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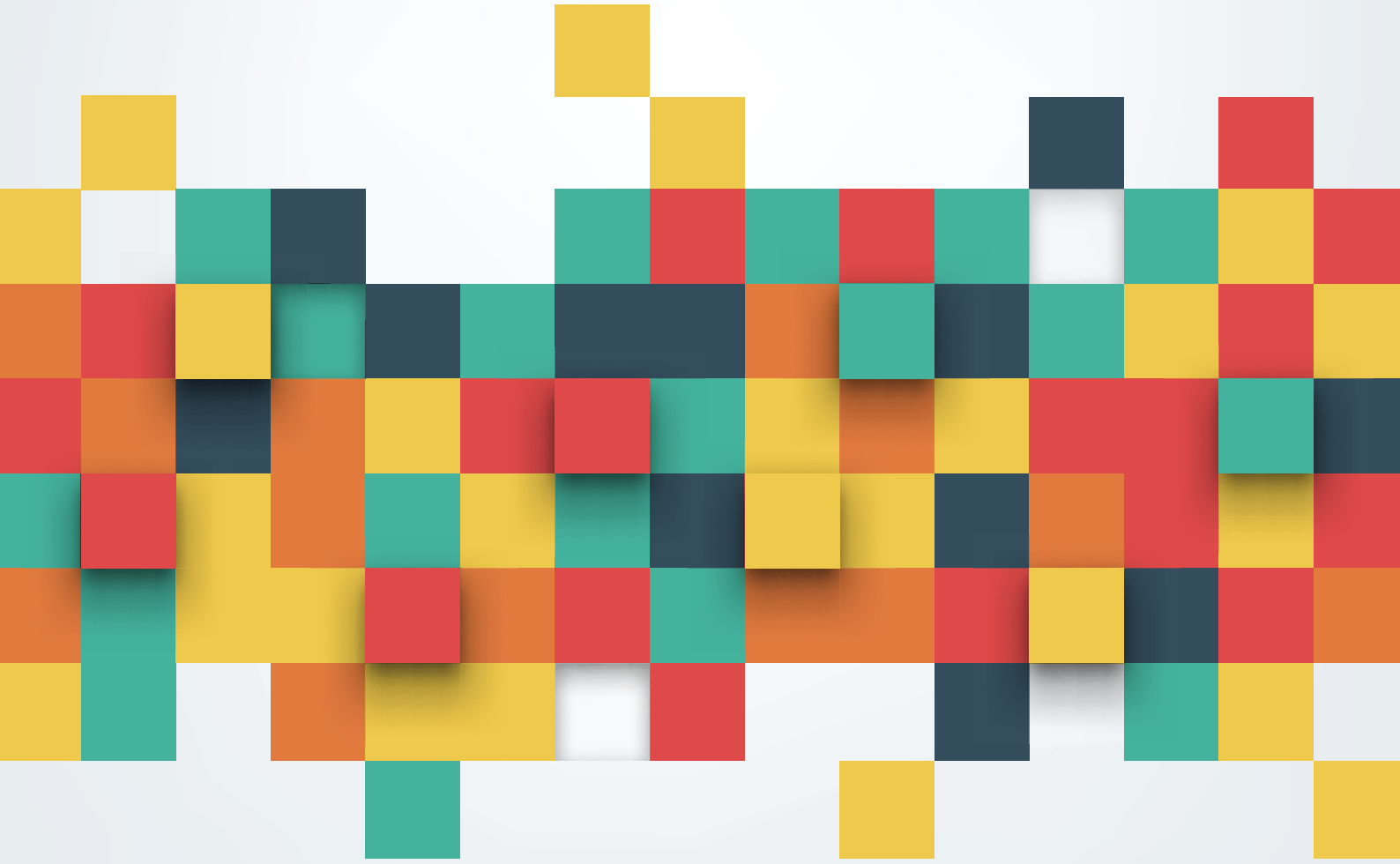
DID YOU KNOW?

IQ AND ENVIRONMENTAL AGREEMENTS



COLIBRILAW

Does IQ explain a nation's commitment to ratifying an international environmental agreement?

The Kyoto Protocol is an international treaty adopted by many nations at the end of 1997, which came into effect after Russia and Canada's ratification on 16 February 2005.

One of the key explanations for the long delay between the adoption of the protocol and its international ratification is its requirement for at least 55 parties to ratify the agreement and for the total of those parties' emissions to be at least 55% of the global production of greenhouse gases.

The agreement is reasonably simple. Developed nations were legally bound to reduce greenhouse gas emissions to the levels produced in the 1990s. If a developed nation failed to reduce its emissions, then it was obliged to participate in emissions trading; i.e. buying "credits" from other participants who were able to exceed their reduction targets in order to offset excess emissions.

Developing nations (including BRICS) faced no legal commitments to tackle emissions but were simply invited to follow pro-green policies. Although the Kyoto Protocol offered numerous benefits for low income nations, such as an opportunity to "sell" their emissions credits to industrial countries, the ratification process for some nations was very time consuming (e.g. Tajikistan, Brunei).

In December 2015, a more recent climate change agreement was adopted in Paris. This agreement is expected to serve as one of the main agreements regulating the adverse effects of climate change. However, the potential of the Paris Agreement to lead humankind into a low-carbon environment and sustainable development is the subject of intense debate. This is particularly so considering the nature of the Paris Agreement, which does not prescribe and regulate what countries are legally bound to do, but merely reminds countries, industries and businesses of their commitments.

Past studies on the ratification of multilateral environmental agreements (MEAs) suggest that there are numerous aspects that influence a nation's decision to partake in international carbon-reduction efforts. For instance, factors such as economic wealth, population size and the quality of democratic institutions were all found to positively influence countries' decisions to ratify MEAs. Yet, these aspects still account for less than 20% of nations' willingness to sign and participate in international environmental commitments[1]. This implies that there are other factors that influence governments' decisions to address climate change.

It is not generally considered that a measure like IQ could be a predicting factor of national commitment to international environmental agreements. However, there is compelling evidence that a nation's average IQ may determine the level of a country's environmental degradation. This leads us to consider how cognitive abilities fit into the international environmental agenda.

In general, recent evidence shows that intelligence may predict the quality of a chosen political regime. For instance, high IQ individuals are found to be more actively involved in elections, vote for democratic parties and for candidates with environmental agendas. Moreover, these studies suggest that more intelligent bureaucrats tend to give preference to larger and delayed rewards rather than smaller but immediate ones. If environmental quality is a luxury good, we may then suppose that demand for it increases with the level of intelligence. Consequently, high-IQ societies would be inclined to pledge more resources to ecological conservation and to follow more eco-sustainable consumption patterns.

Indeed, more intelligent societies are found to be less wasteful as they recognise the long-term financial (and, by implication, potentially environmental) benefits of current investments on environmentally friendly technologies[2].

On the other hand, the existence of market failures leads to the inefficient use of natural resources, which promotes rent-seeking, distorts welfare and reduces quality of life. Collective intelligence may also effectively direct the actions of self-centred economic agents and prevent bureaucrats from ignoring the environmental concerns of a population[3].

Past studies suggest that cognitively advanced societies aim to achieve more efficiency[4] and support policies that create prosperity[5,6], For instance, higher intelligence is associated with less corruption, crime and shadow economy, factors which increase greenhouse gas emissions.

Therefore, our results show that when a nation's IQ is one standard deviation above the global average (approximately a 10-point increase) the predicted probability of ratifying an MEA is 71%. The positive effect of intelligence on environmental commitment retains its significance even when we account for other antecedents of international environmental commitment.

[1] Neumayer (2002), Do Democracies Exhibit Stronger International Environmental Commitment?, Journal of Peace Research, 39 (2)

[2] Squalli (2014)

[3] Minowitz (2004)

[4] Lynn &Vanhanen (2012a)

[5] Jones (2011)

[6] For example, Arvanitis & Ley (2013), using data for 2324 Swiss firms for the year 2008, show that the absence of market failures (intensity of price competition) has positive impact on likelihood of adopting environment-friendly technologies.

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