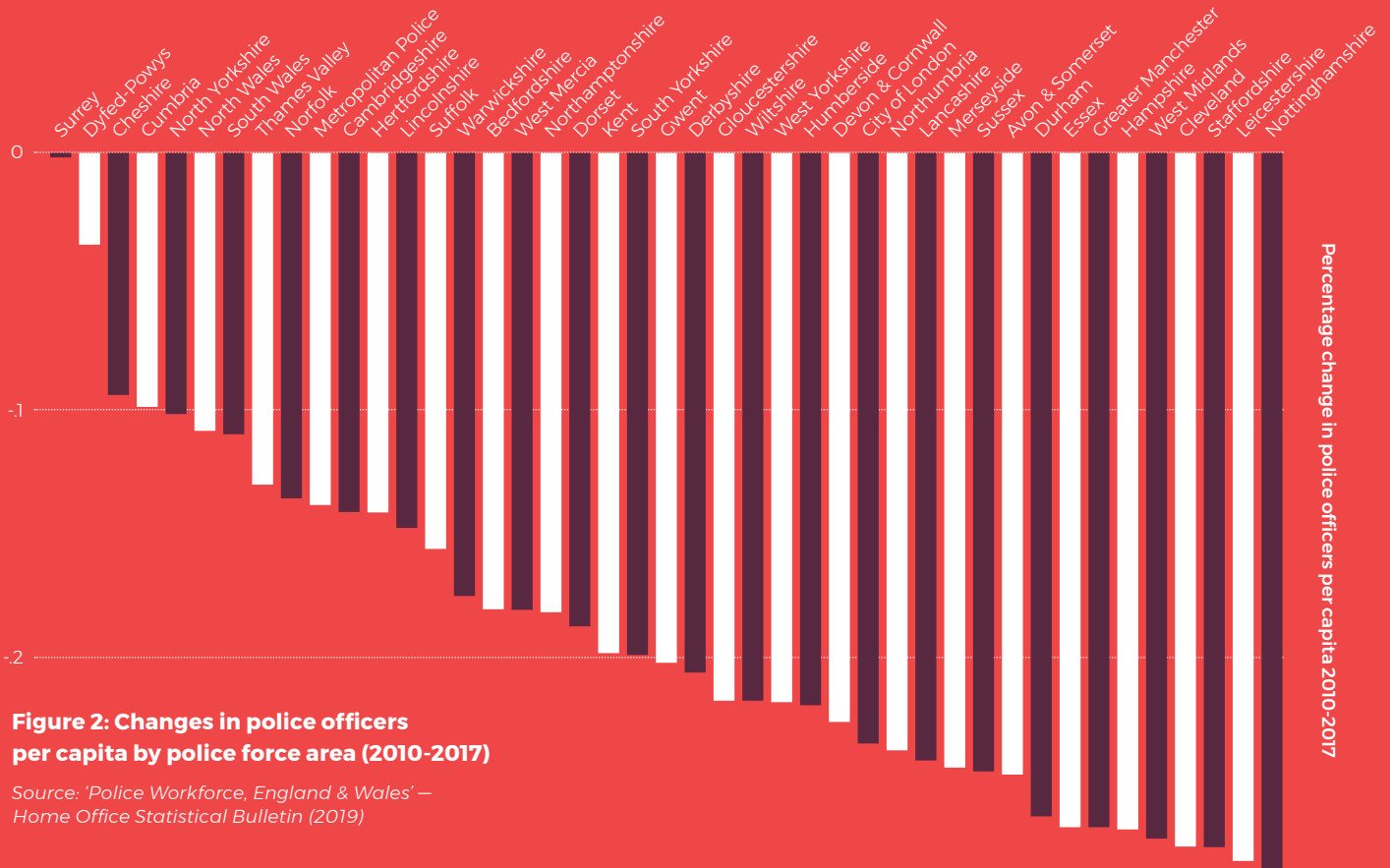


Law, order and austerity: Police numbers and crime in the 2010s

By Mirko Draca and Monica Langella

As the Conservatives hailed the end of austerity in late 2019, they also pledged £750 million to fund 20,000 more police officers, effectively reversing the cuts to police numbers implemented during austerity. The pledge has been described as a move to ‘make our streets safer’ in response to rising crime levels. But what has happened to police numbers across the UK since 2010 and to what extent did policing cuts affect crime rates?

The cuts to police numbers were indeed large by historical standards (14.3%), and have been more severe in existing high crime areas. Crime rates actually fell for a long period in the late 2000s and early 2010s but since 2013 there has been a sharp increase in violent crime that is hard to explain. It could be that the cuts to police numbers reached a ‘critical point’ such that violent crime was able to surge. But, as we will show, this is hard to establish conclusively with the available data. The cuts in police numbers may indeed have played a role in the violent crime surge but it’s also plausible that other dimensions of austerity policies – such as cuts to benefits and local services – may have contributed.

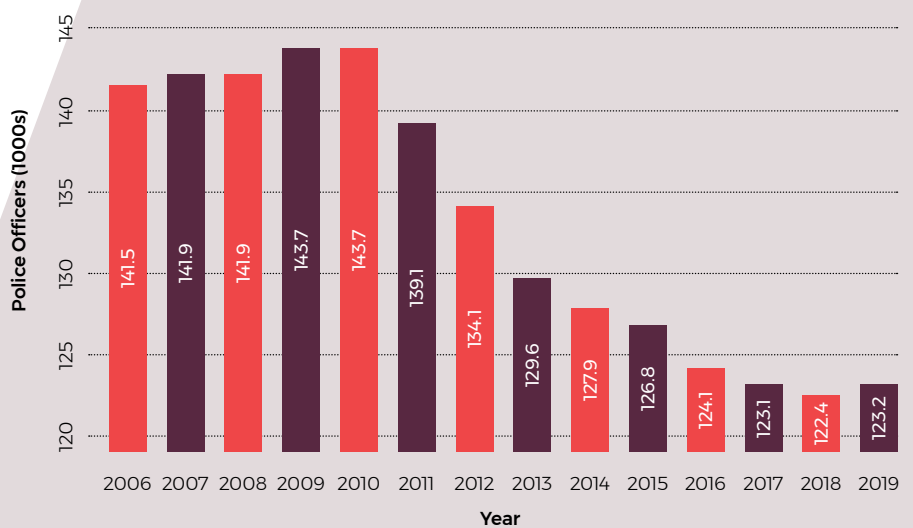


How big was the fall in police numbers?

Figure 1 shows the trends in police officer numbers since 2006 using Home Office data. This shows that overall police officer numbers fell by 14.3% between 2010 and 2019, from approximately 143,700 to 123,200 officers. Estimates based on Freedom of Information (FOI) requests indicate that over 600 police stations closed during this period (Ungoed-Thomas et al., 2018).

The regional picture of police cuts is perhaps best conveyed in Figure 2 which uses the change in officers per head of population as the measure of police numbers. This shows some very large reductions (over 25%) in staffing levels for Police Force Areas (PFAs) in the East and West Midlands in particular. As an example, this kind of fall translates in the West Midlands as a reduction in officers from 3.1 to 2.3 per 1000 people. ▶

Figure 1: Number of police officers (England & Wales), 2006-2019



Source: 'Police Workforce, England & Wales' – Home Office Statistical Bulletin (2019)

An important aspect of these regional cuts is how they relate to pre-existing levels of crime. In Figure 3 we plot the relationship between the change in officers per capita and the initial level of violent and property crimes in a PFA at the beginning of our data in 2006. This shows a clear negative correlation – police cuts were actually higher in per capita terms for existing high crime areas.

A background issue to note here is that police per capita and crime are still positively correlated with crime when we look at the cross-section of PFAs. That is, there are more police per capita in high crime areas to start with. This follows the simple logic that policy-makers have historically tended to distribute more police officers to high crime areas in order to better defend against crime.

However, the pattern of cuts after 2010 weakened this relationship. For example, the raw correlation between police per capita and violent crime fell from 0.64 to 0.47 between 2006 and 2017. In short, austerity has stripped away some of the extra layers of police resources that were allocated to crime-prone areas.

How have crime patterns evolved?

The fact that the cuts in police numbers were more severe in already high crime areas raises the question of whether austerity affected crime trends as a result. This question is complicated by the fact that there are many contributing economic and social factors that help determine crime rates. Some will have helped to lower crime during the 2010s while others will have pushed it up.

We plot total violent and property crimes for England and Wales in Figure 4. The first panel (a) plots crime levels per capita and shows a steady fall in property crime rates from 2006-2017 and a fall in violent crime up until 2013 followed by an increase. The second panel (b) gives an idea of the magnitude of these changes compared to base levels in 2006. Property crime per capita fell

by nearly 40% over the period while violent crime actually rose by 9.8%. A remarkable feature of the violent crime trends is that a 35% fall in crime rates up to 2013 was followed by a complete reversal and then an increase relative to 2006 levels. Violent crime is up nearly 10% across England and Wales relative to 2006.

Did police cuts trigger the post-2013 violent crime wave?

While the changes we trace out above are dramatic, it is hard to directly attribute the upsurge in violent crime to the cuts in police numbers. We illustrate what has been happening across PFAs in Figure 5. This plot records a zero correlation between the change in violent crime and the change in police per capita between 2010-2017. We divide this plot into four quadrants based on 'above mean' and 'below mean' values. The PFAs in quadrants I and IV fit the story of fewer police leading to more crime, but there are still a range of areas in quadrants II and III where the relationship went in the opposite direction.

The academic literature on police and crime (e.g. Draca et al., 2011, Chafin and McRary, 2018) has long told us that the relationship is complicated by 'reverse causality' issues, in particular the fact noted above that policy-makers tend to allocate police to high crime areas. This makes it hard to establish a causal link. This type of 'endogeneity' problem is in play in the PFA data we consider here, but there are also additional austerity-related factors to consider.

Austerity policies cut police resources but they also led to some dramatic reductions in welfare benefits and local services. This in turn would have affected crime. Indeed CAGE-supported research by Fetzer, Sen and Souza (2019) indicates that housing benefit cuts are associated with increased property crime at least during the early stages of austerity.

While the government is now moving to increase police numbers and moderate austerity policies in general, we can expect the impacts to be asymmetric. That is, it's harder to reduce crime with more police and better services and benefits than it is to increase crime by cutting these public resources. In particular, a big challenge for research on these issues is understanding the extent to which the effects of austerity – especially the effects on household incomes – are likely to persist. ◀

About the authors

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Further reading

Chafin, A. and McCrary, J. (2018), "Are US Cities Underpoliced? Theory and Evidence." *The Review of Economics and Statistics*, 100(1): 167-186.

Draca, M., Machin, S., and Witt, R. (2011), "Panic on the Streets of London: Police, Crime and the July 2005 Terror Attacks", *American Economic Review*, 101(5): 2167-2181.

Fetzer, T., Sen, S., and Souza, P., (2019), "Housing Insecurity, Homelessness and Populism: Evidence from the UK". CAGE Working Paper (No. 444).

Ungoed-Thomas, J., Harper, T., and Shveda, K., (2018) "600 Police Stations Closed in Eight Years", *The Times*, 2nd September. www.thetimes.co.uk/article/600-police-stations-shut-in-eight-years-nvjdwjmwj Accessed: 16/02/20.



Figure 3: Change in police per capita and initial PFA violent crime levels (2006)

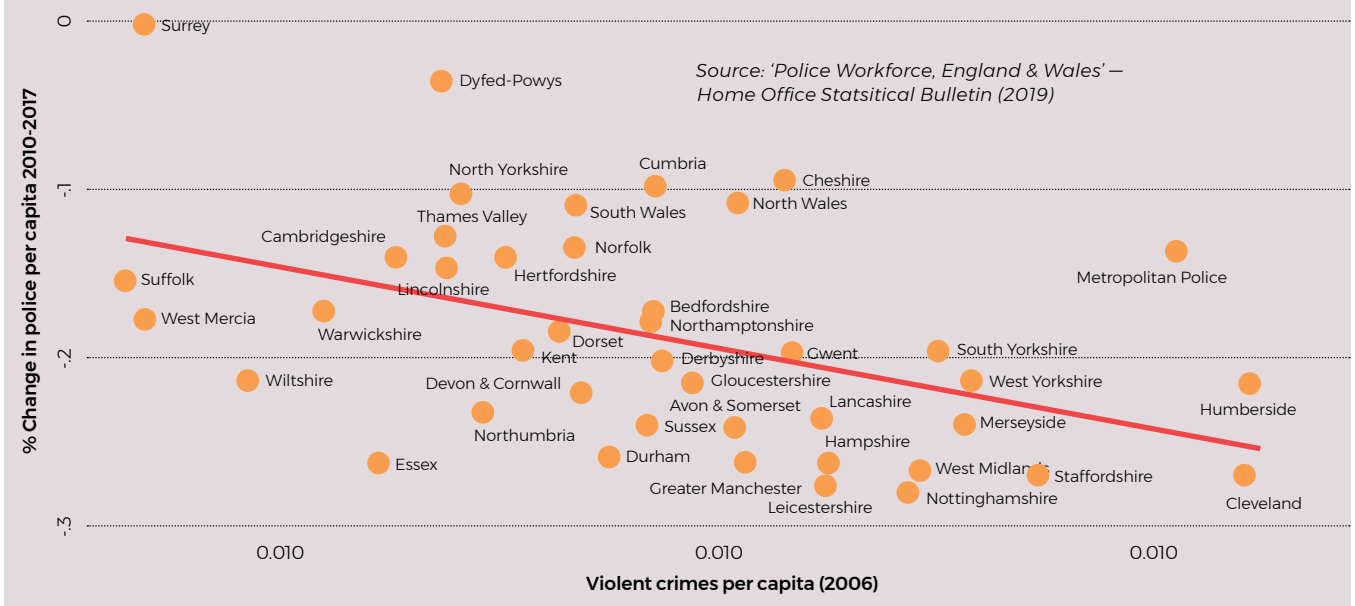


Figure 4: Property and violent crimes per capita, England and Wales, 2006-2017

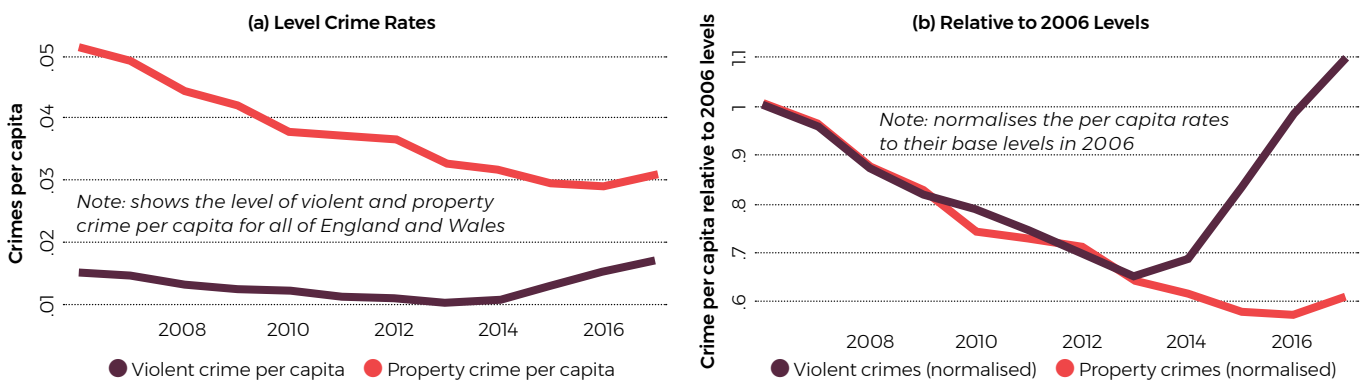


Figure 5: Changes in police numbers and violent crime by PFA, 2010-2017

