

Foreign Direct Investment, Liberal Economic Development, and the Proliferation of Socio-Political Pathology

Ireland: A Case Study

Foreword

The following study was not born in an intellectual vacuum. Two intellectual trends have caught hold simultaneously but separately in recent years. The discipline of economics is broadening its area of inquiry. Until recently economists focused solely on the forces that generate wealth and material prosperity. But recently they have started to turn their attention to broader quality-of-life issues. In 2015, for example, the economist Angus Deaton won the Nobel Prize in economics by studying social pathologies related to what he has termed ‘deaths of despair’ (Case & Deaton, 2020).

At the same time, new intellectual projects are mushrooming. Post-liberal and, more recently, integralist political ideas are ascendent. Probably the landmark work here is political scientist Patrick Deneen’s *Why Liberalism Failed*. But the discussion has evolved enormously even since that book was published in 2018.

What has been lacking up until now is a framework to deploy these new ideas in a manner that aligns with quantitative social science and political economy. Some noteworthy studies align with these ideas—most notably Charles Murray’s *Coming Apart: The State of White America, 1960-2010*—but they are scattered and lack a coherent, common research project.

In what follows we hope to remedy this. This paper is not just a study of economic development and social pathology. It is, implicitly but quite consciously, an attempt to develop a post-liberal or integralist approach to political economy. The premise of the study is that liberal economic development—and the culture it feeds on and promotes—is inherently destabilising.

Having completed this study and tested the hypothesis on reams of data—some of it newly created using new techniques—we believe that this approach shows enormous promise. We believe that we have proven, as well as anything is ever proven in social science, that liberalism is an inherently destabilising system of ideas and policies. It can create great wealth—there is no doubt about that. But this wealth is often a poisoned chalice. It brings with it social dysfunction, crime, drug deaths, suicide, and a remarkable level of political destabilisation. Without pushing the interpretation of the results of this study too far, we even believe it is an open question whether liberalism is compatible with republican and democratic government—a mode of government it purports to be part of.

That we focused on the country of Ireland for this case study has enormous historical significance. Integralist sociology and political economy—now largely forgotten—was born in Ireland with the 1932 publication of Fr. Edward Cahill’s *The Framework of a Christian*

State: An Introduction to Social Science. Although Cahill was completely unfamiliar with many techniques we deploy in the following study, he would not have been remotely surprised by the results. Cahill's work—which includes chapters on liberalism and individualistic capitalism—explicitly outlines what we should expect from statecraft in a country as it becomes dominated by liberalism.

The founders of the Irish State consciously relied on Cahill's work, especially with respect to drafting Ireland's 1937 Constitution. Much of the contemporary Irish liberal political project centres on tearing apart and rewriting the Irish Constitution to eliminate any trace of its origins. By understanding all of this, the reader will better appreciate the enormous historical significance of our basing this study on Ireland. But we did not cherry-pick the example. Ireland is, for any number of reasons, simply the perfect case study for a new integralist sociology and political economy. It all feels remarkably like Providence.

Executive Summary

In the following study we probe the causes of cultural change in Ireland that began in the second half of the 20th century, as Ireland moved away from being a traditional Catholic nation and toward being a more modern liberal country. We pay particular attention to the impact of changing cultural mores but also of economic trends and how these have impacted cultural developments. Our time series findings are as follows:

- Prior to the so-called Celtic Tiger economic boom from the early 1990s into the early 2000s, Ireland was significantly poorer than its neighbours.
- The boom was driven by foreign direct investment (FDI) inflows, which were the result of economic liberalisation policies pursued by the Irish State. These FDI inflows closed the wealth gap between Ireland and its neighbours.
- The Celtic Tiger boom took place against a backdrop of broad cultural change. Religiosity in Ireland was already in decline when the FDI began to pour into the country, but the pace of cultural change appears to have accelerated once economic development got underway.
- As this cultural change took place, every non-economic measure of quality of life in Ireland deteriorated markedly.
- From trough to peak, the suicide rate rose 655%; the homicide rate rose 609%; alcohol consumption rose 128%; drug deaths rose 6,115%; and the fertility rate fell 58%.
- These negative cultural trends sped up as economic development accelerated and, in many cases, outstripped similar negative cultural trends taking place in comparable countries.
- During this period, dramatic political fragmentation occurred, with Ireland moving from being a stable parliamentary democracy with a system of two or three parties, to being a country where nearly half of voters elect fringe and independent representatives and where coalitions are increasingly fractious.

We then turn to cross-sectional analysis to detect any immediate causal connections. Our findings can be summarised as follows:

- FDI is the most important immediate causal force in Irish cultural change.
- FDI can be shown to impact directly the religiosity of the population, the liberality of the population's political views, and the rate of drug offences.
- The liberality of the population's political views—also impacted by religiosity—can be shown to have an impact on political fragmentation, fertility rates, and drug offences.

Finally, we tentatively explore three potential solutions for countries seeking an alternative development path that promotes economic development but maintains cultural cohesion:

1. Promoting friendly or at least value-neutral capital inflows
2. Laying down rules emphasizing that foreign companies should conform to local culture, not vice versa.
3. Building domestic cultural alternatives that attach local culture to high-prestige social networks.

Introduction

Economic development is the goal of every country around the world. Countries with living standards below those of the world's wealthier countries typically turn to other countries that have caught up, in order to determine a successful strategy that they too might deploy. Increasingly the best way to generate prosperity is clearly to open an economy to global forces of trade, stabilise labour markets and prices, and encourage FDI. We might call this the 'neoliberal' path of economic development. There is little doubt that this is a winning strategy that many countries have pursued to increase their national wealth. But few have paid attention to the potentially negative consequences of this strategy.

While economic development is a worthy goal, it is not the only metric of how well a country is doing. Consider the United States. It is the wealthiest country in the world. It surpasses every other country in terms of economic development. Yet few serious people would contest the idea that the United States has become a very sick society in recent years. Wealth inequality has exploded; political debate has become fractious to a dangerous extent; American cities are ravaged with homelessness and crime; and powerful opioids and other drugs are generating hundreds of thousands of so-called 'deaths of despair' (Case & Deaton, 2020).

What contemporary American experience shows us is that wealth can increase, yet misery can proliferate regardless. It also shows us that no guaranteed correlation exists between increasing economic wealth and social stability. The American experience teaches us a lesson that we seem to have forgotten: that although economic development is a laudable goal of statecraft, it should never be the exclusive goal.

In this study we examine the impact of neoliberal development strategies on a country's cultural, social, and political stability. One of the most successful—and emulated—countries that have taken this development path is Ireland. Prior to deploying its neoliberal development strategy, Ireland was one of the most homogenous and stable countries on the planet. Dominated by Catholic culture, the Republic of Ireland was widely recognised as one of the most peaceful places on Earth. This was no mere public relations campaign. As we show in what follows, on almost every metric, Ireland was long a remarkably stable and happy country.

This stability—together with the high-quality historical statistics made possible by Ireland's sophisticated civil service—makes Ireland the perfect object of study. In this paper we examine in granular detail the impact that changes in Irish culture have had on the republic, accelerated greatly by waves of FDI in the 1990s and 2000s. We find highly statistically significant trends that have not been widely discussed until now.

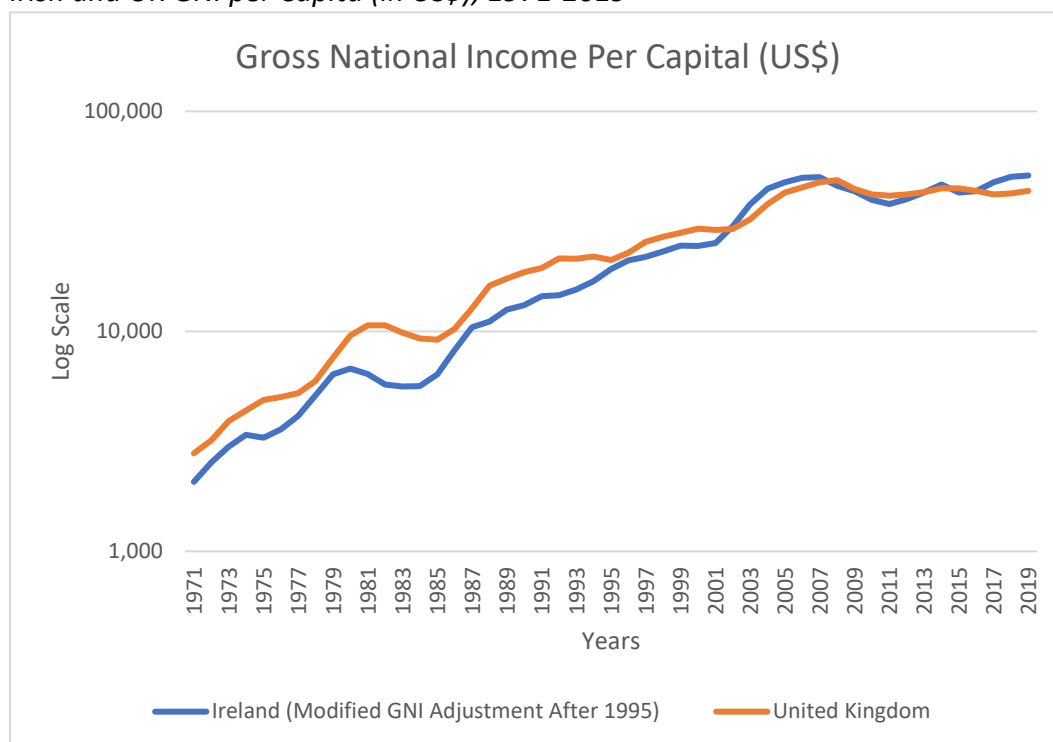
Our findings are mostly negative. While Ireland's economic development has been extremely impressive, Ireland has declined markedly in every other quality-of-life metric. This analysis raises an interesting question that we believe is worth asking: Is another path possible? Is there a way to take advantage of the economic development strategy that Ireland has deployed without unleashing the destructive social and cultural forces that have destabilised Irish society? Every country aspiring to increased wealth should ask itself this same question.

The Celtic Tiger

Prior to the mid-1990s, Ireland was not a rich country. Unemployment was the most obvious problem, with about 15% of the workforce unable to find a job. For this reason, emigration was high. Emigration peaked around 1989 at just over 70,000 people leaving the country—or just over 2% of the population.

The issue was not just that work was hard to find. Ireland also had lower standards of living than other developed economies did. It is best to judge Ireland vis-à-vis the United Kingdom, as the two countries were once a single entity under British control. When we compare their per-capita gross national income (GNI) from 1971 to the present (see Figure 1, log scale), the reasons why many Irish people favoured migration during that time become clear.¹

¹ In recent years, the Irish national accounts have become distorted by foreign capital inflows which vastly overestimate national income. For this reason, we have used a hybrid measure for Irish gross national income (GNI) in this discussion. For comparisons after 1995, we adjusted the data provided by the World Bank using the new modified GNI measure published by Ireland's Central Statistics Office (CSO, n.d.), which tries to correct for the distortions introduced by foreign capital flows.

Figure 1*Irish and UK GNI per Capita (in US\$), 1971-2019*

Note. Source: World Bank, Central Statistics Office (CSO) of Ireland.

As we can see, up until the early 2000s Ireland consistently lagged the United Kingdom in terms of living standards. Between 1970 and 1990, Ireland managed to provide its citizens with only around 72% of the living standard offered by the United Kingdom, as measured by respective GNIs.

Since travel between the United Kingdom and Ireland has no restrictions—due to a law creating the Common Travel Area between the two countries in some form since the Irish Free State was instituted in 1923—many Irish citizens simply moved to the United Kingdom to find work or raise their living standards. Other citizens have availed themselves of the friendly relations between Ireland and the United States to move there.

These problems started to be recognised in the mid- to late-1980s. Irish policymakers were inspired by the new neoliberal or free market policies in the United States and the United Kingdom. They were also given confidence by the increasing economic integration of the European Union, which Ireland had joined relatively early on, in 1973. During the mid- to late-1980s, Irish policymakers sought to stabilise the Irish economy in preparation for later integration in the global economy.

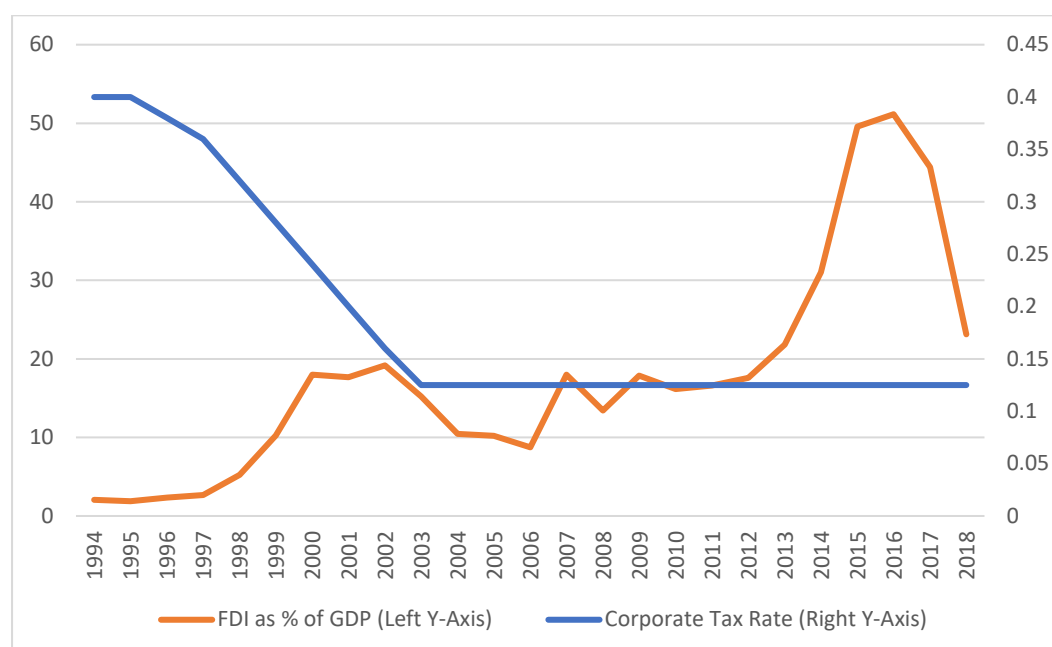
The core economic pillar of the stabilisation program was the Program for National Recovery, 1987-1990. The goals of this program were moderate wage growth and increased Irish competitiveness. These goals were pursued through a social partnership arrangement between trade unions and employers. Following the success of this program, social partnership became an embedded feature of the Irish economy (O'Donnell, 1998).

The next phase of Irish development came in the mid-1990s. As wages stabilised, inflation fell, and EU integration proceeded apace, Irish policymakers were ready to deploy the next pillar of their strategy: cutting the corporate tax rate and deregulating aspects of the financial system. The rationale was to attract FDI. Policymakers believed FDI was key to Ireland's future prosperity. They envisioned attracting enormous amounts of FDI, especially from the United States, and setting Ireland up as an export hub to reach the rest of Europe.

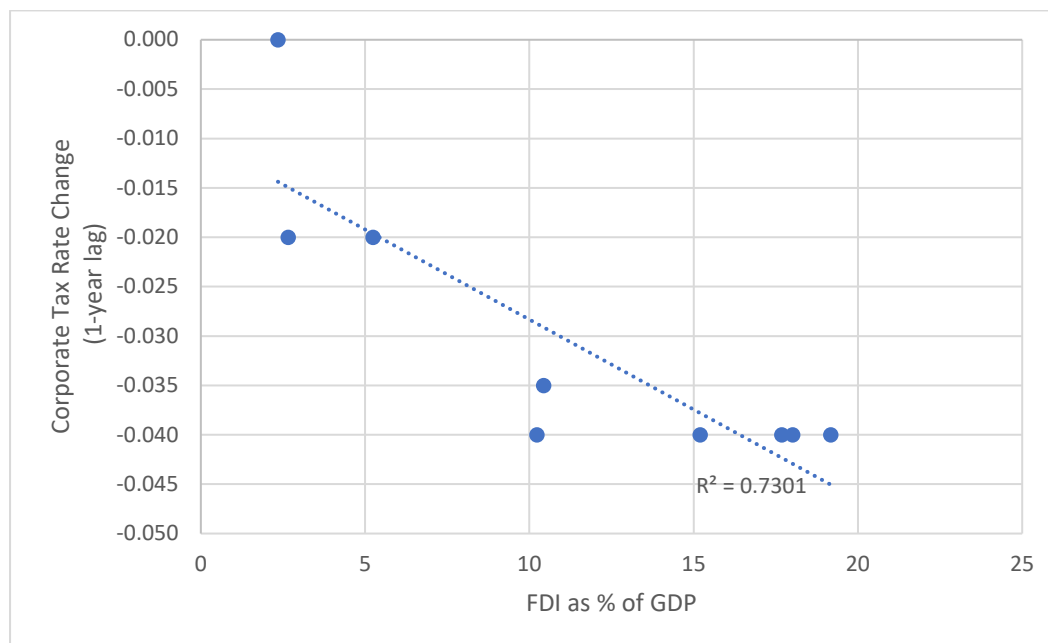
The policy was enormously successful. Figure 2 shows Ireland's corporate tax rate and FDI inflows as percentages of gross domestic product (GDP) from 1994 to 2018. Figure 3 shows a linear regression of one-year lagged changes in the Irish corporate tax rate against the level of FDI as a percentage of GDP during the key years when Irish policymakers were lowering the corporate tax rate (that is, 1995 to 2003).

Figure 2

FDI Inflows as GDP Percentages and Corporate Tax Rates, 1994-2018



Note. Source: Department of Finance, CSO.

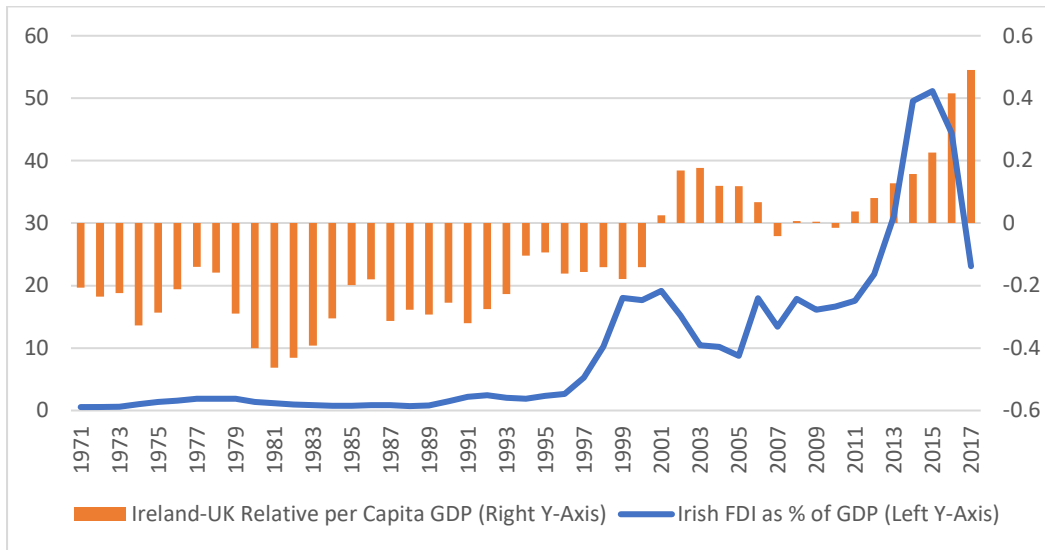
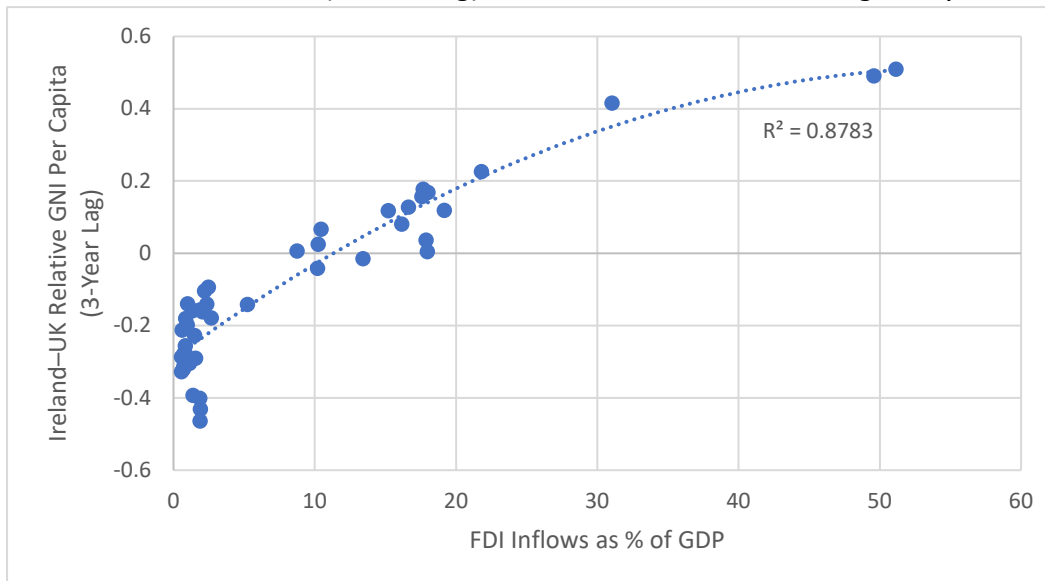
Figure 3*Corporate Tax Rate Changes vs. FDI as GDP Percentage, 1995-2003*

Note. Source: Department of Finance, CSO.

We see that a corporate tax rate in any given year is consistently strongly correlated with FDI inflows in the next year. The slope of the regression suggests that for every 1% the corporate tax rate was lowered between 1995 and 2003, FDI as a percentage of GDP rose about 4%.²

The increased FDI soon had a dramatic impact on Irish living standards. Again, comparing the Irish data to the United Kingdom data is instructive. Figure 4 plots Irish FDI as a percentage of GDP against the relative GNI gap between Ireland and the United Kingdom (i.e., the gap shown in Figure 1). Figure 5 shows the same data, but we have lagged relative per capita GNI by three years and fitted a second-order polynomial regression.

² Careful readers of Figure 2 will notice what appears to be a second wave of FDI starting around 2014. This wave is almost certainly artificial. The FDI in the 1990s and 2000s were genuine inflows of fixed investment in the country. The post-2014 mega-boom more likely arose from intellectual property claims being redomiciled to avoid tax. This is why the CSO created the modified GNI metric and why we use it throughout, where appropriate.

Figure 4*Ireland–UK Relative GNI vs. Irish FDI as GDP Percentage, 1971-2017***Figure 5***Ireland–UK Relative GNI (3-Year Lag) vs. Irish FDI as GDP Percentage, Polynomial Regression*

The data show a very strong relationship between the level of Irish FDI inflows and the Irish living standards relative to UK living standards. This relationship strongly establishes that FDI drove Irish living standards first to align with UK living standards and then even to exceed them. Looking back at Figure 1 we can see that by the 2000s, Ireland had substantially higher living standards than the United Kingdom did. Between 2002 and 2007, Irish living standards were around 11% higher than those in the United Kingdom. They fell after the collapse of the Irish housing bubble, but they have rebounded in recent years.

The policies deployed by Irish policymakers to increase FDI in the country have been enormously successful in raising Irish living standards. This is the consensus view, and we

see no need to argue against it. But this study focuses on the impact of this rising wealth more broadly—on society and politics, in particular. It is to this impact that we now turn.

The Long View of Irish Development

Religious Change

Until recent times, Irish society was one of the most Catholic societies in the Western world. Non-Irish observers and historically uninformed Irish observers also widely believe that in Ireland the Church and the State were intertwined. The former statement is historically accurate, whereas the latter is not. Irish civil society institutions were dominated by the Catholic Church, and Irish citizens were remarkably pious—but since its inception, the Irish State has viewed the Church as a rival institution and competed with it for social and political influence.

The Church initially tried to form the Irish State explicitly. In the 1920s and 1930s, Catholics successfully enshrined some aspects of Catholic natural law into the law of the Irish State. Yet these laws were not all that different to more broadly Christian principles acted upon by courts in other Western countries. The application of these principles by the State and the courts may have lasted longer in Ireland than in, say, the United Kingdom or the United States, but the principles themselves were not substantially different. All countries at the time had protections against obscenity, pornography, abortion, contraception, and so on—rooted in public morality—that were eventually washed away by the influence of the media and the State.

In the 1930s and 1940s, the Catholic Social Movement became a serious force in Irish politics. Initially some so-called integralists wanted to create a truly Catholic state, but the Irish State saw these people as a threat. So after some low-level conflict, the Catholic Social Movement took a backseat in matters of state and focused on becoming a civil society organisation.

As the Catholic Social Movement shifted its focus to civil society matters, the Irish State became increasingly aggressive in carving out its influence. The Irish State clashed with Catholic civil society organisations over a variety of issues. In the 1940s, the Irish State pushed for a centralised bureaucracy, while Catholics preferred a more diffuse vocationalism. This conflict soon led to an overt clash over healthcare in 1947 and then the 1951 Mother and Child Scheme, which was intended to provide healthcare for new mothers and infants (Whyte, 1971).

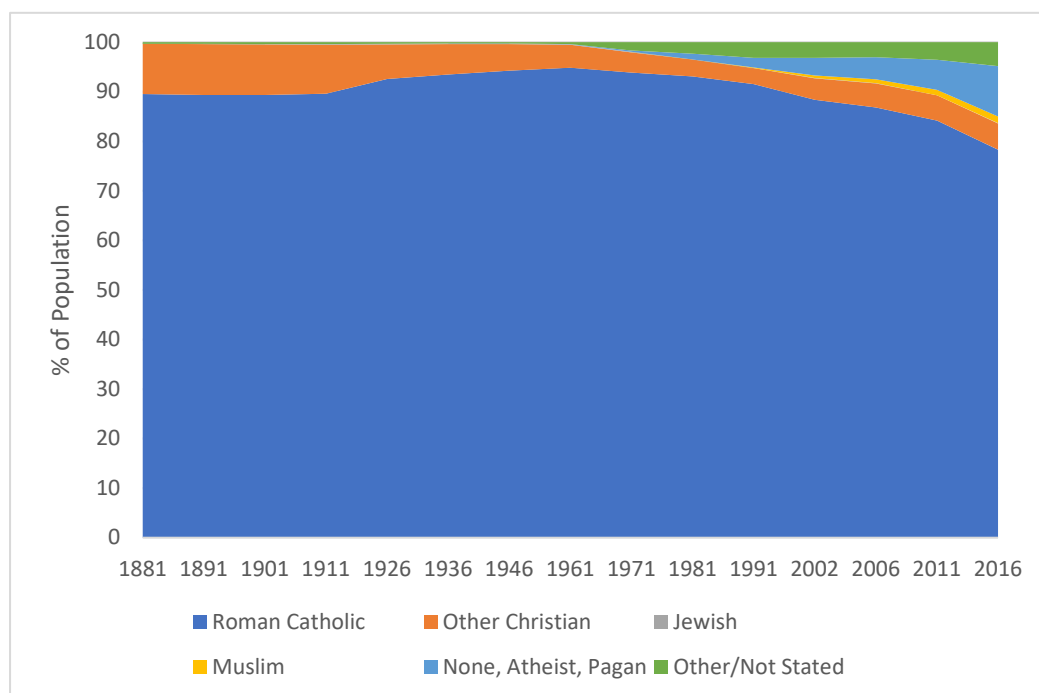
An accurate reading of modern Irish history shows that the Irish State always viewed the Catholic Church as a rival power—and by the 1940s, many Catholics were very sensitive to what they viewed as state overreach. Many in the Irish State were believing Catholics, but many others were republicans and revolutionaries with quite radical views. Several very influential politicians were at best reformist Catholics who viewed the Church's role in society to be very limited, not unlike John F. Kennedy in the United States; others were probably closet radicals.

Nevertheless, during the post-World War II era, the Church had more influence over the day-to-day lives of Irish people than did the Irish State. The Church also had more influence on the Irish State than the Irish State had over the Church in this period. In the 1950s and 1960s, a great deal of Irish daily life was organised around Catholic principles and institutions. Hospitals, schools, and welfare institutions had a heavy Catholic influence. Home and family life centred on the Church and its principles.

Figure 6 shows a breakdown of Irish people by religious affiliation from the late 19th century until 2016.

Figure 6

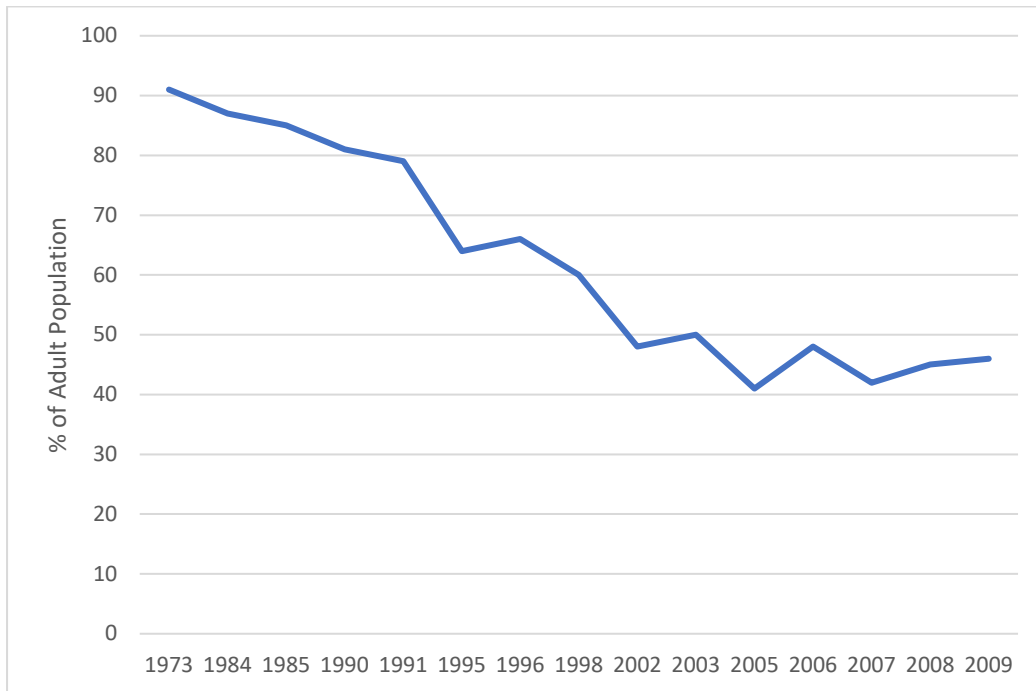
Population by Religious Affiliations, 1881-2016



These religious affiliation estimates, which are based on census questionnaires, are probably misleading in recent times. Many Irish people continue to identify as Catholic but do not adhere to Church teaching and do not interact with the Church. A better measure for Irish religiosity is Church attendance percentages, seen in Figure 7.

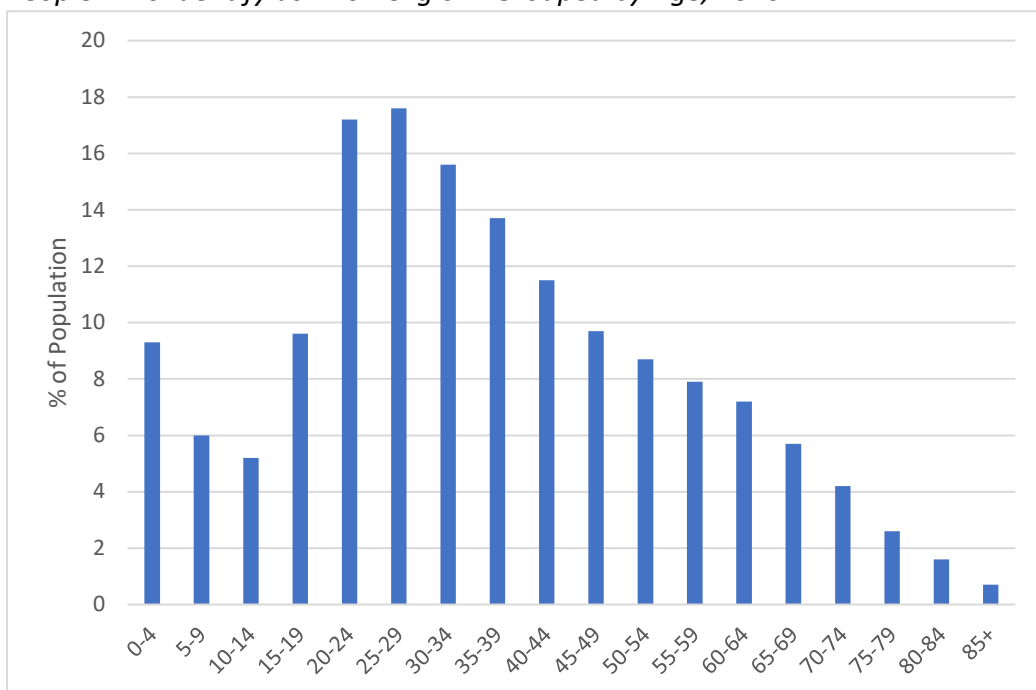
We see that Church attendance has halved since the early-1970s. Even this finding, however, gives a skewed view of Church influence in modern Ireland because many people who still attend church are older. Figure 8 and Figure 9 show the percentages of Irish people by age who identify as 'no religion' and the number of trainee priests at Ireland's largest seminary, respectively.

Figure 7
Adult Catholics Attending Church Weekly, 1973-2009

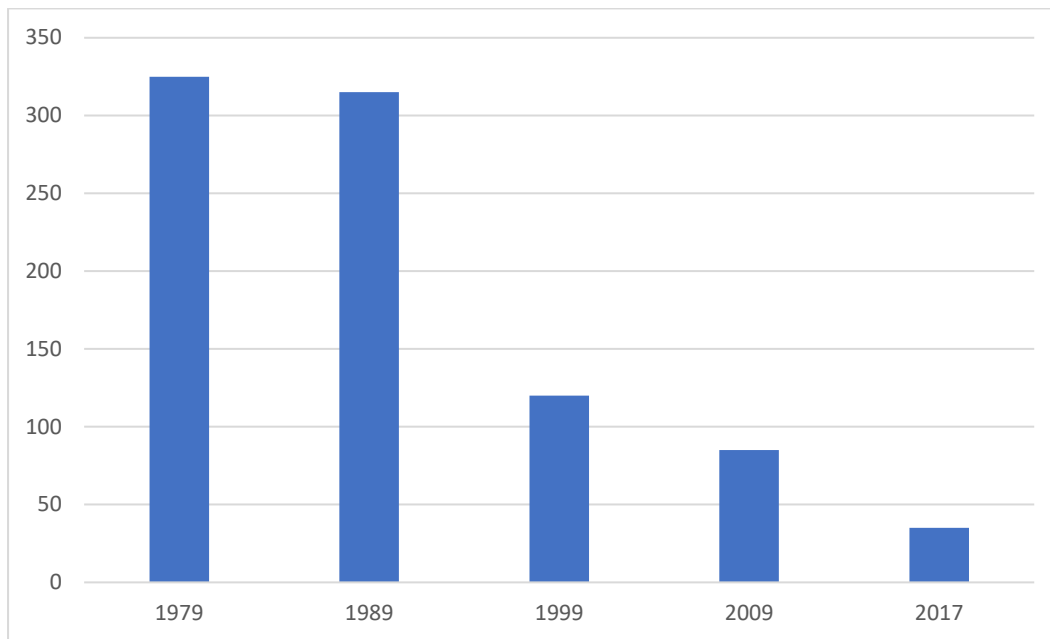


Note. Source: European Values Survey; Fuller, 2002.

Figure 8
People Who Identify as “No Religion” Grouped by Age, 2016



Note. Source: CSO.

Figure 9*Trainee Priest Populations at Maynooth Seminary, 1979-2017*

Note. Source: Catholic Communications Office, BBC.

Looking at all this data together starts to give us a sense of the profound cultural transformation that Ireland has gone through in the past few decades. Not all of this transformation was tied to economic development. The data clearly show that enthusiasm for the Church started to wane before economic development took off. This finding is not surprising. American and British cultural influence started to seep into Ireland in the 1960s; and by the 1970s, people growing up were more exposed to television, movies, and radio than they were to Catholic theology and morality.

Nevertheless, we can see that the changes sped up in the 1990s. This decade is when we see a collapse in religious vocations amongst Irish men, as shown in Figure 9. The 1990s is also when the largest age groups claiming no religious affiliation (that is, the under-40s) came of age. The data show that Ireland was already experiencing a period of cultural upheaval when its rapid economic development began in the late 1990s. But these trends accelerated as economic development increased.

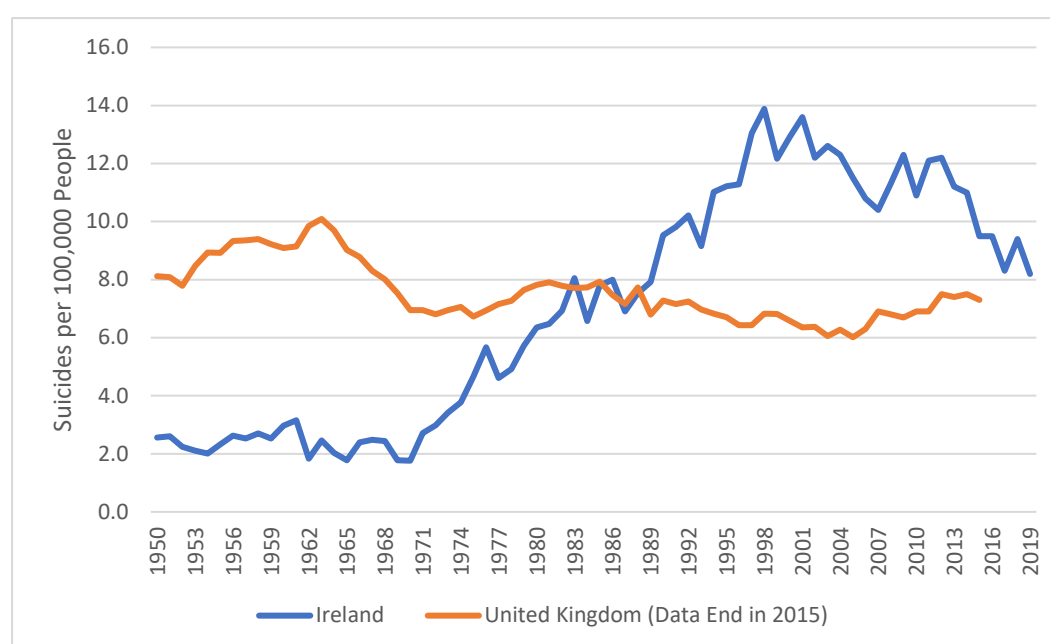
Social and Political Health

In his classic book on empirical sociology, *Suicide*, Émile Durkheim (1966) introduced the notion of ‘anomie.’ Durkheim believed that anomie was a social condition where shared norms that bind the population are broken down and where people become alienated from one another and from society at large. Durkheim believed an increase in anomie coincided with and largely caused social dislocation and breakdown. He predicted that if social scientists could find evidence of anomie, it should correlate with rising social pathologies.

Durkheim believed that anomie was mainly caused by rapid economic development. He has since been criticised by those who argue that his interpretation is overly economic and that we need to reconsider the role of cultural change itself, most notably how it relates to religion (see Lee & Clyde, 1974; for a recent empirical application, see Carter & Carter, 2014). Our own approach takes the middle ground and hypothesises that neither are independent forces. Economic development—especially rapid, undirected economic development—leads to a decline in religiosity; and this lack of religiosity unmoors people from their social and moral norms and leads to anomie and social deviance. Later in this paper we show these interrelationships using cross-sectional regression analyses. But for now, we view historical time-series data through this lens.

If our hypothesis is correct, we should see a rise in social pathology in Ireland as its religiosity declines. This is precisely what we see, and it happens very dramatically. Figure 10 plots the suicide rates in Ireland and the United Kingdom. Again, we here use the United Kingdom as a point of comparison because Ireland was originally part of that country.

Figure 10
Suicide Rates in Ireland and the United Kingdom, 1950-2019



Note. Source: WHO, OECD, CSO.

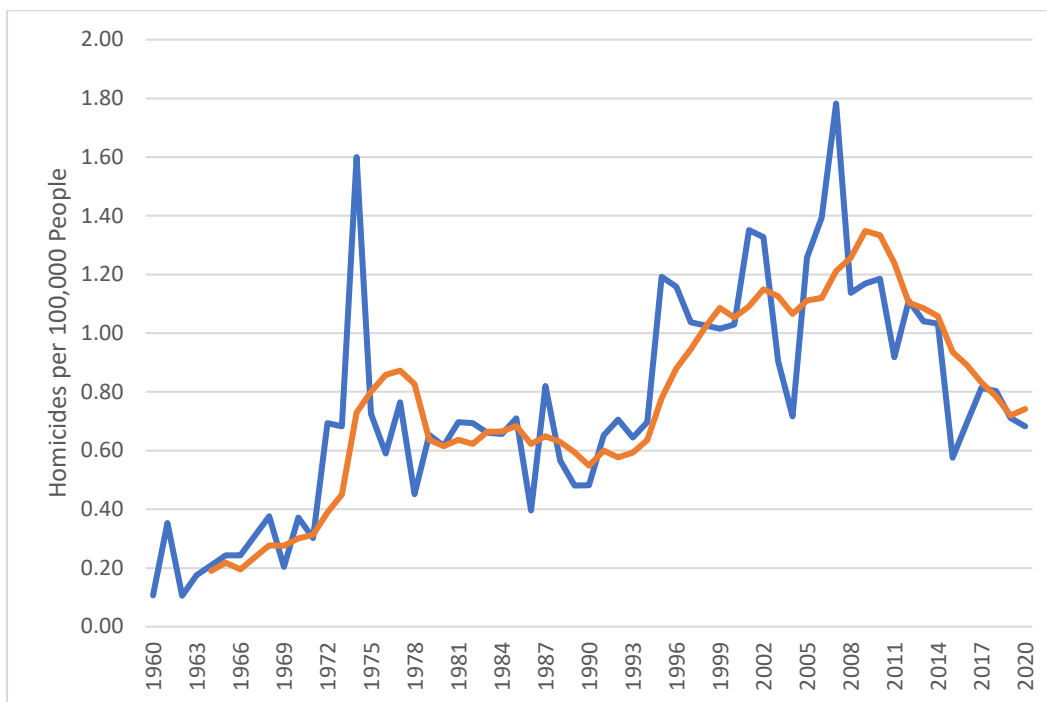
The suicide rates comparison is stark. In the 1950s Ireland had an incredibly low and stable suicide rate around 25% of the rate in the United Kingdom. This extremely low suicide rate suggests a very large degree of social integration in Ireland and conversely a very low level of anomie.

In the 1970s, when the cultural changes imported from abroad started to become ingrained in Irish society, the suicide rate started to rise dramatically. By the mid-1980s, Ireland caught up with the United Kingdom. Then something remarkable occurred: as the social and

economic foundations were laid down for Ireland's rapid economic development, the country's suicide rate far outpaced that of the United Kingdom. Since then, the suicide rate has returned somewhat to levels comparable to the rate in the United Kingdom, but it remains elevated in Ireland.

Figure 11 shows the Irish homicide rate since 1960.³ Once again, the data from the period of continued Catholic dominance are remarkable. Although we have not compared UK data with the Irish data in this chart, consider that the homicide rate in the United Kingdom in the 1960s was around 1 per 100,000 people—or five times higher than the rate in Ireland. Rates in the United Kingdom were broadly similar to rates in Europe (Eisner, 2008). In the United States the homicide rate in this period varied wildly, but the average was around 7 per 100,000 people, or 35 times higher than in Ireland (Pinker, 2011).

Figure 11
Homicide Rate in Ireland, 1960-2020



Note. Source: CSO, 'Measuring Ireland's Progress 2003' & Calculated.

The conclusion is clear: when Irish society was dominated by the Catholic Church, Ireland was an extremely peaceful place. At that time, Ireland was probably one of the least violent societies in the world. Indeed, it was perhaps one of the least violent societies in human history.

As cultural change set in, however, Ireland's homicide rate rose. In the 1970s, like the suicide rate, the homicide rate increased, and Ireland caught up with similar countries like

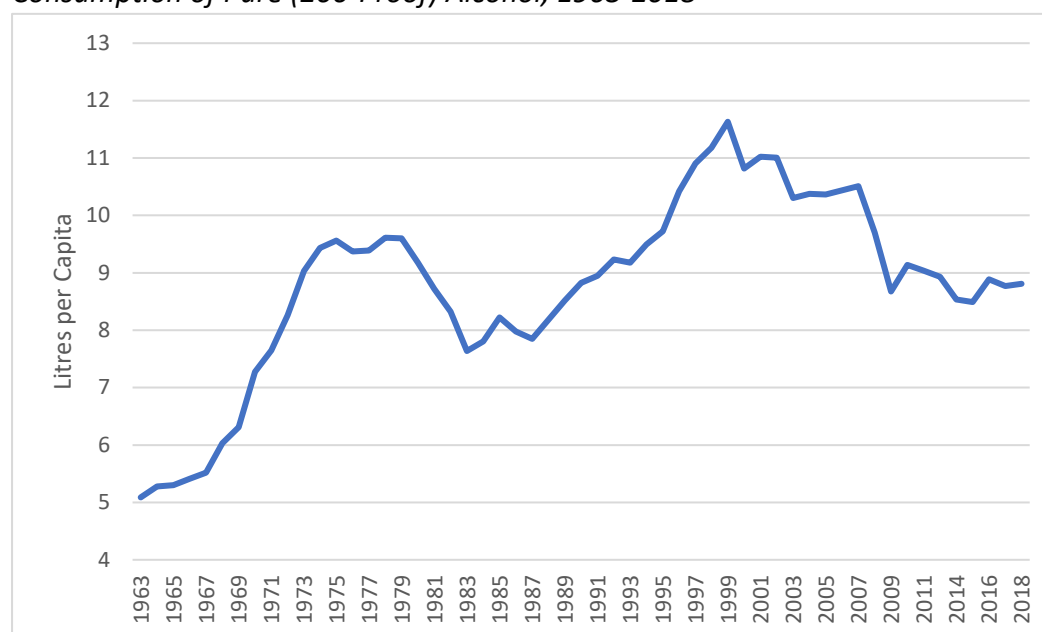
³ We have also included a five-year moving average, as the data are quite choppy, especially in the 1970s when Ireland was experiencing political violence.

the United Kingdom. In the 1990s, Ireland's homicide rate rose again. During the 2000s, Ireland's homicide rate fell in the higher bracket of most (non-Eastern) European countries. Like the suicide rate, the Irish homicide rate has started to normalise recently.

Another variable we can look at to gauge societal health is substance abuse. Let us look at alcohol first. Despite the Irish reputation for very high alcohol consumption, the cross-sectional statistics on this are mixed. Comparative World Health Organisation (WHO) data do put Ireland as one of the leading per-capita consumers of alcohol in the world, ranking eighth. Interestingly, however, Luxembourg and Germany have higher annual alcohol consumption per capita than Ireland (WHO, 2018). Yet Ireland has a relatively low prevalence of alcoholism and death from alcohol-related causes (WHO, 2018; see also Mokdad et al., 2014).

That said, we are interested in Ireland's development over time relative to itself, not relative to other countries. Figure 12 shows per-capita consumption of pure alcohol in Ireland since 1963.

Figure 12
Consumption of Pure (200-Proof) Alcohol, 1963-2018



Between 1963 and 2018, alcohol consumption in Ireland increased 76%. Like the rates of homicide and suicide, this figure was even higher in the 1990s. The alcohol consumption data fit with the data on alcohol-related deaths. While Ireland has fewer liver cirrhosis deaths than do most other countries in Europe, the percentage change in liver cirrhosis deaths in Ireland between 1980 and 2010 is amongst the highest in the world (Mokdad et al., 2014).

Interestingly, per-capita alcohol consumption explains statistically the increases seen in the homicide rate in Ireland. This correlation is not enormously surprising, given the well-known

link between alcohol and violence, but the strength of the correlation—laid out in Figure 13—is somewhat surprising.

Figure 14 lays out direct drug-related deaths per capita in Ireland since 1980. Here the data are worse than we find in other metrics. Whereas other metrics peaked in the 1990s and then declined, the annual numbers of drug-related deaths have risen higher and higher. This trend is interesting because drug-related death as a metric is fundamentally different to the other metrics we have looked at. The other metrics have impacts across social groups, whereas drug deaths more greatly impact the bottom of society. Ireland has by far some of the largest numbers of drug-related deaths in Europe (EMCDDA, 2019).

This evidence suggests that social changes and the higher levels of anomie in Ireland since the decline of broadly Catholic culture have hit lower socio-economic classes disproportionately harder. This is not surprising given how much effort the Church put into caring for and reforming lower socio-economic classes in the 20th century. When these efforts were taken over by the Irish State, the effects were broadly like we expect to see in any country where welfarist efforts end up producing family breakdowns, drug addiction, crime, and social disintegration in poorer areas.

Figure 13

Pure Alcohol Consumption Correlated with Homicide Rates

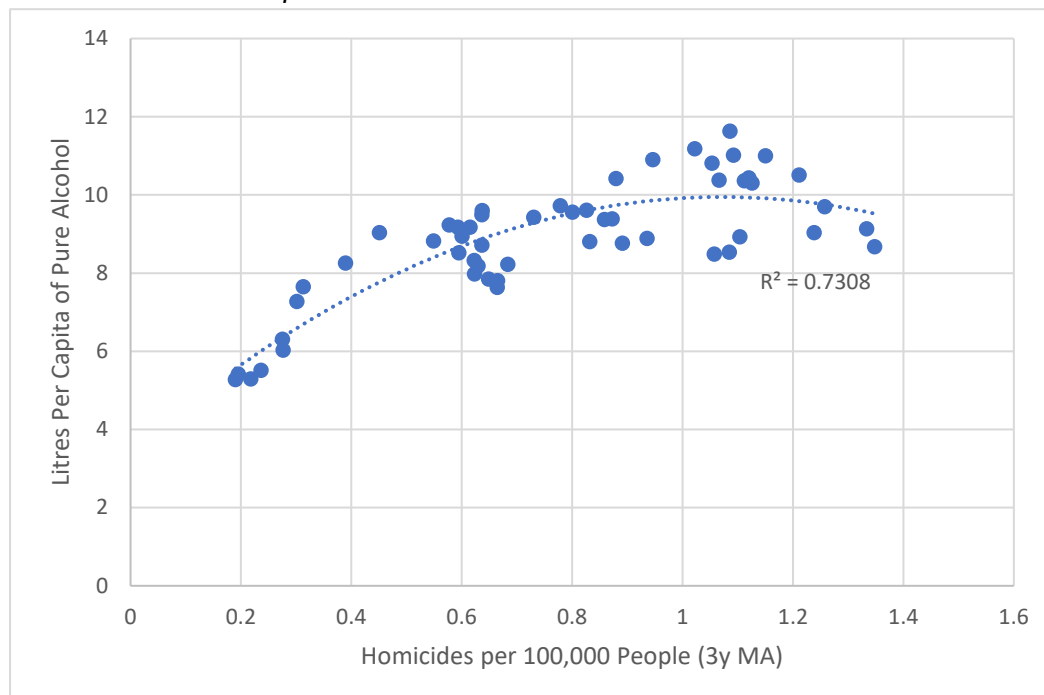
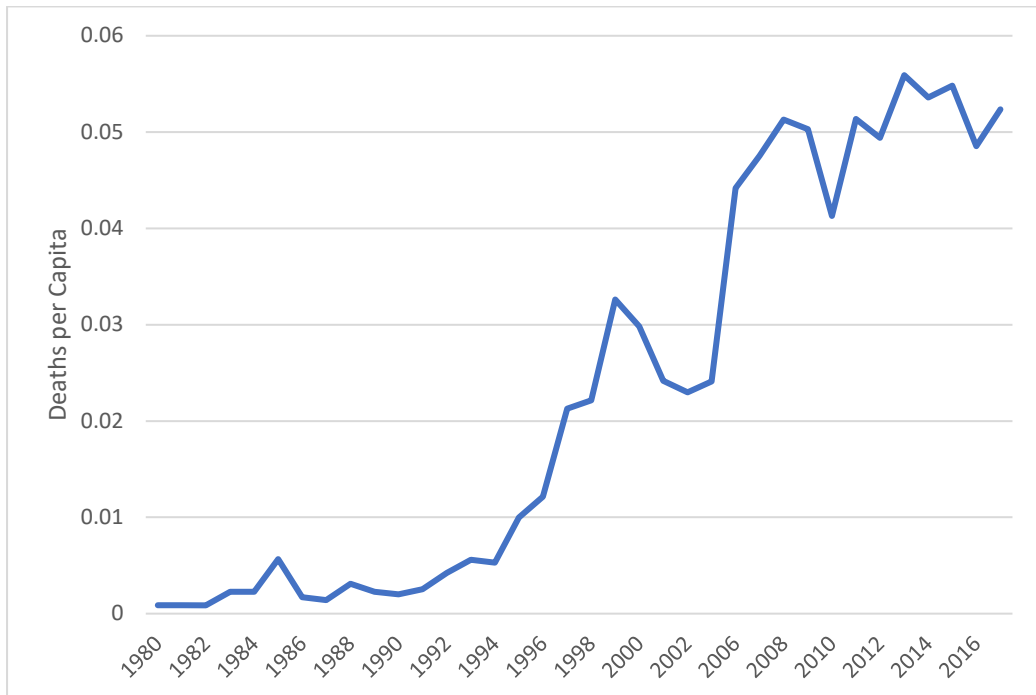
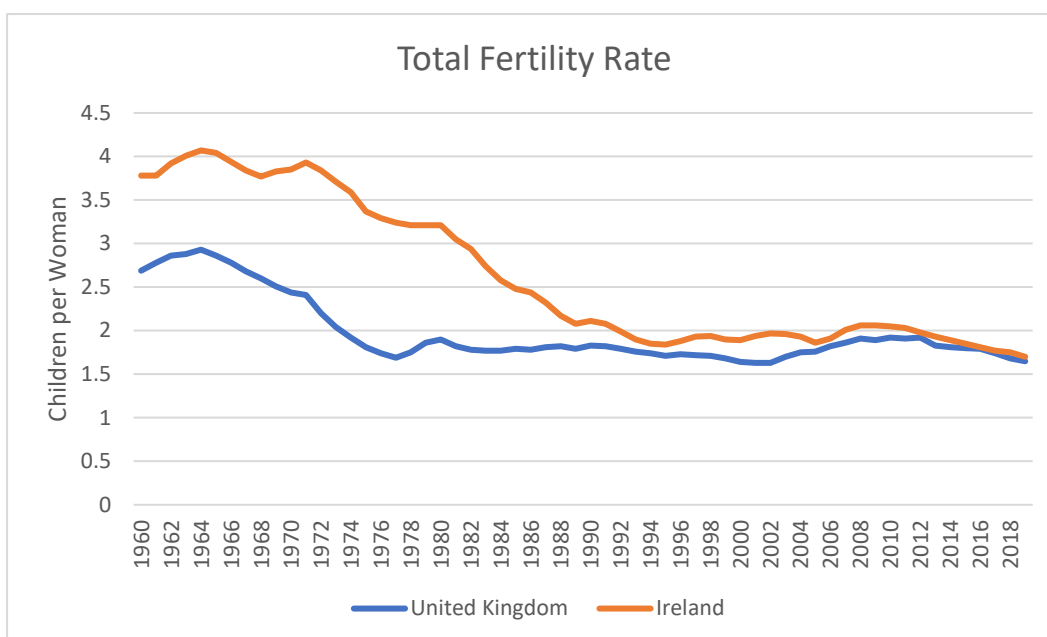


Figure 14
Direct Drug-Related Deaths, 1980-Present



Next, we look at the Irish fertility rate. As is becoming increasingly clear, fertility rates are extremely important to long-term economic growth. Fertility rates below the replacement rate of 2.1 live births per woman suggest that a country will experience economic problems in the future (Goodhart & Pradhan, 2020). Figure 15 compares Irish fertility rates to those of the United Kingdom since 1960.

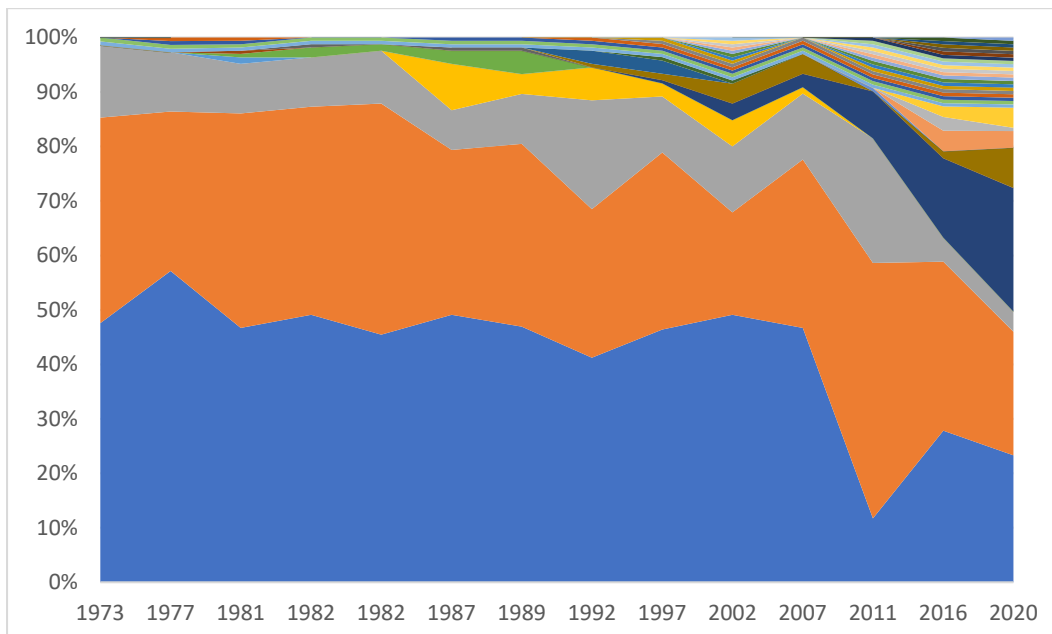
Figure 15
Fertility Rates in Ireland and the United Kingdom, 1960-Present



Here we see consistently higher fertility rates in Ireland than in the United Kingdom until the 1990s. At that point they started to converge. As of 2019, both countries have a fertility rate of around 1.7—substantially below the 2.1 replacement rate. In the short term, this rate points to the Irish people’s inability to form families. In the long term, it means that Ireland will likely experience the same economic problems found in the rest of the developed countries.

Finally, let us briefly look at the Irish political system. Robust democratic multiparty systems balance group consensus with healthy partisan disagreements. In these systems, people who share common interests congeal into voting blocs. When these blocs have opposing interests, they express them in their legislative branches—here the Irish parliament, or Dáil—and attempt to reach compromises. In societies experiencing rising anomie, we expect voting blocs to become much more fragmented. This indicates that people no longer see themselves as sharing common interests with others, leading to democratic government’s inability to function. Figure 16 lays out the composition of the Dáil since 1973. Note that each colour represents an individual political entity (irrespective of identity), whether a political party or an independent politician with a parliamentary seat.

Figure 16
Dáil Composition, 1973-2020



At the end of the period of Catholic dominance, in the early 1980s, we see low levels of anomie translate into a coherent multiparty system. Irish people voted in blocs when such blocs were stable enough to govern but not so large that rival blocs could not challenge them. This started to deteriorate in the 1980s when upstart political parties took advantage of increasing anomie to render the political system less stable.

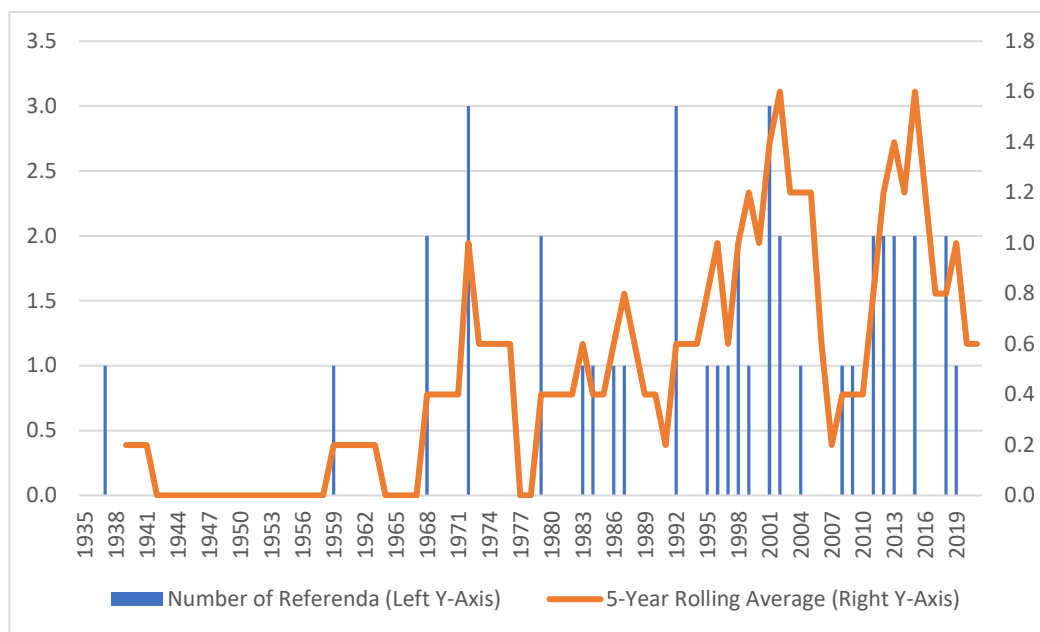
By 2010, the system had completely broken down. Political parties were unable to get sufficient votes to form majority governments, and independent politicians—who

effectively represent protest votes—started to make up around 20% of the Dáil. This diffusion renders democracy basically non-functional, because no matter who one votes for, the result will be an unstable hodgepodge coalition that governs on autopilot.

Another metric to judge the functionality or lack thereof of the Irish political system is the numbers of annual referenda. Ireland has been a constitutional republic since the 1937 foundation of the independent Irish State. The Irish Constitution is a precisely drafted document that sets out the rights and obligations of the Irish people. The drafters inserted a clause stipulating that any proposed changes to the Irish Constitution had to come before the public in a voting referendum.

Figure 17 shows the frequency of referenda in Ireland since the Irish Constitution was drafted. If the republican element of the Irish constitutional republic were stable, we would expect few referenda to take place. After all, a republic where the rules constantly change due to the whims of the majority is not really a republic at all—it is far closer to being a purely majoritarian democracy.

Figure 17
Frequency of Referenda in Ireland, 1935-Present



As other variables demonstrate, we see a great deal of referenda stability in the period of Catholic dominance. The republican element of the Irish political system started to deteriorate sooner than the democratic component. Already in the 1970s, the number of annual referenda started to increase. But in the 1990s, the numbers exploded—peaking at an average of three referenda per year. Unlike other pathologies, which seemed to cool off after the turmoil of the 1990s and 2000s, the numbers of referenda continued to be high in the 2010s.

The cultural and economic changes in Ireland in the later 20th century clearly caused a fracturing in the Irish political system. If we accept that democratic constitutional republics should balance the popular will against a rules-based order that can form functional governments, Ireland's democratic constitutional republic increasingly looks like a failure.

Overall, the evidence shows that when the dominance of the Catholic Church in Ireland waned, social pathologies increased markedly. During the period of Church dominance, Ireland was likely one of the most peaceful, least violent, most integrated, and most lacking in anomie societies that has ever existed. When Church influence waned, Irish rates of social pathology crept up to mirror the rates seen in other secular European countries—and even surpassed them in some cases. We also see that many of these social pathologies became even worse during the rapid economic development of the 1990s and 2000s, before settling down to these more normal European levels.

In the next section we turn to a vast array of cross-sectional indicators to try to untangle causes and effects of rising social pathology in this era.

Breaking Out Underlying Causes

Foreign Direct Investment

At the beginning of this study, we examined the impact of FDI on the Irish economy. We explained how FDI led Ireland from being a lower-income country to being a very high-income country. We also examined how attracting FDI was the goal of Irish State from the 1980s through today. To attract FDI, policymakers reconstructed the labour market and lowered corporate taxes.

Ireland is widely hailed as an economic success story, and it is difficult to argue otherwise on this front. But as we see in the historical time-series data, this economic wealth came at a cost: every metric of social integration and health has deteriorated drastically in the period since Ireland became wealthy. Some of these trends started before Ireland became a wealthy country, but they accelerated dramatically as economic growth took off. These trends suggest a likely link between cultural change and economic growth. While cultural change may have started prior to economic development, cultural change might have been catalysed by economic development.

To explore this statistically, we examined cross-sectional data within Ireland. We looked at correlations between FDI levels in individual Irish counties and a variety of variables. Wherever we found statistically significant cross-sectional results, we can say with confidence that FDI is independently and directly driving a given trend, at least in part.

The variable we used to measure FDI is 'FDI employment as a percentage of total employment.' We used this variable because we assume that FDI has two effects on culture. First, it raises living standards; this new freedom from constraints on consumption generates different cultural aspirations and ideals. Second, and more important, the culture of companies engaged in FDI is passed onto the population. This transmission occurs through employment, so we can expect this effect to appear in the workplace. Put simply,

the more people are employed by foreign firms, the more people are exposed to the aspirations and ideals espoused by those firms.

We first tested the impact of FDI on religiosity. We ran a linear regression on the percentage of the population employed in FDI-generated jobs in each county versus the percentage of that population that identifies as one of the Christian denominations. The key regression outputs can be found in Table 1 below. Full regression outputs appear in the appendix at the end of this study. This regression is labelled Model 1 in the appendix.

Table 1

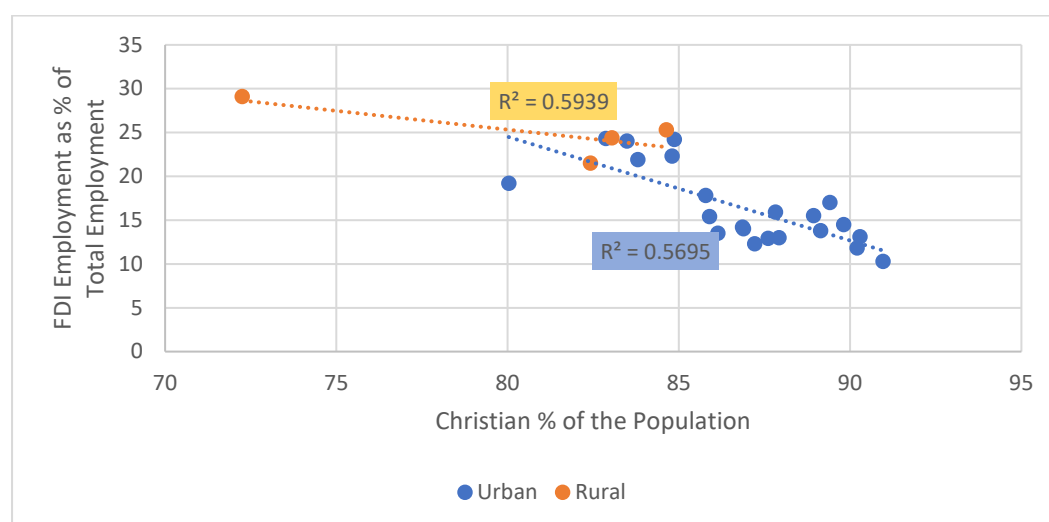
FDI-Employed Population vs. Christian Population

	FDI Employment vs. Christian % Population
Coefficient	-0.610084
p value	< 0.0001***
Adjusted R²	0.637064

Here we see a very strong negative relationship between FDI employment and the percentage of the population identifying as Christian. To firm up these results, we undertook two further tests. First, we broke down the regression into urban and rural counties to ensure that our results were not simply picking up the fact that urban centres tend to be less religious and more likely to attract FDI. The results appear in Figure 18.⁴

Figure 18

FDI-Employed Population vs. Christian Population, Urban vs. Rural



Second, we needed to ensure that the results were not being confounded by the relative ages of the population. Because counties with large FDI deployments have better job opportunities, they may attract younger people for jobs. And since younger people tend to

⁴ "Urban" counties in this analysis are those counties with cities, namely, Cork, Dublin, Galway, and Limerick. All other counties are counted as rural.

be less religious, this trend might give a false positive result. Table 2 below lays out the key variables for a multivariate linear regression that controls for the age structure of the population.⁵ The full model is listed as Model 2 in the appendix.

Table 2

FDI-Employed Population vs. Christian Population, Controlling for Age

	FDI Employment vs. Christian % Population	Age Structure vs. Christian % Population
Coefficient	-0.289818	-152.506
p value	0.0078***	0.0002***
Adjusted R²	0.795613	0.795613

Unsurprisingly, the age structure does matter and shows strongly statistically significant results. But FDI employment continues to yield strong results regardless, showing that FDI seems to impact religiosity independent of its tendency to attract younger people.

Next, we looked at the impact of FDI on culturally liberal attitudes. To gauge this impact, we used the results from the 2015 marriage equality referendum, in which the Irish people voted by a margin of 62 to 38 in favour of legalising same-sex marriage.⁶ We assumed that a higher percentage of people voting in favour of same-sex marriage indicated a higher concentration of culturally liberal attitudes in a given county. Table 3 below shows the key regression outputs, while the full model is listed as Model 3 in the appendix.

Table 3

FDI Employment vs. Those Voting 'Yes' on 2015 Marriage Equality Referendum

	FDI Employment vs. % Voting 'Yes'
Coefficient	0.00869516
p value	0.0001***
Adjusted R²	0.530324

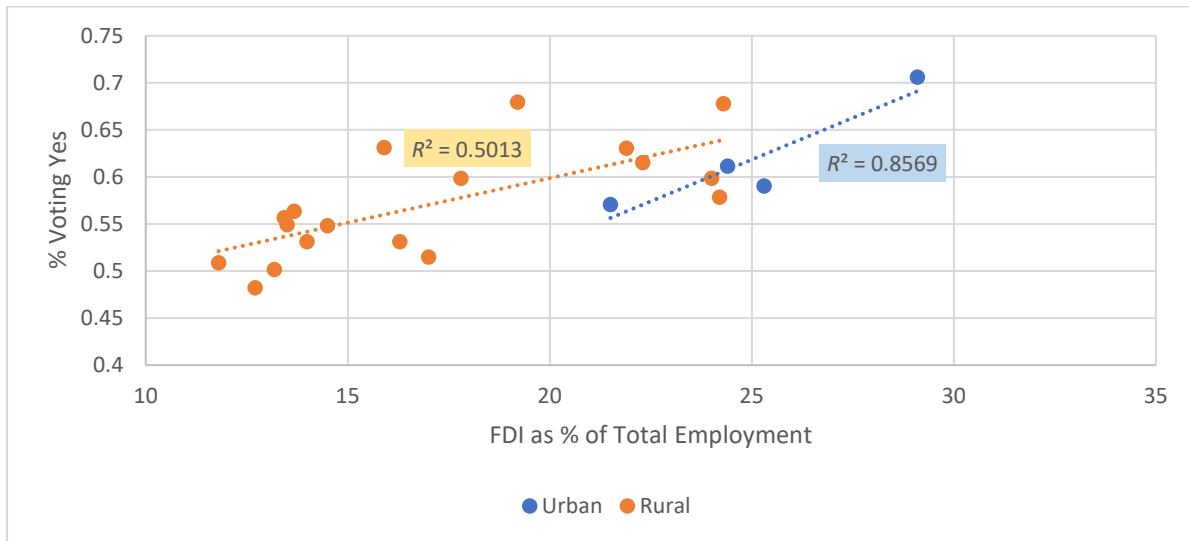
As with religiosity, we found a statistically significant positive relationship between FDI employment and the percentage of people in a given county who voted in favour of same-sex marriage. Once again, we controlled for the urban/rural divide (Figure 19) and the age structure of the population (Table 4, Model 4).

⁵ "Age structure" is defined as the percentage of the population falling between the ages of 20 and 64—so a working-age population.

⁶ We had to choose among three referenda here: the 1995 referendum on the legalisation of divorce, the 2015 referendum on marriage equality, and the 2018 referendum on the legalisation of abortion. We did not choose the 1995 divorce referendum because it took place when economic development was just starting. Also, that highly contested referendum passed by only a very small margin (50.3% to 49.7%), and the result was disproportionately driven by voters in urban centres. We did not choose the 2018 abortion referendum because the results were almost identical, cross-sectionally, to the results of the 2015 marriage equality referendum. Since the latter was the first to generate these results, we decided it was the better candidate for this analysis. That said, if we had used the abortion referendum, the results would almost certainly have been identical.

Figure 19

FDI-Employed Population vs. Those Voting 'Yes' on Marriage Equality, Urban vs. Rural

**Table 4**

FDI-Employed Population vs. Those Voting 'Yes' on Marriage Equality, Controlling for Age

	FDI Employment vs. % Yes	Age Structure vs. % Yes
Coefficient	0.00482877	1.70636
p value	0.0719*	0.0573*
Adjusted R²	0.596664	0.596664

Here we see that the urban/rural divide does not interfere with the results. In fact, the relationship between FDI employment and urban voters' support for same-sex marriage was shown to be even stronger than the relationship across states. When we controlled for age we saw the *p* value decline for the FDI variable; but it remained statistically significant, and the fit of the overall model increased.

Finally, we looked for a direct impact from FDI on manifest social pathologies. We should note before undertaking this exercise that these relationships should be weaker than the impact of FDI on cultural and political attitudes. This hypothesis is because social pathologies tend to be complex effects of cultural breakdown that happen gradually and over time. We saw this already earlier in this paper. Nevertheless, it is worth seeing whether FDI employment explained any of these pathologies directly.

We tested for effects on the following variables: suicide rate, homicide offenses, sexual offences, total fertility rate (TFR), political fragmentation,⁷ and drug offences. We found no statistically significant relationships except when it came to drug offences. The results for

⁷ We discuss our metric of political fragmentation in more detail in the subsection on cultural liberalism. For now, suffice to say that we tried to capture, at a county level, what the data in Figure 16 capture at a national level.

drug offences are laid out in Table 5 and Model 5. The rest of the results are included in the appendix as Models 6 through 10.

Table 5

FDI Employment vs. Drug Offences

	FDI Employment vs. % Drug Offences
Coefficient	63.7023
p value	0.0247**
Adjusted R²	0.198347

The analysis showed a weak yet highly statistically significant result. This finding tells us that FDI inflows seem to directly impact illegal drug usage. None of the other relationships were statistically significant, which is what we expected since these social pathologies are complex phenomena that evolve gradually through time in response to social and cultural changes.

Our key finding when looking at FDI, therefore, is that FDI appears to be driving social and cultural attitudes in a profound way. FDI inflows effectively predict how religious a given county will be and how culturally liberal the voters in that county will be. This finding suggests that FDI inflows are having a profound impact on Irish cultural and political life.

Declining Religiosity

In the previous section we saw the impact of rapid economic development on Irish cultural attitudes. We saw that increased FDI inflows in a given county is predictive of the level of religiosity in that county. In this section we discuss our attempts to quantify the impact that the decline in religiosity is having on other relevant variables.

First, we considered whether the level of religiosity in a given county predicts the extent to which culturally liberal attitudes have spread in that county. Once again, as our proxy for culturally liberal attitudes, we used the percentage of votes in favour of legalising same-sex marriage in the 2015 referendum. The results of this regression are laid out in Table 6; the full results are available Model 11 in the appendix.

Table 6

Christian Population vs. Those Voting 'Yes' on 2015 Marriage Equality Referendum

	% Population Christian vs. 2015 'Yes' Vote
Coefficient	-0.0120985
p value	< 0.0001***
Adjusted R²	0.596900

Here we see a strong, statistically significant relationship between religiosity and culturally liberal attitudes. This relationship is not surprising, but it shows the role that religious decline has played in the changing cultural attitudes amongst Irish people. Of course, we have already shown that FDI inflows impact the religious makeup of the Irish population.

This confirms the intuition that economic development is catalysing cultural changes in Irish society.

We also ran regressions on the relationship between religious belief and the more granular social pathologies: suicide rate, homicide offenses, sexual offences, TFR, political fragmentation, and drug offences. As with the FDI regressions, we did not expect strong results in this direction. And as with the FDI regressions, only the drug offences were found to be correlated in a statistically significant way. Table 7 (and Model 12 in the appendix) outline the results. Results for the other variables are in the appendix under Models 13 through 18.

Table 7

Christian Population vs. Drug Offences

	% Population Christian vs. Drug Offences
Coefficient	-105.044
p value	0.0041***
Adjusted R²	0.356352

Interestingly, the relationship between religiosity and drug offences is stronger than that between FDI inflows and drug offences. This finding suggests that cultural change is a more powerful force impacting drug addiction than economic development is.

Overall, we can see clearly in the cross-sectional analysis the impact that declining religiosity is having on cultural attitudes in Ireland. When we recall that FDI inflows seem to impact trends in religiosity, a causal picture begins to emerge as to what is driving political and cultural change in Ireland.

Cultural Liberalism

In the previous discussions we saw how FDI inflows and changes in religious belief—themselves linked—have driven changes in Irish cultural attitudes, as proxied by people’s tendency to vote in favour of liberal social issues at referenda. Yet for us to treat these liberal cultural attitudes as passive phenomena would be wrong. True, the results show that these attitudes are—in part, at least—caused by changes in the economy and in religiosity. But this finding does not mean that these emergent cultural attitudes are not having effects of their own.

Let us first look at political fragmentation. In a previous section we highlighted how, as Ireland modernised, its political system became increasingly fractious. The country has turned away from having a functional parliamentary system dominated by large voting blocs representing different interests in Irish society. What has emerged instead is a fracturing of political opinion and the rise of smaller parties and independent politicians who find it hard to form meaningful coalitions. This disintegration means that parties who should oppose one another are forming homogenous and fragile coalitions. These coalitions, in turn,

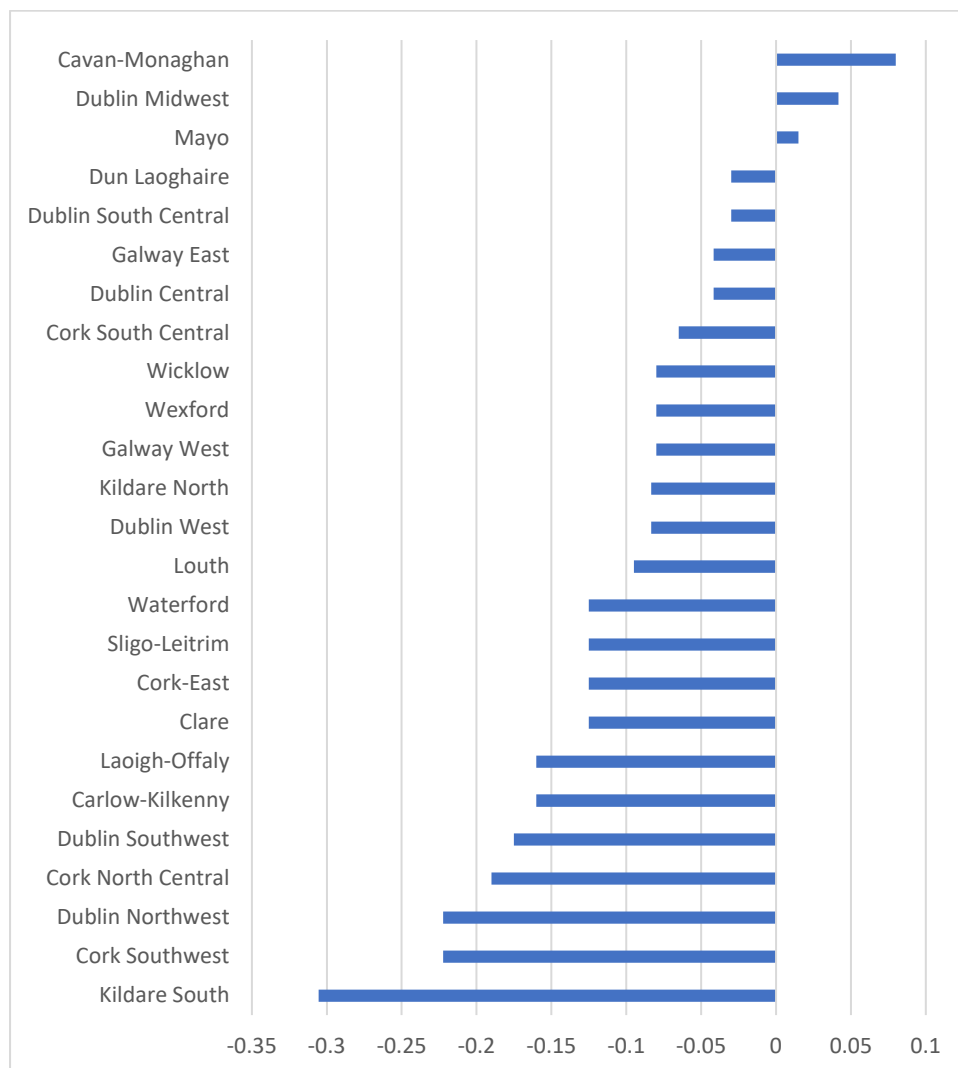
render the democratic process largely meaningless, as voters end up with the same coalition governments no matter how they vote.

To study this fascinating phenomenon further, we created a unique county-level index of political fragmentation. To create this index, we utilised a technique long used by economists to study economic monopolies, called the Hirschman-Hirfindahl Index (HHI). Economists use the HHI to study the levels of economic concentration in a given sector of the economy. A higher reading on the HHI represents a higher level of concentration.

We used the HHI to study the level of concentration in Irish constituencies. It provided a powerful way to track local changes in political fragmentation, which themselves explain national changes in political fragmentation. Figure 20, for example, shows the changes in political concentration that occurred between 2002, when the country's parliamentary democracy was still quite functional, and 2020, when the fragmentation gave rise to fragile, hodgepodge coalition governments.

Figure 20

Changes in Party Concentration Between 2002 and 2020



In addition to developing an overview of where in Ireland this political fragmentation is taking place, we also used the HHI for a regression analysis to find out what is driving the fragmentation. We have already seen that the fragmentation is not explained either by changes in religiosity or by FDI inflows. Table 8 (and Model 17, in the appendix) gives the results of a regression relating our political concentration index to the levels of liberal cultural opinion in a given county (proxied by the 'yes' vote in the 2015 same-sex marriage referendum).

Table 8

Those Voting 'Yes' on Marriage Equality vs. Political Fragmentation

	2015 'Yes' Vote vs. Political Fragmentation
Coefficient	-0.00425599
p value	0.0378**
Adjusted R²	0.114664

The results were remarkable. They showed that increased culturally liberal attitudes predict political fragmentation. Nor were these results an artefact of the urban/rural divide. Model 18 in the appendix shows that the results became more statistically significant when we remove the Dublin constituencies.⁸ These results tell us that part of the explanation for the political fragmentation that we see in Ireland is due to the spread of culturally liberal ideas.

On reflection, this finding is not all that surprising. Cultural liberalism is rooted in an aggressive individualism and distrust of culturally binding forces. The ideal liberal cultural subject is, by definition, an atomised individual who defines him- or herself not by reference to the collective, but by his or her own subjective thoughts and feelings. It is therefore not surprising that these increasing attitudes in a population lead people to increasingly vote in a way that does not benefit collective parties who represent a broad array of different people; rather they turn to idiosyncratic parties and individual politicians promoting niche causes. Once more, reflection makes obvious that these forces, if left unchecked, could prove detrimental to the functioning of a multiparty democracy.

Intuitively, these same forces are likely driving the major increase in referenda that we saw in Figure 17. These referenda are resulting in rapid, tumultuous changes in the constitutional republican component of the Irish State. Naturally, atomised liberal political subjects find burdensome the constitutional constraints on their behaviour handed down by previous generations. But as with democracy itself, these forces left unchecked could easily erode the very foundations of the constitutional republican state. If constitutional rights

⁸ Note that constituency data are different to county-level data. Counties have different constituencies, and some constituencies cross county borders. For this reason, we did not remove the urban counties as we did earlier in this paper. Rather we removed only Dublin, which tends to be the biggest outlier when it comes to voting in a culturally liberal manner.

change every few years, at what point must citizens assume that they cannot depend on said constitutional rights?

Next, we ran regressions relating culturally liberal attitudes to the more granular social pathology indicators. We found two robust results. First, culturally liberal attitudes are associated with increased drug offences. These results are shown in Table 9 (and Model 19 in the appendix).

Table 9

Those Voting 'Yes' on Marriage Equality vs. Drug Offences

	2015 'Yes' Vote vs. Drug Offences
Coefficient	6,453.48
p value	0.0155**
Adjusted R²	0.257484

Unsurprisingly, culturally liberal attitudes overlap with illegal drug use, although it is interesting that the relationship is less strong than it was for religiosity.

Our second robust result concerned the impact of culturally liberal attitudes on the fertility rate. Table 10 below (and Model 20 in the appendix) shows this relationship.

Table 10

Those Voting 'Yes' on Marriage Equality vs. TFR

	2015 'Yes' Vote vs. TFR
Coefficient	-1.08103
p value	0.0746*
Adjusted R²	0.083191

Here we see a weak relationship. But it remains statistically significant. It is very interesting that counties with more liberal cultural attitudes also show a tendency toward lower birth rates. The topic of demographics has become important in recent years, as fertility rates have fallen below replacement-rate levels in many developed countries. These results suggest that cultural liberalism may have not only an indirect impact, but also a direct one.

The rest of the regressions are included in the appendix as Models 21 and 22.

Summing Up the Cross-Sectional Results

The previous three sections utilised cross-sectional regression to try to determine the causal relationships between changes in economic, religious, and cultural life and some pathological trends that we have seen emerge in Irish social and political life. The causes are complex and interrelated. But they can be summarised in a systems dynamic model, seen below in Figure 22 (note that the numbers are *p* values of each relationship).

Here we see that the two forces driving changes at the highest level are FDI inflows and religiosity—with religiosity itself being caused in part by FDI inflows. FDI inflows and

religiosity both account for some of the culturally liberal attitudes we see emerging in Ireland, as proxied by ‘yes’ votes in liberal constitutional referenda. Both FDI inflows and religiosity also partly explain the rise in drug offenses—and presumably drug deaths—we have seen in recent years. We do not have cross-sectional data on alcohol consumption, but it would not be surprising if this too proved to be related to these variables.

At the next highest level, we have culturally liberal attitudes. These partly drive multiple social pathologies, namely the declining fertility rate, political fragmentation, and drug offences.

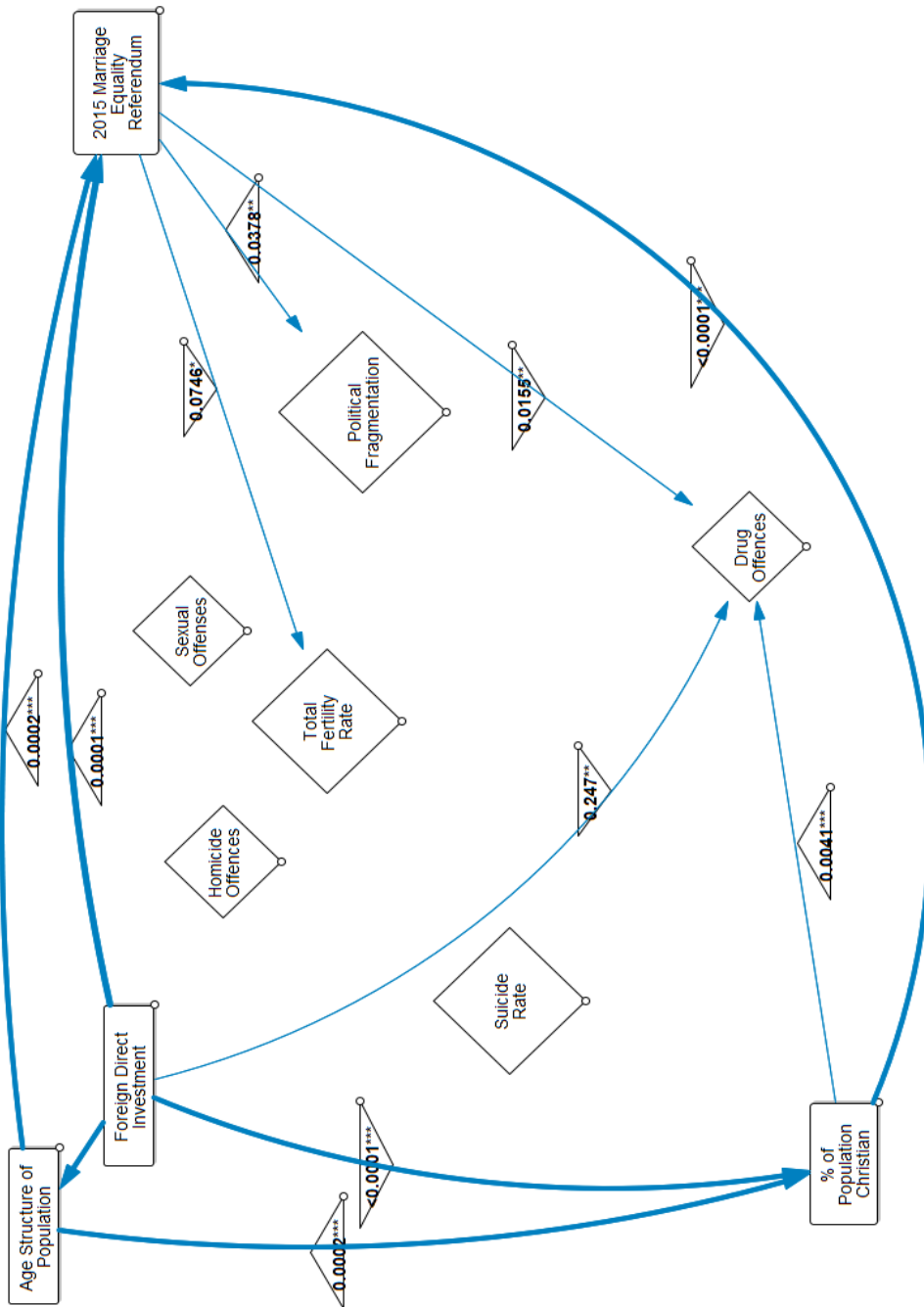
Again, we stress that the results of the cross-sectional data can only be read as showing that these variables are having an *immediate* statistical impact on another variable. Just because no statistical relationship appears in the cross-sectional data between, say, religiosity and the fertility rate does not mean no actual relationship exists between these phenomena. It is intuitively obvious that Ireland’s falling birth rate is in part due to less of the population following the teaching of the Catholic Church. In short, that no immediate statistical relationship exists does not mean that there is no actual relationship. We have limited ourselves to statistical study here, but we trust that readers can use their own common sense to draw conclusions about the many pathologies we showed in the section outlining the historical time-series data and their relationships to cultural and economic changes in the country.

Economic Development Without Cultural Deterioration: Solutions

The findings of this study lead to an obvious question: Could a country that wants to develop economically, as Ireland has done, do so in a way that maintains cultural coherence? We do not know, as it has not been tried. But some lessons from Ireland seem worth considering and applying elsewhere to try a different strategy.

We have seen that FDI seems to have an enormous impact on cultural and political outcomes. This finding suggests that something in the nature of FDI gives rise to anomie and cultural dislocation. It seems likely that this is related to foreign attitudes flowing in along with FDI. Where American companies have landed in Ireland, American cultural attitudes have disproportionately prevailed. This is intuitively reasonable: we should expect that corporations will bring their values with them, both through their company culture but also through their management structures.

Figure 21
Systems Dynamic Model



This phenomenon needs to be studied in more detail. Optimally, this study would be carried out at a microsociological level. But from the results above we can say with some confidence that governments who want to avoid cultural dislocation should be careful in selecting what FDI they let into their country. The market for FDI is highly competitive today—on both sides. Smaller countries often think that they are competing for a limited pool of FDI. But more often than not, FDI is desperate to find new countries in which to deploy. If a country ticks all the boxes—stable political culture, well-defined property rights, educated workforce, reasonable labour costs, etc.—then it should have the power to have some say in what FDI enters the country.

Countries interested in an alternative development path should try as best they can to screen the FDI they let in. Ideally, they should find investors who are sympathetic to the country and its domestic culture. But at the very least they should look for FDI that is value-neutral: that is, FDI that is interested only in economic profit and makes an explicit commitment not to wield political and cultural power.

These countries should also try to ensure that management structures within the new companies remain as domestically influenced as possible. Obviously, there are trade-offs here. One of the advantages of FDI-led development is that small countries can benefit from foreign management structures—and their managers can learn from these structures and replicate them. On the other hand, foreign management structures, left unchecked, can obviously have a negative impact on the domestic cultural ecosystem. Countries that want to follow a different development path must study the trade-offs involved here and negotiate a path whereby they allow in enough foreign management to benefit from it, but not so much that it becomes a culturally domineering force.

Relatedly, the State should not be shy about laying down rules for foreign corporations. Foreign investors do not want their business operations meddled with by governments. But they tend to be perfectly happy complying with local cultural pressures—if these are exerted. Foreign corporations behave very differently in environments where local cultural pressure is exerted—for example, in China or in Saudi Arabia—from how they behave where local culture is compliant to the needs of the corporation.

That corporate entities are not politically or culturally neutral by default is obvious. But their political and cultural activism is only skin-deep. These entities will spread their culture if given a chance. But if they are firmly told not to, they typically comply with this request. The bottom line for investment of any kind is economic profit, and FDI is no different. Local leaders and community activists just need to be polite but firm in laying out the local rules to foreign companies. If locals do not do this, the companies themselves will rewrite those rules.

Finally, a domestic cultural alternative is needed. What the findings in this study suggest is that there is a relation between social success and cultural hegemony. The foreign companies in Ireland brought with them the best jobs, so the culture associated with those companies acquired a prestige that made them attractive to the higher social classes. The

lesson to take from this finding is that any attempt to promote cultural alternatives domestically must link them to success and prestige.

Domestic cultural institutions, whether state-led or civil society-led, should focus on building networks amongst successful people. In Ireland, belonging to cultural networks that share the values of foreign companies is a useful way for people to advance their careers. The basic structure of this model can be replicated, with the promoted cultural mores chosen locally rather than being chosen by the foreign corporations. Once again, if even a small amount of pressure is exerted, the foreign companies are unlikely to object to this. In fact, they will likely stitch themselves seamlessly into the new domestic cultural fabric to ensure their own prestige. This is again what we see in countries like China and Saudi Arabia, where the local culture is upheld.

The three keys to alternative development are friendly or at least neutral foreign capital, cultural pressure by local state and civil society on foreign companies to conform to the local culture; and an alternative domestic culture that can form high-prestige social networks and interact with newly developing economic institutions.

Friendly capital. Respect for local customs. High-prestige local networking.

Conclusion

The findings of this study are clear. There is every reason to think that FDI inflows, merged with incipient social and cultural changes, lead to the dissolution and degradation of communal life in a country. FDI inflows may produce rising wealth; but left to themselves, they lead to a general deterioration of non-economic life. These trends seem to impact every facet of non-economic life, from crime to drug addiction to suicide, and all the way up to political destabilisation.

While many of the social and cultural changes are very long-term changes that are difficult to link statistically to the FDI inflows, others can be shown to have immediate quantitative relationships. Some of these results were a surprise to us, as we thought they would not be detectable. The fact that they are detectable shows just how powerful economic forces can be—especially when merged with incipient cultural changes.

Finally, we briefly consider what lessons we can take from the studies. Specifically, what lessons might a country take away if it wants to pursue an alternative development path? We argue that encouraging friendly or value-neutral capital, laying down rules on foreign corporate cultural engagement, and setting up alternative high-prestige cultural networks are key to any such strategy.

References

- Cahill, E. (1932). *The framework of a Christian state: An introduction to social science*. M. H. Gill and Son.
- Carter, E. M., & Carter, M. V. (2014). Anomie, deviance, and the religious factor: Data from 104 NFL football players. *Journal of Sociology and Social Work*, 2(2), 135-144.
- Case, A., & Deaton, A. (2020). *Deaths of despair and the future of capitalism*. Princeton University Press.
- Central Statistics Office (CSO). (n.d.) Modified GNI. <https://www.cso.ie/en/interactivezone/statisticsexplained/nationalaccountsexplained/modifiedgni/>
- Deneen, P. (2018). *Why liberalism failed*. Yale University Press.
- Durkheim, E. (1966). *Suicide: A study in sociology*. The Free Press.
- Eisner, M. P. (2008). Modernity strikes back? A historical perspective on the latest increase in interpersonal violence (1960-1990). *International Journal of Conflict and Violence*, 2(2), 288-316.
- European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). (2019). Drug-related deaths and mortality in Europe. https://www.emcdda.europa.eu/system/files/publications/11485/20193286_TD0319444ENN_PDF.pdf
- Fuller, L. (2002). *Irish Catholicism since 1950: The undoing of a culture*. Gill and Macmillan.
- Goodhart, C., & Pradhan, M. (2020). *The great demographic reversal: Ageing societies, waning inequality, and an inflation revival*. Springer Nature.
- Lee, G. R., & Clyde, R. W. (1974). Religion, socioeconomic status and anomie. *Journal for the Scientific Study of Religion*, 13(1), 35-47.
- Mokdad, A. A., Lopez, A. D., Shahrzad, S., Lozano, R., Mokdad, A. H., Stanaway, J., Murray, C. J. L., & Naghavi, M. (2014). Liver cirrhosis mortality in 187 countries between 1980 and 2010: A systematic analysis. *BMC Medicine*, 12(145). <https://doi.org/10.1186/s12916-014-0145-y>
- Murray, C. (2012). *Coming apart: The state of White America, 1960-2010*. Crown Forum.
- O'Donnell, R. (1998). *Ireland's economic transformation: Industrial strategy, European integration and social partnership* (Working Paper 2). Centre for West European Studies, University of Pittsburgh.
- Pinker, S. (2011). *The better angels of our nature: Why violence has declined*. Penguin.
- Whyte, J. H. (1971). *Church and state in modern Ireland 1923-1970*. Gill and Macmillan.

World Health Organisation (WHO). (2018). Global status report on alcohol and health 2018.
<https://apps.who.int/iris/rest/bitstreams/1151838/retrieve>

Appendix: Regression Models

Model 1

OLS, Using Observations 1-26

Dependent variable: Christian

	Coefficient	SE	t ratio	p value	
const	96.7081	1.68128	57.52	< 0.0001	***
FDIemploymentasoftot	-0.610084	0.0910648	-6.699	< 0.0001	***

Mean dependent var	85.88614	SD dependent var	3.946047
Sum squared resid	135.6332	SE of regression	2.377264
R ²	0.651581	Adjusted R ²	0.637064
F(1, 24)	44.88264	p value(F)	6.27e-07
Log-likelihood	-58.36655	Akaike criterion	120.7331
Schwarz criterion	123.2493	Hannan-Quinn	121.4577

Model 2

OLS, Using Observations 1-26

Dependent variable: Christian

	Coefficient	SE	t ratio	p value	
const	178.690	18.5525	9.632	< 0.0001	***
FDIemploymentasoftot	-0.289818	0.0994916	-2.913	0.0078	***
Population2064	-152.506	34.4323	-4.429	0.0002	***

Mean dependent var	85.88614	SD dependent var	3.946047
Sum squared resid	73.19911	SE of regression	1.783976
R ²	0.811964	Adjusted R ²	0.795613
F(2, 23)	49.65846	p value(F)	4.51e-09
Log-likelihood	-50.34853	Akaike criterion	106.6971
Schwarz criterion	110.4713	Hannan-Quinn	107.7839

Model 3

OLS, Using Observations 1-21

Dependent variable: MarriageRef

	Coefficient	SE	t ratio	p value	
const	0.417655	0.0346822	12.04	< 0.0001	***
FDIem	0.00869516	0.00179053	4.856	0.0001	***

Mean dependent var	0.580029	SD dependent var	0.061592
Sum squared resid	0.033853	SE of regression	0.042211
R ²	0.553808	Adjusted R ²	0.530324
F(1, 19)	23.58254	p value(F)	0.000110
Log-likelihood	37.71985	Akaike criterion	-71.43971
Schwarz criterion	-69.35066	Hannan-Quinn	-70.98633

Model 4*OLS, Using Observations 1-21*

Dependent variable: MarriageRef

	Coefficient	SE	t ratio	p value	
const	-0.493071	0.449556	-1.097	0.2872	
FDlem	0.00482877	0.00252529	1.912	0.0719	*
Population2064	1.70636	0.840145	2.031	0.0573	*

Mean dependent var	0.580029	SD dependent var	0.061592
Sum squared resid	0.027541	SE of regression	0.039116
R²	0.636998	Adjusted R²	0.596664
F(2, 18)	15.79322	p value(F)	0.000109
Log-likelihood	39.88643	Akaike criterion	-73.77285
Schwarz criterion	-70.63929	Hannan-Quinn	-73.09279

Model 5*OLS, Using Observations 1-21*

Dependent variable: ControlledDrugOffences

	Coefficient	SE	t ratio	p value	
const	526.411	507.897	1.036	0.3130	
FDlem	63.7023	26.1188	2.439	0.0247	**

Mean dependent var	1721.795	SD dependent var	681.6709
Sum squared resid	7,077,654	SE of regression	610.3344
R²	0.238430	Adjusted R²	0.198347
F(1, 19)	5.948460	p value(F)	0.024714
Log-likelihood	-163.4410	Akaike criterion	330.8820
Schwarz criterion	332.9710	Hannan-Quinn	331.3353

Model 6*OLS, Using Observations 1-21*

Dependent variable: HomicideOffences

	Coefficient	SE	t ratio	p value	
const	15.3356	3.50453	4.376	0.0003	***
FDlem	-0.160964	0.180222	-0.8931	0.3830	

Mean dependent var	12.31511	SD dependent var	4.190008
Sum squared resid	336.9757	SE of regression	4.211361
R²	0.040293	Adjusted R²	-0.010218
F(1, 19)	0.797704	p value(F)	0.382954
Log-likelihood	-58.94034	Akaike criterion	121.8807
Schwarz criterion	123.9697	Hannan-Quinn	122.3340

Model 7*OLS, Using Observations 1-21*

Dependent variable: SexualOffences

	Coefficient	SE	t ratio	p value	
const	243.183	35.9326	6.768	< 0.0001	***
FDIem	0.681577	1.84785	0.3688	0.7163	

Mean dependent var	255.9730	SD dependent var	42.23688
Sum squared resid	35,425.42	SE of regression	43.17981
R²	0.007110	Adjusted R²	-0.045148
F(1, 19)	0.136050	p value(F)	0.716318
Log-likelihood	-107.8197	Akaike criterion	219.6393
Schwarz criterion	221.7284	Hannan-Quinn	220.0927

Model 8*OLS, Using Observations 1-26*

Dependent variable: TFR

	Coefficient	SE	t ratio	p value	
const	2.20619	0.0872012	25.30	< 0.0001	***
FDIemploymentasof total	-0.00516715	0.00472315	-1.094	0.2848	

Mean dependent var	2.114530	SD dependent var	0.123783
Sum squared resid	0.364863	SE of regression	0.123299
R²	0.047500	Adjusted R²	0.007812
F(1, 24)	1.196845	p value(F)	0.284812
Log-likelihood	18.56989	Akaike criterion	-33.13978
Schwarz criterion	-30.62359	Hannan-Quinn	-32.41521

Model 9*OLS, Using Observations 1-21 (n = 19)*

Missing or incomplete observations dropped: 2

Dependent variable: PoliticalFragmentation

	Coefficient	SE	t ratio	p value	
const	0.264123	0.0546839	4.830	0.0002	***
FDIem	0.000826199	0.00274836	0.3006	0.7674	

Mean dependent var	0.280015	SD dependent var	0.059412
Sum squared resid	0.063199	SE of regression	0.060972
R²	0.005288	Adjusted R²	-0.053225
F(1, 17)	0.090370	p value(F)	0.767353
Log-likelihood	27.24622	Akaike criterion	-50.49243
Schwarz criterion	-48.60355	Hannan-Quinn	-50.17276

Model 10*OLS, Using Observations 1-21*

Dependent variable: SuicideRate

	Coefficient	SE	t ratio	p value	
const	0.150769	0.0360969	4.177	0.0005	***
FDIemploymentasof total	-0.000809240	0.00184575	-0.4384	0.6660	

Mean dependent var	0.135448	SD dependent var	0.040649
Sum squared resid	0.032716	SE of regression	0.041496
R²	0.010016	Adjusted R²	-0.042089
F(1, 19)	0.192224	p value(F)	0.666017
Log-likelihood	38.07874	Akaike criterion	-72.15748
Schwarz criterion	-70.06844	Hannan-Quinn	-71.70411

Model 11*OLS, Using Observations 1-21*

Dependent variable: MarriageRef

	Coefficient	SE	t ratio	p value	
const	1.61104	0.186530	8.637	< 0.0001	***
Christian	-0.0120985	0.00218655	-5.533	< 0.0001	***

Mean dependent var	0.580029	SD dependent var	0.061592
Sum squared resid	0.029055	SE of regression	0.039105
R²	0.617055	Adjusted R²	0.596900
F(1, 19)	30.61552	p value(F)	0.000025
Log-likelihood	39.32488	Akaike criterion	-74.64975
Schwarz criterion	-72.56071	Hannan-Quinn	-74.19638

Model 12*OLS, Using Observations 1-19*

Dependent variable: ControlledDrugOffences

	Coefficient	SE	t ratio	p value	
const	10,659.8	2,700.08	3.948	0.0010	***
ofPopulationChristian	-105.044	31.7217	-3.311	0.0041	***

Mean dependent var	1728.747	SD dependent var	697.6171
Sum squared resid	5,325,147	SE of regression	559.6820
R²	0.392110	Adjusted R²	0.356352
F(1, 17)	10.96560	p value(F)	0.004127
Log-likelihood	-146.1232	Akaike criterion	296.2464
Schwarz criterion	298.1353	Hannan-Quinn	296.5661

Model 13*OLS, Using Observations 1-19*

Dependent variable: HomicideOffences

	Coefficient	SE	t ratio	p value	
const	-3.00327	21.3323	-0.1408	0.8897	
ofPopulationChristian	0.178303	0.250621	0.7114	0.4865	

Mean dependent var	12.15636	SD dependent var	4.360754
Sum squared resid	332.3944	SE of regression	4.421834
R²	0.028913	Adjusted R²	-0.028210
F(1, 17)	0.506156	p value(F)	0.486456
Log-likelihood	-54.14772	Akaike criterion	112.2954
Schwarz criterion	114.1843	Hannan-Quinn	112.6151

Model 14*OLS, Using Observations 1-19*

Dependent variable: SexualOffences

	Coefficient	SE	t ratio	p value	
const	359.187	214.714	1.673	0.1127	
ofPopulationChristian	-1.18467	2.52255	-0.4696	0.6446	

Mean dependent var	258.4645	SD dependent var	43.53230
Sum squared resid	33,674.21	SE of regression	44.50658
R²	0.012808	Adjusted R²	-0.045262
F(1, 17)	0.220555	p value(F)	0.644585
Log-likelihood	-98.02029	Akaike criterion	200.0406
Schwarz criterion	201.9295	Hannan-Quinn	200.3603

Model 15*OLS, Using Observations 1-26*

Dependent variable: TFR

	Coefficient	SE	t ratio	p value	
const	1.33262	0.526806	2.530	0.0184	**
Christian	0.00910403	0.00612756	1.486	0.1504	

Mean dependent var	2.114530	SD dependent var	0.123783
Sum squared resid	0.350793	SE of regression	0.120898
R²	0.084230	Adjusted R²	0.046073
F(1, 24)	2.207456	p value(F)	0.150364
Log-likelihood	19.08112	Akaike criterion	-34.16224
Schwarz criterion	-31.64605	Hannan-Quinn	-33.43767

Model 16*OLS, Using Observations 1-21 (n = 19)*

Missing or incomplete observations dropped: 2

Dependent variable: PoliticalFragmentation

	Coefficient	SE	t ratio	p value	
const	0.132000	0.292776	0.4509	0.6578	
Christian	0.00174095	0.00343973	0.5061	0.6193	

Mean dependent var	0.280015	SD dependent var	0.059412
Sum squared resid	0.062592	SE of regression	0.060679
R²	0.014845	Adjusted R²	-0.043105
F(1, 17)	0.256168	p value(F)	0.619266
Log-likelihood	27.33793	Akaike criterion	-50.67587
Schwarz criterion	-48.78699	Hannan-Quinn	-50.35619

Model 17*OLS, Using Observations 1-39 (n = 30)*

Missing or incomplete observations dropped: 9

Dependent variable: PoliticalFragmentation

	Coefficient	SE	t ratio	p value	
const	0.561321	0.122214	4.593	< 0.0001	***
ref2015	-0.00425599	0.00195156	-2.181	0.0378	**

Mean dependent var	0.296296	SD dependent var	0.075424
Sum squared resid	0.141022	SE of regression	0.070968
R²	0.145193	Adjusted R²	0.114664
F(1, 28)	4.755937	p value(F)	0.037757
Log-likelihood	37.83243	Akaike criterion	-71.66486
Schwarz criterion	-68.86246	Hannan-Quinn	-70.76835

Model 18*OLS, Using Observations 1-28 (n = 23)*

Missing or incomplete observations dropped: 5

Dependent variable: PoliticalFragmentation_exDublin

	Coefficient	SE	t ratio	p value	
const	0.740164	0.169241	4.373	0.0003	***
ref2015_exDublin	-0.00738407	0.00282750	-2.612	0.0163	**

Mean dependent var	0.299879	SD dependent var	0.079783
Sum squared resid	0.105709	SE of regression	0.070949
R²	0.245148	Adjusted R²	0.209202
F(1, 21)	6.820009	p value(F)	0.016299
Log-likelihood	29.26388	Akaike criterion	-54.52777
Schwarz criterion	-52.25678	Hannan-Quinn	-53.95662

Model 19*OLS, Using Observations 1-21 (n = 19)*

Missing or incomplete observations dropped: 2

Dependent variable: ControlledDrugOffences

	Coefficient	SE	t ratio	p value	
const	-2,064.15	1,416.17	-1.458	0.1632	
MarriageRef	6,453.48	2,398.10	2.691	0.0155	**

Mean dependent var	1,728.747	SD dependent var	697.6171
Sum squared resid	6,143,117	SE of regression	601.1321
R²	0.298735	Adjusted R²	0.257484
F(1, 17)	7.241913	p value(F)	0.015460
Log-likelihood	-147.4807	Akaike criterion	298.9613
Schwarz criterion	300.8502	Hannan-Quinn	299.2810

Model 20*OLS, Using Observations 1-28*

Dependent variable: TFR

	Coefficient	SE	t ratio	p value	
const	2.70793	0.347535	7.792	< 0.0001	***
MarriageRef	-1.08103	0.582010	-1.857	0.0746	*

Mean dependent var	2.066586	SD dependent var	0.218110
Sum squared resid	1.133977	SE of regression	0.208841
R²	0.117147	Adjusted R²	0.083191
F(1, 26)	3.449973	p value(F)	0.074615
Log-likelihood	5.160352	Akaike criterion	-6.320704
Schwarz criterion	-3.656295	Hannan-Quinn	-5.506168

Model 21*OLS, Using Observations 1-21 (n = 19)*

Missing or incomplete observations dropped: 2

Dependent variable: HomicideOffences

	Coefficient	SE	t ratio	p value	
const	22.0102	10.2947	2.138	0.0473	**
MarriageRef	-16.7660	17.4328	-0.9618	0.3497	

Mean dependent var	12.15636	SD dependent var	4.360754
Sum squared resid	324.6281	SE of regression	4.369871
R²	0.051602	Adjusted R²	-0.004186
F(1, 17)	0.924971	p value(F)	0.349655
Log-likelihood	-53.92312	Akaike criterion	111.8462
Schwarz criterion	113.7351	Hannan-Quinn	112.1659

Model 22*OLS, Using Observations 1-21 (n = 19)*

Missing or incomplete observations dropped: 2

Dependent variable: SexualOffences

	Coefficient	SE	t ratio	p value	
const	228.655	105.278	2.172	0.0443	**
MarriageRef	50.7199	178.275	0.2845	0.7795	

Mean dependent var	258.4645	SD dependent var	43.53230
Sum squared resid	33,949.45	SE of regression	44.68810
R²	0.004739	Adjusted R²	-0.053806
F(1, 17)	0.080943	p value(F)	0.779460
Log-likelihood	-98.09763	Akaike criterion	200.1953
Schwarz criterion	202.0841	Hannan-Quinn	200.5149