

Explaining the collapse of the prison population in the Netherlands

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Abstract

Between 2005 and 2015 the Dutch prison population decreased by 44%. Such a rapid yet sustained reduction in the number of prisoners has no parallel in the Western world in this period. What are the factors that underlie this unique development? This article charts the decline of prisoner numbers in the Netherlands and considers areas that may account for it. It takes a systemic approach which considers publicly available data that has involved the whole of the criminal justice system. It finds that a serious decline in crimes reported to the police is part of the explanation. While the overall percentage of cases solved by the police has not changed and the prosecution office has not become more reluctant to forward cases to court, fewer cases that warrant imprisonment have come before the court over this period. In addition, the average sentence length imposed by judges has gone down. The proportion of acquittals has gone up. This shows that any explanation should involve developments in policing as well as in the courtroom. However, questions regarding police capacity to deal with serious and organised crime call into question any conclusion that the Dutch carceral collapse is simply due to a decrease in crime. The reality underlying this remarkable reduction of the number of people in prison at any one time in the Netherlands requires a more multifaceted answer than this.

1. INTRODUCTION

Over the decades prisons and punishment in the Netherlands have caught the eye of criminologists. In 1988 David Downes contrasted punishment in the Netherlands with that of England and Wales, in terms of size of the prison population but also its purpose, severity, and depth. The term he used to denote the essential difference between the Netherlands and England and Wales was, famously, *tolerance* (Downes, 1982, 1988). Rightly or wrongly Dutch tolerance continues to be associated with Dutch criminal justice ever since. However no sooner had his influential book appeared, times were changing and the Dutch prison population went on a definite upward trajectory (Pakes, 2000; Boone and Moerings, 2007; Downes and Van Swaaningen, 2007).

Times have changed again. Recently there has been a flurry of global media news stories that focused on prison closures in the Netherlands. Readers are treated to stories of former prisons that recently have turned into educational establishments, hotels or apartments. French daily *Le Monde*

headlined *Les Pays-Bas ferment leurs prisons* ('The Netherlands closes its prisons'), in 2015, which placed emphasis on fiscal constraints as a driver for this programme of prison closures. The *New York Times* talked about the Dutch luxury problem of having 'a shortage of prisoners'. It highlighted the new uses for the buildings and also the issue of unemployment for prison workers. British newspaper *The Independent* chipped in by arguing that Dutch prisons are closing because 'the country is so safe' (Weller, 2017). It also talks about 'relaxed drugs laws, a focus of rehabilitation over punishment, and an electronic monitoring system' as possible reasons for the Dutch decarceration programme, in May 2017. Similar stories have appeared in the UK on the BBC (10 Nov 2016), in the *Telegraph* (22 May, 2016), and in the US in the *Washington Post* (8 July 2016).

There is no doubt that the prison population has been reduced very significantly in the last 13 years. The Council of Europe's Space I data places the prison rate (number of prisoners per 100,000 population) at 54.4 in 2018 (Aebi and Tiago, 2018). In 2005 this figure was 94.0 (a corrected figure to allow for comparability). This is a reduction of 42%. This is an amazing and, in the Western world, unparalleled development. Later in this paper we will present, for comparison, data from a number of Western countries to illustrate the exceptional nature of the Dutch prison drop.

The burning question here is how the unparalleled collapse of the Dutch prison rate can be explained. Trends in prison rates have quite often received scholarly attention. Different theoretical explanations for rising and falling prison rates are presented in the literature (e.g. Downes and Van Swaaningen, 2007; Snacken, Beyens, & Tubex, 1995; Pfaff, 2008, 2012; Tonry, 2004). Pfaff (2008) divides the theories to explain prison trends into four 'schools of thought'. First, the crime theory, which states that the crime rate affects the prison rate. Second, economic theory, which states that economic conditions and the labour market affect the prison rate. Third, the demographics theory, which states that shifts in age and race of a country's population affect the prison rate. And fourth, the political theory, which links the prison rate to political ideology. Other authors (Spelman, 2009; Snacken, Beyens and Tubex, 1995) point out that the prison rate is affected by policy: the way crimes and suspects are being threatened throughout the criminal justice system.

Building on this prior research we focus on four possible explanations for prison rate trends. They assume that changes in prison rates are either caused by 1) changes in the number or nature of committed crimes; 2) changes in the handling of cases in the various stages of the criminal justice process; 3) changes in sentencing practices by judges; or 4) changes at the backdoor, such as possibilities to substitute the execution of prison sentences or to recall prisoners back into prison.

The first explanation that states that changes in prison rates are caused by changes in crime rates, is extensively discussed in the criminological literature. It has been applied to the reduction in the Dutch prison population too. According to Van Dijk (2011) Dutch decarceration can be explained by a fall in crime in the Netherlands. Just as he argues that the rise in imprisonment until 2005 was due

to more serious crime coming in front of the court, he argues that the decline in prisoner numbers happened due to fewer serious offences being brought to court from 2005 onwards (Van Dijk, 2011). This would suggest a very direct relation between crime and punishment. But although the idea that rising crime rates increase the prison population is intuitively appealing, this theory is often contested (Pfaff, 2008), also for the case of the Netherlands (Van Swaaningen 2013; Boone and Van Swaaningen 2013). To date, the dominant opinion on the crime-punishment-link is that there is no (strong) relation between the two and that prison rates are much more influenced by social and political factors and policy choices (Snacken, Beyens, & Tubex, 1995; Von Hofer, 2003; de Giorgi, 2006; Wacquant 2009a, 2009b; Spelman, 2009; Lacey, 2011). This conviction builds on an old and influential axiom in criminology that crime itself is a social construction and punishment depends in particular on the social definition, perception and response to this phenomenon. This explanation is thus found to be wanting, while acknowledging that there is likely some relationship (Pfaff, 2008). Garland too thinks it would be naive, not to consider a relation between crime and punishment at all, since punishment is, after all, a response to crime (Garland, 2013), leaving open the exact nature of the relation. While Lacey (building on Enns 2014, 2016) indicates that this relation can be indirect, e.g. by violent crime rates influencing levels of public punitiveness which, as such, influence policy strategies towards crime (Lacey, 2018).

The other three explanations of our focus state that fluctuations in prison rates are not so much caused by changes in the number and nature of committed crimes, but by changes in the way the criminal justice system handles them. The system consists of many actors, forming 'a sprawling web of competing institutions' (Pfaff, 2012), among whom legislators, police, prosecutors, the judiciary and probation or parole officers, each with their own tasks and goals. To understand the prison rate drop, it is important to know *who* caused it. There could have been either changes in the processing of cases by the police or the prosecutor, as a result of which fewer cases were put through to the judge (hypothesis 2), or the judges changed their sentencing practice by being less willing to impose imprisonment, or by imposing shorter prison terms (hypothesis 3). And lastly, there could be fewer people in prison due to changes 'at the back door' affecting the execution of prison sentences, such as changes in the early release system (hypothesis 4).

This article tests the different theories to explain the prison rate drop in the Netherlands by interrogating public record sources, such as data from the Council of Europe (Aebi and Tiago, 2018), the Dutch Ministry of Justice and Security (Kalidien, 2018) and from StatLine, the electronic databank of Statistics Netherlands (CBS). The approach is systemic and considers fluctuations in a range of variables including registered crime rates, police statistics, prosecution data as well as sentencing practices by the court. This paper argues that such an approach is required in order to transcend one-dimensional explanations of the process of the lowering of the prison population in the Netherlands.

After a summary of the recent developments in the prison population in the Netherlands we will test the first explanation by focusing on developments in crime rates. Thereafter, we will test the second account by investigating to what extent the collapse of the prison population can be attributed to the case processing in prior stages. Next, we will test the third hypothesis by investigating changes in the sentencing decisions of the judges. In the final section of this contribution we will explore to what extent changes in the executional phase of the prison sentence can explain the collapse of the prison rate.

2. THE DECLINE OF THE PRISON RATE IN THE NETHERLANDS

2.1 The prison rate drop

The *prison rate* is the number of people imprisoned on a given day per 100,000 inhabitants. This rate accounts for changes in the population size and makes international comparisons possible. Although for the latter, it is important that countries use the same definition of 'prison population'. For the Space I data of the Council of Europe, the Netherlands used to include categories that were not included in the submissions of many other European countries, such as illegal immigrants held in immigration detention, juveniles who were detained further to civil - not criminal - law and mentally ill offenders in forensic psychiatric institutions. The Dutch prison rate was thus inflated. However, the *corrected* numbers for the Netherlands, excluding these categories, show a less steep, but still a significant decline in the prison rate (Aebi and Tiago, 2018). The drop commenced around 2005, after a phase of increased incarceration through the 1990s and into the new Millennium (see Figure 1). The corrected prison rate dropped from 94 in 2005 (Aebi et al., 2017) to 51 in 2016 (Aebi and Tiago, 2018); a reduction of 46%. There it seems that the decline stopped: in 2018 the prison rate has increased to 54. We therefore focus on the period 2005-2016 to explain the prison rate drop.

[Figure 1 here]

2.2 The declining Dutch prison rate in a Western European context

It is important to place the Dutch data in a Western European context. First, it shows that the Dutch incarceration rate is not only low for global, but also for European standards. The only European countries with lower rates of imprisonment are some of the Nordic countries, and the mountainous microstates of Andorra and Liechtenstein (www.prisonstudies.org). Second, prison rates in many countries go up and down in time and there are many reasons why this may be the case. However, whereas many other countries are now seeing a drop in their prison population, not least the United States and Russia, the countries surrounding the Netherlands have not behaved in the same way (see

Figure 2). The prison rate in the UK is relatively stable (a slowly rising prison population set against a slowly rising general population), that of Norway is on the rise, as are prison populations in France and Belgium since 2005. There is evidence of very recent dips in some countries such as France and Germany from 2013. However, none of these countries has seen a substantial drop in prison rate as the Netherlands, where it commenced as early as 2005 and where it has been sustained for over a decade. That makes it important that we understand precisely what accounts for this process of Dutch decarceration.

In comparative-methodological terms this is therefore a case study (Pakes, 2019). As such it does not aim to provide data on other countries in the same detail or depth. A degree of comparison is included, but only in order to make the case that the Dutch decarceration process is not simply a trend that surrounding or relatively similar countries in the vicinity also show. We will argue subsequently though, that in order to understand the nature of Dutch decarceration more in depth comparative studies on the composition of prison populations, in particular in relation to sentence length will add an important dimension. We will return to the argument in the conclusion.

[Figure 2 here]

2.3 Drop in daily prison population

In order to explain the decreasing prison rate in the Netherlands, we first take a deeper look into the numbers on the use of prison. Data from the yearly reports of the Dutch Ministry of Justice and Security show that in the period 2005-2016 the number of people entering prison dropped from 44,580 to 33,056: a decrease of 26% (Kalidien, 2018). This decrease is mostly attributable to lower numbers of pre-trial detainees. Where 21,029 people entered pre-trial detention in 2005, this number dropped to 13,350 in 2016: a decrease of 37%. The number of people entering prison because they did not pay their fine also dropped steeply, from 4,939 in 2005 to 3,074 in 2016: a decrease of 38%.

The vast majority of prisoners in the Netherlands has been sentenced to a short prison term. Half of all prisoners is in and out within a month. Therefore, the number of prisoners in the prison system on a given day gives the best measure of the actual size of the prison population. On September 30th, 2005, 14,890 people were imprisoned. This number dropped by almost 6,000 (40%) to 8,910 in 2015.¹ Other data show that the numbers continued to drop in 2016 to 8,806 (DJI, 2017). This reduction in the daily prison population can be attributed to 37% fewer pre-trial detainees (from 6,195 in 2005 to 3,875 in 2015) and to 45% fewer offenders sentenced to prison (from 8,305 in 2005 to 4,540 in 2015). The drop can be seen at every crime type that people are in prison for: the number of people

¹ <http://statline.cbs.nl/>

who are in prison for a property crime dropped by 44%, for violent or sex crimes this percentage is 39% and for a drug crimes even 49%.

3. TESTING THE EXPLANATIONS FOR THE NETHERLANDS

The reduction in the daily prison population is thus seen for every prisoner type and every crime type: it is a general drop. But how can this reduction be explained? In this paragraph we test the theories that explain changes in the size of the prison population. First, we test the explanation that assumes that changes in the prison population are caused by changes in the committed crimes, as Van Dijk (2011) claims. Second, we test the idea that changes in the prison rate are caused by changes in prior stages of the criminal justice process. Third, we test the hypothesis that changes in the prison rate are caused by changes in sentencing practices by the judges, and finally, we test the notion that changes in the prison rate are caused by changes in the executional phase of the prison sentence.

3.1. Can the prison rate drop be explained by changes in crime rates?

During the period 2005-2016 the number of registered crimes dropped from 1,350,000 in 2005 to 930,000 in 2016 (see Figure 3). That means that there were 418,000 fewer registered crimes than in 2005, a reduction of 31%. This is a significant reduction, for all offence types. There were 216,000 fewer property crimes (-27%), and 32,000 fewer violent crimes (-26%) registered. The strongest relative decrease is found for destruction and public order crimes (-50%) and drug crimes (-31%).

The steep decline in the number of crimes is not only seen in police statistics, but in victim surveys as well. Where 27.5% of the participants of a large scale victimisation survey (*Veiligheidsmonitor 2017, 2018*) reported victimhood of a crime in 2005, that percentage dropped to 15.2 in 2016. This represents a 45% decline, which is nearly on a par with the decline in prison rate.

It is thus clear that the number of crimes has dropped, and that it shows a positive relationship between crime and punishment. The question remains open, however, how this relationship should be explained. Van Dijk (2011) argued that the decline in prisoner numbers happened due to fewer serious offences being brought to court from 2005 onwards. He also argued that sentencing for serious crimes such as homicide, aggravated theft, and involving hard drugs actually became somewhat severe during this time. But that increased severity could not compensate for a drop in numbers of these offences in court. And that, Van Dijk argued, is likely down to the fact that there is a genuine drop in such serious crimes in the Netherlands. Homicide statistics are down (Statistics Netherlands puts the number of homicide victims in 2005 at 197 and at 108 in 2016)² and we saw self-reported drops in

² <http://statline.cbs.nl/>

both property and violent crime too (Veiligheidsmonitor 2017, 2018). His analysis seems to be based on the assumption that fewer serious crimes come to court, because fewer are committed. However this leaves open the possibility that a greater number of serious crimes than in the past, for whatever reason, fail to reach the courts. We will elaborate on that second hypothesis in the final sections of this paper.

[Figure 3 here]

3.2 Can the prison rate drop be explained by changes in prior stages of the criminal justice process?

The second hypothesis that we test assumes that changes in prison rates are caused by changes in the processing of cases in prior stages of the criminal justice process. We consecutively study the changes in law and policy, and we compare the 2005 case processing by the police and the prosecutor to the case processing in 2016.

3.2.1 Changes in the law and policy

The legal framework for the processing of criminal cases has had one major change in 2006, when a law was introduced that aims to improve the efficiency of the criminal justice process by giving the prosecutor the power to deal with cases without the involvement of a judge (*Wet OM-afdoening*). The prosecutor can impose non-custodial Punishment Orders, like a fine or a community sentence. To further improve the efficiency of the system, a new modus of case processing (zsm, as soon as possible) was introduced in 2011, focusing on a fast handling of cases, aiming, among other things, to have more cases finally decided at the level of prosecution service (Jacobs and Van Kampen, 2014). We expect that these developments affect the case processing by the prosecutor and could therefore affect the number of people that are sentenced to imprisonment: the suspects that receive a punishment order from the prosecutor are diverted from court and are therefore not eligible to receive a prison sentence. This may have the (small) effect of reducing the number of prison sentences imposed.

Another very different change in the law was the abolition of a statute of limitation for severe crimes, which was set at 20 years. However, we expect that this does not have a large effect on the prison rate, since it is quite rare that severe crimes are actually solved after more than two decades. Finally, in 2013 there was an important policy change: the guideline following the Salduz case of the European Court of Human Right (Salduz v. Turkey - 36391/02. Judgment 27.11.2008) was implemented, as a result of which suspects in police custody were allowed to consult a lawyer. The time that the police spent on interrogations increased, because police officers had to wait until the lawyer was present. This waiting time negatively affected the time the police could be out on the street, registering new crimes and could thereby contribute to the prison rate drop. Another policy change was the

introduction of new registration software at the police. Van Ham et al. (2018) found that the introduction of the new software in 2008 affected the number of registered crimes committed by juveniles: the rather user unfriendly software kept the police longer off the streets and enticed them to make more use of reprimands instead of formal processing. These new software effects could also have affected the handling of crimes committed by adults. However, the timing of the policy events already makes clear that they cannot account for the prison drop: the prison rate started to decline years before these policy changes.

3.2.2 Changes in case processing by the police

The decline in the prison rate could be caused by changes in the processing of cases by the police. To investigate differences in case processing between 2005 and 2016, data are compiled from the report *Criminaliteit & Rechtshandhaving 2017* (Kalidien, 2018). Table 1 compares the number of crimes or suspects at different stages in the criminal justice proceedings for 2005 and 2016. The number of registered crimes has dropped from about 1,350,000 in 2005 to 930,000 in 2016, as was shown in Figure 3. That is a decrease at the entry point of the criminal justice system of 31%. The percentage of crimes solved shows almost the same decrease during that period (-30%). One might assume that with fewer crimes reported, more police capacity could be dedicated to solving a higher proportion of reported crimes, but the percentage of cases solved only increased from 25% in 2005 to 26% in 2016.

While the numbers of registered and solved crimes have dropped, yet the number of registered *suspects* dropped even harder: 2016 has only half the number of registered suspects of 2005 (-46%). Finally, the number of cases that the police has forwarded to the Public Prosecutor has decreased from 264,000 in 2005 to 189,000 in 2016: a drop of 28%.

[Table 1 here]

3.2.3 Changes in case processing by the prosecutor

Table 1 further shows the case processing by the prosecutor in 2005 and in 2016. Where 146,500 cases were sent to court in 2005, that number was reduced by 31% to 100,000 in 2016. Transactions (a fine imposed by the prosecution service) and Punishment Orders (taken together) have halved: they dropped from 74,000 in 2005 to 41,000 in 2016. This is rather surprising considering the new system of processing 'as soon as possible', aiming to have more cases finally decided at the level of prosecution. When there is not enough evidence in the case, or it is a minor case where another solution is better for the defendant, the prosecutor can waive the case. The number of unconditional waivers have increased from 26,000 in 2005 to 40,000 in 2016: an increase of 55%. Conditional waivers have increased as well, from 4,600 in 2005 to 8,100 in 2016: an increase of 77%. It thus seems that for

a relatively larger proportion of the cases the prosecutor did not send the case to court, but has not taken over the imposition of punishment from the judge either.

3.3 Can the prison rate drop be explained by changes in sentencing practices by the judges?

The third theoretical perspective on explanations for changing prison rates is the perspective that points at changed practices by judges. According to this account, a decline in prison rates is caused by judges that have become less punitive. In order to test this we first look at whether there were changes in the law that can explain any changes in sentencing behaviour of the judges. Thereafter, we focus on the numbers of prison sentences that were imposed.

3.3.1 Changes in law

During the period 2005-2016 there were several changes in the law that can affect the decision-making of the judges:

- In 2007 automatic release after two-thirds of the sentence was changed into conditional release. The release date now depends on the behaviour of the detainee in prison, and during the period of the conditional release, the detainee can be subject to supervision and intervention programs. This could push prison numbers up.
- In 2011 the law on conditional sanctions was introduced. It did not create many new sentencing options for the judge, but clearly structured the possible conditions that can be imposed with a suspended punishment. They may make suspended sentences more attractive which may push prison numbers down.
- In 2011 the arsenal of the judge was extended by introducing the restraining order as a measure that the judge can impose to forbid the offender to stay in certain areas or to contact certain people. This intervention may be used to avoid a prison sentence.
- In 2012 the discretionary powers of the judges were reduced by a law that forbids the judges to impose just a community sentence in case of a severe crime. This would increase the likelihood of prison sentences imposed.
- In 2014 a law was introduced that allows for offenders aged 16-18 to be treated as adults, and offenders aged 18-21 to be treated as juveniles when that better fits the stage of their maturation. This is likely to lead to longer prison sentences for some juveniles.
- In 2016 a law introduced long-term supervision for offenders of severe crimes. During the supervision the offenders can be subjected to behavioural interventions and restrictions. This may facilitate release and therefore may push the prison population downwards.
- In 2016 the maximum punishment for human trafficking was increased. This would allow the court to sentence more severely and therefore could increase the prison population.

Although some new laws affect the consequences of the punishment for the offender, it is unclear how these changes affected the sentencing decisions of the judges. On the one side, we expect that the changes in the law contribute to more punitive sentencing outcomes, which cannot explain the decline in prison rates. On the other hand, judges could balance their new powers to impose long-term supervision including behavioural interventions and restrictions with shorter prison sentences. If that were the case, the new laws could divert people from prison, and thus contribute to a declining prison rate. But here too, except for the introduction of conditional early release, the changes in the law only occurred years after the prison rate started to decline.

3.3.3 Changes in case processing by the judge

Table 1 not only shows the case processing at the stages of the police and the prosecutor, it also shows the case processing flow at the court. Compared to 2005 there were 35% fewer convictions in 2016. This percentage is related to the increase in acquittals. Where the court acquitted 7,300 cases in 2005, that number has increased to 10,000 in 2016: an increase of 40%. Finally, at the stage of the sentencing decision, the court convicted 29,000 offenders to prison in 2005. That number dropped to 24,000 in 2016: a decrease of 19%. Other punishment types were imposed less often as well: there was a reduction in the number of fines by 63% and in the number of community sentences by 27%.

About suspended sentences, the data do not reveal the content and harshness of the conditions that join the suspended sentence, but we do know that suspended prison sentences are also imposed less often: the number dropped from 16,500 to 11,300: a reduction of 32% (Kalidien, 2018). Suspended prison sentences thus seem not to have replaced unsuspended prison sentences. With regard to other suspended punishment types, the number of suspended fines only dropped by 28. On the contrary, the number of suspended community sentences more than doubled from 1,800 to 4,400 in the period 2005-2016.

3.3.2 Changes in number and length of imposed prison sentences

To investigate whether judges became less punitive in their sentencing decisions, we consider both the length of the imposed prison sentences and the number of prison sentences per crime type. Table 2 shows for 2005 and 2016 for different types of crime how many prison sentences were imposed and what the average length was. By multiplying these two, the total volume of the years of imposed imprisonment is calculated. Van Dijk (2011) used this same method to investigate the impact of sentencing and came to the conclusion that sentencing tariffs were quite stable because of which changes in imposed prison sentences were attributed to changes in numbers of crimes.

The results of our analyses, however, show that there are large changes in both the number of prison sentences and average length of imprisonment for many types of crime. Except theft, soft drugs, and traffic crimes, for all other types of crime fewer prison sentences were imposed. For example, there were 65% fewer prison sentences imposed for rape in 2016 compared to 2005. With regard to sentence length, the findings show a similar pattern. For most types of crimes the average imposed prison length became shorter. The average prison term for theft, for instance, was 41% shorter in 2016 compared to 2005. However, for rape and homicide the average prison terms increased by respectively 46% and 40%. And for weapons longer prison terms were handed out as well. This seems to indicate the judges have not necessarily become 'milder', certainly not in relation to these serious offences.

Multiplying the number of prison sentences by their average sentence length gives insight into the crime type's contribution to the prison stock. Almost all cases show a drop in the total years of imposed imprisonment. The only exceptions are soft drug and weapon crimes, where the total years of imposed imprisonment increased by 8-10%. Altogether, the changes in volume and severity of punishment lead to a reduction of imposed years of imprisonment of 43%. To the largest extent that change can be ascribed to property crimes, which caused 39% of the change. Hard drug crimes also contributed to the reduction in the total years of imposed imprisonment by 26%. And 21% of the changes can be attributed to robberies. These findings thus show that sentencing practices and tariffs contribute to the prison drop: the number of prison sentences as well as the average sentence length decreased in the period 2005-2016.

[Table 2 here]

3.4 Can the prison rate drop be explained by changes in the executional phase of prison sentences?

3.4.1 Early release

Factors at the end of the prison sentence may possibly partly explain the drop of prisoners as well. After all, a drop in the prison population may be due, in part, to factors to do with early release. In 2008, the system of semi-automatic early release in the Netherlands was reversed in a system of semi-automatic conditional release. The criteria to qualify for conditional release were tightened. On average 1,000 prisoners per year are released on parole (Boone and Beckmann, 2018). Reliable figures of the period before the tightening up of the release system in 2008 are not available, but it is unlikely that more prisoners were released early, since the new system is more restricted than it was before.

3.4.2 Electronic monitoring

Another explanation in this stage of the criminal justice process could lie in the policy to replace prison sentences by electronic monitoring. This policy was announced in the Masterplan of the Dutch prison service for the years 2013-2018 (DJI 2013). Two modalities are mentioned. The 'backdoor modality', to be applied after half of the prison sentence has been served, but before eligibility for conditional release and the 'front-door modality' which is meant to be a substitution for any prison sentence shorter than six months. It was estimated at first instance that a total of 2,033 places in prison would be replaced by electronic detention. However, due to considerable resistance regarding the front-door modality, this objective was subsequently reduced to 800 prison cells and later cut down to 400.³ To what extent prison sentences have actually been replaced by electronic detention is not published in formal documents, but considering the small intended numbers, electronic detention contributed to the reduction of the prison rate very modestly at most.

4. CONCLUSION AND DISCUSSION

The topic of this article is the dramatic drop of the prison population in the Netherlands. The first point to make is that this reduction is real and sustained leading to a prison population to nearly half its size from 2005 to 2016. That is a remarkable reduction that requires an explanation. In this article we tested several theories to explain the prison rate drop using publicly available data. We can summarize our findings as follows. First, the reduction in the prison population cannot be attributed to one single source. Complex phenomena such as prison populations rarely are governed by single factors. It is, however, clear that the number of serious offences that comes to the attention of the police has been much reduced over the period studied. This is true for a range of offences with quite stark reductions for violence, sex offending and drugs. These findings support our first hypothesis, that the collapse of the prison rate is caused by a drop in committed crimes.

But the crime drop is not the whole story. Our second explanation assumes that changes in prior stages of the criminal justice process affect the prison rate. First, at the level of the police, the percentage of crimes solved remained quite stable, while there were 31% fewer crimes reported. Apparently the reduced workload at the entry level did not enable the police to solve a larger proportion of the crimes.

In that next stage, prosecutors have handed out less punishment himself in 2016 compared to 2005. This is rather surprising considering the new system of processing 'as soon as possible', aiming to have more cases finally decided at the level of prosecution. Instead, the number of waivers have increased. It thus seems that for a relatively larger proportion of the cases the prosecutor did not send

³ Parliamentary Papers II, 2012–2013, 24 587, nr. 535 and 2014-2015, nr. 603.

the case to court, but has not taken over the imposition of punishment from the judge either. The prosecutor thereby reduced the number of suspects that could possibly receive a prison sentence. This can also contribute to the drop in the prison rate and thus at this point supports our second hypothesis.

Another part of the answer is to be found in the courtroom: the number of prison sentences has decreased but the average prison sentence length has reduced too. The proportion of acquittals also has somewhat increased. In this way, the court makes an independent contribution to the reduction of the use of imprisonment. We thus also found support for the third explanation. However, we found no evidence that supports our fourth hypothesis, that changes in the executional phase cause the drop in the crime rate.

From the findings of our desk-based research, we conclude that there is not one explanation for the collapse of the Dutch prison rate: it is not either the one explanation or the other. Instead, the explanations are interrelated and cannot easily be disentangled. They are important in their own right, highlighting that research on prison populations require careful examination of the whole of the criminal justice process. In particular the role of the courts is important and does deserve further scrutiny. It would be premature, however to draw the conclusion that thus the judiciary became less punitive. Our data leave open the possibility that the criminal cases brought before the judge became less severe or that prisons sentences are more often supplemented by community sanctions or conditions added to a conditional part of the prison sentence. In a way, it would be rather surprising if the judges had become less strict in a time frame of barely ten years, since an earlier study of Van Tulder (2011) showed that between 2000 and 2009 sentences imposed by the judge increased by an average of ten percent.

As revealing as our data are on the chain of criminal justice agencies from the police onwards, it is in particular at the front end of the criminal justice system where new questions emerge. Our analyses show that both self-report data of crime victims (Veiligheidsmonitor 2017, 2018) and official crime statistics continued to decrease, in particular in the areas of destruction of property and public order crimes (-50%) and drug crimes (-31%).

The conclusion that less (serious) crimes come to court because less crimes are committed does not necessarily have to be accurate. It is even not very obvious that serious crime is less often committed in the Netherlands compared to the surrounding countries, because of the transnational character of many of these crimes. Even the decline in self-report crime experienced by victims does not have to reflect a real reduction of committed crime, but can also point to a change in the nature of crimes to for example 'victimless crimes' (e.g. drugs crimes, environmental crimes and economic crimes) that are traditionally less visible in the victim surveys (De Haan and Janssen, 2016) or cybercrime. Besides, as we stated earlier, it is difficult to understand why a declining crime rate in

combination with stable investigation powers does not result in an increase of the relatively low percentage of cases solved.

An alternative hypothesis would be that the collapse of the prison population is (partly) explained by ineffective criminal justice investigation. Berghuis (2015) for example noted that the diminished need for prison capacity is mainly driven by the response to a limited number of serious offences. There are fewer prosecutions involving the trade in hard drugs, especially of those who play a leading role. In recent years several items appeared in the media that pointed to disastrous consequences in terms of investigative capacity of a reorganization into a national police service. In a similar way serious cutbacks to the prosecution service may related to the reduction of cases prosecuted. According to a study of Valkenhoef and Van der Torre in 2017, a lack of detective investigative capacity (*rechercheurs*) hinders the local police in their efforts to solve organized drugs-crime. They explain that after the introduction of the national police in 2013, the police organisation predominantly invested in uniformed cops on the street and insufficiently in investigative methods towards more complicated offences. This analysis is shared by Fijnaut (Volkskrant, 18 May 2017) and the Prosecutor's Office also blames a lack of both capacity and expertise for the many unsolved crimes (Prosecutor's Office, 2018). This possibility requires urgent consideration.

The current study focused on explanations from the prison drop in the Netherlands, but we must also acknowledge that the prison rate number might have reached its lowest level already: the number in 2018 is 54, while it was 51 in 2016 (Aebi and Tiago, 2018). It is too early to say whether the number is rising again, or whether the number will keep fluctuating between 50 and 55. But if the drop has indeed ended, new questions arise as to why the prison rate stopped declining.

It is, finally important to emphasize again the value of approaching this question comparatively. Quantitative and qualitative comparative research is necessary to understand why certain factors seem to influence the Dutch prison rate, but not or to a lesser extent prison rates of other European countries. In addition, more thorough and systematic research through the entire criminal justice system remains necessary to unveil the real causes of the prison drop in the Netherlands and the differences with other countries.

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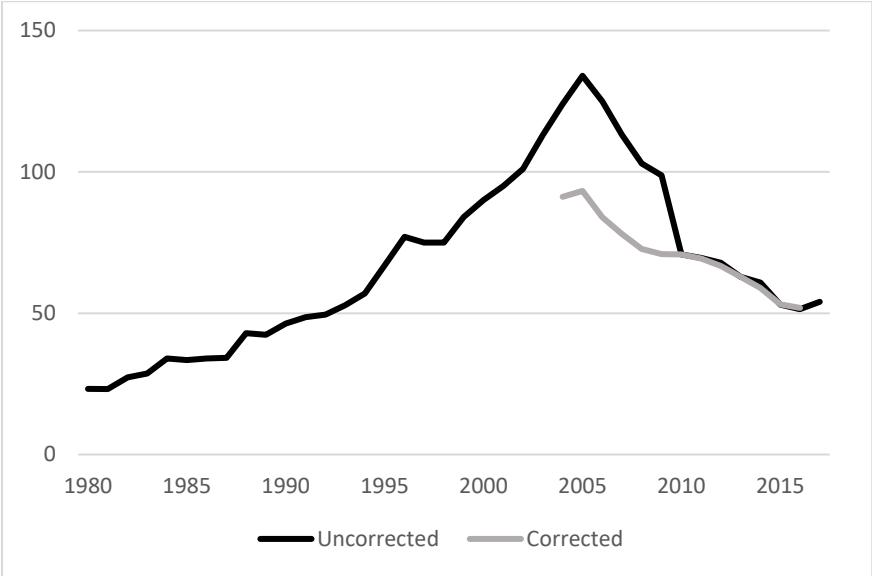
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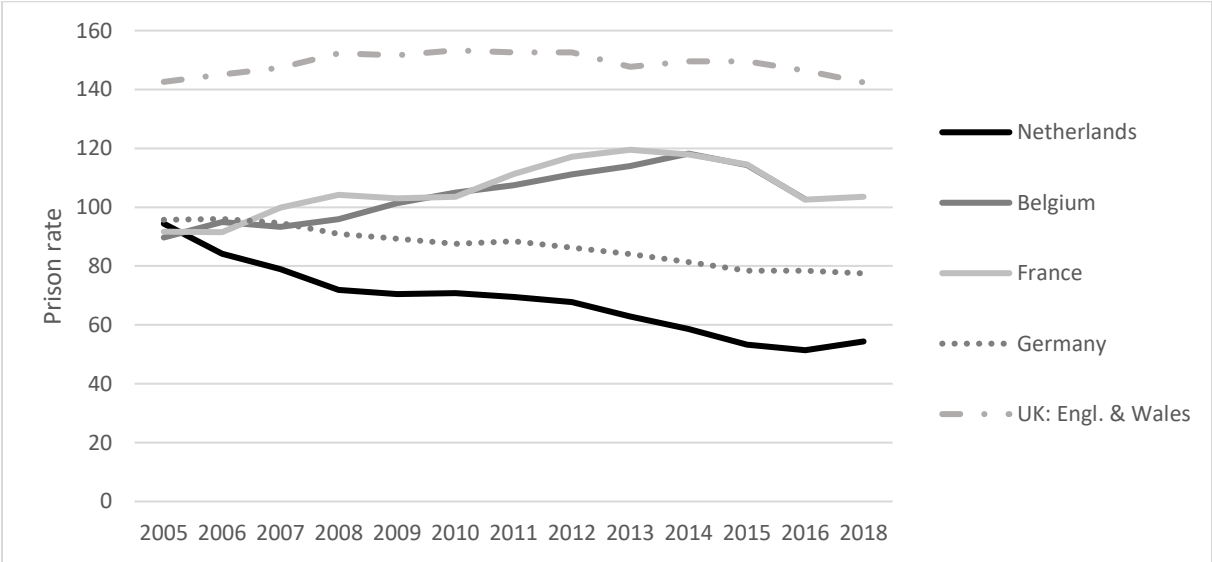
Explaining the collapse of the prison population in the Netherlands: testing the theories

Figure 1: Dutch prison rate (1980-2018)



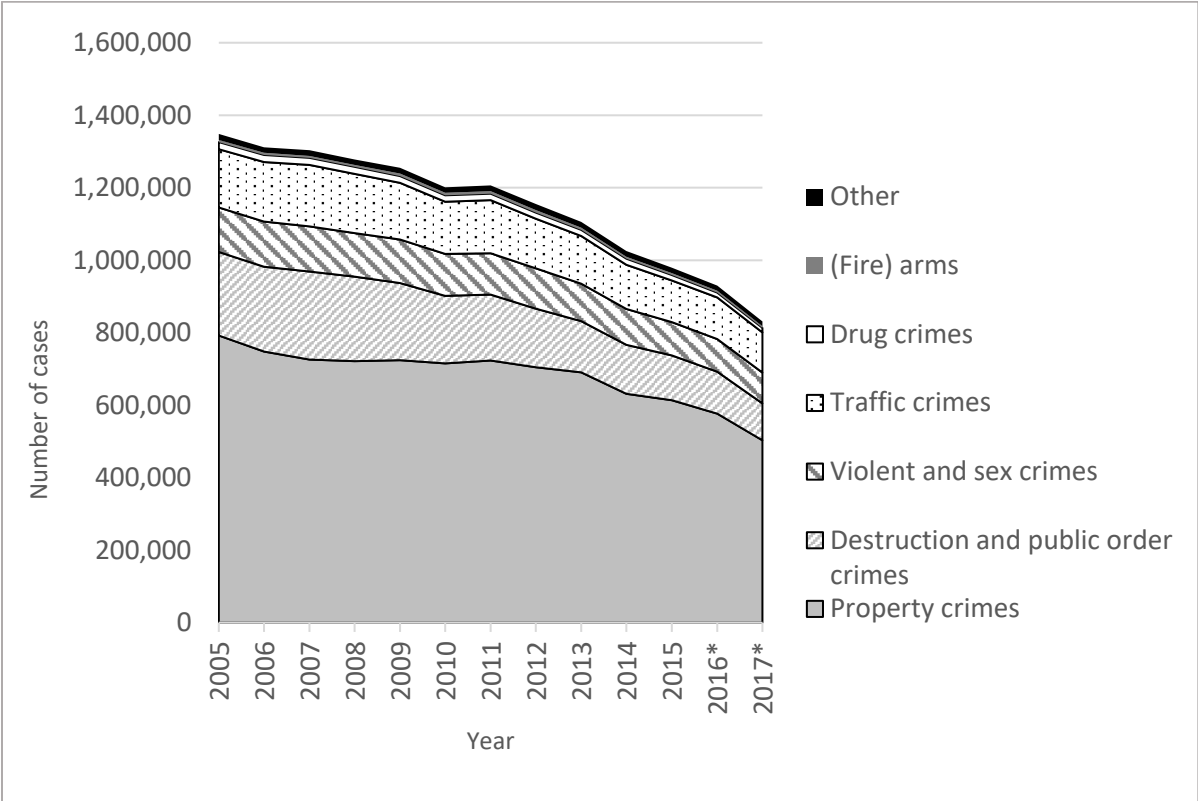
(Source: data 1980-2016: Kalidien 2018; data 2018: Aebi and Tiago, 2018)

Figure 2: Prison rates of several countries surrounding the Netherlands (2005-2018)



(Source: data 2005-2007: Aebi et al, 2017; data 2008-2018: Aebi and Tiago, 2018)

Figure 3: Registered crimes per crime type (2005-2017)



* Numbers for 2016 and 2017 are provisional.

(Source: Kalidien, 2018)

Table 1: Case processing through the criminal justice system: 2005 compared to 2016

	Year		Difference	
	2005	2016	N	%
Police				
Registered crimes	1,348,280	930,300	-417,980	-31%
Solved crimes	339,160	237,920	-101,240	-30%
Registered suspects	513,450	278,690	-234,760	-46%
Cases sent to prosecutor	264,310	189,410	-74,900	-28%
Prosecutor				
Transactions/Punishment Orders	73,825	41,195	-32,630	-44%
Unconditional waivers	25,965	40,360	14,395	55%
Conditional waivers	4,575	8,115	3,540	77%
Cases sent to court	146,545	100,425	-46,120	-31%
Judge				
Acquittals	7,315	10,220	2,905	40%
Convictions	128,180	83,080	-45,100	-35%
- (partly) unsuspended prison	29,425	23,735	-5,690	-19%
- (partly) unsuspended fines	51,090	18,850	-32,240	-63%
- (partly) unsuspended community sentence	38,810	28,315	-10,495	-27%
Years of prison (total)	11,999	6,869	-5,130	-43%
Average number of days per prison sentence	149	106	-43	-29%

Table 2: Changes in numbers of crimes and average length of imprisonment for different types of crimes (2005-2016)

	Number of prison sentences			Length of imprisonment			Total years of imprisonment (number x length/365)			Total change in years of prison	% of change
	2005	2016	Change	2005	2016	Change	2005	2016	Change		
<i>Violent Crime</i>											
Rape	230	80	-65%	461	671	46%	290	147	-49%	-143	3%
Homicide	1.070	425	-60%	682	956	40%	1.999	1.113	-44%	-886	17%
Assault	1.940	1.775	-9%	98	66	-33%	521	321	-38%	-200	4%
Robbery	2.240	1.135	-49%	332	309	-7%	2.037	961	-53%	-1.077	21%
Total violent crime	5.110	3.725	-27%	252	203	-19%	3.528	2.072	-41%	-1.456	28%
<i>Property Crime</i>											
Fraud	1.770	1.025	-42%	105	97	-8%	510	271	-47%	-239	5%
Theft	5.445	6.380	17%	35	21	-41%	530	366	-31%	-164	3%
Aggravated theft	5.560	4.440	-20%	96	73	-24%	1.462	888	-39%	-574	11%
Fencing	725	620	-14%	59	54	-8%	117	92	-22%	-25	0%
Total property crime	16.010	13.915	-13%	110	74	-33%	4.825	2.821	-42%	-2.004	39%
<i>Narcotics</i>											
Hard drugs	3.620	1.785	-51%	253	240	-5%	2.509	1.174	-53%	-1.336	26%
Soft drugs	325	365	12%	123	120	-2%	110	120	10%	10	0%
Total narcotics	3.945	2.150	-46%	243	220	-9%	2.626	1.296	-51%	-1.331	26%
<i>Destruction and crimes against public order</i>											
Destruction and crimes against public order	2.500	1.745	-30%	111	88	-21%	760	421	-45%	-340	7%
<i>Traffic offences</i>											
Traffic offences	1.295	1.535	19%	33	22	-33%	117	93	-21%	-25	0%
<i>Weapons</i>											
Weapons	220	220	0%	121	131	8%	73	79	8%	6	0%
Total (including types of crimes not mentioned above)	29.425	23.735	-19%	149	106	-29%	12.012	6.893	-43%	-5.119	100%

(Source: Kalidien, 2018)