The Dark Side of the Welfare State

Is the carceral state slowly replacing the welfare state?

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Keywords: [welfare], [incarceration], [retributivism] [mass-incarceration] [social-marginalisation] [governance of the less well-off] [prison]
Abstract:

The overarching aim of this thesis is to explore whether traditional welfare politics and the politics of crime and punishment ought to be considered part of the same policy domain — the governance of social marginality.

Previous research suggest that the states discussed in this thesis, through public policy and without much public debate, has created a ‘dark side of the welfare state’. The criminal justice system, or ‘the dark side of the welfare state’ consistently and predictably leaves large parts of those less well-off outside of society.

The research question for this thesis is: “Is there evidence in support of the criminal justice system replacing traditional welfare state politics of governing social marginality?

The purpose of this thesis is theory building. The analyses use an innovative cross-sectional time-series dataset compiled for this thesis to map out the effects of different Welfare State Regime Types, crime, the number of police officers, economic variables, and variables on social spending on the dependent variable; the prison population rate per 100 000.

What this thesis has found is that politicians and scholars alike ought to pay attention to the issue of unemployment and unemployment benefits. The results suggest that the rather specific measure of how much of previous income is retained in the 60th week after becoming unemployed is particularly indicative of how large a prison population a state has.

The findings here also show that crime rates are falling and/or has levelled out, and none of the controls have an effect on the Prison Population Rate. Depending on how it is measured, the much-discussed rise in the Prison Population Rate is more nuanced and not as uniform as often portrayed. What is significant is the decrease in social spending and income inequality – even as the economy of the different states are growing.

This thesis suggests that the correlation between which states have the less generous unemployment benefits and the highest incarceration rates follows a regional pattern where Scandinavia and Central Europe perform better than the Eastern Europe and the Anglosphere. Although not definitive proof, it is enough to warrant further research into whether there has occurred a shift where governments increasingly favour the politics of the criminal justice system over welfare state politics when governing social marginality.
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List of Abbreviations

GDP        Gross Domestic Product
LWOP       Life Sentence without Possibility of Parole
NEET       (Young Person) Not in Education, Employment, or Training
NGO        Non-Governmental Organisation
PPR        Prison Population Rate
UNODC      United Nations Office on Drugs and Crime
UK         United Kingdom
US         United States of America
WSRT       Welfare State Regime Type
WWII       World War II
1. Introduction

The overarching aim of this thesis is to explore whether traditional welfare politics and the politics of crime and punishment ought to be considered part of the same policy domain — **the governance of social marginality.** The research question is:

> Is there evidence in support of the criminal justice system replacing traditional welfare state politics of governing social marginality?

Traditional welfare state politics, as defined by most scholars, usually involve some form of economic benefits, either direct; such as pre- or post-taxes transfers or indirect; such as education and healthcare. The topic of crime and punishment has usually not been part of the conversation, except for those corner cases where misuse or misappropriation of afforded benefits have taken place or is believed to have taken place.

However, a growing body of literature has shown that since the beginning of the 1970s an important policy change has occurred. Fuelled by the advent of neoliberal political philosophy and the political rights movement, criminal justice politics have changed from 'penal welfare’ towards ‘retributivism’ and then what in recent years has been termed ‘the penal harm movement’. When discussing the United States of America, terms such as ‘the age of mass imprisonment’ or ‘mass incarceration’ are being used with increased frequency in both scholarly articles and by politicians when describing the increased use of incarceration. Evidence is mounting which is suggesting that many if not all the states discussed in this thesis, through public policy and without much public debate, has created a ‘dark side of the welfare state’. The development, motivation, and broader consequences of which has rarely been discussed, questioned, or challenged publicly.

The criminal justice system, or ‘the dark side of the welfare state' consistently and predictably leaves large parts of those less well-off in terms of income and social capital outside of society. Disenfranchisement, political, and societal alienation has occurred by enacting public policies which raise the social and legal barriers of political participation for those less well-off. Moreover, the evidence suggests that the penal system is used to contain those less well-off when states are governing social marginality. As will be more thoroughly discussed in the Theory chapter of this thesis, these barriers seldom pass a test of proportionality nor parsimony.
The result is that those less well-off tend to not only be less well-off in economic but also in democratic terms.

1.1 Background

At the beginning of the 1970s a marked shift occurred, away from the criminal justice ideal of rehabilitation and towards a new ideal centred around punishment and to rectify any harm caused. This change occurred both in scholarly literature and in public policy. One of the reasons why this change occurred was an increase in reported crime – particularly residential burglary. Within the literature this increase is referred to ‘criminal insecurities’. The result has been a significant increase in the Prison Population Rate (PPR), particularly from the late 1980s and onward, in many of the states discussed in this thesis. The most dramatic increase happened in the United States — where the PPR peaked at 760 people in prison per 100 000 citizens, in 2008. The Scandinavian\(^1\) states have fared comparatively much better. The average PPR in Scandinavia in 2008 was 65 per 100 000 — which is less than a tenth of that of the US. Germany had in 2008 a PPR of 88 per 100 000. The United Kingdom saw 149 out of 100 000 of its population in prison (see Figure 1 and 2 towards the end of this chapter).

As will be discussed in detail in the Literature Review chapter, there exists evidence in support of the PPR being correlated with the relative generosity of a state’s welfare benefits. There are also regional differences which previous research have found to correlate with the typology of different Welfare States Regime Types (WSRT); as put forth by Gøsta Esping-Andersen in his seminal work *The Three Worlds of Welfare Capitalism* (1990).

This shift away from ‘penal welfare’ and toward ‘penal harm’ has extended the reach of the state and changed how the state deals with those less well-off. As such, this thesis is primarily concerned with those less well-off in a society and how the combination of welfare state retrenchment and a corresponding penal state expansion are challenging the ideals of democratic citizenship by creating what this thesis refers to as a ‘dark side of the welfare state’.

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\(^1\) There is an inconsistency in the literature between the use of Scandinavia and the Nordic countries. Although many in the Scandinavian states would disagree, the rest of the world commonly think of Scandinavia as consisting of Denmark, Finland, Iceland, Norway, and Sweden and as such this is the term used throughout this paper to refer to these states.
The policy domain of the welfare state and the penal state will be treated as being part of the same continuum and this thesis argues in favour of such a view. When governments address the needs of those less well-off in a society they may choose different policies on this continuum — based on the desired outcome. In simplest terms this continuum then ranges from the death penalty on one end to unemployment benefits and redistributive taxation schemes at the other end. Depending on personal preferences, ideological beliefs and public pressure politicians may opt to choose different paths to govern social marginality.

There exists some debate as to the extent or scope of the decline in support of the welfare state in recent decades. However, most academics studying the subject agree that a decline has taken place and that this decline in general correlates with the advent of the neoliberal state. During the same period a shift occurred in penal policy towards a preference for harsher sentencing over rehabilitation – most notably in the US and to some extent in the other Anglospheric states; with three strikes laws, lengthy mandatory minimum sentencing, life without the possibility of parole (LWOP), and ‘sexual predator’ laws as the most evocative examples.

Although the development in prison statistics is by no means uniform — the literature suggests that there is a clear trend of an increase in usage of prison sentencing and longer/harsher sentencing. Figure 1 and 2 below is based on the innovative dataset compiled for this thesis and shows the development in the Prison Population Rate (PPR) from 1993-2014 for a selection of the states included in the analyses in this thesis, and the Crime Trend per 100 000 from 1990-2014) for the different types of crime considered in the analysis part of this thesis.

Most noticeable is the mass-incarceration in the US. In addition, we see that besides the outlier which is the US, then Eastern Europe is followed by Southern Europe and the UK, then Central Europe closely followed by Scandinavia. Figure 2 show that since 1990 the general trend is less rather than more crime.

2 ‘Anglosphere’ is the preferred term used in this paper to describe the states: Australia, Canada, New Zealand, the United Kingdom, and the Unites States of America.
Up until sometime in the 1990s, the idea that incarceration rates and crime rates and/or victimisation rates were not closely connected was almost unheard of even in academic circles. It made perfect sense and was logically coherent to expect that changes in the crime rate would be closely connected to the incarceration rate of any given state. Such an ideal also closely conforms to our moral intuition of proportionality and parsimony for dealing out punishment, and it fits nicely with the ideal of the ‘rechtsstaat’.

However, in the last two decades there has been an increase in research, primarily in the field of criminology, which challenge this conception. New evidence suggests that crime and crime rates are at best loosely related to the incarceration rate in any given democratic state. Predictors such as which political ideology that guides the party/parties in power, legal tradition, whether legal professionals act as civil servants or career politicians, the kind of welfare state and the relative generousness of the welfare benefits, and the level of trust within a society are thought to better explain changes in incarceration rates than crime and victimisation. Considering the findings of previous research the research question for this thesis is:

*Is there evidence in support of the criminal justice system replacing traditional welfare state politics of governing social marginality?*

The remainder of this paper is set out as follows. Chapter 2 starts out with a brief walk through of key terminology before presenting a short introduction to the topic of this thesis. Chapter 3 review the most important literature and identify key scholars and areas of research relevant to the analyses in this thesis. Chapter 4 lays out the theoretical foundation for this thesis. Chapter 5 present the method used to address the research question, and Chapter 6 discusses the data and variables used in the analyses. Chapter 7 present and outlines the results of the descriptive statistics and the different time-series cross sectional
analyses. Chapter 7 discusses these results and identifies implications for future research. Finally, chapter 8 summarises and concludes the thesis.
2. **Introduction to the Topic Area**

2.1 **Terminology**

**Traditional welfare**

This thesis will use the term ‘traditional welfare’ to describe the ‘welfare state’ as defined by the Oxford Concise Dictionary of Politics:

*A system whereby the state undertakes to protect the health and well-being of its citizens, especially those in financial or social need, by means of grants, pensions, and other benefits.* (OED Online 2017b)

This is how welfare has been understood historically. In recent decades, a shift has occurred whereby the government to a lesser degree undertakes the main responsibility of the less well-off but rather delegates an increasing amount of the traditional welfare state tasks to private agents and non-profit organisations. However, the state is still the largest provider of welfare goods and services. By using ‘traditional welfare’ the idea is to allow for a reconceptualization of welfare to include both traditional welfare and the criminal justice system on the same continuum — the ‘governance of social marginality’.

**Penal welfare**

‘Penal welfare’ is a term used by criminologists to describe how the criminal justice system thought about criminal offenders prior to the advent of ‘retributivism’ in the 1970s. Prior to the 1970s the ideal of rehabilitation and treatment were the dominant ideas in criminology, and prison sentencing was thought of more as a last resort for containment and protection of society from particularly dangerous individuals rather than as a catch all approach to crime. The tenet of penal welfare was the idea that most criminals were victims of the lack of socio-economic equalisation — which meant that the state had a responsibility to aid those who could not satisfy their needs themselves.

**Retributivism**

Retributivism is a term used in criminology to describe the ideological, political, and scholarly shift which occurred by the end of 1960s —which transformed the criminal
justice system. In a transformative move the ideal of rehabilitation was swiftly dismantled and replaced by neoliberal ideas of punishment. Tougher sentencing, and the idea of just deserts came to completely dominate as the ideal for the criminal justice system. In this new line of thinking it is the victim(s) of crime which takes centre stage. Media coverage also played a part as crime were on the rise and the victim became the natural subject of the crime reports.

**Just deserts**
Most commonly used in criminology, and is closely related to the philosophical concept of proportionality in sentencing theory, and is defined as: “What a person or thing really deserves, especially an appropriate punishment; now usually in plural.”

(OED Online 2017a).

**Proportionality**
Philosophical concept which in criminology refers to the idea of the punishment should fit the crime.

**Parsimony**
Philosophical concept which in criminology refers to what means to what ends.

**Criminal insecurity**
Refers to the public and political reaction to the increase in crime which occurred at the tail end of the expansion of the middle class in the post WWII period (the golden age of capitalism) and the increase in crime, and particularly property crime, which took place in the 1960s and 1970s.

**Social insecurity**
Refers to the public and political reaction to societal developments in modern democracies from the late 1980s and onward, caused in part by increased economic insecurity and rising income inequality. High unemployment rates and a steady decrease in availability of
traditional blue collar jobs because of labour migration and technological developments in automation. Since the mid 1990s computers and robotics has increased the pressure not only on blue collar but on white collar jobs as well. Thus, posing a threat to the relative wealth and position of the middle class in modern democratic states.

**Deviance**
Deviance is here to be understood as behaviour which is deemed undesirable by society at large — primarily through law making but also to some degree through customs and social practices.

**Defining deviance down**
The significant rise in property crime during the 1960s and 1970s led to the idea of defining deviance down — to lower the bar for what was once considered criminal and deviant behaviour to lessen the burden on police budgets and statistics.

**Governance of social marginality**
This term refers to how politicians through public policy have elected to deal with the issues of ‘social insecurity’ by targeting those ‘less well-off’. It is the process of political decision making and the implementation of policy which influences and determines how and what measures the state use when dealing with social problems. Possible measures include both traditional welfare measures and usage of the criminal justice system to alleviate the friction and ‘social insecurity’ of modern society. The effect, regardless of motivation, is a pacification and exclusion of those less well-off.

**The less well-off**
There is an overlap between the poor and the less well-off but the definition of the less well-off is meant to be conceptually different. The idea is that there has occurred a gradual shift in industrialised democracies where both traditional welfare benefits and sanctions by the criminal justice system has been expanded to encompass more than what the traditional definition of the poor encompass. The less well-off are subject to social insecurity caused by unemployment, financial instability, increased focus on inflation, labour migration,
outsourcing, technological developments such as information technology and automation, and decreased availability of low-skilled jobs. This change has affected a larger and somewhat different subset of the population than what the definition of the poor cover.

**Criminal Justice System**
A catch all definition of the different correctional institutions which the state uses when dealing with deviation. This includes the courts, different types of incarceration such as imprisonment, pre-trail detainees, probation, parole, as well as forced rehabilitation and/or treatment.

**Workfare**
A definition mostly used about the deconstruction of the welfare state in the United States. The idea is that the state only secondarily and conditionally takes on responsibility for the social and economic security of the people. Which means that the ability to receive welfare benefits from the state or private agents acting on behalf of the state is contingent on being able to get work or having had work.

### 2.2 Welfare
The first part of this literature review focuses on welfare state research relevant to this thesis, and then trace key welfare state developments in recent decades.

**Traditional Welfare**
In the post-Reagan and Thatcher era there has been increased academic interest in whether a welfare state retrenchment has occurred, and if such a retrenchment signifies a lack of public support of welfare state solutions to social marginality. When reviewing the political science literature on the welfare state the last two decades, the discussion of whether the welfare state is in decline has had a prominent position. More recently the discussion has shifted towards debating the significance of the decline, the reduction in generosity and scope of welfare state benefits seen in all the states discussed here.
Welfare is what I have chosen to refer to as ’traditional welfare’. Central to this thesis, and to recent research into explanations of the rather large differences in incarceration between the states discussed here, is the seminal work of Gøsta Esping-Andersen, *The Three Worlds of Welfare Capitalism* (1990).

The construction and expansion of the welfare state in the twentieth century meant that the state increased its involvement in many aspects of people’s lives. This increase in scope of state involvement and institutional expansion was fuelled and made possible by the rapid economic development, increased suffrage, labour unions and the need to equalise opportunity and correct the most unbalanced outcomes of the expanding market economy (see for instance Sassoon 2013).

**Government Cutbacks**

The economic downturn in the 1970s had a large and lasting effect on a global scale. Caused at least in part by the two oil crises; the Arab-Israeli conflict in 1973; and the Iranian Revolution in 1979. Both of which led to rapid growth in oil prices and high levels of inflation which signalled the end of traditional Keynesian demand side politics.

As for the topic of this paper the change meant that governments started cutting public expenditures and particularly social expenditures. In the golden years, the rapid economic growth had led most governments covered here to expand the public budgets without much concern for cost as an annual increase in economic performance was to be expected.

However, in Milton Friedman’s memorable words: “There’s No Such Thing as a Free Lunch” (1975), and ever increasing budgets were quickly replaced by austerity measures. Government cutbacks on expenditure and a reduction in the scope and role of the state in the market and in society in general was considered the remedy to falling growth rates and rising inflation. Which is at least in part what fuelled what the literature refers to as welfare state retrenchment.

**2.3 Criminal Justice**
The sub-sections below in turn discuss the different stages of developments in penal theory and practices from the 1970s and onward, which are highlighted in Figure 3, below.


Penal Welfare Retributivism Mass Incarceration

*Figure 3 - The Different Criminological Phases*

The review of historical developments related to crime and punishment, presented below, starts with the paradigm shifting book by David Garland; *The Culture of Control* (2001). In a Foucault like manner, Garland presents a sociological account of how correctional institutions, as well as public policy and academic research regarding crime and criminals developed in the twentieth century. Garland’s overarching goal seems to have been to explain why the correctional system in the US and UK, which was virtually unchallenged up until the late 1960s, could collapse and produce the significant and permanent shift towards retributive justice and mass incarceration as we have seen in the latter part of the twentieth century, and which has continued into the twenty-first century.

**Penal Welfare**

‘Penal welfare’ is a term used in criminology prior to the 1970s, and refers to the ideological, scholarly, and political commitment to rehabilitation and individual treatment rather than imprisonment to reduce recidivism. The penal welfare state developed in parallel to and drew influence from the emergence of the welfare state within the same time-period. From an ideological point of view the idea was that society was both the cause and the remedy to ‘deviance’. The driving force of the expanding welfare state in the post-WWII period was the idea that deviant behaviour was caused by society at large. The welfare state was the long-term solution to the problem of deviance but by extending the principles of the welfare state to the correctional system it was also thought that the deviant behaviour of those which the state did not get to in time could still be remedied — that those less well-off could still be made into cogs and wheels in the state machinery.
Retributivism
Retributivism and the new policies and practices of control are, according to Garland (2001), connected to the development of penal policies and practices from the early 1970s and onwards. At least in the US and to some extent in the UK there was a shift in both political and public opinion about the cause of, and the remedy to, crime and criminal behaviour. The key differentiator between the ideal of penal welfare and that of retributivism is that rather than focus on deviancy the focus changed towards normalcy. Crime and criminals were no longer considered by-products of lack of socio-economic equalisation. Rather, crime could be committed by anyone, and criminals were normal people who were as motivated by opportunity as by need.

If all it takes is opportunity, and anyone can become criminals regardless of need, then control becomes the primary tool for governments when implementing policies of intervention and prevention of crime. According to Garland (2001) the period from 1970s and onwards was characterised by ‘criminal insecurities’. As crime rates increased and the issue of drug use became a key political issue, the public and politicians alike reacted to this criminal insecurity by demanding and passing laws which tightened control, and sought to provide security to the victim by enacting harsher and longer sentences. These new policies disproportionally targeted what this thesis refers to as ‘those less well-off’ (see Garland 2001, 131–35 for more).

In contrast to previous decades, deviance was no longer seen as a by-product of a lack of socio-economic success but rather deviancy was motivated by criminal opportunism, or as Garland puts it; “opportunity creates the thief, rather than the other way around” (Garland 2001, 129).

Penal Harm
The next significant shift which is highlighted in the criminological literature happened during the 1990s and is often referred to as a shift away from ‘criminal insecurities’ and towards ‘social insecurities’. The key characteristic of this period is that crime rates started to flatten and even decrease in most states and for most types of crime, coupled with a new wave of even harsher and more severe punishment. This period is referred to as the ‘penal harm movement’. The new policies, which included two- and three-strikes laws, life without
possibility of parole (LWOPs), strict sentencing guidelines, and an increased use of imprisonment for minor offences further challenged the philosophical idea of parsimony and proportionality as defined by criminological theory.
3. Literature Review

The literature review part of this thesis covers key research into developments in the cross section of crime, punishment, and welfare post-WWII and up until the present with a focus on public policy which targets those less well-off. Developments prior to the Reagan and Thatcher periods will be briefly outlined but the emphasis will be on developments from about the 1990s and onwards – the same period which is covered by the dataset used in the Analysis chapter. The literature reviewed here covers most of the European democracies as well as the Anglosphere.

The first part of this literature review outlines literature focused on explaining the significant change and the differences in incarceration in the last two decades.

3.1 Explaining the Changes in Incarceration

Katherine Beckett and Bruce Western broke new ground in *Governing Social Marginality: Welfare, Incarceration, and the Transformation of State Policy* (2001). Beckett and Western’s preliminary research into this interconnectedness between penal and welfare institutions in the US showed that at the state level, in the period from the early 1980s to 1997, there was a significant correlation between more generous welfare state benefits and a lower incarceration rate. Their study also showed that: “states with larger black populations are states that spent less on social welfare and also incarcerated at higher levels.” (Beckett and Western 2001, 54).

Other authors, most significantly Michael Tonry and Tapio Lappi-Seppälä, have performed research into the relationship first suggested by Beckett and Western. They have expanded the scope to cover most European states and have both highlighted important nuances as well as shown that there is more to the story than the simple; the US leads and in time other states do follow.

Tonry (2007, 13–16) makes a good case for considering changes in penal policy against the backdrop of protective and risk factors. Tonry points to certain key institutional traits which may place limits on or increase the risk of certain policy developments. According to Tonry, one of the more significant risk/protective factors is whether the public prosecutors are politically elected or career civil servants. Other important factors are which
political ideology that guides the party/parties in power, legal tradition, the kind of welfare state and the relative generousness of the welfare benefits, and the level of trust within a society.

Lappi-Seppälä (2008, 316) shows that although the overall trend is a marked increase in the PPR, there are significant exceptions; most notably Finland and the Netherlands which both have seen a significant drop in the PPR in recent decades. The development in Finland was driven by a political decision and the change in the Netherlands was driven by the courts.

Another key finding, first suggested by Beckett and Western (2001), is that the differences in the PPR between states follow the same pattern as the typology of Welfare State Regime Types (WSRT) first laid out by Esping-Andersen in his *Three Worlds of Welfare Capitalism* (1990). The effect of WSRTs on the Prison Population Rate is one of the topics of analysis which will be pursued in this thesis.

Perhaps the most important finding is that although an increasing amount of people are imprisoned and sanctioned by the state — the overall trend is that the crime rate has either levelled out or is on the decline in most of the states discussed here. More on this in the Replication sub-chapter, below. If there is an increase in penal sanctions, increased focus from politicians on crime and crime prevention, and an actual decline in the crime rate then the question becomes what is driving this change? The current literature suggests it is more political than crime related. As part of that discourse this thesis aims to add to the pool of knowledge on what is driving the change in incarceration by extending the period of analysis and using newer data and by utilising cross-sectional time-series analysis.

David Garland, in *The Culture of Control: Crime and Social Order in Contemporary Society* (2001), tries to account for the historic change which happened to the political, public and scholarly debate and practices in the 1970s in the US, and a bit later in the UK. This change away from the rehabilitation ideal towards punitive sanctions and expressive justice took place during the 1970s and transformed the field of criminology. Retributivism became the new ideal and the governing philosophy for both politicians and academics alike. The explanation that Garland gives for this change is that the post WWII emergence of the middle class and explosion of valuable household goods invited a new kind of crime — property crime. This in turn led to what he refers to as ‘criminal insecurity’. Spurred by a significant increase in property crime politicians were forced to act. The result was that the
practice of favouring rehabilitation over incarceration was quickly deemed to have failed and replaced by the now carceral state.

As expected, the incarceration rates rose quickly — first in the US and UK, and in the following two decades most western democracies followed in suite. Although the effect of this change differed greatly between states, the ideological idea of retributivism quickly took hold and affected both debate and policy in all the states discussed in this thesis.

The next important shift happened during the 1990s. The driving force for this change is somewhat more hotly debated. However, the data now suggests that a welfare state retrenchment had begun to take place. Combined with the corporate friendly politics of Reagan and Thatcher, an increase in unemployment and the issue of predicting inflation in the trailing decades shifted the public focus away from ‘criminal insecurity’ and towards what has been termed ‘social insecurity’. In contrast to ‘criminal insecurity’, ‘social insecurity’ is not motivated by fear of crime but rather by fear about the what the future holds — i.e. the ability to find and hold on to a job, economic insecurity in general, and a more pessimistic outlook on one’s prospects.

An increasing number of scholars are now debating whether we are seeing a shift in policy preference; away from traditional welfare politics and towards the criminal justice system and retributivism. Academics on the left now argue that we are seeing the ‘neoliberal endgame’ where ‘workfare’ replaces welfare and poverty is being criminalised. Academics on the right argue that workfare is necessary to support a growing, and ageing, population, and that the usage of the criminal justice system to sanction the poor is nothing more than just desert.

What is clear is that the current penal practices in most western democratic states are challenging the criminological ideal of proportionality and parsimony. Those most affected by this policy change is the least well-off. The result is disenfranchisement and severe limits on legitimate societal and democratic participation for those affected.

**Penal Welfare**

Penal welfare draws on the positivistic ideas which also underpinned the development of welfare state policies in most of the industrialised world in the post WWII period. That is,
the states’ obligation to help or control those less well-off. Industrialisation and economic growth necessitated both an increase in state presence and control in the twentieth century. The scope and reach of the state and its institutions grew rapidly to provide the necessary framework of order and control to facilitate further growth. As Garland points out; research into the developments and changes within the field of crime control is “to investigate the remaking of society and its institutions for the production of order” (Garland 2001, 6). This need to produce order to further economic growth then fuelled developments within the criminal justice system and that of the welfare state.

As the state took on new tasks and provided new functions the issue of control was enhanced by ideological conflict and an influx of worker issues which came because of rapid economic growth and as rapid an increase in income inequality, between those who achieved the status of middle-class and those that did not, in the early twentieth century. Some of these developments are beyond the scope of this thesis but for instance Donald Sassoon’s magisterial One Hundred Years of Socialism (2013) is a good place to start for a more in-depth review of the ideological and labour conflicts of the twentieth century.

Prior to the 1970s the idea of penal welfare had pretty much been the only game in town when it came to dealing with crime and criminals. As Garland puts it:

In the penal-welfare framework, the rehabilitative ideal was not just one element among others. Rather it was the hegemonic, organizing principle, the intellectual framework and value system that bound together the whole structure and made sense of it for the practitioners. It provided an all-embracing conceptual net that could be cast over each and every activity in the penal field, allow practitioners to render their world coherent and meaningful, and to give otherwise unpleasant, troublesome practices something of a benign, scientific gloss. (Garland 2001, 35)

Cavadino, Dignan and Mair (2013) points out that the criminal justice system indeed is a system insofar as that the different institutions like judicial, carceral and probationary, are interdependent. However, when it comes to practices it may be much more difficult to find the kind of coherence one usually would expect to find in a system. Garland (2001) also points out that the reality was often more varied than the ideal described above. In practice, the field of criminology had a great deal of latitude in its institutional organisation and governments lent a great deal of discretion to the judicial, carceral and probationary systems in their dealings with crime and criminals.
Garland proceeds to describe two axioms which remained unquestioned in the period from the beginning of the twentieth century and up until the end of the 1960s. The first axiom, a product of the progressive culture of the time:

[The ‘crime miracle’ of the nineteenth century and nourished by the liberal optimism of the twentieth – took it as self-evident that social reform together with affluence would eventually reduce the frequency of crime. (Garland 2001, 38)]

This teleological argument ought to be familiar to the reader as it surfaces in most social sciences from time to time — perhaps most famously in the modernist account of Francis Fukuyama in his *The End of History?* (1989).

The second axiom was that “the state is responsible for the care of offenders as well as their punishment and control (Garland 2001, 39).”

Together these two axioms fit nicely with the general development of the state apparatus of the time and the ideological narrative where the state had a responsibility not only to the traditional land owners and the bourgeoisie but also to the workers — the wheels and the spokes of the ever-expanding machinery which fuelled the state.

The mode of operation at that time may best be described as dualistic. On the one hand, there was the judicial and penal institutions which dealt with the individual offender — the deviant. These institutions were often, as stated above, given a great deal of leniency and discretion in how they dealt with deviancy and in deciding what kind of carceral or rehabilitative measures was deemed appropriate for different kinds of deviant behaviour.

On the other hand, there was policy making and the politics of the welfare state and penal welfare. The politics of control of deviancy was far less concrete and the goals were often lofty. As the first axiom above stated there was a common belief that economic growth and systematic work to control and negate deviance would eventually all but eradicate crime and thus the criminal. However, as political scientists have long been aware of — Realpolitik is rather slow to develop and does not necessarily move in a consistent, unilateral, direction postulated by many theories of modernity. Political change in practise, more often than not, did slope and turn in its quest of the overarching goal of less friction, less deviancy and ultimately a higher productivity output of those whom the state governed.

Regarding penal welfare, the state assumed the responsibility for correcting the deviant behaviour associated with crime and criminals — as most of this deviancy was
thought to be a by-product of the rapid industrialisation of the states discussed in this paper. Professionals working in correctional facilities, the justice system, and scholars all believed in rehabilitation, reintegration, and individual treatment and sentencing. This ideal was built around strong local support mechanisms such as probation officers, community aid, and the presence of neighbourhood police acting as much as local support as crime fighters (Garland 2001, 123–24).

Although there were many similarities in development trends and motivations there was one key difference between the emergence of the welfare state and penal welfare. The principles and functioning of the welfare state was vigorously debated and public policy making was subjected to what often amounted to intense political and public scrutiny — the penal welfare system was not.

Many of the developments within the penal system was not subject to public debate. The type of sentencing, sentence length, which rehabilitation and treatment programmes were appropriate for different types of crimes and criminals was mostly left to the discretion of the criminal justice system. Perhaps the most interesting case in this regard is the rapid growth in the PPR in the Netherlands in the last part of the twentieth century. As Tonry points out:

[...] the imprisonment rate has risen steadily for a third of a century without enactment of new sentencing laws meant to accomplish that, and without crime becoming a major partisan political issue. (Tonry 2007, 34)

Another case in point is Finland which at the beginning of the 1950s had a PPR of about 200 per 100 000 prisoners. About four times the PPR of that of Norway or Sweden, and two and a half times the PPR of Denmark (Lappi-Seppälä 2008, 316). However, upon Finland joining the Nordic welfare state model the PPR was systematically lowered by political decision and is at present below the PPR of the other Scandinavian states except for Iceland, with a PPR of only 57 per 100 000 in 2014. Neither of these changes were part of a broader political discussion but happened more osmotically or as a by-product of other political decisions.

This system of correctional self-determination remained the status quo throughout the golden years after WWII. As long as the economy grew — budgets grew. As long as the budgets grew and faith in the rehabilitation perspective was unchallenged there remained a consensus that deviancy was best left to professionals. Thus, the public and political support
of both the welfare state and the penal welfare state remained largely unchallenged until the economic downturn in the early 1970s.

In the late 1960s however, the field of criminology suddenly faced a crisis. What had been the only game in town in terms of both academic and political support — the belief in rehabilitation as the ideal for dealing with crime and criminals – was suddenly and abruptly met with crushing critique. The result was nothing short of a complete loss of faith in the rehabilitation ideal. The details of this process are beyond the scope of this thesis but is laid out in detail in David Garlands book *The Culture of Control* (2001). The next section will focus on the most significant changes which occurred at the beginning of the 1970s, and highlight the divergence of the ideals of the welfare state and of penal-welfare up until about 1990.

**Retributivism**

To understand what happened to the criminal justice system in the 1970s it is necessary to expand the determinants beyond the simple explanation of the ideological shift towards neoliberalism which any avid reader immediately will have identified as a possible explanatory variable. Although, neoliberalism certainly played its part, there were other structural problems which emerged and challenged the truthfulness of the two axioms described above.

Perhaps the most devastating blow to the penal-welfare system was that from the late 1960s and onwards there was, in the US and UK, a steep increase in recorded crime – particularly residential burglary.

With the exception of the US, recent research has shown that for most of the states analysed in this thesis the apparent rise in crime from the late 1960s and onward can at least in part be explained by an increase in police resources, skill and technology, lower tolerance for certain types of crimes as the general education and income level rose, as well as changes in reporting and increased reporting as a result of better tools and increased bureaucratisation (Garland 2001; Tonry 2015).

At that time however, the lack of credible criminological evidence in support of the success of the individualised rehabilitation perspective on crime and criminality was damaging. This combined with an increase in reported crime swiftly changed both public
opinion and policy implementation towards what has been referred to as retributivism (Garland 2001). In terms of governance of social marginality, the policy domain slowly shifted along the continuum from a focus on welfare and rehabilitation towards retribution and incarceration.

Considering the political changes in attitude and public policy regarding deviance, the most significant change which occurred was that the first axiom described above did not appear to hold true — economic growth and progress was not enough to curb crime. Although affluence had grown exponentially in the years after WWII, as had the scope and functioning of the state, and still crime appeared to be rampant. As will be explained below, one of the retributivism arguments which gained widespread support is that of the opportunistic criminal. This argument resonated well with the experience of increased affluence, an expanding middle class and increase in crime.

The exposure of an increase in recorded crime, the ‘war on drugs’, the economic downturn of the 1970s which led to governments cutting back on public expenditure, the corresponding ideological shift towards neoliberalism and the new market economy further challenging the position of the less well-off probably all contributed to the challenge to both the welfare state and penal welfare.

In the US and UK, the second axiom, that ‘the state is responsible for the care of offenders as well as punishment and control’ (Garland 2001, 39) mentioned above, rapidly came under fire. The idea that the state was solely responsible for punishment and control of deviance was challenged. At least at first, the removal of punishment and control of deviance from public institutions were a cost-cutting measure. As Downes and Hansen put it:

[…] the fields of crime and punishment can run counter to those of welfare. Budgets for the former have often waxed as those for the latter have waned. (Downes and Hansen 2005, 4)

Prisons were privatised, rehabilitation measures such as parole was left to Non-Governmental Organisations (NGOs), and certain security functions such as neighbourhood policing was left to private security companies. As crime rose and the ideological hegemony of neoliberalism was established a political shift has been observed where the new right parties favoured the retributive side of the continuum of governance of social marginality when they dealt with deviance and governance of social marginality.
The development described above is primarily a description of the developments in the US and UK, and with a bit of a delay in Australia and New Zealand, and to a lesser extent in Canada — what this thesis refers to as the Anglosphere.

As noted above, the statistical data suggests that there was a significant increase in the crime rate from the 1960s and onward. However, it is important to note that when scholars have dug into the data available then this rise in crime can mostly be explained by an increase in police resources, skill and technology as well as increased reporting because of better tools and increased bureaucratisation (Garland 2001; Lappi-Seppala 2011; Tonry 2007). That is not to say that there was not an increase in crime, but rather that there is covariation in the data which makes it that much more difficult to tease out meaningful trends.

For instance, when discussing Nordic Criminal Statistics Van Hofer, Lappi-Seppälä, and Westfelt (2010) shows that reported crime in the Nordic countries has risen steadily since the 1960s. Furthermore, they point to the striking similarities in variations over time in both national and international victimisation surveys covering the Nordic countries and the other Western European countries and that:

[t]his indicates that the trends in violence shown by crime statistics may have been significantly inflated by changes in the reporting behaviour. While this view is widely shared among professionals, it is strongly contested in the media, by various interest groups and NGOs as well as politicians. (Van Hofer, Lappi-seppälä, and Westfelt 2010, 9)

Although the ideological tenet of the neoliberal ideology spread far beyond the Anglosphere the outcome was different in most of the other states discussed here. Although under attack, the Scandinavian states and most of the Central European states do still prefer the core ideal of penal welfare to that of retributivism. In the wake of the financial crisis of 2007 a backlash has occurred — fuelled by rising unemployment and youth unemployment in particular, a more pessimistic view on the future, migration issues and xenophobia. Still, the resilience of the penal welfare ideology in these states support the idea put forward by Tonry (2007) that there are ‘risk and protective factors’ which are important to understanding developments in penal policy. Tonry argues that:

[…] comparative risk factors are relatively greater income inequality, relatively weaker social welfare systems, lower levels of trust in fellow citizens and government, and relatively lower levels of perceived legitimacy of legal institutions.
Prominent protective factors include consensus political systems, nonpartisan judges and prosecutors, Francophonic political cultures, and a predominant view that criminal justice policy falls appropriately within the province of expert knowledge and professional experience. Among the characteristics that lack explanatory power are crime rates and trends, population heterogeneity, globalization, and existentialist angst. (Tonry 2007, 6)

The risk factors of income inequality, weaker social welfare systems and the protective factors of consensus political systems and political cultures are part of what is being looked at in analysis part of this thesis.

The next sub-section discusses in more detail the developments in penal theory and practices from the 1990s and onward.

**The Penal Harm Movement**

Parallel to the reduction in welfare state benefits and transfers from the 1970s and onward, as discussed above, an increase in incarceration occurred. As a result, the end of the twentieth century saw a renewed interest in the subject of crime and punishment. This happened by and large because the growth in prison population in many states had become too significant to ignore.

As the critique of the penal welfare system grew and its collapse was all but inevitable this feature of discretion and individualisation of incarceration or rehabilitation was reframed as professional lenience, as not being particularly scientific, and lacking in structure and order. The new right in the US and UK turned towards retributive policies and argued that deviancy was not a product of society but a feature of opportunity and that of certain deviant individuals. These individuals, it was argued, possessed certain traits which made them susceptible to committing crime — the idea of the opportunistic criminal (Garland 2001; Wacquant 2010). Thus, only sufficiently strong deterrents — usually understood as harsher and sometimes even crueller punishment — could curb the growing rates of crime.

In the 1980s, [the US] Congress enacted a variety of mandatory minimum sentences, especially statutes that disproportionately targeted drug offences. Mandatory minimum sentence laws would typically remove much judicial discretion used at the point of sentencing, which ensures that offenders would be sent to prison. (Listwan et al. 2008, 431)

A particular US feature is that the mass-imprisonment of those least well-off has had a profound effect on the demography of eligible voters. In the words of Downes and Hansen
the; “immense political bonus of felon disenfranchisement for the Republican Party will hardly have escaped the attention of its strategists” (2005, 7). As the idea of being ‘tough on crime and drugs’ has become a fixed part of the US political discourse it has had a lock-in effect which led the Democratic Party, in the 1990s, to preside over the single largest growth of the imprisonment rate in US history. Discussing the effect of this ideological shift on the US Democratic Party’s policies in the 1990s, Downes and Hansen points out that:

[T]o contest this state of affairs at all vigorously would mean their risking the charge of being ‘soft on crime’ – the very fear which led Clinton to adopt ‘tough on crime’ policies in the run-up to the 1992 election and throughout two presidential terms.” (Downes and Hansen (2005, 7)

The force and momentum of the penal harm movement in the US and UK was such that some of the cruellest and most retributive policies was eventually enacted in the 1990s by Bill Clinton of the Democratic Party in the US, and Tony Blair of the New Labour Party in the UK. Actually, former US President Bill Clinton recently admitted to having made the US problem of mass-incarceration worse during his presidency (Dan Merica 2015). These policies included the largest welfare cutbacks since the end of WWII (see for instance Michael Cavadino, Dignan, and Mair 2013, 104–16; Edelman 1997; Garland 2001, 75–77; Nadasen 2016) for more. Coupled together with mandatory sentencing rules, two and three strikes laws and a significant increase in average length of imprisonment sentences, especially for drug offences and repeat offenders, these changes has been termed the penal harm movement in the US and UK in part because many of these policies were almost exclusively targeted at those less well-off. Many of these policies were also later adopted in Australia and New Zealand but few if any other state has gone down that path when addressing the ‘criminal insecurities’ and later the ‘social insecurities’, discussed above.

Garland (2001) uses the term ‘Strategy of punitive segregation’ when he discusses changes in the workings of the criminal justice state and the change from penal welfare towards the age of mass-incarceration. Garland (2001) identifies three distinct features of the new public policies which contributed to this: the idea of being tough on crime —a populist political expressive mode of action; a political preference of public opinion over expert opinions, and the knowledge of professional elites; and a focus on the victim — giving the victim a prioritised place in public discourse and policy making.

An argument is favour of these policy changes not being primarily about addressing the ‘criminal insecurities’ is that although penal reaction peaked in the mid to late 1990s for
both the US and UK, these events lagged “well behind the peaks of criminal victimisation. In the case of the USA, this ‘lag’ is one of not months or years, but of decades” (Garland 2001, 146).

The research into the determinants of penal policy discussed here presents four key findings. One, there is a correlation between the typology of Esping-Andersens (1990) Welfare States Regime Types (WSRTs) and differences in the Prison Population Rate (PPR) commonly measured per 100 000 citizens.

Two, there are certain protective and risk factors which are correlated with both the welfare state typology of Esping-Andersen and more generally with the regional differences in incarceration.

Three, there is a growing amount of evidence suggesting that at least some of these protective and risk factors are squarely within the domain of policy making and that both the welfare state and the criminal justice system are being used when politicians decide how to govern social marginality.

Four, there is evidence that the degree of influence of retributivism and later the penal-harm movement follows regional patterns which resembles the typology of Esping-Andersen (1990) and is comparable to some of the risk and protective factors discussed by Tonry (2007). The social democratic Scandinavian states generally favour inclusionary welfare policies to incarceration, and shorter over longer sentences. On the opposite end of the scale is the Anglospheric and Eastern European states which favour deterrence by both stricter, exclusionary (means tested), welfare policies and longer and harsher sentences (Lappi-Seppälä 2008; Lappi-Seppala 2011).

Within the scholarly literature covered in this chapter there is the idea of convergence — which refers to the idea that cultural, philosophical, and political ideas, over time, converge across the Atlantic and Pacific Ocean. More specifically authors usually refer to the idea that Europe and the other Anglospheric states, in time, will follow in the footsteps of the US.

The idea that most other states in time will experience the same shift along the continuum of governing social marginality as the US and converge on retributivism and penal harm finds little or no support within the literature, beyond the Anglosphere. Looking at the incarceration rates in most states covered here there is no evidence that criminal justice
policy in time will converge on the US retributivism of harsher and more severe punishment. Rather, as will be demonstrated in the analysis it is the opposite that holds true — the US is adjusting course and in recent years appear to be moving closer to its European brethren rather than the other way around.

The last topic to be touched upon before moving on to the Theory chapter of this thesis is what is being referred to as ‘workfare’. ‘Workfare’ is a term used by Loïc Wacquant (2010) to describe how traditional welfare policies are being transformed from ‘providing for the social and economic security of the state’s population’ towards a privilege one acquires through work.

Different varieties of workfare are commonly targeted at the long-term unemployed as a group but “[…] because it [ed: the long-term unemployed] lacks skills and connection to the process of production, it also lacks organization and power and thus is acted upon rather than being an actor in shaping the welfare state (Huber and Stephens 2001, 18–19)“. Workfare is thus often mentioned in the discussion of whether poverty is slowly being criminalised by governments using exclusionary measures, means testing, stricter requirements for access to welfare beyond subsistence, and tougher sentencing for even minor offences most commonly found amongst those less well-off.

**Summary**

This chapter has highlighted that most if not all the states discussed in this thesis are seeing declining support and less funding for traditional welfare state politics. Parallel to this development there has been two major changes in criminal justice policies and practices. The first was a change away from penal welfare; which put emphasis on the societal responsibility for deviancy, and towards Retributivism; which moved the emphasis on to the victim(s) of crime and on the importance of deterrence in criminal justice policies. The second change has perhaps been less universal and is more purely political in contrast to the change from penal welfare towards retributivism which occurred equally in academia, correctional workers and in politics. Since the 1990s there has been a change away from retributivism towards penal harm or mass-incarceration as it is sometime is referred to. The key characteristic of this last change is less focus on parsimony and proportionality in criminal justice policies. Put another way; sentencing and penal practices are less and less
focused on whether the punishment is beneficial to society at large and whether the punishment fit the crime.

In addition, concerns are being raised that these new practices — because they disproportionately target those less well-off — are threatening to criminalise poverty as more of the security net which traditional welfare state policies provided is being replaced by ‘workfare’. ‘Workfare’ is being depicted as a privatised and less universal way of organising the welfare state. One which places heavy emphasis on the necessity of having work to be eligible for welfare benefits as well as being reliant and dependent on regaining employment once one becomes unemployed — thus creating an even greater divide between those that have and those that do not.

Workfare is, except for the US, a way off from becoming reality in the other states discussed here. Luckily one might add, as the evidence from the research presented in this chapter points towards key features of what makes the US different from the non-Anglospheric states are found to be correlated with the ‘risk factors’ discussed above, such as “greater income inequality, relatively weaker social welfare systems, lower levels of trust in fellow citizens and government, and relatively lower levels of perceived legitimacy of legal institution.

Beckett and Western borrowed the term ‘policy regime’ from Esping-Andersens Three Worlds of Welfare Capitalism (1990) as a description of clustering of certain socio-economic policies. This was done to describe their findings — which suggested that penal and social policy are both aimed at governing social marginality. Perhaps the welfare state retrenchment in most states since the 1970s was not simply a result of market deregulation and privatisation but the result of a more complex political reality where politicians increasingly favour incarceration over welfare when dealing with deviance and those less well-off.

In their paper Beckett and Western (2001) performed a US state level comparison of the prison population rate (PPR) and the relative generosity of welfare benefits — between 1975 and 1995. They found that there was a statistically significant correlation between the PPR and the relative generosity of the different states. The US states with more generous welfare benefits had a lower PPR and conversely the opposite held true for states with less generous welfare state benefits. This relationship strengthened over time. Other statistically significant independent variables were the size of the African-American population and a
lagged measure of the percentage of the state legislature which were Republican. Of the crime related independent variables, only violent crime was correlated with an increase in the PPR — lending some support to the idea that the crime rate is only loosely coupled with the rate of incarceration. Beckett and Western concluded that:

[...] the contraction of welfare programs aimed at the poor and the expansion of penal institutions in the 1980s and 1990s reflects the emergence of an alternative mode of governance that is replacing, to varying degrees, the modernist strategy based on rehabilitation and welfarism. (Beckett and Western 2001, 55)

Both the findings of Beckett and Western (2005) and their conclusion sparked debate and a renewed interest in the politics of crime and incarceration in the field of criminology. Looking at the literature there is a lack of political science literature on the politics of ‘governance of social marginality’ and the criminal justice system. It seems obvious that if criminologists have found evidence in support of policies related to crime and punishment being driven by other factors than as a response to crime or public demands, then it ought to be of interest to political science researchers.

The contribution of this thesis is placed into discourse and explained in more detail in the Theory chapter below.
4. Theory

The overarching idea behind this thesis is to present an argument of why and how criminal justice policies and traditional welfare policies ought to be considered on opposite sides of the same continuum; what this thesis refer to as ‘the governance of social marginality’.

Both in traditional political science literature and in criminological literature these two systems have historically been treated as atomic and separate systems.

Based on recent literature on the criminal justice system and its relationship with the welfare system I propose to consider that both welfare state policies and criminal justice system policies ought to be considered part of the same policy domain — the governance of social marginality. That these policy domains are not atomic but different choices along the same continuum, and that a shift has occurred whereby politicians increasingly favour criminal justice politics over traditional welfare state politics when deciding upon policies which affects those less well-off.

It is the argument of this thesis that rather than the occurrence of a welfare state retrenchment in recent decades, a welfare state realignment has occurred. Within the literature to be discussed this shift is referred to as the ‘penal harm movement’, ‘retributivism’, and more recently; ‘the age of mass incarceration’ and even indirectly as 'workfare'. Instead of treating the welfare state as a separate and atomistic concept one ought to treat the welfare state as a necessary but not sufficient explanatory variable for the outcome of those less well-off. Both traditional welfare state policies and criminal justice policies are indicators of how governments address and govern social marginality, and only together do they provide the necessary explanatory power to answer the question of if and
how governance of social marginality has changed. To treat the criminal justice system and the welfare state as separate and holistic means only telling one side of the story.

It is important for any research to be placed within an academic tradition or discourse and to show how it continues, expands or challenges established and relevant literature. As such, the next section of this chapter deals with how this reconceptualization fit with previous research.

4.1 Research Gap

One argument in favour of considering the governance of the least well-off as a continuum which encompasses both the welfare state and the criminal justice state is that it necessitates the rejection of any teleological explanation of policy and/or social developments. Rather than a unilateral movement along a fixed trajectory the different states discussed here are free to change policies and practices and thus move to become either more socially exclusive or more inclusive depending on numerous factors – some of which are covered by this thesis.

In contrast, when Garland (2001) talks about penal modernism there is an implicit link to the teleological idea that not only time but also events move in one, and only one direction. Such a view often deals with staggered developments by increasing the time-frame of analysis to smooth out and thus negate bothersome variations which may harm the overall direction of development.

If one considers a continuum where politicians, professionals and the public at any given time may both discover and rediscover their preferences and where they at any given point in time may redefine their position, then developments both within and between countries becomes possible to examine and explain. Such a view also incorporates the possibility for individuals and groups to be in opposition to the general trend. It allows for gradation and depth of analysis which otherwise is lost in smoothing or elongation of the unit of time being analysed.

The first to suggest treating traditional welfare and criminal justice politics as part of the same continuum were Beckett and Western which suggested that:
in the wake of the Reagan revolution, penal and welfare institutions have come to form a single policy regime aimed at the governance of social marginality. (Beckett and Western 2001, 55)

The same concern has been voiced by Wacquant more than a decade later:

[...], to elucidate the new politics of marginality, we must imperatively re-link shifts in penal and social policy, instead of treating them as separate domains as is conventional in both the scholarly and the policy debate. (Wacquant 2012, 39)

The literature on developments in incarceration rates is still missing a comprehensive theory which integrates both penal and social policy. The aim is for this thesis to be an early step toward a reconceptualization of the governance of social marginality which encompass both traditional welfare state politics and criminal justice politics.

The method used in the analysis part of this thesis is discussed and laid out in the next chapter before moving on to variable description and the analysis part of this thesis.

4.2 Motivation

What is becoming increasingly evident within the literature discussing changes in incarceration is that it is not just a matter of cost or justice but also a matter of whether, or to what degree, such practices can be regarded as democratic.

There is a case to be made that the expansion of the carceral state in the 1970s and 1980s was at least in part a response to increasing crime rates and the ‘criminal insecurities’ people were experiencing.

However, since then most states have seen crime rates level out, and in recent years drop, for many of the most common measures of crime. During the same period unemployment levels have risen\(^3\) and so has wage pressure, as will be seen in the Analysis chapter. Unions have lost foothold and worker protection and welfare benefits have come under pressure (Hay 2001; Huber and Stephens 2001; Pontusson 2005; Sassoon 2013). This

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\(^3\) The data on the Harmonised Unemployment Rate used in this thesis show that the annual mean change is 1.2 percent, and the median is -0.6 percent, with as std. deviation of .103
'social insecurity' has put pressure on politicians. Waquant (2010; 2012) believes that some governments have responded to these concerns with more punitive sentencing and increased usage of incarceration. This policy change, regardless of criminological or political motivation, has disproportionally impacted those less well-off, and is part of what this thesis refers to as ‘governance of social marginality’.

The policy domain that governs this development is in the title referred to as 'the dark side of welfare'. The ‘dark side of welfare’ is a result of how politicians through public policy have elected to deal with the issues of ‘social insecurity’ by targeting those less well-off. The criminal justice system has seemingly shifted towards serving a dual purpose of keeping law and order and at the same time serving as a political instrument to address the ‘social insecurities’ of the late twentieth and early twenty first century. This is the premise for the analysis below, and the idea is to build a theoretical argument for considering the new penal practices as the ‘dark side of welfare’ and then through the analysis try to show how the criminal justice system and traditional welfare is connected in such a manner that they are best understood as being part of the same continuum.

What the literature reviewed in this paper shows is that different penal practices have different effects on ‘social exclusion’. In the words of Cavadino and Dignan:

>The term ‘social exclusion’ is not merely a synonym for poverty, but is used to refer to the denial of full effective rights of citizenship and participation in civil, political and social life. (2006, 442)

The effect on rights of citizenship is particularly pronounced for those less well-off. The literature reviewed here argues that the ‘governance of social marginality’ is increasingly and pre-emptively targeting those less well-off rather than reacting to the effects of crime. This is particularly true when it comes to the politicisation of the criminal justice system and the increased usage of incarceration in recent decades. There is evidence that the ‘penal harm movement’ has, to a varying degree, reduced or denied those less well-off what Cavadino and Dignan (2006), above, referred to as; ‘full effective rights of citizenship and participation in civil, political and social life’.

>One of the most straight forward exclusionary measures used is ‘felon disenfranchisement’. Uggen and Manza when discussing the effect of felon disenfranchisement on recent US presidential elections state that:
Disenfranchised felons and ex-felons currently make up 2.28 percent of the voting age population, a figure that we project may rise to 3 percent within 10 years. Because the margin of victory in 3 of the last 10 presidential elections has been 1.1 percent of the voting age population or less, felon disenfranchisement could be a decisive factor in future presidential races. (Uggen and Manza in Downes and Hansen 2005, 6)

To disenfranchise a large body of the population, especially to either temporary or permanently suspend the right to basic democratic participation, after having finished serving a sentence touches upon the ideals of proportionality, parsimony and democratic rights of citizenship.

The carceral state has grown in its quest for control, and to meet public demands fuelled by social insecurities. If crime does not explain the increased reach of the criminal justice system then:

[… ] we need to theorize the prison not as a technical implement for law enforcement, but as a core organ of the state whose selective and aggressive deployment in the lower regions of social space is constitutively injurious to the ideals of democratic citizenship. (Wacquant 2010, 200)

If one combines disenfranchisement with the well documented effect of socio-economy on the likelihood of a person voting then increasingly large portions of the population are left without the perceived or real possibility for democratic influence or participation in the election of public officials. Although there is a case to be made for there being other mechanisms available to influence public policy and public officials, there is no denying that most theories of democracy place great emphasis on the ability to vote and directly influence who gets into public office. Although it is beyond the scope of this thesis to fully review the democratic issue of disenfranchisement, it is none the less an issue that needs to be kept in mind when discussing the carceral state.

Disenfranchisement is however only one of many ways that penal policies contribute to social exclusion of those less well-off. The increased use of incarceration and other penal sanctions have a real and measurable negative impact on the social mobility of those less well-off. Recent research has shown that having served a prison sentence significantly reduces one’s prospects of future employment (The Pew Charitable Trusts 2010; Western 2011). Moreover, data from the United States show that there are a disproportionate number of people with low income which are serving time, and that the income gap widens further after release (Rabuy and Kopf 2015).
Or, consider data from the US where the majority of those serving a prison sentence has below average education level. The non-incarcerated median education, age 27-42 in the United States, is a high school diploma, and the median of those who has served time is 11 years, and the gap is widening (Rabuy and Kopf 2015; Stoesz and Saunders 1999; Western 2011). It is with education as with other socio-economic indicators – to score below average is correlated with a host of different social economic and health problems. Together these indicators are indicative of limited socio-economic mobility. Add on the issue of progressive sentencing and recidivism – that the next prison sentence, on average, will be harsher than the previous – then it paints a bleak picture indeed.

Another concern which has come to prominence is that of Young People Neither in Education, Employment, or Training (NEETs). The Eurofund in 2012 published a report on the effect of the financial crisis of 2007 which described a lost generation of young people. High unemployment rates and low motivation for education, as it was not believed to increase one’s prospect but rather build up debt, was but a few of the many issues facing young people in Europe and Southern Europe in particular. Restless youth is by no means a new concern but coupled with high unemployment rates one runs the risk of seeing a form of institutionalised unemployment where generations inherit a social position of unemployment and poverty.

Last, but not least one needs to consider the war on drugs. The war on drugs began about the same time as the shift from penal welfare towards retributivism took place, and was in part inspired by the criminal insecurities of the day. However, it has been suggested that the politics of vehemently pursuing drug users go way beyond the need to address any criminal concern. This argument is starting to gain traction as more states are de-criminalising personal drug use and the production and usage of ‘soft drugs’ such as cannabis. To understand why the war on drugs become such an important part of criminal justice politics, consider this quote from John Ehrlichman, the Watergate co-conspirator, given in 1994, when discussing the failure of the war on drugs:

The Nixon campaign in 1968, and the Nixon White House after that, had two enemies: the antiwar left and black people. You understand what I’m saying? We knew we couldn’t make it illegal to be either against the war or black, but by getting the public to associate the hippies with marijuana and blacks with heroin, and then criminalizing both heavily, we could disrupt those communities. We could arrest their leaders, raid their homes, break up their meetings, and vilify them night after night on the evening news. Did we know we were lying about the drugs? Of course we did. (Baum 2016)
There is some debate as to the authenticity of this quote. However there is no question that the essence it captures is well documented as being in line with the beliefs of Nixon and his advisors – as is well documented in transcripts and internal documents from his period in the White House (see LoBianco 2016 for more)

Regardless of whether the war on drugs was intentionally targeted at African-Americans, today the war against drugs has a clear racial profile as discriminatory towards African Americans.

In 2011 the data showed that in the US, one in four children had, by the age of 17, had a father who had served time in prison (Western 2011, 40). Consider then that possession of crack cocaine (a ‘black drug’) up until recently was punished with about 100 times as long a sentence as possession of cocaine (a ‘Wall Street drug’) and one begins to understand how this disparity came to be. This disparity was lessened to about 18 to 1 by Obama in 2010 when he signed the ‘Fair Sentencing Act’ (CNN 2010; Garunay 2015).

When one considers all the above then the idea that incarceration as a catch-all solution to crime does benefit society beyond simple containment looks to be illusory at best. As a result, scholars have begun to ask whether recent trends are indicative of a 'criminalisation of poverty'.

As a political science researcher, it is important to keep in mind how research may inform political debate and shape policy decisions. There are clear benefits to be had by being able to make better and more precise policy recommendations. A key motivator for writing this thesis is thus a belief that knowledge and research may contribute to a better and more just society – that informed decisions are necessary, although not always sufficient, to
create socio-economical beneficial outcomes for those less well-off. If there is evidence which suggests that shifting policy priority from punishment towards traditional welfare, or vice versa, may reduce costs, increases effectiveness of the related institutions, or better the outcome of those less well-off, then there may be clear benefits to be had by moving along the continuum in the desired direction. In addition, I do believe scholars ought to weight the argument of effectiveness against principles and ideals. Which in this case means that although Life Without Parole (LWOPs) and three-strikes-you’re-out laws may be effective in reducing certain crimes – there are clear issues of parsimony and especially of proportionality which both scholars and politicians ought not neglect to reflect upon.

The understanding of policy preferences, when dealing with those less well-off, as being on a continuum also opens the possibility to better classify and understand what drives policy changes.

Previous research primarily conducted in the field of criminology has shown that variables such as crime, police resources and better reporting explain little or nothing of the increase in use of incarceration and more severe penal practices in most democratic OECD states. Moreover, borrowing Esping-Andersen's (1990) typology of Welfare State Regime Types (WSRT) and Lijphart’s (1999) typologies of different political institutional arrangements, previous literature has identified certain variables which are correlated with changes in the Prison Population Rate (PPR). Variables like a Scandinavian style welfare state regime type and social democratic or a consensus oriented political climate have been identified as protective factors. On the opposite side, common-law practices, strong executives, and a majoritarian political system has been identified as risk factors associated with a larger prison population.

Tonry (2007) suggests that institutions, politics, and public policies together either act as protective or as risk factors when it comes to the development and long-term trends in incarceration rates.

The fact that most of the research into explanations of the increase in incarceration so far has been conducted by criminologists – some even referencing well-known comparative politics scholars such as Lijphart and Esping-Andersen – is telling. There is a need to bridge the gap and present better and more coherent theories on how different political institutional features and policy implementations have affected those less well-off when governing social marginality.
This thesis hopes to contribute to a better understanding of how governments deal with those less well-off when governing social marginality, and perhaps uncovering some significant patterns of which an expanded theory of the welfare state can be built on. To do so this thesis used time-series cross-sectional data on most democratic European and the Anglospheric states. The innovative dataset compiled for this thesis uses both classical welfare state measurement variables as well as variables suggested by criminological research such as the Prison Population Rate, the number of Police Officers at the National Level and different measures of Crime.

The next chapter deals with the research method and methodological issues before moving on to a more detailed description of the data compiled for this thesis. The last two chapters deal with the actual analyses and a review of the findings before concluding remarks finish the thesis off.
5. Research method

This chapter deals with the methodology of social science research and the method used in this thesis.

Social science research is at its best an uncertain science. In comparison with the natural sciences there are few, if any, certainties. Truly replicable results are difficult to obtain given the ever-changing nature of societies and the people that inhabit them. Thus, what held true yesterday may very well not hold true today and so on. This presents a host of problems for any scientific research into patterns and trends for instance within, and between states – as this thesis is concerned.

Trying to identify trends across multiple units with many observations such as cross-sectional analysis and across multiple units and observations over time as in cross-sectional time-series analysis would be all but impossible without statistical knowledge and tools. However, with great power comes great responsibility. The easy access to statistical software and the point-and-click analysis that both statistical software and statistical sites on the Internet offer has led to a somewhat deservedly and rightful backlash against statistical analysis (see for instance Davies 2017)

Regardless of the whether there truly is a loss of faith in statistics from the public, there is an ever-ongoing discussion amongst scientists of how statistic is being used. Most of this discussion is outside the scope of this thesis. However, because this thesis make use of statistical analysis I will briefly touch upon two key issues: one, the issue of correlation vs. causation; and two, the issue of how to interpret statistical analysis and the r-squared.

5.1 Correlation vs. Causation

Perhaps the lesson from statistics training which is hardest to learn and most easily forgotten is that there is no truth in statistics. Statistical analysis is an estimation of the real world and as such any result from statistical analysis ought not be treated as true but rather as a possible representation of the truth. Even when discussing statistically significant correlation, the correlations in question does not represent the real world. Rather it is an estimate which states that if you perform the same analysis multiple times then most of the time you are likely to produce comparable results if you use the same variables and the same type of data
collected using the same method etc. How often you would expect to see comparable results would depend upon the confidence level you chose for that particular analysis.

That does not mean that correlations are uninteresting or undesirable but rather that how the correlation is interpreted and the method used is paramount to produce not only reliable but also valid research. Deductive reasoning prior to performing any scientific analysis, and particularly when using statistical tools, is essential.

Finding and testing different variables against each other statistically without proper reasoning is likely to lead to all manner of weird correlations. One such famous finding was the correlation between decreasing number of breeding pairs of white storks in the Lower Saxony region between 1970 and 1985 and a comparable drop in births in the same region. At the same time the number of births and breeding storks soared in suburban Berlin. In reference to these findings:

[...] Robert Matthews writes in Teaching Statistics, “While storks may not deliver babies, unthinking interpretation of correlation ... can certainly deliver unreliable conclusions. (Koerth-Baker 2017)

It is important to be able to justify the different variables selected for analysis as well as to be able to explain through inductive reasoning why a pattern or trend show up in the data analysed.

When attempting to explain patterns or trends the ability to come at a problem sideways is often beneficial as it may uncover whether a correlation is spurious. That is, whether the correlation between two variables in fact is better explained by a third variable which is unaccounted for in the analysis. In the example on storks and babies, above, a better explanatory variable may be economy – that more parents choose to have babies in suburban Berlin because of better economic prospects.

Regardless of storks and babies, the fact remains that statistical analysis in and of itself is not particularly scientific. What makes or breaks the science is the reasoning and the justification of the data included and the careful interpretation of results rather than assuming any truth in statistical significant correlations.

Which brings us to the other issue with statistical analysis which needs to be discussed prior to looking at the method employed in this thesis.
5.2 r2-detour

As the title suggests this thesis will forego referencing the r-squared when interpreting the results of the statistical analysis. However, as it is convention the r-squared will be listed in all regression tables.

The reason for not using the r-squared in the analysis is perhaps best explained by Gary King in his article *Stochastic Variation: A Comment on Lewis-Beck and Skalaban's The R-Square* (1991, 185–200). In summary, his argument is that the r-squared contains no new information. King assumes that \( S(z) \) is “the sample variance of some variable \( z \), \( n \) is the number of observations and \( zbar \) is the sample mean of the variable \( z \).

\[
S(z) = \frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n}
\]

The r-squared is “the ratio of the variance in the fitted values to the variance of the observed values” (King 1991, 186).

\[
r^2 = \frac{S(\hat{y})}{S(y)}
\]

As King (1991, 186) notes, compared to the "estimator for the variance of the disturbances,

\[
\sigma^2 = S(y) S(\hat{y})
\]

and the variance matrix of the coefficients,

\[
\hat{V}(b) = [S(y) - S(\hat{y})] - (X'X)^{-1}
\]

“[…] it should be obvious that \( r^2, \sigma^2 \), and \( \hat{V}(b) \) contain the precisely the same two key pieces of information – \( S(y) \) and \( S(\hat{y}) \)” The equations above ought to show that the r-squared contains no new information. More importantly it lays the groundwork for Kings next argument against the r-squared – that the r-squared is an abstraction away from the data being analysed.

King (1991) argues in favour of using the estimator for variance of the error term or disturbances as it is unstandardized and thus in the same units as the dependent variable –
which makes interpretation easier. The idea that the r-squared is standardised only means that it will return values between 0 and 1, and it does not imply that different r-squared values are comparable between different types of analysis. The content of the compounded r-squared variable does not carry the same meaning across different analysis. Thus, compared to the variance of the error term, the r-squared should be considered an abstraction – lessening the properties and attributes of the original data – without offering new insights.

Another issue with the r-squared is that its value increase by adding more variables – fact that all students of statistics are warned about. Which in and of itself should be considered a serious warning about relying on the r-squared. The current suggestion is to use adjusted r-squared which penalises you for adding additional variables by removing degrees of freedom. Which creates another problem as one is sacrificing precision in the data to compensate for using more independent variables. The problem is not so much the r-squared as it is that when statisticians report results using the r-squared there is a tendency to use a higher value of r-squared as a measure of goodness of fit for the suggested model, regardless of whether the model is theoretically justified and regardless of the number of variables included in the analysis. Thinking that adding more variables is not a problem because one is using adjusted r-squared could mean that there is less focus on the theoretical justification of the different variables used in the analysis.

Which brings us to Kings third argument regarding the problems of inverse probability – the idea that a model can be measured and weighted to describe how close it is to reality or the truth. The idea again is that any model is an abstraction. We sacrifice details in favour of a better overview. This is not necessarily problematic and is an essential feature of statistics. What is problematic is the idea that you somehow can regain or reconstruct the data which has been removed through abstraction by using a compounded variable such as the r-squared.

King thus suggests that by foregoing the use of the r-squared and using the language of “likelihood” we may omit some of the more serious problems of interpreting statistical analysis. The idea is that using likelihood to explain results refers to the statistical nature of the analysis and the probability of reproducibility rather than discussing the how much of the variance in the dependent variable is explained by the independent variable(s) included in the model.
In the next section I will discuss the methods used in this thesis before moving on to the analysis chapter.

5.3 Return of the Statistician

A key part of scientific research is to have a clearly defined research question and a method and research design which fits the data being analysed. The consensus regarding the method – at a high level of abstraction – is that qualitative research design is most appropriate when one has few observations per unit and few units. The classical political science research design is a qualitative case-study of perhaps one or two states and of only a few variables – for instance Theta Skocpol’s States and Social Revolutions: A Comparative Analysis of France, Russia, and China (1979).

On the opposite end of the continuum are quantitative research designs which deal with many units with multiple observations. When one is discussing quantitative method one usually refers to statistical analysis. Statistical analysis has become an essential tool for econometricians and in most of the natural sciences and has seen rapid adoption in almost all areas of scientific research in the last thirty or so years. Although often neglected or played down, as Frequentist statistical analysis have gained somewhat of a hegemony on statistical analysis, there are two different approaches to statistical inference and analysis: Frequentist and Bayesian. The differences and advantages of both approaches is beyond the scope of this thesis. In this thesis, all references to statistics are unless otherwise specified references to Frequentist statistical analysis (see Samaniego 2010 for more on Bayesian vs. Frequentist analysis).

Research Design

The research design will be detailed in the section below before turning to the description and discussion of the data and variables used in the analysis. The research question for this thesis is: “Is there evidence in support of the criminal justice system replacing traditional welfare state politics of governing social marginality?”

The first part of answering the research question above is to determine the scope and units of analysis and then to decide upon a research design. As this research is contributing
to an existing body of literature which has focused on the cause and effect of a growing prison population in most western industrialised democratic states, some parameters are somewhat bounded by previous research. Perhaps even more important is to avoid what Giovanni Sartori (1970; 1984) refers to as conceptual stretching; to expand on categories or concepts to encompass too many units or observations so as to essentially make any taxonomy meaningless. A taxonomy needs to start with logical and theoretically justifiable categories which are mutually exclusive, albeit with radial categories James Collier and James E. Mahon Jr. suggests that one ought to consider whether the second category has more extensions than the original category (Collier and Mahon 1993). Where classical categories may better avoid conceptual stretching by omitting an adjective, radial categories may reduce the chance of conceptual stretching by adding an adjective. Collier and Mahon uses the example of ‘bureaucratic authoritarianism’ which often add additional observations in comparison with ‘electoral democracy’ which is a tighter specification of the primary category; democracy. This was kept in mind when the Welfare State Regime Type typology was developed and when states were selected for inclusion in the analysis.

Looking to answer the research question, it is implausible that such a shift would occur overnight and that data supporting such a finding would be readily and easily available. If it was then there would probably be no need for this line of research. What previous scholars have focused on is either descriptive statistics looking at the PPR (per 100,000) over time or cross-sectional panel data – which snapshots data at a certain point in time. This thesis builds on the idea that if there is evidence of such a shift it would most likely be subtle and incremental. To be able to tease out any trends one needs to consider changes over time, and both within and between the units of analysis. As previous research has pointed out – it is not necessarily so that there is one catch-all explanation for the increased use of the criminal justice system to govern those less well-off.

As discussed earlier in this thesis, there is evidence pointing towards declining support for traditional welfare state politics. Furthermore, as the first part of the analysis below will show, there is a relative decline in social protection benefits spending and a growing income inequality. The latter of which Piketty (2014) has documented in great lengths. This thesis, as it is considering many units with multiple observations across time, will make use of time-series cross-sectional analysis.
The primary unit of analysis is democratic states – specifically industrialised democratic states which are either European or with a distinct Anglo-European legacy, and with some form of welfare state. The states listed in Table 1, below, are the states which were selected to be part of the analysis. Some states like Romania due to unreliable data, others like Bosnia Herzegovina, Serbia, and Montenegro were excluded due to a lack of available data.

The main problem with the categories of Scandinavia and the Anglosphere are perhaps the naming as discussed above – otherwise these two groups ought to be self-explanatory, logically consistent, and in accord with most literature on the subject of crime and welfare.

As for the remaining categories I do believe that; one, it is debatable whether Poland belongs in the Central or Eastern Europe category; and two, it is debatable whether Estonia, Latvia and Lithuania ought to be in a separate Baltic category or part of Eastern Europe. Lappi-Seppälä (2011) divided Eastern Europe and the Baltic countries into separate groups. However, Lappi-Seppälä (2011, 324) never truly justifies the grouping of the Baltic countries in a separate category beyond a reference in the footnotes to an additional criterion; that “[t]he political perspective coincides partly with the welfare clustering, making a distinction between consensual and majoritarian democracies (see Lijphart, 1999)”. It is difficult to know if the typology used by Lappi-Seppälä (2011) was developed prior to the analysis or after. In any case, as the Baltic category was not part of Esping-Andersens (1990) original typology of welfare state regime types. The Baltic as a separate welfare state category does not figure in the updated decommodification index work by Bambra (2006), and neither does it figure in the overview of the different Welfare State Typologies used in different academic research (Bambra 2007, 1099). The Baltic is thus not separated out into a separate group.

The typology presented in Table 1 below, follows a more conservative placement of states to avoid confusion. Slovenia is placed in Eastern Europe rather than in Central Europe as Lappi-Sepälä (2011) does. The reason for this is primarily that Slovenia then follows the other former Yugoslavian states, and the other Eastern European states with a communist legacy. A case could be made that Slovenia perhaps ought to be part of the Southern Europe category as its development across many of the variables used here closely follows that of many of the Southern European states – however that would mean to fit the data to the
typology rather than the other way around. Note that the typology used below is not meant to be directly comparable to other research on the welfare state as the typology is meant to capture general differences in welfare state politics but also regional differences. The idea is that there is more likely to be a diffusion of ideas and political practices across close neighbours than distant friends. Proximity has thus been the delimiting factor when considering the corner cases discussed above.

Table 1 - Welfare State Regime Type Typology

<table>
<thead>
<tr>
<th>Nordic</th>
<th>Central Europe</th>
<th>Southern Europe</th>
<th>Eastern Europe</th>
<th>Anglosphere</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>Austria</td>
<td>Cyprus</td>
<td>Bulgaria</td>
<td>Australia</td>
</tr>
<tr>
<td>Finland</td>
<td>Belgium</td>
<td>Greece</td>
<td>Croatia</td>
<td>Canada</td>
</tr>
<tr>
<td>Iceland</td>
<td>France</td>
<td>Italy</td>
<td>Czech Republic</td>
<td>Ireland</td>
</tr>
<tr>
<td>Norway</td>
<td>Germany</td>
<td>Malta</td>
<td>Estonia</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Sweden</td>
<td>Luxembourg</td>
<td>Portugal</td>
<td>Hungary</td>
<td>United Kingdom</td>
</tr>
<tr>
<td></td>
<td>Netherlands</td>
<td>Spain</td>
<td>Latvia</td>
<td>United States of America</td>
</tr>
<tr>
<td></td>
<td>Switzerland</td>
<td></td>
<td>Lithuania</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Poland</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Slovakia</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Slovenia</td>
<td></td>
</tr>
</tbody>
</table>

This thesis deals with changes both between units (states or compounded measures such as different Welfare State Regime Types) and variations across time (annual changes). A quantitative research design is used to perform statistical analyses on the time-series cross-sectional data collected – augmented by descriptive statistics.

The number of units and observations necessitate some form of quantitative analysis. That there are multiple units and each unit has multiple observations across time support the idea of using time-series cross-section statistical analysis.

One strength of this type of statistical analysis comes from the fact that what may look like random variations at the micro level does not necessarily equate randomness at the macro level. For instance, consider the state level variations of the Prison Population Rate (PPR) in the dataset used in this thesis. Looking at Figure 8 below, the year over year

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4 Although with a long list of conditions, caveats and constraints.
changes in each state looks rather random. However, if you compare Figure 8 to Figure 9 and 10 then possible patterns emerge.

Figure 10 - Prison Population Rate per 100 00, by State

Figure 8 - PPR Trend, Entire Sample

Figure 9 - PPR Trend, by WSRT

Note that the figures above do not show the outliers Bulgaria, Estonia, Latvia, Lithuania, and the US to get a legible scale on the figures.
These and other results will be discussed in more detail in the analysis chapter. However, we can glean a couple of possibly interesting trends from the data above. In Figure 9, if we ignore the data for 1990-1992 which was caused by financial and political turmoil in the Eastern Europe in the wake of the fall of the Soviet Union, we see a steady rise in the Prison Population Rate (PPR) from 1993 and onwards. Dividing the data into Welfare State Regime Types (WSRT) we see that it is the Anglosphere and Southern Europe which have been the driving force behind the increase in the PPR in the last 25 years. Also, Eastern Europe and the Anglosphere are in a separate league when it comes to incarceration rates.

A Note on Imprisonment and Punitiveness

When discussing incarceration, it is important to clarify exactly what is measured and how. Within the literature, the most common dependent variable when measuring punitiveness is the Prison Population Rate (PPR); an annual measure, usually per 100,000, of the total number of remand and convicted prisoners. As such, this thesis follows convention and uses the Prison Population Rate per 100,000 as the dependent variable.

To answer the research question, this thesis follows two separate trails. One trail attempt to trace changes in the welfare state and social spending. The other tries to find out what best explain differences in the PPR. The idea is not so much to find out if an increase in punitiveness has occurred but rather whether there is a correlation between declining social spending and changes in the PPR.

If one is to create the foundation for a new theory which considers both traditional welfare and the criminal justice system to be part of the same continuum of governance of social marginality, then one needs to establish if these two different institutional aspects are linked. That is, if there is a statistically significant correlation that explains changes across units and time.
6. Data and Variable Descriptions

This chapter is a prelude to the Analysis chapter below, and present and discuss the variables used in the analysis part of this thesis.

When presenting scientific work, it is important to be rigorous and transparent. The reason is not only to allow easy replication of any part of the analysis but also to make it easy for the reader to understand the data presented. This is perhaps of particular importance when it comes to quantitative research as the sheer amount of information is often all but impossible to quickly and completely digest. It is the responsibility of the writer to try to make the information as easily digestible and understandable as possible. This thesis aim to do so in part by breaking the information into what hopefully is logical units of limited size, and by utilising descriptive statistics such as table and figures. to make the data as available and understandable as possible.

This chapter first present a table which is intended to provide an overview of the dependent variable and the independent variables used in the analysis. Followed by a brief discussion on data quality and measurement issues follows. Then each variable is presented in more detail and any significant notes or caveats will be discussed before moving on to the analysis.

Table 2 - Overview of Variables

<table>
<thead>
<tr>
<th>Overview of the Variables Used in the Analyses</th>
<th>N</th>
<th>min</th>
<th>max</th>
<th>mean</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prison Population Rate</td>
<td>732</td>
<td>21,98</td>
<td>762,34</td>
<td>140,34</td>
<td>123,80</td>
</tr>
<tr>
<td>Independent Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unlawful acts involving controlled drugs or...</td>
<td>411</td>
<td>0,05</td>
<td>441,85</td>
<td>82,44</td>
<td>92,54</td>
</tr>
<tr>
<td>Intentional Homicide</td>
<td>766</td>
<td>0,00</td>
<td>20,65</td>
<td>2,28</td>
<td>2,56</td>
</tr>
<tr>
<td>Robbery</td>
<td>757</td>
<td>1,40</td>
<td>356,22</td>
<td>76,39</td>
<td>59,89</td>
</tr>
<tr>
<td>Residential Burglary</td>
<td>685</td>
<td>28,14</td>
<td>1828,04</td>
<td>350,07</td>
<td>266,70</td>
</tr>
<tr>
<td>Theft of Motorised Land Vehicle</td>
<td>731</td>
<td>4,93</td>
<td>1125,02</td>
<td>256,25</td>
<td>215,30</td>
</tr>
<tr>
<td>Economy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita (US$)</td>
<td>851</td>
<td>8001,69</td>
<td>96339,18</td>
<td>32821,65</td>
<td>14146,58</td>
</tr>
</tbody>
</table>
Table 2 above lists all the variables used in the analysis part of this thesis, and show the number of observations, as well as the minimum, maximum, mean and standard deviation for each variable.

**Decoupling Crime and Imprisonment**

The subject of crime is perhaps one of the more difficult subjects to perform statistical academic research on. At the same time, this difficulty also highlights the need to consider the criminal justice system as much political as instrumental when dealing with deviance. The difficulty is in part related to how and what to measure, and in part due to the fact that criminal statistics have notoriously been manipulated and misrepresented to serve personal, political or ideological ends. As such this part briefly discuss measurement issues as well as key issues related to statistical reporting and manipulation.

### 6.1 Measurement issues

Issues of massaging the data for either personal or institutional interests is covered below under Statistical Reporting and Manipulation. Sources of measurement issues are related to
everything from poor reporting guidelines, national differences in policy and practices, and politicians or the judiciary changing the definition or boundaries of crime.

Perhaps the most telling example is how politicians have been defining deviance down to address the growth in property crimes in the 1960s and 1970s and the rise in inner city crime rates during the 1980s and 1990s (Garland 2001, 117-119). Defining deviance down is a term which is used to describe how government sometime may choose to: “[…] raise the threshold of law enforcement, in effect to tolerate low-level crime and misdemeanours, or else to respond to them with minimal penalties (Garland 2001, 156)”.

The key motivation for such a move has been to ease the pressure on the police to solve certain types of crime. It usually occurs at the 'shallow end' and typically covers petty theft, property crime and other crimes considered all but unsolvable. The key motivation has usually been to save cost. With the increase in reported crime, the amount of resources needed to solve crimes like petty theft and property crime was deemed unjustifiable compared to the amount of justice and security it delivers to the public and thus defined down.

To a degree this is also related to the war on drugs. Defining deviance down on petty theft and property crime has freed up resources which in many instances have been redeployed to fight more serious crime, and the war on drugs in particular. The issue of measuring crime is thus not only one of precision but also one of considering how definitions and tolerance of crime may change as societies change.

One key source of measurement error comes from changing definitions and poor reporting guidelines. This is perhaps best exemplified with the independent variable 'Unlawful acts involving controlled drugs or precursors' used in this thesis, for which the definition was changed starting from 2008, in accordance with crime definition code 0601, as defined in UNODC's International Classification of Crime for Statistical Purposes (2015). Which for this thesis meant to choose to either use data prior to 2008 or after. To retain as many data points as possible as well as to make the data from the 1990s as complete as possible, the data from 2008 and onward is coded as missing.

Another issue is differences in national definitions of crime and when one is considered an adult within the criminal justice system. Tonry (2007) discusses some of these
issues and points to an issue with juvenile and adults both being reported to the European Council as part of the PPR numbers from Sweden and Finland. Also, Netherland report juvenile offenders covered by civil and criminal law to the European Council as part of their PPR numbers.

In the United States, where some states lowered the maximum age of juvenile court jurisdiction to fifteen, sixteen, or seventeen, and many juveniles in other states are transferred to adult courts to be tried, the adult prisons contain many thousands of juveniles. (Tonry 2007, 8)

The issues regarding the data on the US juveniles in adult prisons is relevant to this thesis. This combined with the fact that the US is such an extreme outlier are some of the reasons for why the US is excluded from the regression analysis part of this thesis. As for the other concerns voiced from Tonry (2007), this thesis uses an innovative dataset compiled from source material rather than a pre-compiled list of the Prison Population Rate per 100 000, and as such does not suffer the issue of over reporting in the cases of Sweden, Finland and Netherland.

The issue of data quality is important and there is no denying that there are sure to be issues with any dataset. However, the dataset compiled and used here does, to the extent possible, try to correct the concerns and issues raised by previous research discussed here. Which means extending the data to be able to do time-series cross-sectional analysis and to use more comparable source data with greater precision. One such measure is using the annual mean total number of prisoners to create more nuanced source data, and then use that to calculate for instance the per Capita and per 100 000 numbers etc. for the variables used here. Which should, at least in theory result in better and more reliable coefficients and residuals.

Statistical Reporting and Manipulation

In addition to measurement issues, there is the real and increasingly well documented issue of ‘massaging’ the data reported to statistical authorities. This can happen for a variety of reasons. One such common theme is the usage of new public management tools to measure and evaluate performance – here the ability to reduce crime. The new public management approach to policing may lead public officials to, as discussed above, ‘defining deviance down’ to change how crime is reported and measured. This approach may also, create
incentives for massaging the numbers to either boost personal performance and/or to boost the performance of a police district or the police as a whole.

For instance, in 2014 the police recorded crime figures for England and Wales lost their ‘national statistics’ status over allegations that “some of the quarterly published figures had been subject to "a degree of fiddling, and were unreliable” (Travis 2014).

Wathne (2015) in her doctoral dissertation on the new management approach to Norwegian policing questioned 2214 police officers from all over Norway. Wathne found that 22.1 per cent of those questioned in 2013 reported to have massaged their crime statistics reports during the previous year and writes that:

 [...] about half of the respondents reported never to have done it [ed: massaged the numbers], 17.1 per cent reported to have done it from 1 to more than 10 times in the last 12 months, and 4.5 per cent report doing it on a regular basis. (Wathne 2015, 294)

These are just a few of many examples of how increased oversight and more sophisticated reporting tools have introduced new sources of measurement error. The error in reporting may also further the decoupling of crime, imprisonment and public policy. If the police misreport their priorities and needs then public officials may end up basing their criminal justice policies and budgetary considerations on misleading data. Worst case, this gap might become large enough that the efforts and policies enacted may no longer reflect the true needs of those less well-off. When, where and if this is happening or has happened is beyond the scope of this thesis but considering the number of police officers in Norway whom report to have massaged the data this might be of interest for future research.

One last note on the UK before moving on to the variable descriptions. England and Wales, Northern Ireland, and Scotland are all separate jurisdictions with different criminal codes and thus report their numbers separately. Although the data used here is collected and compiled separately they are combined in one entity; the United Kingdom – in the analyses. The reason is twofold: one; aside from data relating to crime and imprisonment most of the other independent variable are reported and easily available only for the entire UK and not its constituent parts, and two; all three entities belong to the same Welfare State Regime Type – the Anglosphere. Thus, for consistency and to increase the data points available are England and Wales, Northern Ireland and Scotland combined into unit – the UK. As the primary units of analysis are Welfare State Regime Type and regions this is considered an
acceptable if somewhat problematic solution to the issue of how to report the data on the UK.

**Total prison population**

The data on Total Prison Population is based on data from the World Prison Brief (R Walmsley and Britain 2005; R Walmsley and Britain 2006; R Walmsley and Britain 2008; Roy Walmsley and Britain 2011; Roy Walmsley and Britain 2013), UNODC (2017) and Eurostat (2017c). These databases are built on the same national statistical sources, and reference and report each other as sources for their data. When available, missing data, consistency issues, and previously reported issues were considered and the data was augmented and controlled against data from the different national statistical authorities. This indicator includes not only sentenced prisoners but pre-trial/remand prisoners as well. This is not considered an issue here as the idea behind the PPR per 100,000 variables is to measure the relative differences in punitiveness between states and how the criminal justice system deals with the less well-off rather than conviction rates.

**Independent Variables on Crime**

The primary source of data on crime comes from Eurostat (2017a) and the UNODC (2017) as they are collaborating on data collection as part of the International Classification of Crime for Statistical Purposes project. The data was last accessed 2017-02-27. As with the Total Prison Population variable, these variables are also augmented and controller against national statistical authorities where applicable. These indicator covers crimes recorded by the police by offence category. The variables on crime used here are: Burglary of Private Residential Premises (Burglary), Intentional Homicide, Robbery, Theft of Motorized Land Vehicle (Motor Vehicle Theft), Unlawful Acts Involving Controlled Drugs or Precursors (Drug Convictions). All these variables were converted into per Capita variables to capture the relative crime levels between the states analysed.

**Burglary of Residential Premises (Burglary)**
The UNODC data on Latvia is cited as having changed. Latvia reported there were 5319 burglaries in 2004 and 432 in 2014. In comparison Iceland reported 440 instances of residential burglaries in 2012. Regardless of the reason for this discrepancy, the UNODC data for Latvia (2003-2014) is omitted.

The UNODC data on Poland does not add up as the numbers are reported to be about half of the Eurostat data. As the UNODC uses data from Eurostat the UNODC data on Poland is omitted. The UNODC data for Switzerland is reported to have changed counting rules and does not add up to the Eurostat data and is omitted.

The UNODC data on Bulgaria does not add up to the Eurostat data. The figures seem much too low. Eurostat report 22,208 burglaries in 2007 and UNODC only shows 7193. As there is no report of changed reporting rules the data from UNODC is omitted on suspicion of coding error or reporting/definition issues. The same goes for the UNODC data from Greece – it looks underreported as the Eurostat data from 2007 shows 49,886 and the UNODC shows only 13,797 burglaries in 2007 – thus the UNODC data is omitted.

**Intentional Homicide**

The International Classification of Crime for Statistical Purposes (ICCS) consider Intentional Homicide to be a particular valuable and comparable measure of violent crime and as a between states indicator of the relative level of personal security. According to the ICCS, intentional homicide is defined as: “unlawful death inflicted upon a person with the intent to cause death or serious injury (UNODC 2015, 26)”.

This variable is augmented with data from the different national statistical authorities. The data do include the tragic 77 deaths caused by the terror attack of Anders Behring Breivik, in Norway 2011. As noted below, removing the 77 deaths from that year did not have much of an impact on the Scandinavian Intentional Homicide data. The only variable that saw any noticeable change was the mean which was reduced by 0.02 deaths per capita when the victims of the terror attack were excluded.
Robbery

There were no problems with the variable Robbery except for the UNODC data for Denmark (2003-2014) and Belgium (entire period) – which were omitted.

Theft of Land Based Motor Vehicle (Motor Vehicle Theft)

There were issues with the UNODC for Switzerland (2003-2014) which has changed counting rules and as such the data is not comparable and thus omitted. Eurostat data for Bulgaria is omitted (1995-2007) because of reliability issues. I.e. the data suggests that there were about the same number of motor vehicle thefts in Bulgaria (448) as in Iceland (421) in 2007. The same goes for Greece – as there is reporting inconsistencies in the Eurostat data. Greece saw a threefold jump in motor vehicle theft from 5568 in 2004 to 17552 in 2005 which suggest a change in reporting or counting rules rather than a change in crime. The UNODC data however seems consistent and report a mean value of 21470.18 for the period 1995-2014. Thus, the Eurostat data for Greece was excluded. The UNODC numbers for Latvia is unreliable as they have changed their counting rules and thus omitted. The UNODC data for Denmark (2003-2014) did not line up with the Eurostat data and the numbers released by national authorities and was omitted.

Unlawful Acts Involving Controlled Drugs or Precursors (Drug Convictions)

There was a change in the definition and counting procedure after 2007 of ‘Unlawful Acts Involving Controlled Drugs or Precursors’ which has resulted in the numbers not being comparable to those from 2007 and before. As a result, the analyses below only use data on Drug Convictions prior to 2008 – coding all data on Drug Convictions from 2008 and onward as missing. Otherwise the data is used as is.

Foreign Citizens Held in Prison (Foreign Citizens in Prison)

UNODC data on Foreign Citizens in Prison was last accessed 2017-02-27 and is defined as:
“Persons Held in Prisons, Penal Institutions or Correctional Institutions” means persons held in Prisons, Penal Institutions or Correctional Institutions on a specified day and should exclude non-criminal prisoners held for administrative purposes, for example, persons held pending investigation into their immigration status or foreign citizens without a legal right to stay. “Foreign Citizen” means a person who does not have citizenship of your country. (UNODC 2017)

One issue with this data is that it includes both adult and juvenile offenders – whereby the dependent variable and the other independent variables do only include adults.

Total Police Personnel at the National Level (Police Officers, Total)

UNODC data on Police Officers, Total was last accessed 2017-02-27 and is defined as:

"Police Personnel" means personnel in public agencies as at 31 December whose principal functions are the prevention, detection and investigation of crime and the apprehension of alleged offenders. (UNODC 2017)

UNODC note that this variable ought to be used with caution as there are organisational differences between states when it comes to the criminal justice system. The data only include police officers and not support staff.

Harmonised Unemployment Rate

The data on the Harmonised Unemployment Rate was accessed from the OECD statistical database 2017-02-22.

Harmonised unemployment rates define the unemployed as people of working age who are without work, are available for work, and have taken specific steps to find work. The uniform application of this definition results in estimates of unemployment rates that are more internationally comparable than estimates based on national definitions of unemployment. This indicator is measured in numbers of unemployed people as a percentage of the labour force and it is seasonally adjusted. The labour force is defined as the total number of unemployed people plus those in civilian employment. (OECD 2017b)

NEETs

An indicator focused on young people whom are in ‘neither formal nor non-formal education and training’, and are counted as ‘Inactive persons’ listed as percentage of the same population (Eurofound 2012; Eurostat 2017d)
**Gross domestic product (GDP per Capita)**

OECD data on GDP per Capita was last accessed on 2017-02-17.

“Gross domestic product (GDP) at market prices is the expenditure on final goods and services minus imports: final consumption expenditures, gross capital formation, and exports less imports. "Gross" signifies that no deduction has been made for the depreciation of machinery, buildings and other capital products used in production. "Domestic" means that it is production by the resident institutional units of the country. The products refer to final goods and services, that is, those that are purchased, imputed or otherwise, as: final consumption of households, non-profit institutions serving households and government; fixed assets; and exports (minus imports). Data are internationally comparable by following the System of National Accounts. This indicator is measured in USD per capita (GDP per capita). (OECD 2017a)

**The Giniall and related independent variables (Gini)**

The Giniall and related independent variables was last accessed from the World Bank Database on 2017-02-14. The definition with notes from the World Bank states that:

The new Gini variable and the caveats. As explained, the key new variable provided here is Giniall that gives values of the Gini coefficients from nationally representative household surveys for 2218 country/years.4 In principle, Giniall observations should be comparable, but two important caveats need to be made. First, the dummy variables indicate whether the welfare concept used to calculate Giniall is income or consumption (Dinc), whether it is on a net or gross bases (Dgross), and whether the recipient unit is household or individual (Dhh). Thus, in the empirical work, an adjustment for each of these characteristics is desirable. Giniall should not be displayed or run in regressions, except in special circumstances, alone, that is, without any adjustment or awareness of the underlying concepts. (Milanovic 2014)

The Giniall variable was used with the additional related variables set to income (Dinc), net (Dgross) and at the individual level (DHH).

**House Hold Disposable Income**

Real household net disposable income data from OECD, last accessed 2017-02-17, and defined as:
 [...] the sum of household final consumption expenditure and savings, minus the change in net equity of households in pension funds. This indicator also corresponds to the sum of wages and salaries, mixed income, net property income, net current transfers and social benefits other than social transfers in kind, less taxes on income and wealth and social security contributions paid by employees, the self-employed and the unemployed. Household gross adjusted disposable income additionally reallocates "income" from government and non-profit institutions serving households (NPISHs) to households to reflect social transfers in kind. These transfers reflect expenditures made by government or NPISHs on individual goods and services, such as health and education, on behalf of an individual household. The indicator includes the disposable income of non-profit institutions serving households. Disposable income, as a concept, is closer to the idea of income as generally understood in economics, than is either national income or gross domestic product (GDP). This indicator is measured in terms of net in annual growth rates. (OECD 2017d)

Although the Household Disposable Income variable excludes social transfers it is still subject to changes in governmental policies such as changes in payment for public services or changes in income tax or tax deductibles. Even with such caveats this independent variable goes to the heart of the idea that people are better than the government at determining their own needs.

**Social Expenditure as percentage of GDP or US$ per Capita (Social Expenditure GDP/US$)**

From OECD Social Expenditure dataset, last accessed on 2017-02-17, and defined as:

Social expenditure comprises cash benefits, direct in-kind provision of goods and services, and tax breaks with social purposes. Benefits may be targeted at low-income households, the elderly, disabled, sick, unemployed, or young persons. To be considered "social", programmes have to involve either redistribution of resources across households or compulsory participation. Social benefits are classified as public when general government (that is central, state, and local governments, including social security funds) controls the relevant financial flows. All social benefits not provided by general government are considered private. Private transfers between households are not considered as "social" and not included here. Net total social expenditure includes both public and private expenditure. It also accounts for the effect of the tax system by direct and indirect taxation and by tax breaks for social purposes. This indicator is measured as a percentage of GDP or USD per capita. (OECD 2017g)

**Social Protection Benefits**

Data extracted from Eurostat, last accessed 2017-02-23 and defined as:

Transfers, in cash or in kind, by social protection schemes to households and individuals to relieve them of the burden of one or more of the defined risks or needs. (Eurostat 2017b)
This variable is measured in Euro per inhabitant (at constant 2010 prices).

Net Replacement Rate, Long term unemployment, % of previous net income

The data is a proxy for benefit generosity and was retrieved from the OECD database TAXBEN 2017-02-28. It is defined as:

Long term net replacement rate is calculated based on an annualised income in the 60th month following unemployment for a one earner couple with two children, where the earner previously earned the average wage. Children are assumed to be aged 6 and 4. Where applicable housing and social assistance benefits are assumed to be in payment. (OECD 2017f)

Total Health Expenditure per Capita (Health Expenditure)

OECD data accessed 2017-02-14. Using only the measure of public spending of USD per capita. Definition:

Health spending measures the final consumption of health care goods and services (i.e. current health expenditure) including personal health care (curative care, rehabilitative care, long-term care, ancillary services and medical goods) and collective services (prevention and public health services as well as health administration), but excluding spending on investments. Health care is financed through a mix of financing arrangements including government spending and compulsory health insurance (“public”) as well as voluntary health insurance and private funds such as households’ out-of-pocket payments, NGOs and private corporations (“private”). This indicator is presented as a total and by type of financing (“public”, “private”, “out-of-pocket”) and is measured as USD per capita (using economy-wide PPPs) (OECD 2017c)

Total population

The data for England, Wales, Scotland and Northern Ireland was collected on 2017-02-13 from ONS. Population data for the rest of the sample is primarily from the OECD iLibrary and augmented by the different national statistical authorities. (OECD 2017e)
7. Analysis

The analysis chapter is divided into three distinct parts. The first part revisits and tries to replicate some of the previous findings using the innovative dataset compiled for this thesis. The second part aims more squarely at answering the research question:

Is there evidence in support of the criminal justice system replacing traditional welfare state politics of governing social marginality?

To answer the research question, the analysis aim to find answer to the three questions below:

Is there evidence of cutbacks in public welfare and social benefits?

Are states becoming more penal?

and if so,

Is there evidence that the cut-back of public welfare and social benefits contributing to the growing prison population in advanced democratic capitalist societies?

Tony states that: “The assumption underlying use of the risk and protective factors framework is that increases in punitiveness are generally undesirable (2007, 6). This thesis builds on the same assumption — that an increase in punitiveness is generally undesirable. However, it is necessary to clarify that this is not to say that changes in punishment both in length and severity, in both directions, is off the table but rather that any such change which does not follow the principle of parsimony and proportionality, as discussed in the theory section, is considered undesirable. There should be room for politicians to enact policies, address societal issues, and respond to voter demands.

The primary goal of this analysis is trying to tease out whether there is evidence in support of a correlative shift away from traditional welfare state policies and towards increased use of the criminal justice system when governing social marginality.

7.1 Replication

To examine the relationship between incarceration rates and the welfare state this thesis will build upon earlier quantitative research into this relationship. As discussed in the theory section of this thesis, previous research has found little or no evidence in support of crime or police resources as an explanatory variable for the growing incarceration rate in almost all
the states analysed in this thesis. The analysis using the dataset compiled for this thesis mostly echo previous findings as described below.

The first part of the analysis will look at how my data and my findings compare to the findings of other scholars which have used quantitative analysis to try to explain the developments in the Prison Population Rate (PPR) in the different democratic OECD states. Hypothesis A1 aims to establish a baseline – that there in fact has been an increase in the prison population across the sample used here. The hypotheses A2-A5 below echo key findings from previous research done on possible explanations for the increase in the PPR.

**Hypothesis A1:** There is no growth in the PPR.

**Hypothesis A2:** There is no statistically significant relationship between crime and the PPR.

**Hypothesis A3:** There is no statistically significant relationship between police resources and the PPR.

**Hypothesis A4:** There is no statistically significant relationship between the wealth of the different states and the PPR.

**Hypothesis A5:** There is no statistically significant relationship between the differences in Welfare State Regime Type (WSRT) and the PPR.

**Hypothesis A1: Is the PPR growing?**

The five figures below show the development in the PPR broken down into different units. Figure 15 shows the trend for all the states. The second, Figure 13, shows the trend grouped by regional/cultural belonging. The third, Figure 11, highlights how the PPR has developed between the different Welfare State Regime Types. Notice how the Anglosphere group mean differ based on whether the US is included in the sample. Figure 14 shows the PPR

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6 Note, the large-scale change in the PPR from 1990-1993 is related to the amnesty for political prisoners and a liberalisation of the penal code in the aftermath of the liberation of the Eastern European states from the Soviet Union (Amnesty International 1992; Amnesty International 1993).
difference between a selection of states representing the different WSRTs. In Figure 12 we see the difference in the PPR between the Scandinavian states.

Hypothesis A2: Does crime matter?

Previous research has found little or no support for crime being correlated with the PPR, perhaps with the exception of within some Eastern European states. Below I will first present some figures which visualise the trend in the crime related variables used here before presenting the regression analyses of the effect of crime on the PPR.
What perhaps is most apparent, and a good example of why descriptive statistics is an important part of any statistical analysis, is that the previously discussed issue with the independent variable 'Drug Convictions' becomes apparent. The Drug Conviction data for \( \leq 2008 \) is coded as missing and omitted in Figure 16, as well as for all analyses in this thesis.

For the other types of crime included here the general trend appears to be less crime. However, let us look at the regression analysis below to try to get a clearer picture.

Table 3 - Regression on Crime Variables

<table>
<thead>
<tr>
<th></th>
<th>All Except Eastern</th>
<th>Only Western Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Convictions</td>
<td>-0.014, 0.041</td>
<td>0.042, 0.028</td>
</tr>
<tr>
<td>Intentional Homicide</td>
<td>3.028, 1.018</td>
<td>-4.285, 2.067</td>
</tr>
<tr>
<td>Residential Burglary</td>
<td>-0.010, 0.017</td>
<td>-0.010, 0.011</td>
</tr>
</tbody>
</table>
The numbers are clear, there is a statistically significant negative correlation (-.01) between the PPR and ‘Theft of Motorised Land Vehicle’ across units and time. There is also a statistically significant positive correlation between the PPR and ‘Intentional Homicide’ at the .01 level for the Entire Sample model. 

However, when the Eastern European states are excluded from the analysis we see the same pattern as with previous research – any statistically significant positive correlation between the independent variable Intentional Homicide and the PPR disappear and flip sign. The Intentional Homicide variable is statistically significant and negatively correlated at the .05 level when we Exclude the Eastern European states and when only looking at only Western Europe. The negative effect of the variable ‘Theft of Motorised Land Vehicle’ on the PPR remain highly statistically significant at the .01 level. The independent variables Drug Convictions, Robberies and Burglaries are all statistically insignificant for all three models.

The null hypothesis A2 is false – there is a statistically significant relationship between the PPR and certain measures of crime but not everywhere and not necessarily in the expected direction. This is especially true when we exclude either the Eastern European states or the Eastern European states and the non-European Anglosphere from the analysis.
The statistically significant negative correlation between crime such as ‘Theft of Motorised Land Vehicle’ and ‘Intentional Homicide’ do also have different explanations.

The effect of ‘Theft of Motorised Land Vehicle’ is spurious and is measuring the effect of newer cars having better anti-theft measures such as: alarms, key locks, steering wheel locks, GPS tracking, homing beacons etc. (Roeder, Eisen, and Bowling 2015).

As for the effect of ‘Intentional Homicide’ the explanation is twofold. Eastern European states have a higher murder rate, as Table 4 below shows. This contributes to there being a positive and statistically significant correlation between the rate of Intentional Murders and the PPR. By excluding the Eastern European states, we see that the effect flips sign and becomes negative but remain statistically significant.

<table>
<thead>
<tr>
<th>Intentional Homicide</th>
<th>sd</th>
<th>min</th>
<th>max</th>
<th>median</th>
<th>mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scandinavia</td>
<td>0.93</td>
<td>0.00</td>
<td>3.71</td>
<td>1.03</td>
<td>1.34</td>
</tr>
<tr>
<td>Central Europe</td>
<td>0.58</td>
<td>0.19</td>
<td>3.10</td>
<td>1.25</td>
<td>1.35</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>0.82</td>
<td>0.00</td>
<td>4.55</td>
<td>1.19</td>
<td>1.38</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>3.81</td>
<td>0.49</td>
<td>20.65</td>
<td>2.40</td>
<td>4.10</td>
</tr>
<tr>
<td>Anglosphere</td>
<td>1.35</td>
<td>0.48</td>
<td>6.68</td>
<td>1.56</td>
<td>1.91</td>
</tr>
</tbody>
</table>

To better nuance the data, Table 4 above uses Welfare State Regime Type typology which will be used in the next chapter when looking at the effect of Welfare on the PPR. The rest of this chapter however, will continue to use the simpler division of Easter and Western Europe and the Non-European States.

A decline in the murder rate in Western Europe and amongst the non-European States is significantly correlated with a rise in the PPR. There are two possible explanations to this: one, the correlation is spurious and something else is driving the PPR up even as the intentional murder rate goes down, or two; the murder rate is going down because the

7 The mean value for Scandinavia is somewhat inflated as it includes the terror attack of Breivik on ‘Regjeringskvartalet’ and ‘Utøya’ in 2011 where he killed 77 people. However, excluding those 77 deaths does not change the result much: sd 0.93, min 0.00, max 3.71, median 1.03, mean 1.32.
increase in incarceration has the desired effect on intentional homicide – more criminals are incarcerated and for a longer time thus there are less potential murderers walking around.

To untangle whether incarceration has an effect on the intentional murder rate is beyond the scope of this thesis. However, looking at the Norwegian Murder Statistics for 2013 we get an idea of how murder in Scandinavia is committed.

According to the official Norwegian National Murder Statistics for 2016 (KRIPOS 2017) there were 45 victims of intentional murder. Of those 45, 15 were either in a relationship with the murderer or had been in a relationship with the murderer. An additional 7 of those murdered had close family ties to the murder. In total 22 of the 45 murder victims had family ties to the murderer. Moreover, an additional 16 of those murdered were described as friends or acquaintances to the murderers. Only 12 of 45 murder victims had no known ties to the murderer.

Next, let us move on to see whether police resources and other controls influence the PPR.

**Hypothesis A3: Controls**

One of the independent variables often used in the literature discussed above is the number of Police Officers at the national level. The idea is that more police resources ought to lead to more arrests, more convictions, and thus more criminals incarcerated. The number of Police Officers at the National Level is divided by the population for each observation so that we get a more comparable independent variable Police Officers at the National Level per Capita which is added as one of two control to the model specified above,

The other independent control variable added is the Share of Foreign Citizens of the total prison population. This variable is added as a kind of proxy for migration. Looking at the Figure 22 below, we see that Foreign Citizens make up quite a bit of the total prison population in Scandinavia, Central Europe and South Europe — ranging on average from about 20 percent to about 50 percent in recent years. The opposite is true for Eastern Europe and the Anglosphere, where the share of Foreign Citizens in prison is below 10 percent.
The Number of Police Officers at the National Level show a familiar pattern with Scandinavia and then Central Europe with the lowest number and the US followed by Eastern Europe and Southern Europe at the other end.

Table 5 below show the fixed effects regression for the crime variables and the controls ‘police resources per capita’ and ‘percentage share of foreign prisoners of the total prison population’. Note that the independent variable ‘Drug Convictions’ had many missing values since the counting rules were changed in 2008. Drug Convictions caused the number of observations to drop well below 100 observations and as it had no statistically significant correlation with the PPR in any of the three models above it was thus dropped from the remaining analyses.

**Table 5 - Regression on Crime and Control Variables**

<table>
<thead>
<tr>
<th></th>
<th>Entire Sample</th>
<th>All Except Eastern Europe</th>
<th>Only Western Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>_cons</strong></td>
<td>191,547***</td>
<td>151,034***</td>
<td>119,617***</td>
</tr>
<tr>
<td></td>
<td>34,628</td>
<td>32,249</td>
<td>23,873</td>
</tr>
<tr>
<td>Intentional Homicide</td>
<td>0,997</td>
<td>12,305*</td>
<td>6,203</td>
</tr>
<tr>
<td></td>
<td>5,816</td>
<td>7,469</td>
<td>4,837</td>
</tr>
<tr>
<td>Residential Burglary</td>
<td>-0,005</td>
<td>-0,007</td>
<td>-0,011*</td>
</tr>
<tr>
<td></td>
<td>0,007</td>
<td>0,006</td>
<td>0,006</td>
</tr>
<tr>
<td>Robbery</td>
<td>-0,332**</td>
<td>-0,152</td>
<td>0,109</td>
</tr>
<tr>
<td></td>
<td>0,134</td>
<td>0,067</td>
<td>0,085</td>
</tr>
<tr>
<td>Motor Vehicle Theft</td>
<td>0,000</td>
<td>-0,027</td>
<td>-0,015</td>
</tr>
<tr>
<td></td>
<td>0,023</td>
<td>0,030</td>
<td>0,024</td>
</tr>
<tr>
<td>Foreign Citizens in Prison (%)</td>
<td>-1,988</td>
<td>-8,697</td>
<td>2,765</td>
</tr>
<tr>
<td></td>
<td>44,755</td>
<td>52,633</td>
<td>41,882</td>
</tr>
<tr>
<td>Total Police Officers</td>
<td>-0,051*</td>
<td>-0,027</td>
<td>-0,003</td>
</tr>
<tr>
<td></td>
<td>0,026</td>
<td>0,032</td>
<td>0,030</td>
</tr>
<tr>
<td>R-squared within</td>
<td>0,157</td>
<td>0,090</td>
<td>0,127</td>
</tr>
<tr>
<td></td>
<td>0,034</td>
<td>0,316</td>
<td>0,010</td>
</tr>
<tr>
<td>overall</td>
<td>0,022</td>
<td>0,295</td>
<td>0,007</td>
</tr>
</tbody>
</table>
Looking at the regression on the entire sample of states we see that the number of police officers at the national level (.10) and Robbery (.05) are statistically significant and negatively correlated with the PPR. The same holds true for the he variable measuring Robberies per 100 000 (.05) which is also negatively and statistically significantly correlated with the PPR.

When we break down the data into regions we see that Intentional Homicide is marginally statistically significant (.10) and positively correlated with the PPR in the All Except Eastern Europe model. In the model with Only Western Europe we see that Robbery is statistically significantly and negatively correlated with the PPR at the .05 level, and Residential Burglary at the .10 level. All other independent variables are without significance. It seems that if crime has an effect at all it is in the opposite direction – where more crime is correlated with a lower PPR. Most likely this correlation is spurious given how all three models tested above are a poor fit.

It is important to note that there is an issue with the independent variable Foreign Citizens in Prison in all three models in Table 5. The Foreign Citizens in Prison variable yields a standard error which is about an order of magnitude larger than its coefficient. The coefficient for Intentional Homicide is also affected but given that the coefficients were within bounds in the analysis in Table 4 above, it is reasonable to assume that the effect is the result of an interaction with the Foreign Citizens in Prison variable. Per suggestion in the Stata manual a Modified Wald test for group wise heteroscedasticity in cross-sectional time-series FGLS regression model was performed. The Modified Wald test showed that there is group wise heteroscedasticity. Running a Wooldridge test for autocorrelation shows that the data has first order autocorrelation. To address these issues the analysis below uses a modified GLS suggested when the disturbance term is first-order autoregressive (Baltagi and Wu 1999).
Table 6 below repeat the analysis in Table 5 but add another control variable; GDP per Capita. Looking at Figure 25 and Figure 26 below, we see that there is a large difference in the scatter plots between looking only at Western Europe and the Entire Sample excluding the US. In Western Europe, the GDP per capita variable is a poor fit with the PPR.

Looking at the Entire Sample Excluding the US, we see that the angle of the fitted line is quite steeply negative, suggesting that when analysing the entire sample there is a correlation. However, the spread, or the deviations from the mean is quite large. The angle of the fitted line is slightly positive for Western Europe but there is a quite large spread or deviation around the fitted line suggesting that the independent variable GDP per Capita explains nothing of the PPR in Western Europe.

**Table 6 - Regression on Crime and Control Variables 2**

<table>
<thead>
<tr>
<th></th>
<th>Entire Sample</th>
<th>All Except E. Europe</th>
<th>Only W. Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>coef</td>
<td>se</td>
<td>coef</td>
<td>se</td>
</tr>
<tr>
<td>_cons</td>
<td>184,728**</td>
<td>28,131</td>
<td>105,513***</td>
</tr>
<tr>
<td>Intentional Homicide</td>
<td>6,427***</td>
<td>2,034</td>
<td>28,072***</td>
</tr>
<tr>
<td>Residential Burglary</td>
<td>-0,006</td>
<td>0,016</td>
<td>0,010</td>
</tr>
<tr>
<td>Robbery</td>
<td>-0,127</td>
<td>0,089</td>
<td>0,140</td>
</tr>
<tr>
<td>Motor Vehicle Theft</td>
<td>-0,039</td>
<td>0,024</td>
<td>-0,074**</td>
</tr>
<tr>
<td></td>
<td>81,814***</td>
<td>31,211</td>
<td>-109,006**</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Foreign Citizens in Prison (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Police Officers per Capita</strong></td>
<td>-0.047</td>
<td>0.034</td>
<td>-0.036</td>
</tr>
<tr>
<td><strong>GDP per Capita</strong></td>
<td>0.000</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>R-squared</td>
<td></td>
<td>0.023</td>
<td>0.009</td>
</tr>
<tr>
<td>within</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>between</td>
<td>0.200</td>
<td>0.637</td>
<td>0.077</td>
</tr>
<tr>
<td>overall</td>
<td>0.160</td>
<td>0.633</td>
<td>0.052</td>
</tr>
<tr>
<td>rho_ar (estimated autocorrelation coefficient)</td>
<td>0.591</td>
<td>0.519</td>
<td>0.480</td>
</tr>
<tr>
<td>sigma_u</td>
<td>91,247</td>
<td>64,563</td>
<td>33,680</td>
</tr>
<tr>
<td>sigma_e</td>
<td>20,859</td>
<td>30,150</td>
<td>11,400</td>
</tr>
<tr>
<td>rho_fov (fraction of variance due to u_i)</td>
<td>0.950</td>
<td>0.821</td>
<td>0.897</td>
</tr>
<tr>
<td>Wald chi2</td>
<td>25,670</td>
<td>50,870</td>
<td>15,590</td>
</tr>
<tr>
<td>Prob &gt; chi2</td>
<td>0.001</td>
<td>0.000</td>
<td>0.049</td>
</tr>
<tr>
<td>N</td>
<td>254</td>
<td>196</td>
<td>176</td>
</tr>
</tbody>
</table>

GDP per Capita has almost no impact at all — neither on the significance of the results or the coefficients themselves. It appears as if the GDP per capita not only has no explanatory power but is quite randomly distributed in relation to the PPR within the sample used in the analysis of crime and controls in Table 6 above.

In the final three models of the replication analysis we see that Intentional Homicide is statistically significant and positively correlated with the PPR — at the .01 level for the Entire Sample and for the All Except Eastern Europe model, and at the .10 level when only considering Western Europe. Motor Vehicle Theft was negatively correlated with the PPR at the .05 level in the All Except Eastern Europe Model and at the .10 level in Western Europe. We see that for the Entire Sample, the share of Foreign Citizens in Prison is highly negatively correlated with the PPR at the .01 level and at the .05 level in the all Except Eastern Europe model. This corresponds with what we saw in Figure 22 that there is a pattern of more Foreign Citizens in prison in Western Europe than Eastern Europe and the non-European Anglosphere. We see that the independent variable — acting as a migration proxy — Foreign Citizens in Prison follows the same pattern as Intentional Homicide being
most significant when we include some or all the non-Western European states in the dataset. However, it is difficult to draw any conclusions regarding the Foreign Citizens in Prison variable as there were issues with the error terms/residuals.

To summarise; previous findings regarding the lack of effect of crime and the number of police officers on the PPR in general hold true using the dataset compiled for this thesis. Except for Intentional Homicide, crime and the number of police officers explain little to none of the changes in the PPR. Foreign Citizens in Prison was statistically significant and negatively correlated in the Entire Sample (.01 level) model and in the All Except Eastern Europe (.05 level) model. None of the other independent control variables had any effect on any of the proposed models.

As for the other independent variables, we see that Theft of Motorised Land Vehicle is somewhat correlated and significant but only in Western Europe and for All Except Eastern Europe; and as noted above this correlation is spurious and mostly caused by better anti-theft technology.

Lastly it is interesting to note that GDP per Capita appear to have no explanatory power, and in relation to the PPR it appears randomly distributed when only considering Western Europe.

What we have seen so far is that most types of crime, the number of police officers at the national level and GDP per Capita have no or limited effect on the PPR. What has been shown to be significant is regional differences. These differences is a subject to be explored in more detail in the next chapter – which deals with Welfare and Punishment and whether there is evidence in support of considering a shift towards ‘penal welfare’ and away from traditional welfare.

7.2 Welfare or Punishment

Whereas the first part of the analysis was about testing the data and comparing the dataset compiled for this thesis to results from previous research. To recap, the aim of this second part of the analysis chapter is to provide an answer to the research question:

Is there evidence in support of the criminal justice system replacing traditional welfare state politics of governing social marginality?
To answer the research question, the analysis aim to find answer to the three questions below:

- Is there evidence of cutbacks in public welfare and social benefits?
- Are states becoming more penal?

and if so,

- Is there evidence that the cut-back of public welfare and social benefits contributing to the growing prison population in advanced democratic capitalist societies?

This part of the analysis chapter test three hypotheses:

**Hypothesis B1:** There is no evidence of declining public welfare spending.

**Hypothesis B2:** There is no evidence of an increase in the PPR.

**Hypothesis B3:** There is no evidence in support of the idea of a shift away from traditional welfare state politics towards the criminal justice system.

Testing of the Hypothesis B1 and B2 is straight forward. As discussed in the theory section, previous research has shown that there has been a steady increase in the PPR for most of the states included in the analysis. Furthermore, evidence has been presented which suggests that there are large differences in the PPR between states but that a pattern emerges when utilising Esping-Andersens typology of Welfare State Regime Types (WSRT). The analyses in this chapter follow the same line of inquiry but also tries to identify which, if any, key characteristics best explain the regional differences previous scholars have found.

### 7.2.1 Public Welfare

First let us look at public welfare spending. Most of the independent variables used here are selected because they have been used in previous research and are theoretically justified. An additional benefit is that it places this thesis in the same discourse as previous scholars on the subject of crime, punishment and the welfare state.
Prior to any regression analysis let us look at some descriptive statistics, starting with the social spending. Lappi-Seppälä has previously found a correlation between the PPR (in 2007) and both what kind of welfare state regime type a state belongs to and the Social Expenditure measured as share of GDP (€), using cross-sectional data from 2003. In comparison, this thesis uses cross-sectional time-series data and cover the period from 1990-2015.

![Figure 30 - Social Expenditure, sample mean](image.png)

![Figure 28 - Social Expenditure, mean by WSRT](image.png)

![Figure 27 - PPR and Social Expenditure, mean by WSRT](image.png)

![Figure 29 - PPR vs. Social Expenditure, mean by country](image.png)

Perhaps most striking is the development in Social Spending as share of GDP per Capita in Figure 27 and Figure 28 and what happened in the period prior to the economic downturn in 2001 and the financial crisis of 2007, and similarly what happened shortly thereafter.

Scandinavia and Central Europe show some deviations around a mean value for the share of GDP per Capita spent on Social Expenditures. Prior to 2007 the Eastern European states were on a downward trajectory where their public spending on Social Expenditures intersected with that of the Anglosphere in 2007. The opposite is true for the Southern
European states which have seen more or less a continuous growth in the Social Expenditures from the 1990s and onward.

Looking at Figure 29 and 30 we see that when Social Expenditure is measured in US$ per Capita, a higher share of Social Expenditure is correlated with a lower PPR in Scandinavia, Eastern and Western Europe. Whereas the PPR in the Anglosphere is significantly higher than predicted by the Social Expenditure alone. The opposite holds true for Southern Europe which see a lower than expected PPR given their Social Expenditure spending levels.

The main reason for looking at both Social Expenditure as share of the GDP and as per Capita US$ is to able to make comparison to the previous findings by Lappi-Seppälä, discussed above. In addition, any change in Social Expenditure as share of GDP could simply be a result of changes in growth in the economy. Whereas any change in per Capita US$ may better reflect whether the change is a result of deliberate political decision making.

Next, we look at some of the other independent variables included in the analyses below.

Looking at Figure 31 and 32, the general trend for the GDP per capita and Gini Coefficient was growth from 1990 and onwards. Remember that, the closer the Gini Coefficient is to zero the closer the household income is to a perfectly equal income distribution. This means that the general trend for the states analysed here was a decline in income equality despite significant economic growth.
Figure 33, shows the net annual growth rate for Household Disposable Income which hovers between ~2-3 percent of annual growth prior to the financial crisis of 2007. After 2007, we even see a couple of years with a negative net Household Disposable Income growth rate. What is most interesting though, is when we look at the average annual growth rate (1990-2015) of GDP per capita against the Gini Coefficient, Household Disposable Income, the Net Replacement Rate for the Long Term Unemployed and Social Protection Benefits. In Table 7 below, we see that despite a mean annual increase in the GDP per Capita of about 1.2 percent we see a mean annual decrease\(^8\) in all the other independent variables considered here — except for Social Expenditure as share of the GDP which saw a small increase in spending of 0.8 percent. As noted above it is reasonable to assume that when the GDP per Capita grow, the Social Expenditure as share of GDP also grows. In Table 7 the GDP grew more (1.2 %) than Social Expenditure as share of GDP (0.8 %) – signifying a real decrease in social spending.

The Household Disposable Income and Social Expenditure variables stands out as they are particularly influenced by the financial crisis of 2007 (see Figure 27 and 33, above). The mean annual growth rate of the Household Disposable Income flip direction when the years after 2007 are excluded, and the effect of Social Expenditure all but disappear. However, as the focus is on the criminal justice system and not the financial crisis, and there

\(^8\) The Gini Coefficient is technically increasing but remember that an increase in the Gini means a less equal income distribution.
is no theoretical justification for doing so these results are not displayed in the table below\(^9\). The less well-off appear to become worse off relative to the high-income earners even as the economy as such is growing. Put another way, this is evidence suggests a sort of Matthew Effect\(^10\) — that the rich get richer and the poor get poorer.

\textit{Table 7 - Mean Annual Change in Social Spending Variables}

<table>
<thead>
<tr>
<th>Variable</th>
<th>mean</th>
<th>median</th>
<th>min</th>
<th>max</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per Capita</td>
<td>.011809</td>
<td>.017984</td>
<td>-.0732981</td>
<td>.0421622</td>
<td>.0272702</td>
</tr>
<tr>
<td>Gini</td>
<td>.0058364</td>
<td>-.0026931</td>
<td>-.0612173</td>
<td>.108583</td>
<td>.0335437</td>
</tr>
<tr>
<td>Household Disposable Income</td>
<td>-.3624937</td>
<td>-.0064047</td>
<td>-5.422227</td>
<td>3.489637</td>
<td>1.541341</td>
</tr>
<tr>
<td>Net Replacement Rate LTUE</td>
<td>-.0117643</td>
<td>-.0084558</td>
<td>-.032497</td>
<td>.0197118</td>
<td>.0131262</td>
</tr>
<tr>
<td>Social Expenditure % of GDP</td>
<td>.0076641</td>
<td>-.0020038</td>
<td>-.029369</td>
<td>.1147352</td>
<td>.0309603</td>
</tr>
<tr>
<td>Social Protection Benefits</td>
<td>-.0010203</td>
<td>.0114564</td>
<td>-.2484471</td>
<td>.0722049</td>
<td>.0621281</td>
</tr>
</tbody>
</table>

The data in Table 7 agree with the findings of Thomas Piketty (2014)- that despite economic growth — income and wealth is not benefitting those less-well off nearly as much as those well-off, and the situation is not getting better.

The information above show some evidence of declining public welfare spending with a small average annual decline in Social Protection Benefits (-0.1 percent). It is also interesting to note that Household Disposable Income saw an annual decline of -3.6 percent and the Net Replacement Rate for the Long-Term Unemployed saw an annual decline of -1.2 percent. Which corresponds well with the Gini showing a -0.6 percent annual increase in income inequality across the entire sample used here.

\(^9\) The mean annual growth rate for Household Disposable Income when 2008-2015 is excluded is: .062, and .003 for Social Expenditure as percentage share of GDP. Both well below the GDP growth of .017 for the same period. Thus, in real terms there was a decline in both Household Disposable Income and Social Expenditure.

\(^10\) The Quote is actually: […]: “the practice of giving unto everyone that hath much while taking from everyone that hath little will lead to the rich getting forever richer while the poor become poorer.” (Merton 1988, 610)
Together these figures presented in the chapter and the data in Table 7 suggest that public spending on welfare has declined – thus we can reject Hypothesis B1.

### 7.2.2 Incarceration

Next, let us quickly revisit the PPR. As shown in previous chapter when replicating some of the findings of other scholars there is a general increase in the PPR (see Figure 11-15). However, there are significant and important differences. Looking at the Figure 37, below, we see that when we use the typology presented in the Research Method chapter above, the different WSRT's are placed quite nicely on the fitted line when using the mean PPR for 1990-2015 and thus conform with the theoretical expectations. However, when we exclude the US from the Anglosphere group (the grey diamond) we see that the Anglosphere without the US is much closer to Eastern and Western Europe, and that it is Eastern Europe which has the highest PPR.

However, Figure 37 is only a snapshot which shows how the PPR differ between the different WSRTs. Table 8 below, shows the average annual change in the PPR for the entire sample and broken down into the different WSRTs to better understand how the PPR have changed over time. What we see is unexpected; the mean annual change in the PPR for the entire sample is -0.4 percent. The average annual change for Scandinavia and the Western Europe excluding the UK is a very small average annual change in the PPR of -0.2 percent over the last 25 years. Eastern Europe had an average annual change in the PPR by 0.4 percent. Southern Europe (2.0 percent) and the Anglosphere without the US (1.9 percent) has seen the greatest average change in the PPR. Looking back at the figures in the Replication
sub-chapter it is perhaps not entirely surprising but none the less interesting to note that including the US in the Anglosphere group actually changes the direction of the average annual change to negative (-0.1 percent). This is the opposite of what previous research has shown. Some of this change may be attributed to this analysis using newer data in which the US in recent years has seen a significant reduction in the PPR from 762 per 100 000 in 2007 to 698 in 2014.\(^\text{11}\)

*Table 8 - Annual Change in the mean Prison Population rate per 100 000*

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>median</th>
<th>min</th>
<th>max</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scandinavia</td>
<td>-0.002</td>
<td>-0.003</td>
<td>-0.089</td>
<td>0.087</td>
<td>0.041</td>
</tr>
<tr>
<td>W. Europe excl. the UK</td>
<td>-0.002</td>
<td>-0.005</td>
<td>-0.153</td>
<td>0.106</td>
<td>0.050</td>
</tr>
<tr>
<td>S. Europe</td>
<td>0.020</td>
<td>0.018</td>
<td>-0.057</td>
<td>0.165</td>
<td>0.048</td>
</tr>
<tr>
<td>E. Europe</td>
<td>0.004</td>
<td>-0.004</td>
<td>-0.125</td>
<td>0.143</td>
<td>0.059</td>
</tr>
<tr>
<td>Anglosphere</td>
<td>-0.001</td>
<td>-0.007</td>
<td>-0.358</td>
<td>0.120</td>
<td>0.089</td>
</tr>
<tr>
<td>Anglosphere w.o. the US</td>
<td>0.019</td>
<td>0.005</td>
<td>0.080</td>
<td>0.134</td>
<td>0.067</td>
</tr>
<tr>
<td>Entire Sample</td>
<td>-0.004</td>
<td>0.012</td>
<td>-0.395</td>
<td>0.120</td>
<td>0.089</td>
</tr>
</tbody>
</table>

So far most of the data and findings related to public welfare and income inequality has either conformed with previous findings or with the theoretical expectations. However, when looking at the mean annual change in the PPR for the entire sample, as well as broken down into WSRT's, then the results presented here do not agree with previous findings. It is somewhat difficult to decide whether to reject Hypothesis B2. Although maybe would possibly be the best result, it is better to err on the side of caution and not reject Hypothesis B2, at least until the rest of the analyses are reviewed.

This warrants a more thorough analysis, and the next section uses what we have learned to first test how robust these findings are. Then two core models are proposed to test whether there is support for the idea that cut-backs of public welfare and social benefits is influencing the prison population rate.

\(^{11}\) The US mean PPR for the entire period from 1990 to 2014 is 664 per 100 000.
What has been established is that there are differences in the absolute prison population rate (per 100,000) between the different WSRTs. In general, Scandinavia has the lowest PPR and either the Anglosphere (if the US is included) or Eastern Europe (if the US is excluded) has the highest PPR. In the middle is Central Europe and then Southern Europe. This distribution conforms with previous findings. However, what this thesis is concerned with is not primarily the absolute value of the PPR but the relative development in the PPR from 1990 and up until 2015. The findings in Table 8 above, suggests that rather than a general increase in the PPR there are differences both in size and direction between the different WSRTs. This, together with what we saw in previous chapter regarding the decline in the general crime rates, and a decline in social spending suggests that other mechanisms are at play. The findings so far lend support to the idea that the Welfare State Regime Type typology is relevant enough to warrant further analysis.

Next, we look at the different WSRT’s to try to identify differences which may contribute to explain the relative change seen above. Table 9 below, uses a dummy variable to separate the different WSRTs. Scandinavia was chosen as the reference category because Scandinavia has the lowest PPR. What we are testing is the performance of the other WSRTs against that of the Scandinavian states on the dependent variable PPR.

Table 9 - Regression on PPR and the dummy WSRTs

<table>
<thead>
<tr>
<th>Dependent Variable: Prison Population Rate</th>
<th>Entire Sample</th>
<th>Entire Sample except the US</th>
</tr>
</thead>
<tbody>
<tr>
<td>_cons coef</td>
<td>coef se</td>
<td>coef se</td>
</tr>
<tr>
<td>61,260</td>
<td>48,505</td>
<td>61,267</td>
</tr>
<tr>
<td>i.WSRT coef</td>
<td>coef se</td>
<td>coef se</td>
</tr>
<tr>
<td>Central Europe 30,283</td>
<td>63,504</td>
<td>30,276</td>
</tr>
<tr>
<td>Southern Europe 33,844</td>
<td>65,672</td>
<td>33,839</td>
</tr>
<tr>
<td>Eastern Europe 130,740**</td>
<td>59,405</td>
<td>130,743***</td>
</tr>
<tr>
<td>Anglosphere 149,258**</td>
<td>65,672</td>
<td>58,489</td>
</tr>
<tr>
<td>R-squared within 0,000</td>
<td>0,000</td>
<td>0,254</td>
</tr>
<tr>
<td>sigma_u 108,281</td>
<td>57,834</td>
<td>27,870</td>
</tr>
<tr>
<td>sigma_e 9,890</td>
<td>23,240</td>
<td>0,042</td>
</tr>
<tr>
<td>rho N 732</td>
<td>707</td>
<td></td>
</tr>
<tr>
<td>Wald chi2 732</td>
<td>707</td>
<td></td>
</tr>
<tr>
<td>Prob &gt; chi2 0,042</td>
<td>0,000</td>
<td></td>
</tr>
</tbody>
</table>

note: .01 - ***; .05 - **; .1 - *;
Scandinavia is the reference category (i.WSRT === 1)
The results conform to expectations. When the US is included in the analysis of the effect of WSRT on the PPR then both the Anglosphere and Eastern Europe is statistically significantly correlated with an increase in the PPR. When the US is excluded from the analysis only Eastern Europe is statistically significantly correlated with an increase in the PPR, and the standard errors drop to almost half of the analysis which included the US; increasing the explanatory power of the model and supporting the theoretical arguments against including the US because of the US being a significant outlier when it comes to incarceration.

What we have established thus far then is that it is not the much talked about increase in the PPR which is interesting or relevant. Rather what stands out is the relative, and relatively stable, regional differences – here analysed using the typology of Welfare State Regime Types. Next, we will look closer at whether these differences can be attributed to social welfare, workfare, income inequality or something else.

7.2.3 Welfare vs. Workfare

The models proposed below look at what, if any, of the selected variables which best protect against a rise in the PPR.

At the core of the different models used here is the belief that most criminal acts are motivated by need or greed rather than opportunity or any habitual or latent criminal intent. Greed may be difficult to model and is not within the scope of this thesis. Need on the other hand is relevant to those less well-off. Need as it is used here does not equal objective justifiable need but rather is subjective in nature. Neither does it imply that those less well-off are doomed to become criminals. When it comes to crime people may differ in their opinion about different acts and the moral of them but the need a drug addict feels for another fix is as real as the need to feed ones child. Although people may be inclined and able to rank the needs listed above it is not the aim of this thesis to pass judgment on which act or which order may be more or less justifiable. Rather, the assumption here is simply that the ability to address one’s need through other means than crime ought to have a positive effect on the PPR. Other mechanisms proposed here, besides crime, are that some needs may be addressed by either public support through benefits and transfers or better pay (the actions traditionally preferred by the political Left), or through income tax cuts, deductibles or (more) work (the preferred method for the political Right). The models below are intended to
see if either perspective may better explain the difference in the PPR between the states or WSRT’s analysed here.

This section test Hypothesis (B3): There is no evidence in support of the idea of a shift away from traditional welfare state politics towards the criminal justice system when dealing with those less well-off.

In order to do so the Hypothesis B3 is divided into two:

**B3a:** Welfare state transfers and benefits do not contribute to a statistically significant reduction in the Prison Population Rate; and

**B3b:** Better household economy does not protect against a rise in the Prison Population Rate.

The analyses below start with two core models which were selected to test whether welfare state transfers and benefits and/or household economy influences the PPR. Model B3a and B3b uses the Prison Population Rate (PPR) per 100 000 as the Dependent Variable. Both models also share two Independent Variables; Net Replacement Rate for the Long-Term Unemployed and Total Health Expenditure. The reason for including these two independent variables in both models is that conceptually they may be relevant for both perspectives.

**Net Replacement Rate LTUE** measures the annualised net percentage of previous income retained in the 60th month after becoming unemployed (see variable description in the Data and Variable Description chapter). This independent variable was chosen as it goes to the heart of the relative generosity of the welfare state’s transfers and benefits. The longer one stays unemployed the less likely one is to ever regain full employment, and the longer one is unemployed the less likely one is to regain employment (see Ghayad and Dickens 2012; Wacquant 2010; Western 2002). The assumption here is that the more of the previous income one retains after becoming long-term unemployed the less likely one is to commit crime because of need. When becoming long-term unemployed; how hard do you fall and how likely are you to get back up on your feet?

The **Total Health Expenditure** variable include both public and private health spending. This variable is included here not because it is a particularly good fit for either public welfare state transfers and benefits or household economy but rather because it is deemed a good proxy for determining the difference in general development between the
states included in the sample used here. One alternative would be the GDP per Capita but the GDP per Capita is problematic. It is determined by numerous factors – many of which are external to the state and many of these factors do governments have little or no influence over. Total Health Expenditure is thus preferred over GDP per Capita as a general development indicator because how much of the budget any government choose to spend on healthcare is under normal circumstances totally within the realm of state self-determination.\textsuperscript{12} That is not to say that the GDP per Capita and Total Health Expenditure are interchangeable variables. Neither that they share a statistical probability distribution. Rather, the rationale is that Total Health Expenditure, as a part of the GDP per Capita, better captures what this thesis is interested in — which is how governments use public policy to deal with those less well-off. An additional issue with GDP per Capita is that the GDP per Capita is largest in Scandinavia and lowest in Eastern Europe followed by Southern Europe. Which means that when we consider the development in the PPR by WSRT as shown in Figure 37 above, we see that when we exclude the US, as an outlier, the PPR follows the same pattern as the GDP.

As shown in Figure 36 above, the trend is clearly towards increased spending on healthcare. Some of this trend is explained by an ageing population and greater life expectancy. A continuous increase in life expectancy is coupled with an increase in the cost of eldercare for every additional year of expected life (Razin, Sadka, and Swagel 2001). Although interesting, a more thorough analysis of state health expenditure is outside the scope of this thesis. As stated, the Total Health Expenditure is included in both models as a proxy for comparing the general level of development between states.

Figure 38, below, shows that there is a curve linear relationships between the GDP per capita and Health Expenditure, as well as for PPR and GDP per capita and PPR and Total Health Expenditure. However, the distribution for PPR and Total Health Expenditure is a bit more uniform along the quadratic fitted line. What Figure 38-40 suggests is that the effect of an increase in either GDP per Capita or in Total Health Expenditure on the PPR diminishes and even becomes negative at the tail end of the distribution (here, in particular for Norway and Switzerland). Running a random effects regression on the effect of either GDP per

\textsuperscript{12} Although some would argue that this statement did not hold true for the Southern European states in the aftermath of the financial crisis of 2007.
Capita or Total Health Expenditure plus crime control variables (Intentional Homicide, Residential Burglary, and Robbery) showed that both are positively and significantly correlated (.01) with the PPR. Both regressions show that Intentional Homicide (.01) is positively and significantly correlated and Residential Burglary (.05) is negatively and significantly correlated. In summary, Total Health Expenditure looks like a better independent variable for assessing the general level of development than the GDP per capita.

The two core models differ in that Core Model 1 include the social welfare related variable Social Protection Benefits as an independent variable. Whereas Core Model 2 include the independent variable Household Disposable Income.

The first part below will present the cross-sectional time-series analysis of both core models before moving on to testing the effect of the other independent variables discussed above. As described previously the analysis below, unless otherwise stated do not include the United Stated of America.

Table 10 - Regression on Core Model 1 and 2

<table>
<thead>
<tr>
<th></th>
<th>Core Model 1</th>
<th>Core Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>_cons</strong></td>
<td>128,923***</td>
<td>160,703***</td>
</tr>
<tr>
<td>Total Health Expenditure</td>
<td>0.002</td>
<td>0.002**</td>
</tr>
<tr>
<td>Net Replacement Rate for LTU</td>
<td>-0.230**</td>
<td>-0.338***</td>
</tr>
<tr>
<td>Social Protection Benefits</td>
<td>0.001</td>
<td>-0.641***</td>
</tr>
<tr>
<td>Household Disposable Income</td>
<td>-0.641***</td>
<td>0.220</td>
</tr>
<tr>
<td>R-squared within</td>
<td>0.056</td>
<td>0.097</td>
</tr>
<tr>
<td>R-squared between</td>
<td>0.197</td>
<td>0.073</td>
</tr>
<tr>
<td>R-squared overall</td>
<td>0.191</td>
<td>0.109</td>
</tr>
</tbody>
</table>
For Core Model 1 we see that only the Net Replacement Rate for the LTUE is significantly and negatively correlated with the PPR, at the .05 level.

However, all three variables are statistically significant in Core Model 2. The Net Replacement Rate for the LTUE and Household Disposable Income are both negatively correlated at the .01 level, and Total Health Expenditure per Capita is positively correlated with the PPR at the .05 level.

That there is a positive and significant correlation between the PPR and the Total Health Expenditure may be an indication of the hypothesis that developed states increasingly use the criminal justice system to deal with those less well-off. It may be that the more developed a state is the more likely it is to be under pressure to address social concerns of which the criminal justice system may act as a kind of band aid. It may be easier to sell a quick and actionable fix rather than the idea of a slow-moving system where people are helping themselves. It may also simply be a spurious correlation. Further analysis below will attempt to clarify the significance and direction of the independent variable Total Health Expenditure.

It is interesting to note that only the Net Replacement Rate for the LTUE was statistically significant in both the models. Of the two models, Core Model 2 looks the more promising. However, it is not difficult to find significant correlations without any real world meaning. Given the results of the analysis above then further analysis will use model Core Model 2 as a basis in order establish validity. To improve upon the validity of the model the next part will look at how the model behave when we add additional independent variables or controls to them.

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13 The Internet is full of sites with examples of spurious correlations. This is a particularly funny site: http://www.tylervigen.com/spurious-correlations
7.2.4 Expanding the Model

To test the model for weaknesses additional variables, detailed in previous chapter, will be tested for effect in the models below. Parsimonious Model 1 and 2 include only those variables which fit the theoretical assumptions and have been shown above to be correlated with the PPR.

The model Parsimonious Model 1 includes an interaction term between the independent dummy variable WSRT and Intentional Homicide. According to previous research and the findings in previous chapter there are regional differences which are important to explain the effect of Intentional Homicide. This interaction term is included to test the effect of the regional welfare state model on Intentional Homicide.

Likewise, the Parsimonious Model 2 includes an interaction term between the independent dummy variable WSRT and Social Protection Benefits. The rationale here is much the same as for Parsimonious Model 1 – to test the findings in previous research and whether the regional welfare state model is relevant for the effect of Social Protection Benefits. Social Protection Benefits was chosen over the broader measures of Social Expenditure as it is a tighter fit to the idea of governance of social marginality and the outcome of those less well-off.

Table 11 - Regression on the Parsimonious Model 1 and 2

<table>
<thead>
<tr>
<th></th>
<th>Parsimonious Model 1</th>
<th>Parsimonious Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>_cons</td>
<td>74,172***</td>
<td>73,238***</td>
</tr>
<tr>
<td>Net Inc. Replacement Rate for LTU</td>
<td>-0,437***</td>
<td>-0,465***</td>
</tr>
<tr>
<td>Household Disposable Income</td>
<td>-0,652***</td>
<td>-0,701***</td>
</tr>
<tr>
<td>Social Protection Benefits</td>
<td>0,002</td>
<td>0,001</td>
</tr>
<tr>
<td>WSRT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Europe</td>
<td>25,720*</td>
<td>19,194</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>46,973**</td>
<td>19,427</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>107,006***</td>
<td>213,328***</td>
</tr>
<tr>
<td>Anglosphere</td>
<td>67,306***</td>
<td>21,046</td>
</tr>
<tr>
<td>Intentional Homicide</td>
<td>1,353</td>
<td>5,962***</td>
</tr>
<tr>
<td>i.WSRT##c.Intentional Homicide</td>
<td></td>
<td>1,590</td>
</tr>
</tbody>
</table>

Random Effects GLS regression with AR(1) disturbances
Dependent Variable = Prison Population Rate
Parsimonious Model 1 and 2 both show that the Net Income Replacement Rate for the Long Term Unemployed and Household Disposable Income are highly statistically and negatively correlated with the PPR at the .01 level.

The effect of Social Protection Benefits has no effect in model Parsimonious Model 1 but in Parsimonious Model 2 we see that when we include the interaction term then it is highly statistically negatively correlated (.01) with the PPR in Eastern Europe but nowhere else. Intentional Homicide is highly significantly positively correlated (.01) with the PPR in Parsimonious Model 2, but when look at the interaction term in Parsimonious Model 1 we see that Intentional Homicide is only statistically significantly and positively correlated with the PPR in Easter Europe and not significant at all in the other WSRT.

Table 12 below retest the findings in Table 11 but throw in most of the independent variables used in this thesis to test the robustness of the model when all the reliable control variables relating to crime, economy, police, unemployment, and welfare are included.

<table>
<thead>
<tr>
<th></th>
<th>Big Model 1</th>
<th>Big Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certain variables like Drug Convictions and Share of Foreign Citizens in Prison</td>
<td>0.002</td>
<td>0.002</td>
</tr>
<tr>
<td>R-squared within</td>
<td>0.295</td>
<td>0.185</td>
</tr>
<tr>
<td>between</td>
<td>0.770</td>
<td>0.853</td>
</tr>
<tr>
<td>overall</td>
<td>0.764</td>
<td>0.830</td>
</tr>
<tr>
<td>rho_ar (estimated autocorr. coef.)</td>
<td>0.478</td>
<td>0.475</td>
</tr>
<tr>
<td>sigma_u</td>
<td>23,092</td>
<td>17,300</td>
</tr>
<tr>
<td>sigma_e</td>
<td>10,134</td>
<td>10,342</td>
</tr>
<tr>
<td>rho_fov (fraction of variance due to u_i)</td>
<td>0.838</td>
<td>0.737</td>
</tr>
<tr>
<td>Wald chi2</td>
<td>210,220</td>
<td>322,490</td>
</tr>
<tr>
<td>Prob &gt; chi2</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>302</td>
<td>302</td>
</tr>
</tbody>
</table>

Table 12 - Regression on Big Model 1 and Big Model 2

14 Certain variables like Drug Convictions and Share of Foreign Citizens in Prison have been discounted as unreliable and are omitted in the final analyses.
<table>
<thead>
<tr>
<th></th>
<th>coef</th>
<th>se</th>
<th>coef</th>
<th>se</th>
</tr>
</thead>
<tbody>
<tr>
<td>_cons</td>
<td>128,170***</td>
<td>38,229</td>
<td>52,597*</td>
<td>31,683</td>
</tr>
<tr>
<td>Net Inc. Replacement Rate for LTU</td>
<td>-0.480***</td>
<td>0.125</td>
<td>-0.435***</td>
<td>0.132</td>
</tr>
<tr>
<td>Household Disposable Income</td>
<td>-0.075</td>
<td>0.277</td>
<td>-0.367</td>
<td>0.313</td>
</tr>
<tr>
<td>Social Protection Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSRT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Europe</td>
<td>24,053</td>
<td>16,195</td>
<td>40,300</td>
<td>37,043</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>28,944</td>
<td>20,674</td>
<td>29,979</td>
<td>35,170</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>74,800***</td>
<td>18,754</td>
<td>219,053***</td>
<td>27,010</td>
</tr>
<tr>
<td>AngloSphere</td>
<td>87,834***</td>
<td>18,776</td>
<td>-63,575</td>
<td>53,191</td>
</tr>
<tr>
<td>Intentional Homicide</td>
<td>0.599</td>
<td>3.367</td>
<td>8.078***</td>
<td>1.892</td>
</tr>
<tr>
<td>i.WSRT##c.Intentional Homicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Europe</td>
<td>2,086</td>
<td>9,175</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Europe</td>
<td>-0.137</td>
<td>8,842</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>15,765***</td>
<td>3,962</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AngloSphere</td>
<td>-18,463*</td>
<td>10,710</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Protection Benefits</td>
<td>0.003</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i.WSRT##c.Social Protection Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Europe</td>
<td>-0.002</td>
<td>0.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Europe</td>
<td>0.002</td>
<td>0.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>-0.042***</td>
<td>0.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AngloSphere</td>
<td>0.016**</td>
<td>0.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Health Expenditure</td>
<td>0.000</td>
<td>0.002</td>
<td>-0.004*</td>
<td>0.002</td>
</tr>
<tr>
<td>Residential Burglary</td>
<td>-0.010</td>
<td>0.010</td>
<td>-0.006</td>
<td>0.011</td>
</tr>
<tr>
<td>Robbery</td>
<td>0.035</td>
<td>0.055</td>
<td>0.109***</td>
<td>0.055</td>
</tr>
<tr>
<td>Theft of Land Based Motor Vehicle</td>
<td>-0.005</td>
<td>0.019</td>
<td>-0.032</td>
<td>0.020</td>
</tr>
<tr>
<td>Police Officers at National Level</td>
<td>-0.038</td>
<td>0.027</td>
<td>0.005</td>
<td>0.028</td>
</tr>
<tr>
<td>Harmonised Unemployment Rate</td>
<td>0.429</td>
<td>0.512</td>
<td>0.061</td>
<td>0.533</td>
</tr>
<tr>
<td>GDP per Capita</td>
<td>0.000</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>Social Spending as Share of GDP</td>
<td>-0.164</td>
<td>0.694</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.286</td>
<td>0.286</td>
<td></td>
<td>0.156</td>
</tr>
<tr>
<td>within</td>
<td>0.781</td>
<td>0.781</td>
<td></td>
<td>0.917</td>
</tr>
<tr>
<td>between</td>
<td>0.767</td>
<td>0.767</td>
<td></td>
<td>0.882</td>
</tr>
<tr>
<td>rho_ar (estimated autocorr. coef.)</td>
<td>0.424</td>
<td></td>
<td>0.379</td>
<td></td>
</tr>
<tr>
<td>sigma_u</td>
<td>19,579</td>
<td></td>
<td>12,821</td>
<td></td>
</tr>
<tr>
<td>sigma_e</td>
<td>10,885</td>
<td></td>
<td>10,554</td>
<td></td>
</tr>
<tr>
<td>rho_fov (fraction of variance due to u_i)</td>
<td>0.764</td>
<td></td>
<td>0.596</td>
<td></td>
</tr>
<tr>
<td>Wald chi2</td>
<td>273,260</td>
<td></td>
<td>484,500</td>
<td></td>
</tr>
<tr>
<td>Prob &gt; chi2</td>
<td>0.000</td>
<td></td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>243</td>
<td></td>
<td>220</td>
<td></td>
</tr>
</tbody>
</table>

When retesting the two parsimonious models B3b v1 and B3b v2 with everything but the kitchen sink we see that of the two key variables identified above only the Net Income Replacement Rate for the Long Term Unemployed remains statistically significant and is highly negatively correlated with the PPR (.01) in both model B3b v3 and B3b v4.
When we look at Intentional Homicide it is still highly positively correlated with the PPR (.01) in model Big Model 2. When we consider the interaction term between WSRT and Intentional Homicide in Big Model 1, then Eastern Europe is highly positively and significantly correlated with the PPR (.01) and the Anglosphere is now slightly positively correlated with the PPR (.10), but none of the other WSRTs are significant.

Again, the pattern all but repeats itself with Social Protection Benefits – when we look at the interaction term between the WSRT’s and Social Protection Benefits in Big Model 2 we see that it is highly significant (.01) and negatively correlated with the PPR in Eastern Europe. In addition, we see that the Anglosphere is now statistically positively correlated with the PPR (.05) in Big Model 1. In Big Model 1 the independent variable Social Protection Benefits has been replaced by the independent variable Social Spending as share of GDP without any effect.

To quickly sum up we see that two patterns emerge. First, the Net Income Replacement Rate of the Long-Term Unemployed is highly statistically negatively correlated with the PPR. Second, the four analysis above show the variable Social Protection Benefits and Intentional Homicide are only statistically significantly correlated in Eastern Europe.

Regarding Hypothesis B3, the evidence suggests that both hypothesis B3a and B3b should be rejected. The evidence in model all the six models above show that Social Protection Benefits contribute to a lower PPR in the of Eastern Europe, and for Eastern Europe and the Anglosphere in Big Model 2. More importantly, the regression results above show that the Net Income Replacement Rate for the Long-Term Unemployed is very robust. The more generous the welfare state unemployment benefits are the more likely it is to have a negative effect on the PPR across units and time.

As for the effect of Household Disposable Income, looking at the effect in the Parsimonious Model 1 and 2 we see that it is highly statistically significant and negatively correlated with the PPR. Although the effect disappeared in Big Model 1 and 2 that does not necessarily mean much as the additional variables added did not add much in terms of explanation but probably added disturbances in the data.

Note that, given the low number of observations in the final analyses (~300) there is a greater possibility of a type II error than a type I error – that is to not detect an effect that is present.
In sum the findings above suggest that parallel to a decline in spending on traditional welfare state policies we see that states which spend more on welfare state benefits and transfers and which uses public policy to decrease income inequality perform relatively better when it comes to having a lower PPR.

In addition, we see that Welfare State Regime Types do play a role in explaining both differences in the dependent and in many of the independent variables included here. The states that are commonly associated with less welfare spending such as the Anglospheric and Eastern European states perform comparatively much worse than Scandinavia and Central Europe in more or less every measure included here.

Although the findings presented here are circumstantial they do support rejecting Hypothesis B3. The evidence does suggest that less social spending is correlated with a higher PPR. Furthermore, the findings suggest that the states which are known to be the most neo-liberal and negative to big welfare spending, and the states that spend well below average on welfare, are the states that perform worst on not only incarceration but across the board.
8. Discussion of Results

Previous literature on the welfare state and the criminal justice system has suggested that a more integrated approach to the governance of social marginality might be in order. This was the motivation for this thesis – which set out to find evidence in support of considering both traditional welfare state politics and criminal justice politics to be part of the same continuum – the governance of social marginality.

Note, that the analyses here tend to have a rather high rho – this interclass correlation suggest that much of the difference in the variance is caused by differences across panels. There are inherent difficulties interpreting cross-sectional time-series data, which encompass both within units- and between-units effects. In the case of Net Replacement Rate for the LTUE in Big Model 2 one would assume that the average effect of the Net Replacement Rate for the LTUE is equal to a reduction in the PPR of -0.435 prisoners per 100 000 when the Net Replacement Rate for the LTUE changes by one unit across time and between states.

However, as this is a theory building thesis the focus has not been on interpreting absolute effects or to discuss the finer details of how much effect a change in a coefficient of an independent variable is having on the dependent variable, and I am not sure if you will ever find -0.435 prisoners. For the purpose of this thesis it is the broader strokes which is the gesso on a canvas which may be the beginning of a reconceptualization of how the welfare state is understood.

The significance of the results highlighted in Table 11 and 12 show that the choices politicians make have a real effect on real people. Moreover, the position of the less well-off is getting worse even as the economy of the state grow.

Depending on how it is measured, the much-discussed rise in the Prison Population Rate is more nuanced and not as uniform as often portrayed. What is significant is the decrease in social spending and income inequality – even as the economy of the different states are growing.

The one crime indicator that shows a significant correlation with the PPR is Intentional Homicide, however only for Eastern Europe, and slightly for the Anglosphere in Big Model 2. This support one of the assumptions of the theories of modernity and that of
penal welfare – that as societies develop there will be less crime and less violent crime, as people become more sensitive to the consequences of crime.

Whether the change in how the less well-off are being governed is deliberate or not is beyond the scope of this thesis and would need a much better theoretical foundation before being able to answer for sure. What this thesis has found is that politicians and scholars alike ought to pay particular attention to the issue of unemployment and unemployment benefits. The results suggest that the rather specific measure of how much of previous income is retained in the 60th week after becoming unemployed is particularly indicative of how large a prison population a state has.

If the crime rate is slowly falling and/or has levelled out, and none of the controls have an effect on the PPR then the correlation between which states have the less generous unemployment benefits and the highest PPR becomes impossible to ignore. Although not definitive proof, it is enough to warrant further research into whether there has occurred a shift where governments increasingly favour the politics of the criminal justice system over welfare state politics when governing social marginality.
Literature


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