wood. Fuel poverty and deprivation leads to further social tensions. As energy becomes increasingly scarce, the power of groups controlling coal mining increases.

2040 to 2070

International tensions result in military conflicts emerging worldwide, including in parts of Europe, with adverse knock-on effects in the UK including illegal immigration and further decreases in already weak international trade. These additional pressures further strain relationships between the four UK countries, and around 2040 Scotland becomes independent from the UK, with the other nations following quickly. Each country focuses on making the best use of its own resources. Collaboration between the four countries is challenged by strict border controls for goods, which leads to decreases in trade among the countries.

The trends in public spending from previous decades continue and strengthen, with governments in all four UK countries prioritising the defence sector at the expense of social, education, health and public infrastructure spending. In some of the countries, national service is re-introduced. Roads and public transport are not maintained, and by the 2050s the railway system collapses. The underfunded universities are forced to further cut down their curricula and eventually collapse.

Without a social buffer, internal migration within the UK further increases as people move to regions with jobs and/or plentiful natural resources, which are better able to provide labour and food. This prompts even greater border security to limit migration among the four UK countries, resulting in further regional tensions.

The amount of agricultural land and intensity of production continue to increase to compensate for reduced food imports and a decaying food distribution system. GMOs become common in both crops and livestock. However, the cost of synthetic fertilizers and pesticides start to become prohibitive in the 2050s and chemical inputs for farming become unobtainable in the UK by 2060. Yields decrease in spite of recycling and technological development to compensate for fertilizer limitations. Reduced food availability causes malnutrition and further increases in mortality. The UK population level starts to decline from midcentury onwards.

To compensate for reduced yields, the agricultural area expands significantly as growing food for survival becomes a priority for all people. This has highly detrimental effects on biodiversity. Natural pest control weakens, leaving farming vulnerable to widespread outbreaks of crop and livestock diseases. Pollinator communities are further homogenized and many species are pushed to local extinction. Local people start keeping bees to support local food production and as a source of honey. National Parks and other protected areas de facto disappear by the 2060s and many wildlife populations become extinct. Protected land nearest to agricultural and urban areas disappears first, with location driving the decrease rather than type of protected area.

By 2050, the water distribution system collapses due to lack of investment and maintenance of infrastructure. This is further exacerbated in England as water transfers from Wales are terminated after the four countries break apart. "No water England" is prevented through individual and community rainwater harvesting and decreasing per capita use.

In the 2050s, the National Health Service collapses due to the cuts in investment in previous decades and a shortage of skilled staff. The health system, originally free at point of contact, is replaced by a new system requiring an insurance or a direct payment, which leads to further health inequalities. The lack of infrastructure and investment in water treatment and maintenance facilitates an increase in water-borne diseases. Worsening living and working conditions lead to poorer health and contribute to the re-emergence of previously eradicated diseases.

In the 2060s, governance effectively collapses. Working conditions further deteriorate and deaths in the work place rise. The working lifespan expands and child labour re-emerges in connection to a widespread return to subsistence farming and bartering systems. Informal income jobs and informal economies increase. To escape the poor social and environmental conditions, drug consumption increases, which results in associated negative social trends such as increases in domestic and community violence.

2070 to 2100

By 2070, political and governance systems across the four nations have collapsed and a tipping point is reached when the police and justice system (as known in the past) cease to exist. Because of past investments in military and defence, but without an effective central government, different military groups (militias, criminal groups, etc.) rise to de facto power and compete for control and natural resources, creating their own feudal semi-independent micro-states with their own laws and means to enforce them. People accept severe restrictions on freedom in exchange for employment and protection.

Borders between the (former) UK countries cease to exist. Instead, new regions start to emerge within and between the four countries, centred around manufacturing, industry and natural resource heartlands. For example, self-governed regions emerge in South Wales centred around the coalfields, in the West Midlands centred around manufacturing, and across northern England and southern Scotland centred around agriculture.

With high levels of corruption, criminality is widespread across society and criminal groups replace former institutions. Arms trading increases and markets of non-monetary goods become more important. Militia enforce laws locally, and control resources and an illegal arms trade. As coal starts to run out, wood fuel becomes an important source of power. Scarce remnants of renewable energy infrastructure (e.g. solar or wind farms) are maintained by those who have access to the necessary resources and know-how. Remaining energy infrastructure is strictly local-scale and groups compete to control energy resources.

Housing is largely developed informally and people are forced to provide for themselves on their own or in family groups, with no safety net to rely on. Slum housing appears and diseases spread in urban areas. People migrate to rural areas to follow a subsistence livelihood on the land. Smallholder farming fully substitutes for intensive arable farming. The impacts of environmental degradation in the previous decades affects which crops can be grown. Soils and water bodies are severely polluted across all of the UK leading to the spread of disease. Due to the greater vulnerability to pest outbreaks, little is produced in some years, which leads to armed conflict between rural and urban micro-communities as the latter try to seize the production of the former. Occasionally, food shortage leads to famines. By the 2070s malnutrition is widespread.

Decreases in working and living conditions lead to social unrest at all levels — within families, communities and wider society. Towards the end of the century, armed conflict, internal terrorism and riots are pervasive.

Country specificities in relation to the full narrative

The following paragraphs build on the main narrative, emphasising differences of each UK country from the full narrative or providing specific regional examples. They should be read in conjunction with the main narrative.

England

England turns to greater free market thinking and English nationalist parties become stronger. A major source of tension is the urban/rural divide. Urban voters tend to be more liberal and progressive, while rural voters are traditional and conservative. These differences mean that leaders with more liberal policies, despite commanding a strong percentage vote, are only really popular in a small number of constituencies.

Many of the remaining constituencies move more towards right-wing populism as the UK doubles down on closing borders. This results in urban centres becoming unruly, but as the main drivers of the economy, the government decides to heavily invest in keeping these areas in line — to the continued detriment of rural areas. London is highly dependent on a service economy and possesses little manufacturing, and consequently its importance diminishes as the scenario evolves.

England shifts towards developing infrastructure for defence, leading to building in more remote areas in the countryside. This leads to a deregulation of habitat protection and particularly the loss of protected areas. England lowers food standards comparatively more than the other UK countries, and becomes short of land, water and forest resources, as well as energy resources, for which it depends on other UK regions. Until the midcentury, England continues to get resources from Wales and other UK countries, and in terms of international relations it remains less outward looking. Later on, as devolution proceeds and the supply of resources weakens, further tensions escalate between southeast and northern England as the north of England still has reasonable supplies of water.

Wales

As the governments in different UK countries have increasingly divergent views on policies, social coherence in Wales, built around people seeing themselves as both Welsh and British, starts to crumble. This identity crisis is further fuelled by the narrative of English wealth generated as a consequence of the exploitation of Welsh resources. Nationalistic views build momentum and snowball into greater nationalism and tensions between Wales and England. As a result, people with original roots outside Wales start moving out, primarily to England (mostly to cities), as nationalistic views take hold. The availability of natural resources becomes a trigger for further increases in tension between Wales and England once Wales stops the distribution of water to English cities.

Wales also still has large reserves of coal and access to wind-farms, leading to a captive industrialisation of natural resources. This contributes to Wales leaving the UK.

Wales inclines to more socialist principles than England, however, less than Scotland. Wales develops cooperative ties with Scotland and other parts of the world (i.e. the Celtic fringe — Basque region, Ireland, northern France, Cornwall). The rivalry with England, however, remains strong. Initially, a limited number of centres of cooperation appear within Wales, where communities of people with similar beliefs concentrate, promoting alternative lifestyles and less antagonism compared to the mainstream society. These centres develop locallevel governance structures.

In the widespread move to manufacturing, Wales adapts more quickly than the other parts of the UK since it is still relatively industrial. Tension and rivalry around key infrastructure and industrial areas in Wales increases (e.g. northeast Wales, a manufacturing centre adjacent to energy sources), as these have high demands for water as well as other resources. Welsh Government invests in reviving docks and manufacturing centres along the north and south coast of Wales (along the railroads) as well as restarting coal mining. As energy supply (particularly the import of electricity) becomes an increasing issue, old coal-based power stations are brought back into use. The breakdown of national governance around 2070 leads to a resurgence of tribe governance.

Scotland

Increasing polarisation between Scotland and the other UK countries is triggered by Scotland's turn to more socialist principles and Scottish independence parties gaining more power. Those who do not consider themselves as Scottish move back to other UK countries that better represent their heritage and beliefs. Soon after Scotland becomes independent in the 2040s. It forges ties with Wales and other Celtic regions, such as Cornwall and the Basque region.

Early in the scenario, Scotland is energy-rich due to its oil stocks, hydro-power plants and wind-farms, although the oil stocks run out by mid-century. Scottish Government provides substantial investments to reinvigorate ex-industrial areas (e.g. papermills, coal towns) to boost local manufacturing. These investments target the Central Belt and highly populated areas with cheap labour, but quickly deplete public spending. When splitting from the UK, Scotland claims the UK's nuclear arsenal and infrastructure and incorporates it into its defence, which gives it a disproportionate influence on the other UK countries. Nevertheless, maintaining the arsenal is extremely resource-intensive. With the bulk of public resources spent on defence and manufacturing, the Scottish government quickly runs out of money for public services, which degrade rapidly.

Agriculture intensifies in eastern and southern Scotland. While early in the scenario there are only limited options in terms of what crops can be grown and later on the food supply becomes critical, Scotland's food production is more climate resilient than other UK countries, as it possesses more land and freshwater and is relatively less dry compared to the more southern UK countries. Food standards are lowered, however, comparatively the least out of the four UK countries. Forest resources decline, but are relatively plentiful compared to the other countries. The disparity between the rich and the poor grows and the fragmentation of the society leads to increasing sectarianism based on culture, religion and dialect. Increasingly more people have problems buying food and water.

As Scottish Government collapses around 2070, a new form of governance based on a feudal system reminiscent of the Middle Ages emerges. These new 'clans' rule different parts of Scotland, with some moving into organized crime.

Northern Ireland

Northern Ireland is particularly challenged by the sudden cessation of imports, as the majority of industry comprises small and medium-sized enterprises who do not have the resources to adapt quickly. At the same time, Northern Ireland's strong agricultural sector is a benefit when food imports are substantially reduced. At first, smaller farmers are dispossessed in moves towards large-scale industrialised agriculture, with associated negative social consequences, including increasing unemployment and loss of traditions/ traditional landscapes. Northern Ireland maintains and increases agricultural subsidies to ensure economic growth in the agricultural sector. Environmental regulations are greatly weakened in lieu of prioritising economic activity. However, later on people are forced to revert to small subsidence agriculture.

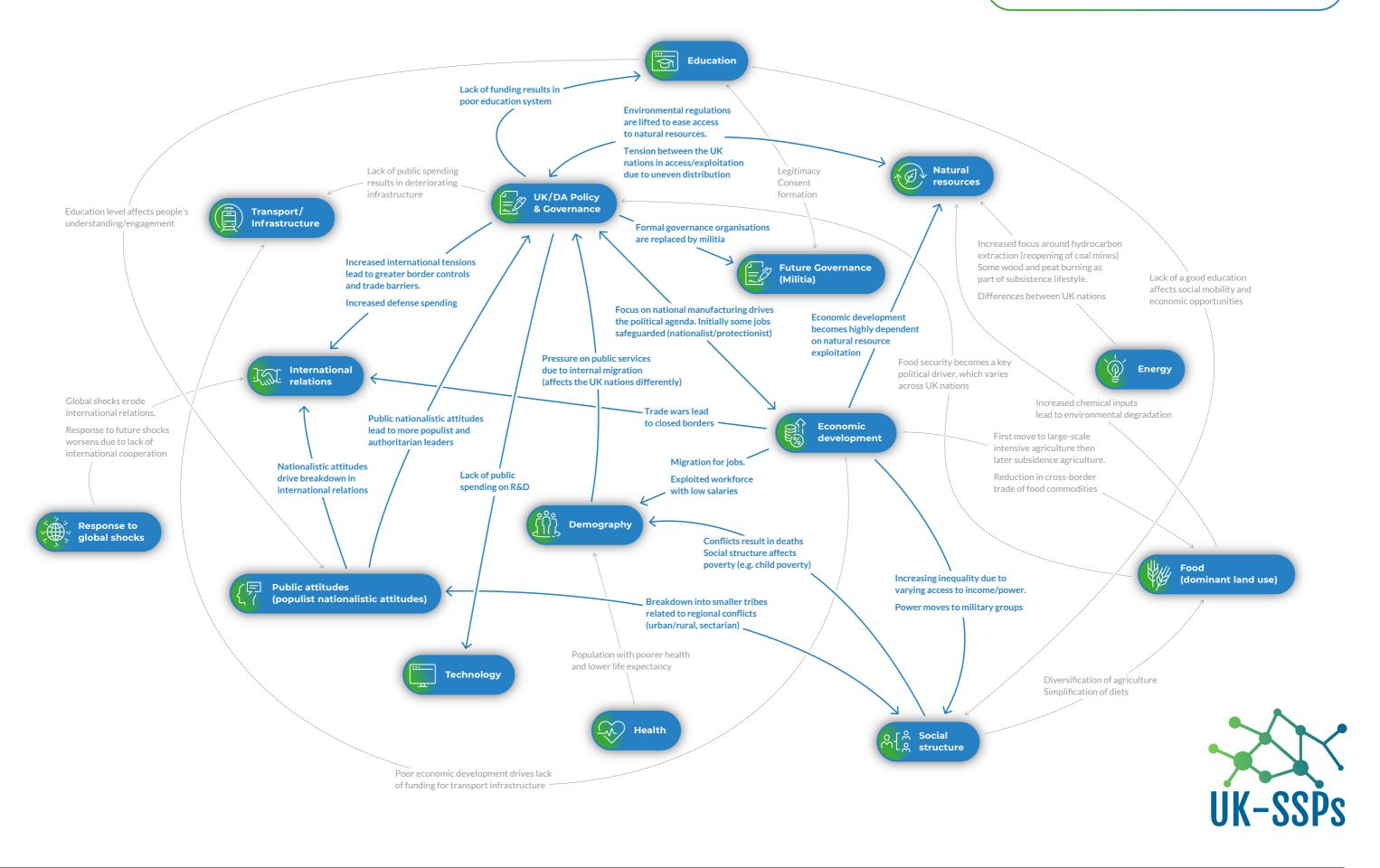
Divisions strengthen between those who identify as British (unionist and loyalists) and fight for a continued UK, and those who identify as Irish (nationalists, republicans, etc.). Among nationalists, another level of tension arises, between those who want reunification with the Republic of Ireland and those who wish to see an economically strong, independent Northern Ireland. These divisions are further worsened by mass job losses and related class tensions. Previous border defence infrastructure is re-established in Northern Ireland. creating tensions within the country, with the Republic of Ireland and the EU.

Cities are particularly affected by fuel poverty, causing fuel deprivation and also contributing to social tensions. Around mid-century, they escalate into a sectarian conflict, leading to the collapse of the Northern Ireland Assembly. This creates a political vacuum and causes large scale political conflict in which military groups and competing interest groups gain power, culminating in economic recession, higher mortality rates, increased deprivation, and geopolitical tension (particularly with respect to the Republic of Ireland). As a result, migration between Northern Ireland and the Republic of Ireland increases. Towards the end of the century, the country eventually sinks into war as loyalist and republican paramilitaries compete for the control of the state.

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System diagram visualising the interrelationships between drivers

System diagram animation available to view at: https://youtu.be/K2x07LLRrUE



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All the UK-SSP products are available from: https://www.ukclimateresilience.org/products-of-the-uk-ssps-project/

Acknowledgements

Project team

The UK-SSP Consortium consists of Cambridge Econometrics, UK Centre for Ecology & Hydrology, the University of Edinburgh and the University of Exeter.









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