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# CORRUPTING PERCEPTIONS: THE IMPACT OF THE UNITED NATIONS CONVENTION AGAINST CORRUPTION ON CORRUPTION PERCEPTIONS INDEX SCORES

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**ABSTRACT**

This paper examines the impact early ratification of the United Nations Convention against Corruption has on a country's Corruption Perceptions Index score. It builds on much of the recent scholarly work that explores policy diffusion and the role of early adopters (or leaders) in creating the space for later adopters (or laggards) to adopt particular policies and the broader impact this has on country performance in a key international index. It tests empirically the impact of early ratification upon both the diffusion of policy and, more generally, the role of international legal instruments in comparative public policy.

## 1 INTRODUCTION AND THEORY

This research contributes to an emerging literature by evaluating the role played by the ratification of a key component of global anti-corruption policy, namely, the United Nations Convention against Corruption (UNCAC) in determining country scores on the Corruption Perceptions Index (CPI), through an ordinary least squares (OLS) simple linear regression analysis focused on a panel dataset. The analysis shows that early ratification of UNCAC did lead to improved scores on the CPI. However, the relationship is not particularly substantive and there are a number of factors that may have contributed to early ratification leading to improved CPI scores.

It is important to note that whilst improved CPI scores were not a defined objective of UNCAC, both instruments were developed in a period of sustained

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international concern with fighting corruption and, as such, may be evaluated through the lens of the "corruption eruption".[1] The CPI should be viewed also in terms of Treisman's observation that "perceptions — even if not matched by reality — can have powerful effects".[2]

Corruption often is considered as old as government itself. Paradoxically, however, corruption long has faced a complex definitional problem, despite its being understood as relatively intuitively by many. This paradox is due partly to the lens through which corruption is understood. Thus, is corruption a moral problem? Is it an economic problem? Or is it a political problem? Perhaps it is a cultural problem. Maybe it has been the struggle with modernisation which has spurred the growth in anti-corruption advocacy and policy. Many scholars point to one or some combination of these problems as being the basis for the rise in attention paid to corruption in recent years.[3] However, the negative socio-economic ramifications of failing to control corruption has begun to be approached empirically only since the early work of Klitgaard.[4]

The longevity and pervasiveness of corruption are evident in several historical writings. For example, more than 2 300 years ago the Prime Minister of Chandragupta listed over 40 ways of "embezzling money from the government".[5] In the 14th century, Islamic scholar and historian, Ibn Kaldun, wrote that corruption was "the passion for luxurious living within the ruling group".[6] Plato commented, in relation to bribery in the public service, that the "servants of the nation are to render their services without any taking of presents".[7] Corruption was seen as a severe enough concern to be included as an offence in the French Napoleonic *Code Penal* in 1810.[8] Much of this early work was focused on the challenge that corruption posed to the legitimacy of an individual state, and only relatively

1 Naim M (1995) "The Corruption Eruption" 2 *Brown Journal of World Affairs* 245-261 at 245.
2 Treisman D (2007) "What Have we Learned about the Causes of Corruption from Ten Years of Cross-National Empirical Research?" 10 *Annual Review of Political Science* 211-244 at 220.
3 See Huntington SP (1968) *Political Order in Changing Societies* New Haven: Yale University Press; Klitgaard R (1988) *Controlling Corruption* Berkeley: University Of California Press; Williams R (1999) "Editorial: The New Politics of Corruption" 20(3) *Third World Quarterly* 487-489; Williams R (1999) "New Concepts for Old?" 20(3) *Third World Quarterly* 503–513; Stessens G (2001) "The International Fight against Corruption" 72(3) *Revue Internationale De Droit Pénal* 891-937.
4 Klitgaard (1988).
5 Cited in Klitgaard (1988) at 7.
6 Cited in Alatas SH (1986) *The Problem of Corruption* Kuala Lumpur: The Other Press at 7.
7 Cited in Klitgaard (1988) at 7.
8 Stessens (2001) at 905.

recently have we begun to explore the international aspect of corruption.[9] However, one thing which has remained clear is that the pervasiveness of corruption has done nothing to enhance its respectability. Thus, while bribery has remained consistent, it has been and continues to be seen as "universally shameful".[10] According to Green, the conception of bribery in a legal context continues to evolve over time, and the ways in which we conceive of the moral wrongness surrounding both bribe giving and bribe receiving are influenced by a number of contextual factors, not least amongst which are culture and an understanding of "positional duties" across cultures.[11]

While such a moral interpretation of the roots of corruption have had a strong impact on the genesis of anti-corruption policy, recent years have seen the rise of two dominant strains which have informed and inspired research on corruption. Firstly, there is the understanding that corruption was inspired by culture and, perhaps more regrettably, by race in the late 19th and early 20th centuries. However, while culture plays a role in the facilitation of corruption, it is important to note, with Klitgaard, that:

> we should take cultural and other variables into account, while steadfastly resisting the temptations of cultural fatalism or insidious racialism.[12]

Secondly, growing attention has been paid to the economic case both for and against corruption, as evidenced in the work of Huntington and Klitgaard. Huntington, for example, argues that, for those who were politically alienated, corruption was a means to buy one's way into the system and to become embedded within it:

> He who corrupts a system's police officers is more likely to identify with the system than he who storms the system's police stations.[13]

Through this lens, corruption may be understood as a moderating economic process which can enable a form of political stability. However, following the end of the Cold War, we have seen a "corruption eruption", due in part to what Seligson highlights as a period in which "trade, neoliberal reforms, and anti-narcotics efforts had come to dominate US interests abroad". He adds: "Along with

9 See Engels JI in Kroeze R, Vitória A & Geltner G (2017) *Anti-Corruption in History: From Antiquity to the Modern Era* Oxford: Oxford Scholarship Online at 167-169.
10 Noonan JT (1984) *Bribes* New York: Macmillan Publisher at 702.
11 Green S (2006) *Lying, Cheating and Stealing* Oxford: Oxford University Press at 200-211.
12 Klitgaard (1988) at 8.
13 Huntington (1968) at 64.

the expansion of trade and economic reforms, however, have come unprecedented opportunities for corruption".[14]

Recently, much empirical scholarship has sought to build on the seminal work of Klitgaard in approaching corruption from a more theoretical economic perspective and utilising the "principal-agent" model of corruption as a way to guide policy formation.[15] Klitgaard's earlier work included the development of a formula that seeks to explain how corruption manifests itself, namely, that "[c]orruption equals monopoly plus discretion minus accountability" or, more simply expressed, C = M + D – A.[16] This work went some way in providing an impetus for the use of a theoretical economic perspective to evaluate corruption. In its simplest form, however, corruption usually is understood as some variation of "behaviour of public officials which deviates from accepted norms in order to serve private ends",[17] "the abuse of public office for private gain",[18] "the abuse of entrusted power for private gain",[19] and typically constitutes some version of bribery, extortion, embezzlement, fraud, tax evasion, kickbacks and the like.

Building on the significant increase in attention paid to corruption, several international organisations set out to control corruption more effectively. Notable amongst these are the United Nations and Transparency International, who sought to control corruption through the development of the United Nations Convention against Corruption (UNCAC) and through the provision of greater information through the Corruption Perceptions Index (CPI), respectively.

## 2 BACKGROUND

### 2.1 United Nations Convention against Corruption

The development of UNCAC was a lengthy process, which began in December 1989, following an inter-regional seminar hosted by the government of the Netherlands in the Hague. The seminar led to the formulation of a series of recommendations about how best to tackle corruption on an international level. The seminar also outlined a number of prerequisites to tackle corruption effectively, such as those

14 Seligson M (2002) "The Impact of Corruption on Regime Legitimacy: A Comparative Study of Four Latin American Countries" 64(2) *The Journal of Politics* 408-433 at 409.

15 This model is built around asymmetric information between a principal and an agent. The actions of the agent lead to negative externalities for the principal.

16 Klitgaard (1988) at 75.

17 Huntington (1968) at 59.

18 World Bank (1997) *Helping Countries Combat Corruption: The Role of the World Bank* Washington: World Bank at 8.

19 Transparency International (2019) "What Is Corruption – Define", available at *https://www.transparency.org/what-is-corruption#define* (visited 31 July 2019).

which later would be identified by Naim,[20] including increased democratisation and a freer press. Over the next number of years, much of the UN's work on examining corruption was conducted under the auspices of the United Nations Convention against Transnational Organised Crime (UNCTOC). Arguably, this work contributed to the enactment of the OECD's convention against bribery of foreign public officials, thus signalling an interest on the part of developed countries[21] in clamping down on bribery, in particular, and on corruption more broadly.[22]

The *Ad Hoc* Committee tasked with negotiating UNCTOC ultimately decided that corruption was much too complex and broad an issue to be covered in any concerted way by the convention. It was resolved that further work was required on corruption and that the issue perhaps warranted its own convention. From an early stage, member states across the UN General Assembly agreed that consensus and building on the experience gained in adopting UNCTOC should be carried through to any negotiation on a convention against corruption. This intention was achieved in UNGA Resolution 55/61 of 2000, which established an *Ad Hoc* Committee for negotiating a convention against corruption.[23]

The General Assembly provided clear terms of reference and requested the negotiation to be completed by the end of 2003. This firm deadline was seen as important, highlighting that the international community was serious in its commitment to tackling corruption, while seeking:

> tangible proof that significant, ground-breaking new legal instruments can be produced in the United Nations within a pre-determined and reasonable time frame.[24]

Following the preparatory meeting in 2001, the *Ad Hoc* Committee began working in January of 2002 and held seven two-week sessions, which culminated in the presentation of a draft of the convention in October 2003. This was a significant achievement, considering that the process involved more than 130 delegations which, through complex negotiations, came to develop an innovative convention which was open for signature by December 2003 and effective from 2005.

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20 Naim (1995) at 247.

21 This development was spearheaded by the United States seeking to level the playing field following the adoption of the Foreign Corrupt Practices Act in 1977.

22 Stessens (2001) at 894-895.

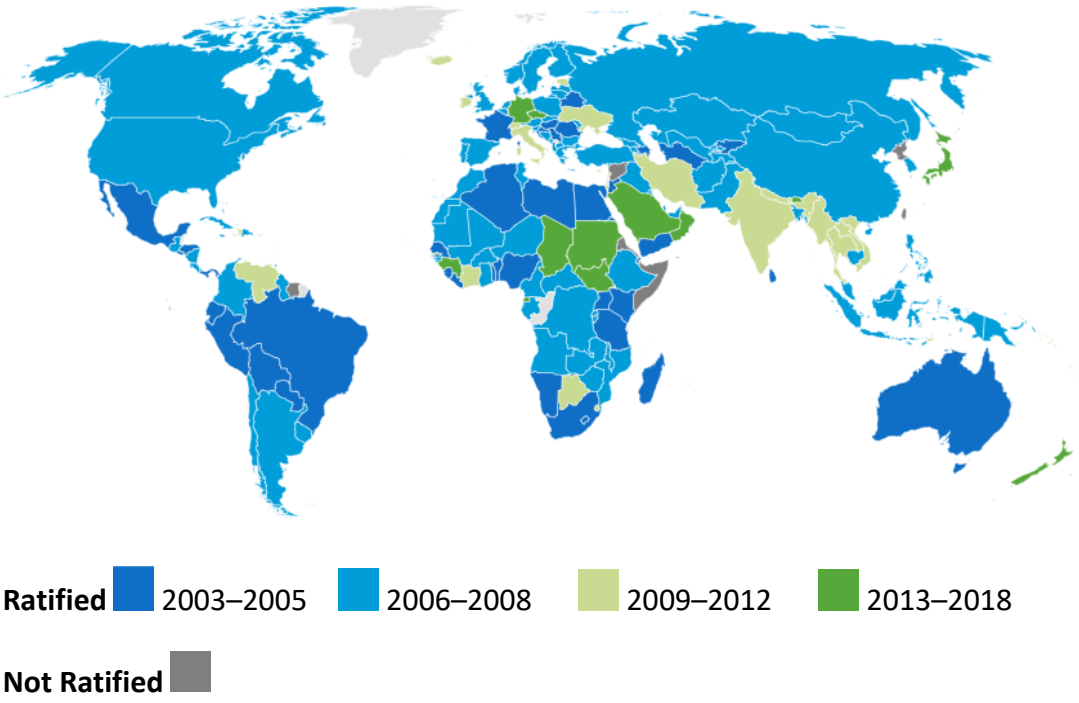
23 Yukins CR (2007) "Integrating Integrity and Procurement: The United Nations Convention against Corruption and the Uncitral Model Procurement Law" 36(3) *Public Contract Law Journal* 307–329 at 308-309.

24 Vlassis D (2004) "The United Nations Convention against Corruption: Origins and Negotiation Process" 66 *Resource Material Series* at 130.

It is important to recognise the unique role of UNCAC, as it is the only legally binding universal anti-corruption instrument in existence. However, there have been a number of notable acts which, while conceived and implemented in a national sense, have a serious and real impact internationally. Of particular note here are the Foreign Corrupt Practices Act (FCPA) enacted in the US in 1977 and the UK Anti-Bribery Act of 2010. Both of these statutes offer insight into the use of quasi-universal jurisdiction tools by national governments, as well as into the overall trend of conceiving of the fight against corruption and bribery through an international lens. Indeed, many of the mandatory provisions in UNCAC go much further than any of the preceding anti-corruption instruments.

As of February 2020, the vast majority of countries have both signed and ratified UNCAC, as can be seen from Figure 1 below.[25] It is both the staggered ratification process and UNCAC's unique and ground-breaking approach to addressing corruption which serve as key motivations for analysing its impact.

**Figure 1: Ratification of UNCAC by Country/Period**




25 United Nations Office of Drugs and Crime (2019) "Ratification Status", available at *https://www.unodc.org/unodc/en/corruption/ratification-status.html* (visited 22 July 2019).

However, whilst UNCAC serves as an important constituent of international anti-corruption policy, it encounters considerable criticism, specifically with regard to its structure and what ratification does and does not mean with regard to state obligations and monitoring. A number of scholars point to the need to track not only ratification of UNCAC but also implementation of its provisions in order to gain a fuller picture of the likelihood of UNCAC having a tangible impact in addressing corruption.[26] Indeed, as outlined by Hechler *et al*, we can see that the political power networks which enable and sustain corruption in developing countries can lead to UNCAC facing severe implementation challenges.[27] This can be seen most frequently as regards addressing state capture, the influence of elite power networks, and the technical and policy challenges inherent in the integration of international instruments into domestic policy frameworks. However, Argandoña goes so far as to state that ratification and adoption of UNCAC likely would have a "major" impact on reducing the level of corruption.[28] Considering that many of the articles contained in Chapter II focus on institutional structures and state obligations to prevent corruption, it becomes apparent that incorporation of UNCAC into domestic policy could serve to reduce incidents of corruption.

We see also consistent criticism of the limited enforcement and monitoring mechanisms included in UNCAC originally.[29] This is a problem that has undermined the ability of UNCAC to deliver meaningful change following ratification, as there were initially no provisions for monitoring its adoption and enforcement, which may signal a greater impact on corruption being achieved through the use of quasi-universal jurisdiction tools such as the FCPA and the UK Anti-Bribery Act. The focus on provisions to implement, as opposed to mandating implementation further, serves to undermine the potential of UNCAC to be more robust and effective, as well as leaving many provisions open to adjustment pending adoption into domestic law, which can lead to a more subdued policy being implemented in the national context. Several scholars point towards this particular shortfall of UNCAC being particularly detrimental to its early effectiveness. Indeed, Hechler *et al* go on to state that:

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26 Hussmann K & Hechler H (2008) *Anti-Corruption Policy Making in Practice: Implications for Implementing UNCAC* Bergen: Chr. Michelsen Institute 1-4 at 2; Hechler H, Zinkernagel GF, Koechlin L, Morris D (2011) *Can UNCAC Address Grand Corruption?* Bergen: Chr. Michelsen Institute 1-73 at 12-17.

27 Hechler *et al* (2011) at 6-12.

28 Argandoña A (2007) "The United Nations Convention against Corruption and Its Impact on International Companies" 74(4) *Journal of Business Ethics* 481-496 at 491.

29 Webb P (2005) "The United Nations Convention against Corruption — Global Achievement or Missed Opportunity" 8(1) *Journal of International Economic Law* 191–229 at 219-222; Argandoña (2007) at 490; Hechler *et al* (2011) at 22-24.

> UNCAC is not very specific about the role of oversight institutions. Its focus on governments, especially executives, as the primary actors in anti-corruption reform makes it especially weak in addressing institutions for checks and balances, such as the judicial and legislative branch.[30]

Similar critiques have been offered by Argandoña,[31] Webb,[32] and Yukins.[33] The weakness of oversight initially led to the convention being seen as relatively toothless in achieving its ambitious provisions. However, following consultations it was decided in Doha, Qatar, in 2009 that a raft of review mechanisms would be implemented, as outlined in COSP Resolution 3/1.[34] Most notable was the provision for a peer review of implementation performance of a country by two other countries, with one being from the same regional grouping and the other state being drawn by lots.[35] There were a number of "guiding principles" for this mechanism, including the search to share "best practice" implementation and to ensure that the review was "non-adversarial and non-punitive, without any form of ranking".[36] The increased focus on reviewing performance, whether through self-assessments, peer reviews or expert country reviews, which began in 2010, serves to add more nuance to measuring the effectiveness of the adoption of UNCAC provisions into domestic policy.

### 2.2 Corruption Perceptions Index

The Corruption Perceptions Index (CPI) was developed by Dr Johann Graf Lambsdorff for Transparency International in 1995.[37] It emerged during the "corruption eruption" as a response to the need for a measurement methodology that could evaluate perceptions of corruption broadly while allowing for comparative analyses across countries. This approach had the benefit of permitting the identification of successful policy frameworks which could have a positive impact on perceptions of corruption in various countries. Today, the CPI

30 Hechler *et al* (2011) at vii.
31 Argandoña (2007) at 490.
32 Webb (2005) at 218.
33 Yukins (2007) at 313.
34 UNODC (2009) *CAC/COSP3 Resolutions and Decisions* Doha, Conference of the States Parties to the UNCAC.
35 UNODC (2011) *Mechanism for the Review of the Implementation of the United Nations Convention against Corruption* New York: United Nations at 7-8.
36 UNODC (2011) at 5.
37 Lambsdorff JG (2005) "Measuring the Dark Side of Human Nature: The Birth of the Corruption Perceptions Index", available at *http://www.icgg.org/corruption.cpi_childhooddays.html* (visited 31 July 2019).

continues to be focused on the degree to which corruption is perceived to exist amongst public officials and politicians.

From its inception, the CPI has held a privileged position within discussions on the comparison of corruption across countries and time — a privilege stemming from a variety of factors including "first-mover advantage",[38] the simplicity of the model,[39] the ability to compare through a "league table" format[40] and, more generally, the centrality of Transparency International in discussions surrounding corruption.[41] The methodology of the CPI has been challenged for an over-reliance upon a small number of sources,[42] utilising only "expert opinions",[43] its concern with public sector corruption only and, more broadly (and indeed related to the first criticism), a focus on the business case against corruption.[44] Further criticism addresses the CPI's perceived Western bias and poor conceptual framing more generally — a problem this paper seeks to overcome by analysing the CPI in the context of robust control variables.[45]

Although it has undergone several changes over the years, the measurement methodology of the CPI continues to face a litany of challenges, primarily due to the conceptual problem of understanding how to frame corruption and, more specifically, what to include in such a framing.[46] One persistent challenge is the problem of data collection on corruption.[47] However, following the notable change made to the methodology in 2012,[48] the Joint Research Committee of the European Commission has stated that:

> the CPI, besides being appealing for reasons of transparency and replicability, is also conceptually and statistically coherent and with a

38 Andersson S & Heywood PM (2009) "The Politics of Perception: Use and Abuse of Transparency International's Approach to Measuring Corruption" 57 *Political Studies* 746–767 at 761.

39 Norwegian Agency for Development Co-operation (2011) *Evaluation of Transparency International* Oslo: NORAD at 31.

40 Andersson & Heywood (2009) at 754.

41 Andersson & Heywood (2009) at 759.

42 This is a problem which Transparency International has gone some way to address by the changes made in 2012.

43 NORAD (2011) at xv.

44 Andersson & Heywood (2009) at 753.

45 Andersson & Heywood (2009) at 749.

46 See Thompson T & Shah A (2005) "Transparency International's Corruption Perceptions Index: Whose Perceptions Are They Anyway" World Bank at 3.

47 Donchev D & Ujhelyi G (2014) "What Do Corruption Indices Measure?" 26(2) *Economics & Politics* 309-331 at 318.

48 See Saisana M & Saltelli A (2012) "Corruption Perceptions Index 2012: Statistical Assessment" Publications Office of the European Union at 5.

balanced structure (i.e. the CPI is not dominated by any of the individual sources).[49]

Although alternatives to the CPI measurement have been proposed and outlined by several scholars,[50] the CPI maintains its validity in the context of this research. This is due partially to its being a composite index, but mainly because the impact of policy diffusion,[51] as epitomised in early ratification of international treaties and conventions, is believed to be captured within the component indices used to calculate the annual CPI score. Furthermore, the CPI serves as an important benchmark metric which is used widely to understand corruption and, for this reason, it maintains validity as a methodological tool when evaluating country performance in addressing corruption.[52]

As stated previously, the purpose of this paper is to use the CPI as a key tool in analysing the international nature of corruption. Of particular interest in this regard is how the CPI incorporates changes within the policy and legal framework of countries through early ratification of UNCAC and its resultant impact on CPI scores. Given the growing internationalisation of corruption, it is important to view both the development of the CPI and the drafting and adoption of UNCAC as part of this changing policy paradigm and to analyse UNCAC critically through the lens of policy diffusion, focusing on early ratifiers of the convention.[53]

## 3 DATA AND METHOD

The CPI enjoys widespread use as a tool to measure corruption within countries. For instance, there have been a number of attempts to evaluate the effect that a country's CPI score or rank has on a wide range of variables across a number of disciplines, including corporate social responsibility,[54] environmental studies,[55]

49 Marcos Á.-D, Saisana M, Montalto V & Tacao Moura C (2017) "Corruption Perceptions Index 2017: Statistical Assessment" Publications Office of the European Union at 21.

50 See, for example, Kaufmann D, Kraay A & Zoido-Lobatón P (1999) *Aggregating Governance Indicators* Washington DC: World Bank Institute; Hart E (2019) *Guide to Using Corruption Measurements and Analysis Tools for Development Programming* Bergen: Chr Michelsen Institute.

51 See Shipan CR & Volden C (2008) "The Mechanisms of Policy Diffusion" 52(4) *American Journal of Political Science* 840-857 at 843; Marsh D & Sharman J (2009) "Policy Diffusion and Policy Transfer" 31(3) *Policy Studies* 269-288 at 277.

52 Marcos *et al* (2017) at 21; Hart (2019) at 6-11.

53 See O'Sullivan D (1993) "The Concept of Policy Paradigm: Elaboration and Illumination" 27(3) *Journal of Educational Thought* 246-272; Shipan & Volden (2008); Marsh & Sharman (2009).

54 Luo Y (2006) "Political Behavior, Social Responsibility, and Perceived Corruption: A Structuration Perspective" 37(6) *Journal of International Business Studies* 747-766.

55 Koyuncu C & Yilmaz R (2009) "The Impact of Corruption on Deforestation: A Cross-Country Evidence" 42(2) *Journal of Developing Areas* 213-222.

medicine,[56] economics,[57] engineering,[58] military science,[59] religion,[60] and gender studies.[61] And whilst much research has been devoted to evaluating the merits and demerits of the CPI,[62] considerably less attention has been paid to the role that ratification of key global anti-corruption legal conventions have on country scores within the CPI. It is within this context that this paper evaluates whether early ratification of UNCAC has had an impact on CPI country scores.

In an attempt to evaluate whether there is, in fact, a relationship between early ratification of UNCAC and a country's CPI scores, a panel of 178 countries using data gathered for the period 2004—2018 has been constructed. There are a total of 2 638 country-year observations contained within the CPI scores data, and a total of 25 806 data points across all variables contained within the dataset.

Given the focus on the score, as opposed to the rank, of a country on the CPI, this paper uses an ordinary least squares (OLS) simple linear model to regress the score received each year with the addition of a lagged CPI explanatory variable as a means of capturing dynamic effects in political processes which may not be captured by a simple CPI score and as a method of ridding the model of autocorrelation.[63] The focus on the score was chosen to ensure that changes in CPI

56 Gadit A (2011) "Opinion and Debate-Corruption in Medical Practice: How Far Have We Gone?" 61(1) *Journal of the Pakistan Medical Association* 93-94.

57 Dreher A & Herzfeld T (2005) "The Economic Costs of Corruption: A Survey and New Evidence", available at *https://ssrn.com/abstract=734184* (visited 14 July 2020); Ulman SR (2014) "The Impact of the National Competitiveness on the Perception of Corruption" 15 *Procedia Economics and Finance* 1002-1009; Manu K & Patel V (2018) "The Dynamic Linkage between Corruption Index and Foreign Direct Investment: The Case of Developed and Developing Countries" IX(2) *Indian Journal of Commerce & Management Studies* 59-67.

58 Sohail M & Cavill S (2008) "Accountability to Prevent Corruption in Construction Projects" 134(9) *Journal of Construction Engineering and management* 729-738.

59 Georgiev V (2013) "Methods and Techniques for Assessment of Corruption Risks in Defence and Security" 53 *Journal of Defense Management* 1-2.

60 Charles NM, Orman WH & Gwin CR (2013) "Religion, Corruption and the Rule of Law" 45(5) *Journal of Money, Credit and Banking* 1-35.

61 Alatas V *et al* (2009) "Gender, Culture and Corruption: Insights from an Experimental Analysis" 75(3) *Southern Economic Journal* 663-680.

62 See generally Andersson & Heywood (2009); Gilman S (2018) "To Understand and to Misunderstand How Corruption is Measured: Academic Research and the Corruption Perceptions Index" 20(1) *Public Integrity* S74-S88; Hart (2019); Laufer W & Warren D (2009) "Are Corruption Indices a Self-Fulfilling Prophecy? A Social Labeling Perspective of Corruption" 88 *Journal of Business Ethics* 841-849; Luo Y (2006) "Political Behavior, Social Responsibility, and Perceived Corruption: A Structuration Perspective" 37(6) *Journal of International Business Studies* 747-766; Saha S, Gounder R & Jen-Je S (2012) "Is There a Consensus towards Transparency: International's Corruption Perceptions Index?" 20(1) *International Journal of Business Studies* 1-9; Thompson & Shah (2005).

63 Dougherty C (2016) *Introduction to Econometrics* (5ed) Oxford: Oxford University Press at 402.

performance were captured — whereas rank may be affected by the inclusion of new countries or by significant changes in the rank of countries that were lower, without a change in score. It was decided that evaluating country scores produced a more reflective picture than one based on rank.

The dependent variable, in this case a country's CPI score, was regressed against a dichotomously coded indicator variable which looked at whether a country was an early ratifier of UNCAC or not, specifically whether a country ratified UNCAC before December 2008 or afterwards. The analysis focuses on viewing early ratification through the lens of policy diffusion, and the staggered ratification process allows for an analysis which incorporates the notions of "leaders" and "laggards" — the former being those countries which ratified pre-2008 and the latter those which ratified after 2008 — in relation to the diffusion of policies.[64] This facilitated an analysis that could calculate the impact of early ratification, given two important developments following this period: firstly, the introduction of an implementation and enforcement review for UNCAC in 2009; and, secondly, the methodology changes made to the CPI in 2012.

As can be seen from Figure 1 above, a considerable majority of countries had ratified UNCAC by December 2008. Indeed, 68% of countries had ratified the convention by this date.[65] This diverse diffusion in early ratification meant that we could control for regional variations, which otherwise would make findings more difficult to interpret. Similarly, building on previous policy diffusion literature, it can be seen that ratification prior to 2008 serves as an effective gauge for whether countries which could be considered "leaders" would benefit from an improvement in their CPI scores at later stages.

The choice of the OLS simple linear model permitted an exploration of the relationship between the dependent variable and an independent variable that looked at whether a country ratified UNCAC early. This method provides an estimation of the relationship by minimising the sum of the squares in the difference between the observed and predicted values of the dependent variable, which is configured as a straight line. The inclusion of control variables allowed us to hold all other factors constant and address the problem of confounding.[66] The use of a lagged dependent variable enables the model to map more accurately the

64 Shipan & Volden (2008) at 843.

65 Cole WM (2015) "Institutionalizing a Global Anti-Corruption Regime: Perverse Effects on Country Outcomes, 1984–2012" 56(1) *International Journal of Comparative Sociology* 53-80.

66 Pearl J (2009) "Causal Inference in Statistics: An Overview" 3 *Statistics Surveys* 96-146 at 116.

temporal dynamics of the dependent variable and to take account of the impact of previous dependent variable values as an insight into current and future dependent variable values. Here it may be observed, in line with Dougherty[67] and Keele & Kelly,[68] that the use of lagged dependent variables can serve also to correct for potential autocorrelation. In addition, as noted by Dougherty, the use of a model with a lagged dependent variable is:

> often attractive because it permits the representation of the process to have plausible dynamic properties without necessarily giving rise to the problem of multicollinearity.[69]

### 3.1 Dependent Variable: Corruption Perceptions Index

Of particular relevance to this paper is the fact that the CPI is not dominated by any individual sources.[70] Whilst this is important for the statistical coherence of the CPI, it also should support more thoroughly the case for exploring the impact of such a wide-ranging global instrument as UNCAC upon country scores in the CPI. Indeed, it should support the case for analysing whether this can be seen across the sources which contribute towards the constitution of the CPI, and the impact that policy changes and ratification of international conventions may have upon country CPI scores, with specific reference to those countries which ratify such conventions early and could be considered leaders in tackling corruption.

A number of scholars, most notably Kolstad & Wiig,[71] posit that whilst the use of perceptions of corruption data has its drawbacks, it remains valid in such research. Indeed, Kolstad & Wiig go so far as to assert that:

> While the indices of corruption employed capture perceived rather than actual corruption levels, this reflects limitations in data availability, not in analytical approach. The empirical approach used would be perfectly applicable to analysis using other corruption indices, should these attain wider country coverage.[72]

It is within this context that we seek to use the CPI as the best available measurement methodology to collate data on perceived levels of corruption internationally.

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67 Dougherty (2016) at 454-457.

68 Keele L & Kelly NJ (2006) "Dynamic Models for Dynamic Theories: The Ins and Outs of Lagged Dependent Variables" 14(2) *Political Analysis* 186-205 at 187.

69 Dougherty (2016) at 402.

70 See Marcos *et al* (2017) at 21.

71 Kolstad I & Wiig A (2011) *Does Democracy Reduce Corruption?* Bergen: Chr. Michelsen Institute.

72 Kolstad & Wiig (2011) at 19.

### 3.2 Independent Variable: Early Ratification of UNCAC

Building on the work of Cole who sought to evaluate significant, increased attention paid to corruption through examining the volume of anti-corruption conventions and treaties,[73] this paper takes UNCAC — the most wide-reaching convention — and analyses it through the lens of early ratification as the dichotomously coded independent variable. This approach advances that used by Heather *et al*, who similarly used dummy coded early adoption variables in an analysis of the adoption of an international treaty.[74] Given its widespread ratification, along with its unique development process, UNCAC serves as a benchmark through which countries may be assessed on their commitment to tackling corruption, by being ratification "leaders" of a key international instrument aimed at reducing corruption on a level which is properly universal. As noted earlier, the wide-ranging provisions in UNCAC provide an insight into the level of commitment required by states prior to ratification.

UNCAC does face serious challenges with regard to the review mechanism, which evaluates the co-option of the policy prescriptions into domestic legislation and would provide a more nuanced picture of how countries are facing up to the challenge of corruption, as well as whether it goes far enough in tackling corruption.[75] Such a nuanced picture, and indeed the varying motivations for early or late ratification, may serve to inform a more balanced interpretation of the results of this analysis. The independent variable is structured as an indicator variable, with 1 being those countries which were early ratifiers of UNCAC and 0 being those who were not.

### 3.3 Control Variables

This analysis of the relationship between early ratification of the UNCAC and its impact upon CPI scores uses a number of social, political and economic control variables into perceptions of corruption in order to minimise their potential impact upon this analysis.[76]

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73 Cole (2015).

74 Heather WL, Fujimoto K & Valente TW (2010) "Global Tobacco Control Diffusion: The Case of the Framework Convention on Tobacco Control" 100 *American Journal of Public Health* 1260-1266.

75 See Hechler *et al* (2011) at 25.

76 See generally Dreher & Herzfeld (2005); Charles *et al* (2013); Cole (2015); Achim MV (2016) "Cultural Dimension of Corruption: A Cross-Country Survey" 22(3) *International Advances in Economic Research* 333-345.

**Table 1: Control Variables Used**

| Control Variable | Explanation | Source |
|---|---|---|
| Democracy | Building on the work of Kolstad & Wiig, we see that democracy is correlated with a reduction in the level of corruption and serves as an effective control of corruption considering the stage of democracy. | Freedom House, 2019 |
| Human Development Index | Whilst there continues to be a widespread academic debate on the merits of the HDI in measuring levels of development vs GDP data,[77] there is more consensus around the impact of poverty, low life expectancy (and more specifically poor health outcomes), and poor education in creating the conditions for corruption.[78] This paper tests the use of the HDI in models 2 and 3. | UNDP, 2019 |
| GDP Per Capita (Purchasing Power Parity) | Another variable used to control the level of development is GDP per capita purchasing power parity (PPP). GDP PPP has particular merit because of its ability to compare generalised differences in living standards. It is used in models 1 and 4. | World Bank, 2019 |
| OECD Member | As outlined by Ross,[79] the idea of using OECD membership is to control for Western biases, a criticism which the CPI often faces. By using a dummy coded variable for OECD membership, we can control largely for those countries typically considered "Western".[80] | OECD, 2019 |
| Protestantism | A number of studies have demonstrated that corruption is less severe in predominantly Protestant societies. This paper uses the percentage of population that identifies as protestant, based on the Correlates of War, World Religion Project dataset.[81] | World Religion Project, 2019 |

77 See Islam S (1995) "The Human Development Index and Per Capita GDP" 2(5) *Applied Economics Letters* 166-167 at 167; Brinkman R & Brinkman J (2011) "GDP as a Measure of Progress and Human Development: A Process of Conceptual Evolution" 45(2) *Journal of Economic Issues* 447-456 at 451; Dervis K & Klugman J (2011) "Measuring Human Progress: The Contribution of the Human Development Index and Related Indices" 121(1) *Revue D'économie Politique* 73-92 at 75.

78 See Mauro P (1998) "Corruption and the Composition of Government Expenditure" 69 *Journal of Public Economics* 263-279 at 267; Gupta S, Davoodi H & Alonso-Terme R (2002) "Does Corruption Affect Income Inequality and Poverty?" 3(1) *Economics of Governance* 23-45 at 36-37; Dreher & Herzfeld (2005) at 11.

79 Ross M (2004) "Does Taxation Lead to Representation?" 34(2) *British Journal of Political Science* 229-249 at 241.

80 Rehman H & Naveed A (2007) "Determinants of Corruption and its Relation to GDP: (A Panel Study)" 12(2) *Journal of Political Studies* 27-59 at 34.

81 Sandholtz W & Koetzle W (2000) "Accounting for Corruption: Economic Structure, Democracy and Trade" 44(1) *International Studies Quarterly* 31-50 at 44; Treisman D (2000) "The Causes of Corruption: A Cross-National Study" 76(3) *Journal of Public Economics* 399-457 at 405; Jong-sung Y & Khagram S (2005) "A Comparative Study of Inequality and Corruption" 70(1) *American Sociological Review* 136–157 at 146.

| Control Variable | Explanation | Source |
|---|---|---|
| Inequality (Gini) | A number of scholars show that income inequality correlates with increased corruption.[82] In this regard, the paper uses a measure of gross income inequality, expressed as Gini coefficients. | World Bank, 2019 |
| Region | Using data from Wahman *et al*[83] and Teorell *et al*[84] this variable entails a politico-geographic classification of world regions into ten distinct categories. | Wahman *et al*, 2013; Teorell *et al*, 2019 |
| Country | Due in part to the unique and long-term country-specific effects which often are not captured in the variables above — such as the impact of culture, history and institutional structure on a country's CPI score — it was decided to include a dummy coded variable to control for country-specific effects. | CPI, 2019 |

## 4 RESULTS AND ANALYSIS

When one begins to explore the results of the OLS simple linear regression, as recorded in Table 2 below, one notices several interesting findings. In general, there is a statistically significant positive, but not especially substantive, relationship between early ratification of UNCAC and a country's CPI score. Across the various models employed, we can see the impact of a one-unit increase in CPI corresponding to between a .025 (Model 4) and a .631** (Model 2, significant to the 95% confidence level) higher average value in the scores of countries which ratified UNCAC early versus those countries which did not ratify early. That this exists across all four models, with varying standard errors and varying levels of statistical significance, with the various control variables included, adds to the robustness of the findings that the relationship is positive between early ratification of UNCAC and CPI scores. However, the effect is not substantive across all the models.[85]

82 See Gyimah-Brempong K (2002) "Corruption, Economic Growth and Income Inequality in Africa" 3(3) *Economics of Governance* 183-209; Gupta *et al* (2002); Jong-Sung Y & Khagram S (2005) "A Comparative Study of Inequality and Corruption" 70(1) *American Sociological Review* 136–157 at 146.

83 Wahman M, Teorell J & Hadenius A (2013) "Authoritarian Regime Types Revisited: Updated Data in Comparative Perspective" 19(1) *Contemporary Politics* 19-34.

84 Teorell J *et al* (2019) *The Quality of Government Standard Dataset* University of Gothenburg: The Quality of Government Institute.

85 While the adjusted R2 values seem to signify a strong fit, this is likely not the case as much of this variation is due largely to the inclusion of the lagged value across all the models.

**Table 2: Linear Regression Output**

| DEPENDENT VARIABLE: CPI | | | | |
|---|---|---|---|---|
| | **MODEL 1** | **MODEL 2** | **MODEL 3** | **MODEL 4** |
| Early Ratification of UNCAC | 0.545* | 0.631** | 0.032 | 0.025 |
| | (0.288) | (0.288) | (0.150) | (0.150) |
| | | | | |
| OECD | 0.342 | 0.258 | 0.145 | 0.198 |
| | (0.364) | (0.360) | (0.259) | (0.258) |
| | | | | |
| Gross Domestic Product Purchasing Power Parity | 0.00002 | | | 0.00002*** |
| | (0.00001) | | | (0.00001) |
| | | | | |
| Human Development Index | | 6.938*** | 3.731*** | |
| | | (2.231) | (1.010) | |
| | | | | |
| Democracy | 0.478* | 0.194 | 0.472*** | 0.679*** |
| | (0.288) | (0.304) | (0.175) | (0.178) |
| | | | | |
| Government Expenditure | -0.002 | -0.011 | 0.010 | 0.012 |
| | (0.030) | (0.029) | (0.011) | (0.011) |
| | | | | |
| Percentage Protestant | 0.374 | 0.418 | | |
| | (0.581) | (0.578) | | |
| | | | | |
| Gini Coefficient | -0.010 | -0.019 | | |
| | (0.022) | (0.022) | | |
| | | | | |
| CPI.lag | 0.964*** | 0.955*** | 0.959*** | 0.963*** |
| | (0.011) | (0.011) | (0.006) | (0.006) |
| | | | | |
| Eastern Europe and Post-Soviet Union | -0.039 | -0.211 | 0.047 | 0.135 |
| | (0.702) | (0.700) | (0.404) | (0.403) |
| | | | | |
| Latin America and The Caribbean | -0.384 | -0.121 | -0.187 | -0.273 |
| | (0.752) | (0.753) | (0.414) | (0.414) |
| | | | | |
| North Africa and The Middle East | -0.159 | -0.107 | -0.268 | -0.398 |
| | (0.795) | (0.789) | (0.429) | (0.434) |
| | | | | |
| South Asia | -0.356 | 0.421 | 0.516 | 0.167 |
| | (0.977) | (1.010) | (0.506) | (0.489) |
| | | | | |
| South East Asia | 0.043 | 0.316 | 0.293 | 0.115 |
| | (0.825) | (0.826) | (0.464) | (0.461) |
| | | | | |
| Sub-Saharan Africa | 0.057 | 1.589* | 0.515 | -0.130 |
| | (0.774) | (0.930) | (0.462) | (0.411) |

| | MODEL 1 | MODEL 2 | MODEL 3 | MODEL 4 |
|---|---|---|---|---|
| Western Europe and North America | -1.099 | -1.033 | -0.371 | -0.492 |
| | (0.787) | (0.765) | (0.426) | (0.426) |
| | | | | |
| Constant | 1.577 | -2.495 | -1.087 | 1.195** |
| | (1.179) | (1.783) | (0.765) | (0.465) |
| | | | | |
| Observations | 711 | 712 | 1,940 | 1,926 |
| Adjusted $R^2$ | 0.985 | 0.985 | 0.983 | 0.984 |
| Residual Standard Error | 2.702 (df = 695) | 2.686 (df = 696) | 2.648 (df = 1926) | 2.645 (df = 1912) |
| | | | | |
| **NOTE** | *p<0.1 | **p<0.05 | ***p<0.01 | |

If we focus, firstly, on Models 1 and 2 in Table 3, that is, those which include Protestantism and the Gini Index as control variables,[86] we see that early ratification of UNCAC is significant at the 90% (Model 1) or 95% (Model 2) significance level, and that the relationship is positive, albeit not definitively substantive. While a positive relationship is consistent across all the models employed, Models 1 and 2 are interesting because of the statistically significant nature of their relationship to the CPI score as dependent variable. Indeed, while there are a number of benefits to ascribing particular weight to statistical significance in a simple linear regression, we can assume that for a 95% confidence level there is, in fact, something noteworthy taking place in the relationship between the dependent and independent variables that warrants further exploration of the factors contributing to this relationship. This takes cognisance of the statement by the American Statistics Association that:

> By itself, a p-value does not provide a good measure of evidence regarding a model or hypothesis. Researchers should recognise that a p-value without context or other evidence provides limited information. For example, a p-value near 0.05 taken by itself offers only weak evidence against the null hypothesis.[87]

This caution provides the perspective from which the results of the OLS simple linear regression will be examined.

As the independent variable is a dichotomously coded dummy variable, we can understand that a one-unit change in the dependent variable, as epitomised in

86 Due to the lack of available data, it was decided to exclude both Protestantism and Gini variables from Model 3 and Model 4 in order to explore the impact of an increased number of observations (which effectively double). However, the effect is quite muted.

87 Wasserstein RL & Lazar NA (2016) "The ASA Statement on p-Values: Context, Process and Purpose" 70(2) *The American Statistician* 129-133 at 132.

the coefficient in Model 1 (0.545) and Model 2 (0.631), tells us how the value of the dependent variable (CPI score) changes, on average, when the dummy variable switches from 0 to 1. Such a positive and significant association serves to indicate that the nature of the relationship between the dependent and independent variable, controlling for all of the other variables included in the regression, is one which calls for further examination of the factors which could contribute towards this relationship. While the relationship seems small, it does fit in with an observable pattern in other empirical studies which examine the impact which policy interventions can have on an index score.[88] For example, there is a comparable finding in the OLS linear regression analysis conducted by Cole.[89] While there are differences between this research and Cole's, the impact of a policy intervention on an index score remains comparable between the two, thus building on previous literature to develop a more thorough analysis of the "treatment effect",[90] that is, the impact of policy interventions and conventions on index scores in general and on CPI scores in particular.

One factor which could go some way in explaining the direction of the early ratification coefficient, as well as providing some insight into the scale of the coefficient, is the movement within the CPI. When one examines the results recorded in this paper against the work of previous scholars who show the nature of movement within the CPI empirically, we can see that this movement encompasses not only rank but also, and more importantly, score. Indeed, many scholars point to low levels of internal movement being an enduring feature of the CPI.[91] This observation is supported by the findings of this analysis which, in turn, is supported by the empirical research conducted by Zouaoui *et al*.[92] This particular facet of the results serves to confirm the hypothesis that early ratification of UNCAC does have an impact on a country's CPI score, in the sense that there does exist a small positive and significant relationship between early ratification and an improvement within CPI scores. In compliance with the findings of other empirical analyses, it must be noted that the rate of this change and, indeed, its scale are

88 See, for example, Van Aaken V, Feld LP & Voigt S (2010) "Do Independent Prosecutors Deter Political Corruption? An Empirical Evaluation across Seventy-Eight Countries" 12(1) *American Law and Economics Review* 204–244 at 223; Cole (2015) at 71.

89 Cole (2015).

90 A 'treatment effect' is the average causal effect of a binary (0–1) variable on an outcome variable of scientific or policy interest.

91 See Andersson & Heywood (2009) at 754; Saha *et al* (2012) at 8; Zouaoui A, Qudah AA & Ben Arab M (2017) "World Corruption Perception Index Analysis" 8(24) *Research Journal of Finance and Accounting* 85-91 at 90-91.

92 Zouaoui *et al* (2017).

quite muted and not altogether supportive of the notion that early ratification leads to a substantial change in a country's CPI score.

It can be seen also that the spread of this positive change is not dispersed evenly and that there is a considerable degree of regional variation at play, which may point to a much more nuanced impact being felt across different regions. Of particular interest, however, is the impact which early ratification appears to be having in Western Europe and North America, where across all models we can detect a negative relationship. Whilst this relationship is not significant, it could provide an insight into what Garin refers to as the "ceiling effect",[93] in terms of which many countries in Western Europe and North America tended to score relatively high and, in many cases, likely only will reduce their scores over the designated time period. Thus, a general reduction in scores resulting from the use of a more robust methodology by the CPI is to be expected for these regions, leading to lower absolute country scores, while maintaining higher rankings relative to other countries. This theory is supported by the work of Zouaoui *et al*.[94] That there is some degree of coalescence becomes evident when we begin to explore the impact in the Sub-Saharan Africa region, with Model 2 showing a statistically significant positive relationship at the 90% confidence level. This finding may lend credence to the inverse of the ceiling effect, namely, the floor effect, having an impact, with improvements in CPI scores having a limited effect on a country's CPI rank.[95]

Interestingly, amongst the control variables in Model 2 there is a substantial and significant relationship when one controls for the human development index (HDI). Countries with higher HDI scores have better CPI scores. This is not altogether surprising. Indeed, a number of scholars point to the importance of economic development in controlling corruption.[96] However, the HDI having a positive relationship to perceptions of corruption is a novel ancillary insight offered by this paper and points to a need for further research on usage of the HDI, as opposed to GDP measures, when controlling for corruption.

It is possible also that a causal explanation as to the improvement in scores over this time could be due to Cole's submission that:

93 Garin O (2014) "Ceiling Effect" in Michalos A (ed) *Encyclopedia of Quality of Life and Well-Being Research* Dordrecht: Springer. The ceiling effect is said to occur when participants' scores cluster toward the high end (or best possible score) of the measure/instrument.

94 Zouaoui *et al* (2017).

95 Zouaoui *et al* (2017) at 91

96 See Gupta *et al* (2002) at 40.

> The worldwide increase in corruption scores beginning in the mid-1990s can be attributed, at least partially, to international efforts to fight corruption.[97]

The increased attention paid to corruption — as demonstrated in the use of a longer CPI, with data beginning from the early 1980s — alongside standardised definitions and more significant sanctions for engaging in corruption, led to a short-term increase in perceptions of corruption. Perhaps we could view the improvement in scores for those countries who were early ratifiers of UNCAC as a solution to the information paradox, wherein:

> [i]ncreasing the quantity and quality of information regarding undesirable practices often gives the impression that those practices worsened, when in fact underlying conditions may have stabilised or even improved.[98]

From this perspective, we could view those countries which were early ratifiers as benefitting from a greater perception of controlling corruption and thus achieving improved scores on the CPI. The information paradox and, indeed, the lukewarm levels of adoption of the policy provisions contained in UNCAC, could lead to a situation where those countries which ratified early could benefit from overcoming the information paradox. Indeed, early ratification could lead to a perception of greater commitment by a country to controlling corruption than what actually exists, whilst not facing any enforcement or monitoring of such ratification prior to the development of a review mechanism in 2009.

A challenge which faces this analysis is the lack of an effective method to quantify what ratification signifies, given that the review mechanism was developed in such a way so as to eliminate rankings between countries. Thus, the quantitative limitations of the data available[99] meant taking all ratifications as being equal in intent when evaluating their significance in the context of differing national objectives and expectations of ratification. Indeed, the rather limited effect of early ratification could be due, in part, to the lukewarm commitment to adopting the UNCAC provisions into domestic policy.[100] Further research thus would be required to explore how far countries which have ratified UNCAC have gone in adopting its provisions into domestic policy.

Whilst some countries may have benefitted from an early ratification bounce in their CPI scores, we could be seeing a more sanitised impact as a result of countries, post-2009, being more aware of the implications of ratification, their

97 Cole (2015) at 73.
98 Cole (2015) at 57.
99 UNODC (2011) at 7-10.
100 Hechler *et al* (2011) at 7.

obligations under the review mechanism, and some inspection of their enforcement of the provisions of the convention. This could lead to countries doing better than one would expect in controlling corruption post-2009, thus limiting the average difference between early and late ratifiers and producing results that point towards a relatively small impact of early ratification.

Another factor which appears to be having a limiting influence is the inclusion of the Gini variable in Models 1 and 2. The nature of this variable and its unequal data availability could mean that it is reducing the number of democracies included in the regressions in Model 1 and 2, thus causing a higher coefficient between the dependent and independent variables. While this does not change the nature of the relationship in Models 3 and 4, it does serve to curtail further the impact of early ratification, thereby removing the significance of the relationship. This could mean that the relationship well may remain positive but not entirely significant or substantive.

## 4 CONCLUSION

Beginning in the late 1980s and continuing through the 1990s, corruption — and, indeed, the campaign against corruption — changed fundamentally in both approach and intensity. However, through the period of the "corruption eruption", a number of ground-breaking advances were made to lessen the negative social and economic impacts of corruption, along with improved ways in which to measure the severity of the problem. It is within this context that this paper set out to evaluate the relationship between two key advances made during this period, namely, the impact of early ratification of UNCAC on country CPI scores.

Through the use of an OLS linear regression, this analysis found that, whilst there is a positive relationship between early ratification of UNCAC and a country's CPI scores, the relationship is not particularly substantive. Still, the fact that this relationship is positive, points towards a potential incentive for early ratification. There are a number of factors which may lead to this relationship being positive, such as the impact of normalisation of CPI scores over time, low levels of internal movement leading to minor changes, the level of adoption of UNCAC provisions into domestic policy, strong regional variations in impact being tied to the ceiling effect in Western Europe and North America, and the potential impact of a floor effect in parts of Sub-Saharan Africa. That this relationship across all models pointed towards a positive, albeit not substantive, relationship adds to the robustness of the findings and also provides insight into areas which require further research to test the findings empirically.

However, while the findings contained in this paper do go some way towards clarifying the nature of the relationship between early ratification of UNCAC and CPI scores, there are certain limitations that should be applied to the findings. These limitations pertain to the need for further research into the level of transposition and adoption of the provisions of UNCAC into domestic policy. Such research would be required for academic discussions which seek to engage in a more qualitative analysis of the merits and demerits of UNCAC, as well as its broader effectiveness in reducing the preponderance of corruption globally. Having to take all ratifications as equal to each other in intent is due, in large part, to the lack of available quantitative data on the implementation progress of countries. A more detailed analysis of the adoption of UNCAC provisions is required to examine fully UNCAC's ability to help reduce corruption. Further exploration of the impact of transposition of UNCAC provisions into domestic legislation could provide greater insight into whether such movements as observed in this paper are justified, given the commitment of a state to move beyond ratification into integrating the provisions of the convention into domestic policy.

The findings in this paper serve to build on emerging literature which sets out to examine the interaction between a country's CPI scores and several other factors which may contribute to movement of that score. It appears that early ratification of UNCAC has a positive and significant relationship to a country's CPI scores. Early ratification may serve as a signal, both domestically and internationally, of a greater willingness on the part of countries to tackle corruption more determinedly. Countries which ratified early may be driven by a desire to signal to domestic political audiences their commitment to controlling corruption more effectively, which could lead to improvements across the constituent indices of the CPI that a country is improving in how it tackles corruption. However, whether there exists a serious change — not just in perceptions — in a state's commitment to tackling corruption may be hindered by a failure to adopt the provisions of the convention into domestic policy.

Both the immense damage which corruption causes to the social fabric of countries around the world alongside its real and consistent long-term negative economic consequences, have produced an acknowledgement of a greater need for countries to control corruption. This is why a number of countries have sought to use international collaboration and international treaties and conventions to combat corruption. In part, this is motivated by the challenges globalisation has presented to a number of countries, giving rise to a greater necessity for countries to use international instruments and international collaboration to tackle corruption effectively. It is hoped that this paper can contribute towards

developing a greater understanding of how important international instruments can be in supporting countries which are attempting to root out corruption, and that it can provide insight into areas which require further research if international instruments are to be effective in the fight against corruption.