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On my honour as a student of the Diplomatic Academy of Vienna, I submit this work in good faith and pledge that I have neither given nor received unauthorized assistance on it.

A handwritten signature in black ink, appearing to read 'CLM', is centered on the page.

Caroline Laura Mayr

Abstract

This thesis deals with the implementation of the Sustainable Development Goals (SDGs), and factors that make countries more likely to comply with these goals. The SDGs, which are intended to elevate people's lives, were put forward in 2015 by the member states of the United Nations. The literature review shows that the liberal International Relations approach to compliance is the most suitable one. The hypotheses regarding which factors enhance compliance, hence, revolve around liberal development theories, in particular, Good Governance and GDP per capita. The assumption is that the higher the value of these two variables, the higher the compliance with the SDGs. In order to test these hypotheses, 152 countries and their overall scores for the different goals are examined with the use of multiple linear regressions. It is uncovered that the two variables, but, especially, Good Governance influence compliance in the majority of the cases. After the quantitative examination of the issue, a qualitative part follows which looks more closely at three Middle Eastern and North African states, namely, the United Arab Emirates, Morocco and Iraq. The SDG progress in these countries, which exhibit different levels of Good Governance, will show that the results from the quantitative analysis also hold true in reality. This thesis contributes to the literature of compliance as it demonstrates one way to measure it, which is through linear regression. Furthermore, it also contributes to the SDG literature, which is still rather sparse.

German Abstract

Die vorliegende Masterarbeit untersucht welche Faktoren die Erfüllung der Ziele für Nachhaltige Entwicklung von den Vereinten Nationen beeinflussen. In dem quantitativen Teil der Arbeit wird der Einfluss von einer guten Regierungsführung und dem BIP pro Kopf auf die Ziele für Nachhaltige Entwicklung getestet. Das Ergebnis zeigt, dass vor allem eine gute Regierungsführung einen hohen Einfluss auf die Erfüllung der meisten Ziele hat. Dieses Ergebnis wird in dem qualitativen Teil der Arbeit an Hand von Beispielen getestet. Drei Staaten mit unterschiedlich hohen Regierungsführungswerten und drei Zielen für Nachhaltige Entwicklung werden untersucht. Dies zeigt auf, dass sich der quantitative Teil auch in der Realität beweisen kann.

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Introduction

Humanity today faces a world of far-reaching environmental problems, societal issues and economic troubles. Countries have, therefore, realised the urgency to deal with these challenges, for the benefit of both the current and the next generations. The concept of Sustainable Development has managed to gain footing as a starting point in solving some of these problems.

In 1983, the United Nations (UN) General Assembly established the World Commission on Environment and Development. This commission published the well-known report "Our Common Future", normally called the Brundtland Report, named after its Chair Gro Harlem Brundtland, then Prime Minister of Norway.¹ The report introduced the term "Sustainable Development" and provided its most widely used definition. This definition states that "Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."² Its political essence is a mix between the environmental problems of developed states and the developmental needs of Third World countries.

In 2000, the UN adopted the Millennium Declaration, which was signed by 189 countries. This historic declaration put forward eight goals, the common purpose of which was to advance sustainable development. The goals, called Millennium Development Goals (MDGs) ranged from providing universal primary education to avoiding child and maternal mortality³ as well as reducing the spread of HIV and malaria.⁴ The timeframe was 25 years, with 1990 used as a benchmark and

¹ Paul Bac Dorin, "A History of the Concept of Sustainable Development: Literature Review," *Annals of the University of Oradea, Economic Science Series* 17, no. 2 (2008): 577.

² Charles Pearson, *Economics and the Global Environment* (Cambridge University Press, 2000), 463.

³ "Millennium Development Goals," MDG Achievement Fund, accessed February 15, 2019, <http://www.mdgfund.org/node/922>.

⁴ "United Nations Millennium Development Goals," United Nations, accessed January 2, 2019, <http://www.un.org/millenniumgoals>.

2015 as the end of the timeframe. The goals were set up to support the three dimensions of sustainable development, namely the economic, the social and the environmental sphere.⁵

Studies after the expiration of the MDGs have shown that they have positively changed some people's lives; but the progress was somewhat uneven. The most visible results of the MDGs were in "life or death" matters. For instance, child mortality, HIV/AIDS and tuberculosis rates were reduced. According to the researchers John McArthur and Krista Rasmussen, more than 21 million people's lives were saved because of the MDGs. In the areas of water safety and undernourishment, advancements were made as well, but overall the success was outweighed by slowdowns in the rate of progress in many densely inhabited countries. Furthermore, low-income countries have advanced faster than middle-income countries.⁶ Overall, the MDG programme was able to improve people's lives in some countries but it also had its flaws.

One criticism was that the MDGs lacked legitimacy as the countries, which were affected the most, were not included in the process of creating the MDGs. They were also criticised for lack of emphasis on the environment and their over-emphasis on the social and economic dimensions. Nevertheless, the MDGs provided the international community with a common understanding of what the aims of Sustainable Development should be. Moreover, some of these criticisms were also taken into consideration when the Sustainable Development Goals (SDGs) were created.⁷

In 2012, 20 years after the first Rio Conference, another UN Conference on Sustainable Development was held in Rio de Janeiro. The prime outcome of the conference was the non-binding document, "The Future We Want," which paved the way for the creation of the SDGs. Three years later, 193 countries adopted the

⁵ "Category: Millennium Development Goals," MDG Monitor, 2017, accessed February 4, 2019, <https://www.mdgmonitor.org/millennium-development-goals/>.

⁶ John McArthur and Krista Rasmussen, "How Successful Were the Millennium Development Goals?," Brookings, January 11, 2017, accessed January 4, 2019, <https://www.brookings.edu/blog/future-development/2017/01/11/how-successful-were-the-millennium-development-goals/>.

⁷ Martin Sandbu, "Critics Question Success of UN's Millennium Development Goals," Financial Times, September 15, 2015, accessed February 07, 2019, <https://www.ft.com/content/51d1c0aa-5085-11e5-8642-453585f2cfd>.

2030 Development Agenda titled "Transforming our world: the 2030 Agenda for Sustainable Development," which outlined 17 SDGs and more than 150 targets. In contrast to the MDGs, they were created through a more bottom-up consultation mechanism and targeted the challenges developing countries face more specifically.⁸

In the case of the MDGs and the SDGs, it appears obvious that different outcomes regarding the SDG progress also underly different compliance levels by states. Many countries, however, face similar challenges regarding the implementation of the goals. An interesting aspect to examine is why some countries comply, and others do not. Astonishing is how much some countries have progressed since the introduction of the SDGs. Hence, the research question guiding this thesis is: *"what factors foster countries' compliance with the SDGs?"* In order to answer this question, the thesis will take a quantitative and a qualitative study approach.

This thesis is divided into three chapters. The first one will introduce the theoretical and methodological framework of the thesis. In the literature review, International Relations theories that explain compliance are discussed, namely realism, constructivism, and liberalism. Liberalism is found to offer the best explanations for compliance due to its focus on domestic structures. Thus, the development theories explained in the second part of the literature review are related to liberalism. The development theories that seem to support a successful implementation of the SDGs are Good Governance and structural change theory, whereas GDP per capita can be used to measure structural transformation. Based on these theories, the hypotheses are developed. They state that the higher the Good Governance Index and the GDP per capita, the higher the compliance with the goals. The methodology of the thesis, explained at the end of the first chapter, is two-fold. There is a quantitative approach, which attempts to prove this thesis' hypotheses through linear regression, and a qualitative approach, which analyses whether the regression results hold true. Furthermore, the data collection process and the choice of the analytical method are delineated.

The second chapter explains the results of the findings of the regression analysis, which shows that in the majority of the cases Good Governance and GDP

⁸ Liz Ford, "Sustainable Development Goals: All You Need to Know," The Guardian, January 19, 2015, accessed January 15, 2019, <https://www.theguardian.com/global-development/2015/jan/19/sustainable-development-goals-united-nations>.

per capita indeed foster compliance with the different SDGs. Although the impact of the variables differs between various SDGs the majority are affected by the variables and particularly by Good Governance. It can also be seen that wealth in some instances can be a hinderance to development, especially, when it comes to the environment.

The third chapter is the qualitative approach, which examines three specific countries in the MENA region, namely the United Arab Emirates, Morocco and Iraq. In these countries, three SDGs are looked at more closely. This is done to verify whether the quantitative part is also applicable in natural settings, which seems to be true in most cases. Finally, the findings will be summarised in a final assessment.

The contribution of this thesis is the discussion of compliance literature in relation to the SDGs as well as showing two factors which impact compliance with the SDGs. Overall, it can be said that Good Governance is the main driver for compliance with the SDGs, which should be better supported by the UN and other international organisations.

Chapter 1: Theoretical and Methodological Chapter

Literature Review

Compliance Theories

Over time, compliance with International Law has puzzled scholars and policymakers alike. According to the scholar Louis Henkin, most states comply with International Law almost all of the time,⁹ but what factors influence this behaviour? This literature review will focus on International Relations theories that attempt to explain this behaviour. Later, development theories will be reviewed to evaluate their possible effect on compliance and development.

Before discussing the International Relations theories in more detail, compliance should be defined. One of the more widespread definitions, which also fits the purpose of this thesis, was developed by Ronald Mitchell. He puts forward that compliance is understood as conformity between state behaviour and a specific rule.¹⁰ Compliance is, furthermore, related to the concepts of implementation and effectiveness. Implementation is mostly considered as a process of practising international commitments. Compliance can, however, also occur without implementation if, for example, the current practices are already aligned with the international rule. Effectiveness is related to changes in behaviour owing to a certain rule. This implies that compliance can be low even if the effectiveness is high and vice versa.¹¹ Regarding compliance with the SDGs, the implementation dimension is more important since the evaluation of effectiveness is still highly difficult to determine due to the relatively recent adaption of the SDGs. The review of the International Relations literature shall determine which school is most apt to delineate compliance and, in particular, compliance with the SDGs.

⁹ Louis Henkin, *How Nations Behave* (Columbia University Press, 1979), 47.

¹⁰ Ronald B. Mitchell, *Intentional Oil Pollution at Sea: Environmental Policy and Treaty Compliance* (MIT Press, 1994), 30.

¹¹ Kal Raustiala and Anne-Marie Slaughter, "International law, International Relations and compliance," in *Handbook of International Relations*, ed. Walter Carlsnaes et. al. (SAGE Publications Ltd, 2002), 539.

The most prominent International Relations theory is realism. While many different strands of realism have been developed (for example, classical realism and structural realism), these variations usually share similar characteristics. Realists, first, believe that states are the main actors in the international system and that each state has certain interests. These interests are usually determined by external factors.¹² Besides this, each state has certain material power capabilities. Although the definition of power is contested, it is normally regarded as the ability of a state to convince others to do something they would not do otherwise. Additionally, they assume that the international arena is anarchic in nature, which implies that there is no central authority.¹³ According to these assumptions, realists assume that International Law only reflects the interests of powerful states and that powerful states will not comply with International Law if it is not in their interest. They, however, also presume that complying to International Law can make states better off under certain circumstances.¹⁴

These assumptions are the basis for most realist accounts, but some theorists have also added complementary factors. When Thucydides, a precursor to the realist thought, wrote about compliance, religion was still an essential factor in regard to compliance.¹⁵ For Niccolò Machiavelli, an early modern realist, the commitment to a treaty depended on the strategic interests and the relative power of states. He concluded that kings, due to the clout they could exert can break and end treaties as they please and will do so in accordance with their interests.¹⁶ In the mid-twentieth century, Hans Morgenthau, a traditional realist, stated that International Law could only exist if all parties adhere to it or if one power constellation enforces it. This implies that weak states can be coerced into complying with a treaty. He, furthermore, specified that shared norms are a potent force in International Law and

¹² Anne-Marie Slaughter, "International Law in A World of Liberal States," *European Journal of International Law* 6, no. 3 (1995): 507.

¹³ David Cox and Andrew O'Neil, "The Unhappy Marriage between International Relations Theory and International Law," *Global Change, Peace & Security* 20, no. 2 (2008): 208-209.

¹⁴ Richard H. Steinberg, "Wanted – Dead or Alive," in *Interdisciplinary Perspectives on International Law and International Relations*, ed. Jeffrey L. Dunoff and Mark A. Pollack (Cambridge University Press, 2013), 150.

¹⁵ Thucydides, *History of the Peloponnesian War*, translated by Rex Warner (Penguin Classics, 1954), Book 5.21.

¹⁶ Richard H. Steinberg, "Wanted – Dead or Alive," 151.

that rules that are backed by interests and norms are likely to generate compliance.¹⁷ Yet, Morgenthau admitted that International Law has mostly been observed, although he attributes this mainly to convergent interests and dominant power relations.¹⁸ These theories started to be criticised in the 1970s. One of the critics was Kenneth Waltz.

Waltz, a structural realist, tried to reduce the indeterminacy of the theory and started by claiming that all states are unitary actors.¹⁹ Moreover, he assumed that the prime interest of states is survival; suggesting that states are concerned with relative gains, namely, maintaining or acquiring power.²⁰ Waltz himself did not make any assumptions concerning International Law, but the neo-realist Stephen Krasner used his theory to produce a quite controversial claim about International Law. He declared that international regimes are not autonomous as states' interests and relative powers shape the content of such regimes. This assumption implies that International Law is a pure by-product of states' powers and interests. This approach might be useful in comprehending the effects of regimes on the structure of the international system, but it ignores the effects of International Law on matters other than structure.²¹

Despite the dominance of the realist perspective, there are a number of other theories challenging its views and emphasising the dominance of international institutions.²² Constructivism, for example, partly arose as a criticism to neo-realism but also to neo-liberalism. Constructivism countered the presumed significance of the distribution of power, the pursuit of power and wealth by focussing on ideas and how they shape identities, world politics and states. When the theory first appeared

¹⁷ Hans J. Morgenthau, "Positivism, Functionalism, and International Law," *American Journal of International Law* 34, no. 2 (1940): 261-280.

¹⁸ Beth A. Simmons, "Compliance with International Agreements," *Annual Review of Political Science* 1, no. 1 (1998): 79.

¹⁹ Kenneth N. Waltz, *Theory of International Politics* (Addison-Wesley, 1979), 116-128.

²⁰ Kenneth N. Waltz, *Theory of International Politics*, 105-128.

²¹ Stefan Krasner, "Global Communications and National Power: Life on the Pareto Frontier," *World Politics* 43, no. 3 (1991): 337-360.

²² Neomi Rao, "Public Choice and International Law Compliance: The Executive Branch Is a "They," Not an "It"," *Minnesota Law Review* 96, no. 1 (2011): 212.

in the 1980s, it was not taken very seriously; by the 1990s, its popularity had risen, and it has become another leading school in International Relations.²³

For constructivists, the world is historically and socially constructed, whereas this construction is also fluid and can change depending on actors' actions. As Wendt famously said: "Anarchy is what states make of it."²⁴ There are many different forms of constructivism: some prioritise agents, others emphasise structures; some highlight inter-state politics, others transnationalism. Nevertheless, there is some unity, for example, in their focus on the human consciousness and its function in the international community. It suggests that people's ideas are shaped by common knowledge, symbols and language and not material forces. International Relations are also formed by on-going processes of social practice and interaction, so, it also rejects the dominant assumption that the interests of states and other actors are shaped before social interactions.²⁵ Constructivists highlight the importance of culture, ideas, institutions and social norms, which they view as significant in shaping behaviour.

Behaviour through the constructivist lens is driven by the actor's social identity and not calculations of material cost and benefit. Hence, compliance happens when the rules are deemed appropriate. Identities of actors and their preferences are not fixed but are formed through interactions.²⁶ States are persuaded to comply with International Law as their preferences change due to mobilisation and social learning. The former asserts that domestic actors such as NGOs use international norms to pressure decision makers on the state level into compliance. Social learning, on the other hand, is a process through which actors acquire new interests and preferences, without considering material incentives.²⁷ This also suggests that social learning is most likely to take place between countries which exhibit a similar

²³ Michael Barnett, "Social Constructivism," in *The Globalization of World Politics: An introduction to International Relations*, ed. Baylis, John et. al. (Oxford University Press, 2009), 161-162.

²⁴ Alexander Wendt, "Anarchy is what States Make of it: The Social Construction of Power Politics," *International Organization* 46, no. 2 (1992): 391-425.

²⁵ Michael Barnett, "Social Constructivism," 162-164.

²⁶ Jeffrey L. Dunoff and Mark A. Pollack, *Interdisciplinary Perspectives on International Law and International Relations* (Cambridge University Press, 2013), 4-5.

²⁷ Asher Alkoby, "Theories of Compliance with International Law and the Challenge of Cultural Difference," *Journal of International Law and International Relations* 4, no. 1 (2008): 169-190.

cultural or ideological background. Actors who are the most receptive to such learning are those with little historical and cognitive baggage as their interests can more easily be shaped. Over time, nations do not only obey because of interest-related calculations but also because repeated obedience shapes their interests and they begin to value compliance.²⁸ Thus, constructivism can also explain why countries do not comply. As interests are shaped through interaction between states, those which do not comply have not internalised the norms yet. Socialisation, hence, occurs in the long-term, after continued exposure to international norms.

Liberalism is another theory that is, in contrast to the previous two, particularly in contrast to realism. The liberal tradition in International Relations highlights cooperation, peace and progress and has often been identified with individualism as it emphasises the freedom of the individual and moral equality of all.²⁹ Liberal philosophers, such as John Locke, assumed that human progress had great potential in modern civil society and capitalist economies, both of which could flourish in states which ensured the liberty of the individual.³⁰ Liberals, indeed, take a positive view of human nature and believe in reason. Nevertheless, they do accept that individuals are self-interested and competitive, but they also assume that individuals share some interests, which can make cooperation possible. The presumption is that when people employ reason, they can achieve mutually beneficial cooperation, on an intra-state level as well as internationally.³¹

In contrast to realism, but similarly to constructivism, liberals do not think that states are the most fundamental actor in the international community. Although liberals accept that states are important, it has introduced other crucial actors, such as individuals, social groups, intergovernmental organisations, officials, etc. These actors have different goals and ideas as well as varying degrees of influence on state policies.³² Liberals suppose that these actors can impact agendas and also

²⁸ Jeffrey T. Checkel, "Why Comply? Social Learning and European Identity Change," *International Organization* 55, no. 3 (2001): 553-581.

²⁹ Michael Doyle, *Ways of War and Peace: Realism, Liberalism and Socialism* (W.W. Norton, 1997), 206.

³⁰ Bruce A. Hunt Jr., "Locke on Equality," *Political Research Quarterly* 69, no. 3 (2016): 546-550.

³¹ V. N. Khanna, *International Relations* (Vikas Publishing House, 2013), 27-29.

³² Andrew Moravcsik, "Liberal Theories of International Law," in *Interdisciplinary Perspectives on International Law and International Relations*, ed. Jeffrey L. Dunoff and Mark A. Pollack (Cambridge University Press, 2013), 84.

tend to view International Relations as a function of domestic politics. They also assume that politics should mainly focus on the advancement of the domestic sphere instead of going to war with another state.³³ Compliance is, hence, examined by analysing the domestic politics of countries that might result in a state's decision to comply with International Law.

Anne-Marie Slaughter tried to establish a new liberalism as a theory of International Law. For her, the distinction between liberal and illiberal states is crucial. This differentiation is related to republican liberalism, which has its origins in Immanuel Kant's work. For Kant, a republic's main elements are civil liberties, the rule of law, the separation of power and representative governance.³⁴ Indeed, Slaughter also focuses on the domestic structures of a state and contends that these structures dictate the way nations behave and the respect they receive in international affairs. Since liberal states are more likely to resort to peaceful forms of dispute settlement such as arbitration, better compliance with international dispute settlement among these states can be expected.³⁵

Beth Simmons, who also highlights the significance of domestic structures, has argued that a country's legal culture is particularly important in regard to its willingness to comply. A strong domestic commitment to legal rules, for instance, suggests a greater willingness to comply with International Law.³⁶ This means that democracies are more receptive to law-based persuasion, such as judges' tendencies to comply with foreign rulings. In particular, new democratic regimes adhere to International Law because they are eager to please the international community.³⁷ Beth Whitaker also underlines the assumption of the importance of domestic structures as she found that poor domestic institutions hamper the ability of weak African

³³ John MacMillan, "Liberal Internationalism," in *International Relations Theory for the Twenty-First Century: An introduction*, ed. Martin Griffiths (Routledge, 2007), 21-22.

³⁴ Vesna Danilovic and Joe Clare, "The Kantian Liberal Peace (Revisited)," *American Journal of Political Science* 51, no. 2 (2007): 397-404.

³⁵ Anne-Marie Slaughter and Jose E. Alvarez, "A Liberal Theory of International Law," *American Society of International Law* 94 (2000): 240-250.

³⁶ Beth A. Simmons, "International Law and State Behavior: Commitment and Compliance in International," *American Political Science Review* 94, no. 4 (2000): 819-821.

³⁷ Kendall Stilles, *State Response to International Law* (Routledge, 2014).

states, for example, leading to poor anti-terrorism compliance.³⁸ Domestic institutions are of such high importance as the enforcement of all legal norms happens in the domestic realm.

In the post-war period, various new liberalisms emerged, such as neo-liberal institutionalism. Robert Keohane is the main proponent of neo-liberal institutionalism, which has been influenced by liberalism and realism alike. It accepts the realist argument that states are major unitary actors in an anarchic world, whereas anarchy in this case shapes states' preferences and actions. Neo-liberal institutionalism, furthermore, contends that anarchy does not suggest a lack of cooperation. Indeed, actors can create institutional frameworks that, by lowering their fear of being exploited by free riders, permit them to secure goals only obtainable through cooperation.³⁹ Therefore, neo-liberals also accept the importance of institutions and believe they can aid in making states cooperate. When actors realise that they are faced with a repeated scenario and that the transaction costs for improvised solutions are high, they quite rationally enter into binding contracts that can persevere despite shifting balances of power among member states.⁴⁰

Looking at the world today, the realist perception regarding compliance clearly seems obsolete. Coercion as a factor of compliance is not apt to explain the vast amount of treaties that have been implemented and the number of states that have complied with International Law. Additionally, realism has difficulties delineating where the interests of powerful states to comply with treaties have come from. Liberalism and constructivism present a more modern worldview.

Constructivism is more an ontology than a theory. It yields conclusions that in contrast to realism seem more optimistic than the real world. It focuses on societal issues presented by civil society and activists and highlights shared knowledge and information. It seems to provide a middle ground between other theories. Nevertheless, it does exhibit some flaws as it focuses more on non-state actors, hence, it still lacks consideration of the roles played by states.

³⁸ Beth Whitaker, "Compliance among weak states: Africa and the counter-terrorism regime," *Review of International Studies* 36, no. 3 (2010): 639-662.

³⁹ Robert Keohane, *After Hegemony* (Princeton University Press, 1984), 60-90.

⁴⁰ Sarah Elizabeth Kreps and Anthony Clark Arend, "Why States Follow the Rules: Toward a Positional Theory of Adherence to International Legal Regimes," *Duke Journal of Comparative and International Law* 16, no. 331 (2006): 340-42.

Liberalism, on the other hand, seems the most useful when trying to explain compliance, particularly regarding the SDGs. Most strands within liberalism highlight and examine domestic structures in relation to compliance. Domestic institutions are of such high importance as the enforcement of all legal norms happens in the domestic realm. It can also explain compliance and non-compliance, which relates to a high development stage of the country.

Hence, the next step in this literature review is to discuss development theories, mainly those that are related to liberalism, to analyse what kind of development is the most important in the advancement of a country and what factors influence this progress.

Development Theories

Early development theories emerged in the United States. In general, they describe how societal changes are best achieved. Throughout the 20th and 21st centuries these theories were mostly developed by scholars in the industrialised parts of the world, who were attempting to aid third world countries.

One of the earliest theories is the modernisation theory, which can be associated with liberalism. It was developed in the 1960s and it is used to explain the process of modernisation within societies. The theory discusses what factors are beneficial and which ones are a constraint for the economic development of a country. Science and technology are, for example, important aspects regarding the advancement of a country. Very influential in this area was the American economist Walt Whitman Rostow. He described development as a sequence that occurs in five successive stages: the traditional society, the preconditions for take-off, the take-off, the drive to maturity and the age of high mass consumption.⁴¹ Rostow regarded an increase in the share of savings and investment as critical factors that move an economy out of low-income stagnation onto the path of an industrialised country.⁴² The problem with this approach lies in its simplicity. It assumes that all

⁴¹ Walt W. Rostow, "The stages of Economic Growth," *The Economic History Review* 12, no. 1 (1959): 4-13.

⁴² Fidelis Ezeala-Harrison, *Economic Development: Theory and Policy Applications* (Greenwood Publishing Group, 1996), 105-108.

countries face the same challenges and move through the same stages.⁴³ Furthermore, it is very West-centric as it is modelled on the development of the wealthiest states. For the internal aspects of the progress, theories of structural change are more appropriate.

Structural-change theory can be identified with neo-liberalism and discusses the mechanisms due to which underdeveloped countries are able to transform their domestic economic structures from an emphasis on agriculture to a more modern and industrially diverse manufacturing and service economy.⁴⁴ The British economist Arthur Lewis stated in his model that the economy of an underdeveloped country is divided into two different sectors, the capitalist and the subsistence sector. When the capitalist sector expands, it extracts labour from the other sector. When the transition is finished, the agricultural wage is assumed to equal the manufacturing wage and no labourer has an incentive to switch.⁴⁵ The process of structural change, can, however, vary due to domestic and international reasons.

The dependency theory, which can be associated with Marxist theory, developed out of structuralist thinking and rose to prominence in the 1970s and 1980s. The main idea is that in a globalised world some countries are winners and others are losers, but the main issue is that countries become wealthier by exploiting weaker states through unjust means. The initial exploitive nature of rich countries or their neglect of underdeveloped countries leads to a system in which rich countries dominate poor ones.⁴⁶ The Guyanese Marxist historian Walter Rodney, for example, stated that the continuous exploitation of Africa by Europe led to its underdevelopment.⁴⁷ This approach, therefore, suggests that it would be best for developing countries to detach themselves from developed countries and pursue development on their own or at least trade with other countries in the same development stage.

⁴³ Giang Dang and Low Sui Pheng, *Infrastructure Investments in Developing Economies: The Case of Vietnam* (Springer, 2014), 16.

⁴⁴ Werner Nafzinger, *Economic Development* (Cambridge University Press, 2006), 137-138.

⁴⁵ S. K. Misra, *Economics of Development and Planning: Theory and Practice* (Himalaya Publishing, 2010), 263.

⁴⁶ Giang Dang and Low Sui Pheng, *Infrastructure Investments in Developing Economies: The Case of Vietnam*, 18.

⁴⁷ ROAPEadmin, "How Europe Underdeveloped Africa: The Legacy of Walter Rodney," ROAPE, June 16, 2017, accessed January 25, 2019, <http://roape.net/2017/06/16/europe-underdeveloped-africa-legacy-walter-rodney/>.

In the 1980s, a neo-classical counter-revolution emerged, which is in line with neo-realist thinking. Its main argument is that underdevelopment is a result of bad resource allocation, government interventions and corruption.⁴⁸ One important proponent of this theory is the economist Robert Solow. His model of economic growth implies that whether economies converge or not depends on how they differ. They will, in theory, converge to the same level of income, given that they have the same rates of savings, depreciation, labour force growth, and productivity growth.⁴⁹ Criticisms of this approach revolve around the fact that institutional and political realities in developing countries differ from the West and that better governance structures are needed to solve some of the market problems.

In the 1990s, the World Bank published a report entitled "Governance and Development," in which it put forward a definition of Good Governance.⁵⁰ The concept draws on neo-institutionalist theories by Douglass North and Mancur Olson, which have discovered a positive relationship between the quality of institutions, governance structures and economic growth.⁵¹ Governance describes a mode of interaction "in which government, other public bodies, private sector and civil society participate, aiming at solving societal problems."⁵² Government, in contrast to governance, refers to actors which execute and implement activities due to the authority that has legally and formally been given to them. Recently, a number of growth economists, development experts and policy makers have started to regard Good Governance as a requirement for sustained increases in living standards.⁵³ The UNDP followed in embracing the notion and has also suggested that Good Governance can aid countries in achieving human development. Other approaches have also focussed on the societal aspects to reach development.

⁴⁸ Fidelis Ezeala-Harrison, *Economic Development: Theory and Policy Applications*, 219.

⁴⁹ Werner Nafziger, *Economic Development*, 153-155.

⁵⁰ Sebastian Dellepiane-Avellaneda, "Review Article: Good Governance, Institutions and Economic Development: Beyond the Conventional Wisdom," *British Journal of Political Science* 40, no. 1 (2010): 2.

⁵¹ Veerle van Doeveren, "Rethinking Good Governance," *Public Integrity* 13, no. 4 (2011): 302-303.

⁵² Margarida Monteiro and Maria Rosario Partidario, "Governance in Strategic Environmental Assessment: Lessons from the Portuguese practice," *Environmental Impact Assessment Review* 65 (2017): 125.

⁵³ Sebastian Dellepiane-Avellaneda, "Review Article: Good Governance, Institutions and Economic Development: Beyond the Conventional Wisdom," 2.

The Human Development Theory created by the Indian philosopher and economist Amartya Sen went beyond the mainstream approach towards development, wealth or GDP, to viewing development as a process of expanding people's freedoms. Sen's capability approach is an evaluative framework for individual welfare and social arrangements, but it is also used to examine the phenomenon of underdevelopment or poverty. It proposes that social arrangements should be primarily evaluated according to the extent of freedom people have to promote or achieve 'functionings' they value. The central terms in the capability approach are 'functionings' and capability.⁵⁴ According to Sen, 'functionings' are "the various things a person may value doing or being."⁵⁵ 'Beings' refer to, for example, being well-nourished or being educated. 'Doings' can, for instance, include travelling and voting. Capabilities on the other hand are the "various combinations of 'functionings' that the person can achieve."⁵⁶ The purpose of development is to ameliorate people's well-being by increasing the range of things they can do to be healthy or participate in their communities. In short, it is about removing obstacles in people's lives.⁵⁷ Criticism revolves around the weakness in its assessment of social justice, inequalities, and human well-being, especially in the case of multicultural societies.⁵⁸

The most recent trend in development theory is the post-development theory, which is similar to the dependency theory. It questions the value of national economic development altogether and contends that the industrialised countries cannot and should not help the developing countries. People rather have to develop themselves, than relying on inappropriate support from the West. The German sociologist Wolfgang Sachs states that the concept of development is a Western concept that assumes that emerging states want to reach a similar development stage as developed countries without confirming whether they actually desire that.⁵⁹

⁵⁴ Martha Nussbaum and Amartya Sen, *The Quality of Life* (Oxford University Press, 1993), 30.

⁵⁵ Amartya Sen, *Development as Freedom* (Oxford University Press, 1999), 75.

⁵⁶ Amartya Sen, *Inequality Re-examined* (Clarendon Press, 1992), 40.

⁵⁷ Ingrid Robeyns, "The Capability Approach: A Theoretical Survey," *Journal of Human Development* 6, no. 1 (2005): 94-95.

⁵⁸ Charles Gore, "Irreducibly Social Goods and the Informational Basis of Amartya Sen's Capability Approach," *Journal of International Development* 9, no. 2 (1997): 242-246.

⁵⁹ Wolfgang Sachs, "Introduction," in *The Development Dictionary: A Guide to Knowledge as Power*, ed. Wolfgang Sachs (Zed Books, 1992), 1-5.

Reviewing the literature regarding development theory provides a rather clear picture, namely the importance of economic development and strong institutional structures to implement these advances. The two most convincing development theories are the structural change theory and the Good Governance theory. Both focus on the internal aspects of the country and the economy to reach a higher development stage or more growth. The Good Governance theory underlines the importance of functioning institutions to ameliorate a country's socio-economic and environmental situation, whereas the structural change theory looks at structural transformations within the country to accumulate wealth. Both seem fundamental for countries to implement change.

Development and compliance were discussed due to their importance for a proper fulfilment of the SDGs. It is evident that different schools propose different views of how compliance and development are achieved. Nevertheless, liberalism seems to be the most suitable one regarding compliance and development theories since it emphasises the domestic structures, which clearly are important for the fulfilment of the SDGs. The structural change theory and the Good Governance approach will be the basis of the hypotheses.

Theoretical Framework

The literature review has shown that the liberal theory of compliance is the most fitting to explain states' compliance with SDGs. Furthermore, liberal development theories and several aspects important for countries' development have been identified. Two factors are especially suitable for analysing compliance with the SDGs, namely Good Governance structures and the structural change within a country, measured in GDP per capita. Further details clarifying why these two variables were chosen for the hypothesis will be given in the following paragraphs. The first hypothesis discusses Good Governance as the main force of compliance with the SDGs.

Hypothesis 1: The better a nation's Good Governance, the higher its compliance with the Sustainable Development Goals.

The argument here is that Good Governance structures heighten the ability and commitment to comply with and implement the SDGs. Governance can be delineated as activities executed by organisations both governmental and non-governmental, such as civil societies, action networks and private-sector entities. Good Governance also fosters the implementation of rules and norms on the national and local levels, which is significant for the compliance with International Law.⁶⁰

Good Governance refers broadly to a set of qualitative characteristics relating to processes of rulemaking and their institutional foundations. The Good Governance Index encapsulates six different variables: 1. Voice and Accountability, which assesses the adherence to political and human rights; 2. Political Stability and Absence of Violence, which refers to the frequency of violence and terrorist attacks; 3. Government Effectiveness, which concerns the quality of public services; 4. Legal Framework, which is related to the politics that trigger the free market; 5. Law Enforcement, which regards the implementation of contracts and courts; 6. Control of Corruption, which investigates the abuse of offices.⁶¹

⁶⁰ Frank Biermann, et. al., "Integrating Governance into the Sustainable Development Goals," *Post2015/UNU-IAS Policy Brief*, no. 3 (2014): 3.

⁶¹ Engjell Pere, "The impact of Good Governance in the economic development of Western Balkan countries," *European Journal of Government and Economics* 4, no. 1 (2015): 28.

Indeed, it is not very likely that a country is able to improve people's lives without having quality institutions as it lacks the competences to implement change, which implies that Good Governance is crucial to guarantee efficient and fair resource allocations and that the government is able to respond to people's needs. Good Governance does not necessarily imply that the political regime is democratic as autocratic regimes can also have a relatively high Good Governance Index and democratic regimes can also have a rather low one. It is also not necessarily related to the economic development of a country because even rich countries can have very corrupt and malfunctioning institutions.⁶²

Good Governance has also been highlighted by the UN as a vital factor for the implementation of the SDGs. A UNDP report even stated that "the quality of governance plays a defining role in supporting the [economic, social and environmental] pillars" of the SDGs.⁶³ Academics also support this by stating that Good Governance is a crucial matter in sustainability.⁶⁴ Klaus Bosselmann et al. even claim that it is the prerequisite for realising sustainability.⁶⁵

Nevertheless, Good Governance is not viewed as effective by everyone. Derick Brinkerhoff and others, for example, assume that replacing bad institutions with good ones does not always work.⁶⁶ Democratic changes in the Middle Eastern and North African (MENA) region have often produced the opposite effect as replacing bad institutions with good institutions did not provide political and economic sustainability. It is important that it is a bottom-up process and not a top-down process in order to be effective and long-lasting.⁶⁷

In addition, another hypothesis that might explain the high commitment to compliance will be tested. This hypothesis is related to the structural change theory, which discusses how a country can transform its domestic economic structures to

⁶² Jong Woo Kang, "Benefits of Good Governance Outweigh the Costs," Asian Development Bank, April 26, 2017, accessed April 2, 2019, <https://blogs.adb.org/blog/benefits-good-governance-outweigh-costs>.

⁶³ Frank Biermann et. al, "Integrating Governance into the Sustainable Development Goals," 2.

⁶⁴ S. K. Sharma, "Governance for realising a sustainable society," *Social Change* 31, no. 1/2 (2001): 165-173.

⁶⁵ Klaus Bosselmann et. al., *Governance for Sustainability: Issues, Challenges, Successes* (International Union for Conservation of Nature, 2008), 6.

⁶⁶ Derick Brinkerhoff et. al., "Institutional Dualism and International Development: A Revisionist Interpretation of Good Governance," *Administration & Society* 37, no. 2 (2005): 201-219.

⁶⁷ Ilija Stojanovic et. al., "Good Governance as a Tool of Sustainable Development," *European Journal of Sustainable Development* 5, no. 4 (2016): 558-559.

reach a higher development stage. In this case it shall be represented through GDP per capita.

Hypothesis 2: The higher a state's GDP per capita, the higher its compliance with the Sustainable Development Goals.

The assumption is that Sustainable Development is likely to be a more compounding subject in countries with a higher GDP per capita. They should, therefore, be more committed to complying with the SDGs. Furthermore, they also have more means to execute compliance. However, countries with a low GDP per capita might be just as apt if they have Good Governance structures and can use the financial aid they receive from organisations or other countries effectively.

During the post-war efforts to reconstruct economies, GDP per capita was a suitable metric that served an imperative part in assessing economic growth and a country's production capacity. The growth of GDP was thought to mirror an increase in individual income, thus leading to an improvement of the wellbeing of citizens.

Yet, it has become clear, especially as economies evolve, that economic growth does not improve the lives of all citizens equally. High levels of corruption and different living standards in the rural and urban regions of a country can contribute to such unequal distribution.⁶⁸ Nevertheless, countries with a higher GDP per capita are less dependent on other countries to fund the implementation of the SDGs.

These hypotheses, which are not necessarily related, will be tested quantitatively and qualitatively in the following chapters. The following chapter also explain the methods used to test these hypotheses and explain the findings regarding them.

⁶⁸ Thomas Alexander et. al., *Sustainable Development Goals (SDGs) and GDP: What National Accounts Bring to the Table* (International Monetary Fund, 2018), 4.

Methodology

The theoretical framework outlined what factors could make countries more likely to comply with the SDGs, namely Good Governance and GDP per capita. This chapter provides an overview of the methodological approach, including the data collection process and the operationalisation of the variables. In order to analyse what influences the commitment of states to the SDGs, a regression analysis of the different SDGs and the explanatory variables (Good Governance and GDP per capita) will be used as a measurement of compliance.

Research Design

This study uses a mixed method design, which embodies quantitative and qualitative methods. Although the quantitative approach might demonstrate causality, it might be limited in reality. Therefore, the qualitative approach facilitates the exploration of the phenomenon (why states comply) and might be able to find other explanations. Thus, the mixed design study suits this research aim the best.

Data Selection Process

The quantitative approach part of this study will investigate what factors foster compliance with 16 out of the 17 SDGs. SDG 16 (Peace, Justice and Strong Institutions) will be excluded from the analysis due to its evident overlap with the Good Governance Index, hence, it is not entirely bound to be free. Compliance will be tested by the use of multiple linear regressions. The main variables will be the Good Governance Index and the GDP per capita. The control variables are the Democracy Index, provided by the Freedom House report and Trade Openness respectively. The values of three out of the four variables have been taken from

online sources, whereas the Good Governance Index was calculated with the data provided on the WGI website.⁶⁹

Sustainable Development Goals⁷⁰	
1	No poverty
2	Zero Hunger
3	Good Health and well-being
4	Quality Education
5	Gender Equality
6	Clean water and sanitation
7	Affordable and clean energy
8	Decent work and economic growth
9	Industry, Innovation and Infrastructure
10	Reduced Inequalities
11	Sustainable cities and communities
12	Responsible Consumption and production
13	Climate Action
14	Life below water
15	Life on Land
17	Partnership for the goals

Table 1. The 16 Sustainable Development Goals used in the analysis

The Good Governance Index ranges from numbers between 0 and 100, whereby 100 is the best score. The Freedom House Report divides countries into free (democracies), partly free (hybrid regimes) and not free (autocracies) and provides a number between -1 and 100 for each country, whereas 100 is the best grade achievable. Trade Openness shall be measured through the ratio of trade to GDP.

⁶⁹ The Good Governance Index has been calculated by using all six dimensions of governance and dividing them by 6.

⁷⁰ "About the Sustainable Development Goals," United Nations, 2019, accessed March 6, 2019, <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

The changes within a country's economy are depicted by GDP per capita. The control variables were chosen based on their similarities to the explanatory variables and the possibility that they might explain compliance better. Conceptually, the Democracy Index and Good Governance are similar. However, a poor or a corrupt country or a new regime might have difficulties establishing or keeping up good institutions, hence, the Good Governance Index seems to be the better explanatory variable, but the Democracy Index is a good control variable for it. Trade Openness was chosen as a control variable as it is widely assumed that open economies grow faster than closed ones. Hence, as the GDP per capita, it is an indicator for the economic power of a country.

Hypotheses	Explanatory variable	Control Variable
<i>1. The better a nation's Good Governance, the higher its compliance with the Sustainable Development Goals.</i>	Good Governance <i>Source: World Governance Index (2017).⁷¹</i>	Democracy Index <i>Source: Freedom House Report (2018).⁷²</i>
<i>2. The higher a state's GDP per capita, the higher its compliance with the Sustainable Development Goals.</i>	GDP per capita <i>Source: International Monetary Fund (2018).⁷³</i>	Trade Openness <i>Source: World Bank - Ratio of Trade to GDP (2016-2017).⁷⁴</i>

Table 2. Summary Explanatory Variables and Control Variables

⁷¹ "The Worldwide Governance Indicators," The Worldwide Governance Indicators, 2019, accessed March 5, 2019, <http://info.worldbank.org/governance/wgi/#home>.

⁷² "Freedom in The World 2018," Freedom House Report, 2018, accessed March 1, 2019, <https://freedomhouse.org/report/freedom-world/freedom-world-2018>.

⁷³ "GDP per capita, current prices," International Monetary Fund, 2019, accessed March 2, 2019, <https://www.imf.org/external/datamapper/PPPPC@WEO/OEMDC/ADVEC/WEOWORLD>.

⁷⁴ "Trade (% of GDP)," The World Bank Group, 2019, accessed February 3, 2019, <https://data.worldbank.org/indicator/ne.trd.gnfs.zs>.

As the UN has defined 169 targets and more than 300 indicators to monitor the progress of adherence, it is difficult to choose a specific target. Thus, the countries' overall score per SDG⁷⁵ was chosen to know how well the countries are doing in each SDG, whereas the higher the SDG score, the better the performance. However, for 37 countries out of the 193 countries that committed themselves to the SDGs no data has been provided by the UN. In the cases of four other countries, some of the explanatory variables were not available. Therefore, 152 countries instead of 193 countries are being examined in total. Despite the missing data in some countries, all continents are covered, and more than 150 countries are used in the analysis, meaning the analysis can be considered representative.

Africa (47)	Algeria, Angola, Bahrain, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Cote d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lebanon, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe
Asia and Pacific (42)	Afghanistan, Armenia, Australia, Azerbaijan, Bangladesh, Bhutan, Cambodia, China, Cyprus, Georgia, India, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Laos, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Oman, Pakistan, Philippines, Qatar, Russia, Saudi Arabia, Singapore, Sri Lanka, Tajikistan, Thailand, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, Vietnam, Yemen
Europe (37)	Albania, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Lux-

⁷⁵ J. Sachs et. al., *SDG Index and Dashboards Report 2018* (Bertelsmann Stiftung and Sustainable Development Solutions Network, 2018).

	embourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom
America (26)	Argentina, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, United States of America, Uruguay

Table 3. Countries included in the Quantitative Analysis

Linear Regression

As aforementioned, a multiple linear regression will be used to examine whether Good Governance and GDP per capita foster compliance with the SDGs. A multiple linear regression analysis examines the strength of the linear relationship between a set of independent variables (Good Governance and GDP per capita) and a single dependent variable (the different SDGs). Each SDG will be examined considering all four variables, then the correlation between the variables, the standardised regression coefficients, the adjusted coefficient of determination (R^2), the Type III Sum of Squares and the significance level will be determined.

The correlation matrix shows the strength of a linear relationship between paired data. Positive r values denote a positive linear correlation and negative values show a negative linear correlation. The closer the value is to 1 or -1 , the stronger the linear correlation. The statistician Jacob Cohen recommended that r values from 0.10 to 0.30 are to be interpreted as a weak correlation, 0.30 to 0.50 as a moderate correlation and if the r value is greater than 0.50 it is a strong correlation.⁷⁶

The adjusted R^2 (coefficient of determination) indicates the percentage of variability of the dependent variable which is explained by the explanatory variables.

⁷⁶ Jacob Cohen, "A Power Primer," *Psychological Bulletin* 112, no. 1 (1992): 156.

0% indicates that the model does not explain the variability of the response data around its mean and 100% states that it explains all of it.⁷⁷ The adjusted R^2 is a modified version of R^2 that has been adjusted for the number of predictors in the model; it increases only if the new term improves the model more than one would suppose by chance.⁷⁸ For this thesis, a model is considered significant if the adjusted R^2 is greater than or equal to 20%.

The F-test of overall significance indicates whether the linear regression model provides a better fit to the data than a model that contains no independent variables. The significance of the model has to be smaller than 0.001 so that the null hypothesis can be rejected. The null hypothesis states that the two explanatory variables have no effect on the model. Furthermore, the standardisation of the coefficient states which of the independent variables have a greater effect on the dependent variable.⁷⁹ Similarly, the Type III Sums of Squares demonstrate whether there is a unique significant effect of a variable after controlling for all the other variables.⁸⁰

After having looked at all these statistical values, the regression will be redone with the Good Governance and the GDP per capita if they are statistically significant. This will be done examine check whether the influence increases or decreases without the control variables and the non-significant variables.

⁷⁷ "Regression Analysis: How Do I Interpret R-squared and Assess the Goodness-of-Fit?," Minitab Blog. May 30, 2013, accessed May 29, 2019, https://blog.minitab.com/blog/adventures-in-statistics-2/regression-analysis-how-do-i-interpret-r-squared-and-assess-the-goodness-of-fit?hs_amp=true.

⁷⁸ "Multiple Regression Analysis: Use Adjusted R-Squared and Predicted R-Squared to Include the Correct Number of Variables," The Minitab Blog Editor, June 13, 2013, accessed March 01, 2019, <https://blog.minitab.com/blog/adventures-in-statistics-2/multiple-regession-analysis-use-adjusted-r-squared-and-predicted-r-squared-to-include-the-correct-number-of-variables>.

⁷⁹ Jim Frost, "How to Interpret the F-test of Overall Significance in Regression Analysis," Statistics By Jim, March 15, 2019, accessed April 9, 2019, <https://statisticsbyjim.com/regression/interpret-f-test-overall-significance-regression/>.

⁸⁰ Matt Cooper, "Anova – Type I/II/III SS Explained," Matt's Stats N Stuff, March 2, 2011, accessed March 15, 2019, <https://mcfromnz.wordpress.com/2011/03/02/anova-type-i-ii-iii-ss-explained/>.

Chapter 2: Quantitative Analysis

In this chapter, each SDG will be looked at individually. Additionally, it will be examined whether the Good Governance Index and the GDP per capita affect it. Tables and Data, including the correlation matrix, the Type III Sum of Squares, the standardised coefficient and the adjusted R^2 , can be found in the appendix. The regression analysis will be done twice if the variables foster compliance and the adjusted R^2 is higher than 20%. This is to test whether the influence on compliance might increase without the control variables and the not statistically significant variables in the model. It is only redone with the variables from the hypotheses and only if they do not have an adverse effect on the SDG. There are three dimensions of sustainable development, namely the economic, social and the environmental sphere. For simplicity, the 16 SDGs discussed are categorised into these three domains.

The first four SDGs and SDG 6 shall be put into the societal group, SDG 5, SDG 8, SDG 9, SDG 10, SDG 11 and SDG 17 are related to the economy. The other SDGs: SDG 7, SDG 12, SDG 13, SDG 14 and SDG 15 are part of the environmental SDGs. There are obviously overlaps between the different SDGs and the different domains, hence, this is only one of many possible categorisations. However, this classification is suitable for the research of this thesis.

Societal SDGs

The five SDGs classified as 'societal' impact aspects of people's daily lives within a country and particularly the lives of the most vulnerable. As shall be seen in the following paragraphs, Good Governance is vital for all of them and for two of them a country's wealth is also imperative for compliance.

SDG 1 – No Poverty

Regarding SDG 1, the Good Governance Index and the GDP per capita display a moderate to strong correlation with SDG 1, 0.491 and 0.447 respectively. Furthermore, their correlations with the SDG are higher than the correlations the control variables exhibit with the SDG. The adjusted R^2 shows that 25% of the variability of the dependent variable is explained by the four explanatory variables. The rest of the variability can be explained by other factors, which are not in this analysis, for example, the number of shelters for homeless people, needs-based benefits systems, etc. The Fisher's F test is used to determine whether the independent variables bring significant information to the model and in this case the probability corresponding to the F value is lower than 0.0001. This indicates that there is a lower than 0.01% risk in assuming that the null hypothesis is wrong. Based on the Type III Sum of Squares, the Good Governance Index is the only variable that brings significant information to explain the variability of the dependent variable. Additionally, the standardised coefficients allow a direct comparison of the relative influence of the explanatory variables on the dependent variable, and their significance. The standardised values state a one standard deviation increase in the Good Governance Index increases the value of SDG 1 by 0.521 standard deviation; a one standard deviation increase in GDP per capita increases the value of SDG1 by 0.155; a one standardised deviation increase in the Democracy Index decreases the value of SDG 1 by 0.145; a one standardised deviation increase in the Trade Openness of the country decreases the value of SDG 1 by 0.074. Overall, for SDG 1, the only statistically significant variable is Good Governance and although GDP per capita also exhibits a relatively high correlation, it is not statistically significant.

After having redone the regression only with the Good Governance Index, the standardised coefficient equals the correlation coefficient, 0.491. The adjusted R^2 is slightly lower and equals 0.236, which again shows that the Good Governance Index is the main driver for SDG 1 as although three variables have been removed the adjusted R^2 has not been reduced massively, meaning the other variables do not heavily impact compliance. *It can, therefore, be concluded that the better the governance of a country, the better its compliance with eliminating poverty.*

SDG 2 – Zero Hunger

In the case of SDG 2, the Good Governance Index and the GDP per capita also exhibit strong correlations with the goal, 0.741 and 0.653 respectively. The control variables, on the other hand, show a moderate to strong correlation. The variables with an adjusted R^2 of over 50% can explain the majority of the variability of the dependent variable. The F-Test also shows that the independent variables bring significant information to the model as $Pr > F$ is <0.0001 . The Type III Sum of Squares shows that the Good Governance Index is the most influential variable. The standardised coefficients are all positively related to SDG 2 and reaffirm that the Good Governance Index has the highest influence on SDG 2. A one standard deviation increase in the Good Governance Index increases the value of SDG 2 by 0.508 standard deviation; a one standard deviation increase in GDP per capita increases the value of SDG 2 by 0.237 standard deviation; a one standardised deviation increase in the Democracy Index increases the value of SDG2 by 0.049; a one standardised deviation increase in the Trade Openness of the country increases the value of SDG2 by 0.054. This means that Good Governance and a high GDP per capita affect SDG 2 more than the control variables, and that both are also statistically significant since $Pr > |t|$ are 0.0004 and 0.014 respectively.

Redoing the regression analysis with the Good Governance Index and GDP per capita shows a slightly higher standardised coefficient in the case of Good Governance, namely, 0.567. For GDP per capita, the standardised coefficient stays the same. The adjusted R^2 is marginally higher, this means that the two variables can explain the model even better than a model that also includes the control variables. The analysis reveals that the two variables strongly influence SDG 2. *It can be concluded that the better the governance and the higher the GDP per capita of a country, the better its compliance with eradicating hunger.*

SDG 3 – Good Health and Well-Being

The findings concerning SDG 3 are rather similar to those of SDG 2. The Governance Index and the GDP per capita again have a very strong positive corre-

lation with SDG 3, 0.782 and 0.718 respectively. The Democracy Index also displays a strong correlation around 0.5 with SDG 3, whereas the Trade Openness only has a weak correlation with the dependent variable. The adjusted R^2 indicates that 65% of the variability of SDG 3 is explained by the independent variables, which suggests that the model is a rather good fit. Based on the F-Test, it can also be stated that the independent variables bring significant information to the model. The Type III Sum of Squares shows that the most influential variable is that the Good Governance Index. This can also be seen looking at the standardised coefficients. A one standard deviation increase in the Good Governance Index increases the value of SDG 3 by 0.662 standard deviation; a one standard deviation increase in GDP per capita increases the value of SDG 3 by 0.290 standard deviation; a one standardised deviation increase in the Democracy Index decreases the value of SDG 3 by 0.095; a one standardised deviation increase in the Trade Openness of the country decreases the value of SDG3 by 0.045. Both the Good Governance Index and the GDP per capita are statistically significant.

Looking at the two-variable regression, it can be observed that the standardised coefficient for Good Governance is lower than in the four-variable model; however, the standardised coefficient for the GDP per capita has increased. The adjusted R^2 is the same. The analysis tells that the two variables powerfully influence the well-being and health agenda. *It can be concluded that the better the governance and the higher the GDP per capita of a country, the better its compliance with the promotion of health and well-being.*

SDG 4 – Quality Education

The correlation matrix shows that the Good Governance Index and the GDP per capita have a strong positive correlation with SDG 4, 0.663 and 0.577 respectively, whereas the correlations with the control variables, especially with the Trade Openness, are rather low. The adjusted R^2 indicates that nearly 45% of the variability of SDG 4 can be described by the independent variables. The F-Test shows that the independent variables bring significant information to the model. Type III Sum of Squares identifies the Good Governance Index as the most important and

only significant variable. The standardised coefficients assert that the Good Governance Index has the highest and only statistically significant influence on SDG 4. A one standard deviation increase in the Good Governance Index increases the value of SDG 4 by 0.663 standard deviation; a one standard deviation increase in GDP per capita increases the value of SDG 4 by 0.152 standard deviation; a one standardised deviation increase in the Democracy Index decreases the value of SDG 4 by 0.126; a one standardised deviation increase in the Trade Openness of the country decreases the value of SDG 4 by 0.028.

Redoing the regression analysis only with the Good Governance Index provides the same standardised coefficient for the independent variable and a slightly lower adjusted R^2 , implying that it is capable of explaining the model on its own. *To conclude, it can be stated that the better the governance of a country, the better its compliance with the provision of quality education.*

SDG 6 – Clean Water and Sanitation

In this case, the control variable for Good Governance, the Democracy Index, exceeds the correlation value of Good Governance and all the other variables with a correlation of 0.555, whereas the Good Governance Index also has a correlation of 0.454 with SDG 6. The GDP per capita and the Trade Openness have a very low correlation with the SDG. The adjusted R^2 indicates that 32% of the variability of SDG 6 can be described by the independent variables. The F-Test shows that the independent variables bring significant information to the model, hence, the null hypothesis can be discarded. Among the explanatory variables, based on the Type III Sum of Squares, the Democracy Index is also stated as the most influential one. Looking at the standardised coefficients, Good Governance impacts the SDG slightly more. Furthermore, it can be seen that with a correlation coefficient of -0.317, the GDP per capita also affects the SDG. A one standard deviation increase in the Good Governance Index increases the value of SDG 6 by 0.377 standard deviation; a one standard deviation increase in GDP per capita decreases the value of SDG 6 by 0.317 standard deviation; a one standardised deviation increase in the Democracy Index increases the value of SDG 6 by 0.363; a one standardised deviation increase in the Trade Openness of the country increases the value of SDG

6 by 0.051. Indeed, in this case, three variables are statistically significant, namely, the Good Governance Index, the GDP per capita and the Democracy Index. Nevertheless, according to the standardised coefficient, the GDP per capita has an adverse effect on compliance, hence it will not be included in the 2nd round of the regression, the same applies to the Democracy Index that despite being significant is less important to the analysis of compliance.

Redoing the regression only with the Good Governance Index shows a lower R² of only 20.1%, but the standardised coefficient is higher than before, augmenting to 0.454. Although the Democracy Index is more influential in achieving this SDG, *it can also be assumed that the better the governance of a country, the better its compliance with the assurance of clean water and sanitation.*

Economic SDGs

Six SDGs are included in this group. They discuss, for example, the sustainability of cities, innovation etc. For four out of the six SDGs, the Good Governance Index contributes to the explanation of the compliance with the SDGs. In two out of these four SDGs, the GDP per capita also contributes to explaining the variability of the dependent variable. In the case of two SDGs, namely SDG 10 and SDG 17, the independent variables cannot explain why states might comply with the SDGs.

SDG 5 – Gender Equality

The Good Governance Index and the Democracy Index have a strong positive correlation with SDG 5, 0.623 and 0.545 respectively. In this case, the GDP per capita exhibits a weaker correlation than the Good Governance Index, but also a weaker correlation than the Democracy Index. Nevertheless, the GDP per capita has a stronger correlation with the SDG than its control variable. The adjusted R² specifies that nearly 40% of the variability of SDG 5 can be described by the independent variables. The F-Test shows that the independent variables add significant information to the model. According to the Type III Sum of Squares, the Good Gov-

ernance Index is the most important variable in regard to this SDG. The standardised coefficients affirm this. A one standard deviation increase in the Good Governance Index increases the value of SDG 5 by 0.627 standard deviation; a one standard deviation increase in GDP per capita decreases the value of SDG 5 by 0.080 standard deviation; a one standardised deviation increase in the Democracy Index increases the value of SDG 5 by 0.079; a one standardised deviation increase in the Trade Openness of the country decreases the value of SDG 5 by 0.019. In this case, only the Good Governance Index is statistically significant with a $Pr > |t|$ of 0.0003.

Doing a regression analysis only with the Good Governance Index increases the adjusted R^2 slightly, from 0.381 to 0.385; the standardised coefficient equals the correlation coefficient. It is not surprising that GDP per capita does not significantly impact gender equality as money alone cannot change perceptions regarding gender. Good Governance is important to start the reforms necessary for gender equality, however, religion and culture may be other vital factors, such as the acceptance of the equal status of the two sexes, which have not been included in this analysis. *Nevertheless, it can be stated that the better the governance of a country, the better its compliance with the creation of gender equality.*

SDG 8 – Decent Work and economic growth

For SDG 8, it can be observed that Good Governance and GDP per capita exhibit very strong correlations with the SDG, 0.779 and 0.664 respectively. The other variables only display strong and moderate correlations. The goodness of fit is quite good for this SDG as the adjusted R^2 is over 60%. The F-Test also shows that the independent variables bring significant information to the model. The Type III Sum of Squares shows that the Good Governance Index variable brings significant information to the model, which is confirmed by the standardised coefficients. A one standard deviation increase in the Good Governance Index increases the value of SDG 8 by 0.694 standard deviation; a one standard deviation increase in GDP per capita increases the value of SDG 8 by 0.177 standard deviation; a one standardised deviation increase in the democracy Index decreases the value of SDG 8 by 0.054; a one standardised deviation increase in the Trade Openness of

the country decreases the value of SDG 8 by 0.004. Besides, both the Good Governance Index and the GDP per capita are statistically significant with a $Pr > |t|$ of < 0.0001 and 0.048 respectively.

Redoing the regression analysis only with Good Governance and GDP per capita shows that the adjusted R^2 increases slightly showing that the two variables on its own can contribute even more to the model than with the control variables. The standardised coefficient of the Good Governance Index decreases, and the one for GDP per capita increases in the two-variable model. *Overall, it is clear that the better the governance and the higher the GDP per capita of a country, the better its compliance with the establishment of a decent work environment.*

SDG 9 – Industry, Innovation and Infrastructure

Similar to SDG 8, the variables from the hypotheses exhibit very strong correlations with the SDG, 0.874 and 0.836 respectively. The other variables only display strong and moderate correlations. The goodness of fit is excellent for this SDG as the adjusted R^2 shows that nearly 90% of the variability of SDG 9 can be defined by the independent variables; not surprisingly, the analysis of the variance affirms that the null hypotheses can be rejected. Among the explanatory variables, based on the Type III Sum of Squares, the Good Governance variable is the most influential one. The standardised coefficients also indicate that Good Governance has the highest influence on SDG 9. A one standard deviation increase in the Good Governance Index increases the value of SDG 9 by 0.744 standard deviation; a one standard deviation increase in GDP per capita increases the value of SDG 9 by 0.414 standard deviation; a one standardised deviation increase in the democracy Index decreases the value of SDG 9 by 0.152 ; a one standardised deviation increase in the Trade Openness of the country decreases the value of SDG 9 by 0.141 . Strikingly, although the control variables have lower correlation coefficients and negative standardised coefficients, all four variables are statistically significant to the model. For example, although Trade Openness only exhibits a small impact, this is the first case it impacted an SDG so far.

Redoing the model without the control variables shows that the model can explain less of the variability of the SDG as the adjusted R^2 is reduced from 86% to

84%. Nevertheless, they still manage to explain nearly all of the variability. Although the control variables are statistically significant, their influence is rather small. *Hence, it can be concluded that the better the governance and the higher the GDP per capita of a country, the better its compliance with the promotion of Industry, Innovation and Infrastructure.*

SDG 10 – Reduced Inequalities

For SDG 10 all variables display rather weak correlations. Out of those, the correlation between the GDP per capita and SDG 10 is the highest with 0.366, which can be considered as moderate. The goodness of fit is also very low, the adjusted R^2 shows that only around 13% of the variability of SDG 10 can be defined by the independent variables. Nevertheless, the analysis of the variance table shows that the independent variables bring significant information to the model. Based on the Type III Sum of Squares, the GDP per capita is the only variable that brings significant information to the model. The standardised coefficients also indicate GDP per capita has the highest influence on SDG 10, although it is a rather low one. A one standard deviation increase in the Good Governance Index increases the value of SDG 10 by 0.014 standard deviation; a one standard deviation increase in GDP per capita increases the value of SDG 10 by 0.294 standard deviation; a one standardised deviation increase in the democracy Index decreases the value of SDG 10 by 0.005; a one standardised deviation increase in the Trade Openness of the country increases the value of SDG 10 by 0.137. Although the GDP per capita has a low correlation with the SDG and a low standardised coefficient value, it is still significant. However, the variability of SDG 10 explained by the variables is below the indicator of 20%, which has been set for this analysis. *Therefore, in this case the variables are not apt to explain compliance with the reduction of inequalities.*

SDG 11 – Sustainable Cities and Communities

In this case, the correlations between the Good Governance Index and the SDG are strong as well as between the Democracy Index and the SDG, 0.650 and 0.546 respectively. For the other two variables, GDP per capita and Trade Openness, the correlations can only be considered moderate. The goodness of fit is sound, since the adjusted R^2 shows that around 43% of the variability of SDG 11 can be outlined by the independent variables. The F-Test also shows that the independent variables bring significant information to the model. Based on the Type III Sum of Squares, the Good Governance Index is the most influential variable for this SDG. The standardised coefficients indicate that the Good Governance Index has the highest influence on SDG 11. A one standard deviation increase in the Good Governance Index increases the value of SDG 11 by 0.802 standard deviation; a one standard deviation increase in GDP per capita decreases the value of SDG 11 by 0.237 standard deviation; a one standardised deviation increase in the democracy Index decreases the value of SDG 11 by 0.030; a one standardised deviation increase in the Trade Openness of the country increases the value of SDG 11 by 0.121. Both the Good Governance Index and the GDP per capita are statistically significant; however, according to the standardised coefficients, the GDP per capita has an adverse effect on the SDG. Hence, the regression will only be redone with the Good Governance Index.

Redoing the regression analysis with the Good Governance variable reduces the adjusted R^2 only slightly to 0.418. The standard coefficient is the same as the correlation coefficient. *In conclusion, the better the governance of a country, the better the compliance of a country with the agenda of creating sustainable cities and communities.*

SDG 17 – Partnerships for the Goals

The independent variables only correlate weakly with the last SDG 0.444 and -0.135 respectively. The Good Governance Index and its control variable have a positive correlation with the SDG, whereas the GDP per capita and its control variable have a negative correlation with it. Looking at the correlations, it seems like

the independent variables do not affect compliance in this case. This is also underlined by the adjusted R^2 and the $Pr > F$. The adjusted R^2 is only 0.037, showing that almost nothing of the variability of SDG 17 can be explained by the independent variables. $Pr > F$ is 0.049, which means that the null hypothesis can barely be rejected. Surprisingly, GDP per capita exhibits a weak significance level of 0.012. Nonetheless, due to the low Adjusted R^2 the regression will not be redone. *In this case, the independent variables cannot explain compliance with this SDG.*

Environmental SDGs

Five SDGs are concerned with the environment and its protection. Most of these SDGs are dealing with the protection of land, species and the climate. In only one of the five cases the independent variables are able to explain compliance with the environmental SDGs. This clearly shows that for the advancement of the environment, factors other than Good Governance and a high GDP per capita are more relevant.

SDG 7 – Affordable and clean energy

In the case of SDG 7, Good Governance and GDP per capita exhibit strong correlations with the SDG, 0.601 and 0.564 respectively. The other variables only display weak and moderate correlations. The adjusted R^2 shows that nearly 40% of the variability of SDG 7 can be described by the independent variables and according to the F-Test the independent variables can indeed add significant information to the model. The Type III Sum of Squares signifies that the Good Governance Index brings significant information to explain the variability of SDG 7. The standardised coefficients indicate that Good Governance and GDP per capita have the highest influence on SDG 7. A one standard deviation increase in the Good Governance Index increases the value of SDG 7 by 0.486 standard deviation; a one standard deviation increase in GDP per capita increases the value of SDG 7 by 0.278 standard deviation; a one standardised deviation increase in the Democracy

Index decreases the value of SDG 7 by 0.065; a one standardised deviation increase in the Trade Openness of the country decreases the value of SDG 7 by 0.099. In this case, the Good Governance Index and the GDP per capita are the only statistically significant variables with $Pr > |t|$ of 0.004 and 0.015 respectively.

Redoing the regression analysis only with the Good Governance Index and the GDP per capita does not change the adjusted R^2 meaningfully. The standardised coefficient of the Good Governance Index is now 0.406, the one of GDP per capita is 0.266. Overall, it has been shown that Good Governance and GDP per capita are the main drivers for this SDG, which is also not unforeseen as clean energy is a complex subject. Good Governance is needed to organise and oversee the planning of the new energy resources and a relatively high GDP per capita is needed for its implementation. *In conclusion, the better the governance and the higher the GDP per capita of a country, the better its compliance with the provision of clean and affordable energy.*

SDG 12 – Responsible Consumption and Production

In the case of SDG 12, all the correlations are negative, which already indicates that more developed countries tend to be less responsible regarding consumption and production. The Good Governance and the GDP per capita show very strong negative correlations, -0.741 and -0.813 respectively, whereas the control variables only exhibit moderate results. The goodness of fit is fairly good, since the adjusted R^2 shows that more than 70% of the variability of SDG 12 can be outlined by the independent variables and F-Test shows that the independent variables bring significant information to the model. The Type III Sum of Squares and the standardised coefficients show that the GDP per capita is the most influential variable and the only significant one. The standardised coefficients also show that a one standard deviation increase in the Good Governance Index decreases the value of SDG 12 by 0.198 standard deviation; a one standard deviation increase in GDP per capita decreases the value of SDG 12 by 0.646 standard deviation; a one standardised deviation increase in the democracy Index decreases the value of SDG 12 by 0.104; a one standardised deviation increase in the Trade Openness of the country increases the value of SDG 12 by 0.037.

Although the GDP per capita impacts the SDGs, it is a negative influence. Hence, instead of explaining compliance, it is more apt to explain non-compliance. Redoing the regression is in this case not necessary *as it can already be concluded that the independent variables cannot explain compliance with countries' actions towards responsible consumption and production.*

SDG 13 – Climate Action

The correlations of the independent variables with SDG 13 are similar to those of SDG 12 since all the correlations are negative apart from the Democracy Index. The strongest correlation can be examined between the GDP per capita and the SDG (-0.461), the others are rather weak. The goodness of fit is also rather weak, as the adjusted R^2 shows that only around 28% of the variability of SDG 13 can be outlined by the independent variables. The analysis of the variance, nonetheless, indicates that the variables bring significant information to the table. The Type III Sum of Squares also shows that the GDP per capita is the most influential variable. According to the standardised coefficients, GDP per capita and the Democracy Index are statistically significant. A one standard deviation increase in the Good Governance Index decreases the value of SDG 13 by 0.213 standard deviation; a one standard deviation increase in GDP per capita decreases the value of SDG 13 by 0.508 standard deviation; a one standardised deviation increase in the democracy Index increases the value of SDG 13 by 0.410; a one standardised deviation increase in the Trade Openness of the country increases the value of SDG 13 by 0.102.

Redoing the regression analysis with GDP per capita and the Democracy Index in this case is not reasonable. Firstly, the control variable of Good Governance is significant and not the variable itself. Furthermore, the GDP per capita can explain non-compliance but not compliance with the SDGs. Indeed, it seems that decoupling economic performance from the level of climate pollution has not been reached yet. It seems like Good Governance cannot alleviate these issues and that the GDP per capita, instead of positively influencing compliance, influences it negatively. Although this is an interesting finding, it can be neglected due to the focus

of the study. *Hence, the independent variables are not apt to delineate countries' compliance with achieving climate action.*

SDG 14 – Life below Water

In the case of SDG 14, none of the correlations are particularly strong. Furthermore, the goodness of fit is very weak; the adjusted R^2 shows that only around 6% of the variability of SDG 14 can be outlined by the independent variables. The analysis of the variance, however, still states that the independent variables bring significant information to the model as $Pr > F$ is 0.014. Among the explanatory variables, based on the Type III Sum of Squares, variable Good Governance is the most influential. Nevertheless, it is not statistically significant, nor are any other variables. *Hence, in this case, the variables used cannot explain compliance with the protection of life below water.*

SDG 15 – Life on Water

SDG 15 as SDG 14 does not show strong correlations with the independent variables. In this case, all the correlations are quite weak. This is also underlined by the adjusted R^2 and the $Pr > F$. The adjusted R^2 is only 2%, showing that almost nothing of the variability of SDG 15 can be sketched by the independent variables. $Pr > F$ is 0.118, which means that the null hypothesis in this case cannot be rejected. Although the Trade Openness seems to be statistically significant, redoing the analysis is superfluous due to the low R^2 and the fact that the null hypothesis cannot be rejected. *It can be concluded that the independent variables cannot explain compliance in this case.*

Regression Conclusion

	Goodness of fit		Significance ^{81, 82}			
	Adjusted R ² 1st round	Adjusted R ² 2nd round	Good Govern- ance	GDP per capita	Democ- racy In- dex	Trade Open- ness
SDG 1	24.7%	23.6%	√			
SDG 2	56.6%	56.9%	√	√		
SDG 3	65.2%	65.2%	√	√		
SDG 4	44.8%	43.6%	√			
SDG 5	38.1%	38.5%	√			
SDG 6	32.3%	20.1%	√	(√) ⁸³	(√)	
SDG 7	38.7%	38.6%	√	√		
SDG 8	61.6%	62.1%	√	√		
SDG 9	86.4%	84.4%	√	√	(√) ⁸⁴	(√) ⁸⁵
SDG 11	43.3%	41.8%	√	(√) ⁸⁶		

Table 4. An Overview of the Results of the Regressions

Overall, a Good Governance structure and a high GDP per capita seem to impact compliance in regard to most of the SDGs. The SDGs not listed in the table either did not have an adjusted R² greater than 20% or the variables had an adverse effect on the SDG, or they were not statistically significant to the model. In 10 cases, one or both hypotheses were confirmed. Indeed, in 10 out of the 16 cases, Good Governance structures foster compliance. Its control variable, the Democracy Index

⁸¹ The red ticks symbolise the most influential variable, the black ticks signify other statistically significant variables.

⁸² The ticks in brackets have not been included in the 2nd round of the regression.

⁸³ Variables with an adverse effect on compliance.

⁸⁴ Variables with an adverse effect on compliance.

⁸⁵ Variables with an adverse effect on compliance.

⁸⁶ Variables with an adverse effect on compliance.

was only significant in 2 cases and looking at SDG 6, it was even more influential than Good Governance. It can also be observed that the GDP per capita fosters compliance with the SDGs in 5 cases. Its control variable, the Trade Openness, was only significant once.

Looking at the categories the SDGs have been classified into, it can be said that the GDP per capita and the Good Governance structures are particularly good at delineating compliance in certain domains of Sustainable Development. The two variables have a high influence on the societal SDGs but a low impact on the SDGs that are concerned with the environment and a medium impact on the economic SDGs. This in itself is already an interesting finding. Richer and better governed countries focus more on the people within their societies than the environment. This implies that Western countries are still not interested in saving the environment, whereas less developed countries, mostly due to the lack of financial means are better at keeping the environment safe but cannot properly protect their own people.

In conclusion, it can be said that the variables presented in the hypotheses have considerable influence on the compliance of states with the SDGs. To test these hypotheses in reality, the next chapter examines the Middle Eastern and North African (MENA) region and within the region three countries in particular to check whether the statistical results are also true when looking at a more localised example.

Chapter 3: Case Studies

Country	United Arab Emirates	Morocco	Iraq	Median
Good Governance Index	69.52	42.21	8.89	44.03
GDP per capita	69,382.00	8,933.00	17,659.00	13,583.00
Democracy Index	17.00	39.00	31.00	62.00
Trade Openness	172.81	83.73	76.00	75.22
SDG 3	87.55	73.83	64.15	76.66
SDG 5	60.45	42.60	44.73	67.91
SDG 12	44.08	71.26	76.34	73.30
Overall SDG score	69.22	66.27	53.75	67.94
Overall SDG rank	60	77	127	

Table 5. MENA countries' SDG scores

Considering the results from the last chapter, this chapter will delve more into compliance and Good Governance in the MENA countries. It will primarily focus on the effects of Good Governance as the last chapter has shown that it is the more decisive factor regarding compliance with the SDGs. The MENA region was chosen as it is still a developing region, which is also home to an array of different countries with varying degrees of economic, political and ecological problems, which could be ameliorated through the implementation of the SDGs.

The MENA region has no real standardised definition and different organisations define the region as consisting of different territories. The UN normally includes 20 states (Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, Yemen),⁸⁷ most of which can be classified as middle-income nations. The MENA region is, however, not as homogenous as commonly assumed.

It is, indeed, often only grouped together as the dominant religion is Islam and the dominant language is Arabic. Although the MENA countries do share a number of similar features, such as the Arab-Israeli conflict, the Gulf war, oil-price volatility and the rise of Islamist fundamentalism, the countries differ greatly in their geographic size, population density, amount of arable land, oil reserves, religious and linguistic diversity.⁸⁸ This diversity was also observable during the fulfilment of the MDGs, the predecessor of the SDGs.

Overall, it seems that the Arab region has achieved much regarding the MDGs, particularly in school and university enrolments as well as literacy. Significant issues, on the other hand, lie with the resolution of hunger, the eradication of poverty and the provision of water and sanitation in rural areas. Besides, the progress towards the MDGs was uneven and inequalities have in some cases even increased. This often occurred due to the political volatility of some countries or conflicts, which gave rise to unprecedented displacement, consequently thwarting progress regarding some SDGs, for example, poverty reduction.⁸⁹ Nevertheless, the region as a whole has done better than other developing areas and with some of the conflicts fading out, the region is in a good position to tackle the SDGs.

This chapter will consider the compliance with the SDGs by three countries, namely, the United Arab Emirates (UAE), Morocco and Iraq. These countries have dealt with different challenges over the years. The UAE, for example, was barely affected by the Arab Spring and achieved to circumvent any civil unrest. Morocco has so far managed to get most uprisings under control quite quickly, whereas Iraq

⁸⁷ J. Sachs et. al., *SDG Index and Dashboards Report 2018* (Bertelsmann Stiftung and Sustainable Development Solutions Network, 2018), 22.

⁸⁸ Edgar Göll, André Uhl and Jakob Zwierns, *Sustainable Development in the MENA Region* (MENARA Future Notes, 2019), 3-5.

⁸⁹ League of Arab States et. al., *The Arab Millennium Development Goals Report: Facing Challenges and Looking Beyond 2015* (United Nations Report, 2013), xi.

has had to deal with the highest number of conflicts. The countries also have different economic resources and different levels of governance. Since this part is mainly about discussing the level of governance, the three countries chosen, exhibit three rather different levels of governance, the UAE has a high one, Morocco a medium level of Good Governance and Iraq a low one.

This qualitative analysis is significant and revealing, as it helps to give more detail about the causality between Good Governance but also the GDP per capita and the SDGs. Furthermore, it might also aid in explaining what goes wrong politically, economically and socially, which results in countries not complying with the SDGs. The three SDGs, which will be considered in more detail, are from different domains: one deals with the social aspect, one with the economic, and one with the environmental one. The SDGs were not only chosen based on the domain they influence but also by what factors they are influenced; these SDGs are SDG 3, SDG 5 and SDG 12.

SDG 3 focuses on the assurance of healthy lives and the promotion of well-being for all people of all ages. This SDG is a combination of three different MDGs, namely, MDG 4 (Reduce child mortality), MDG 5 (Improve maternal health) and MDG 6 (Combating HIV/AIDs, malaria, and other diseases).⁹⁰ During the MDGs, progress in the reduction of child and infant mortality has been slow in the Arab region, but advances have been made and, moreover, the vaccination coverage has improved. The situation is relatively similar looking at maternal health; the progress has not been very quick, but the use of contraception has spread, and teenage pregnancies have decreased as well.⁹¹ The number of people infected with HIV has risen, but at the same time more people are now able to obtain access to treatments.⁹² In the previous chapter, it could be observed that Good Governance and the GDP per capita have a significant effect on the compliance with this SDG. Some countries in the region lack properly designed programmes or the management capacity to implement a proper health care system as they cannot use their resources suitably. This examination will analyse the progress and issues the three countries are experiencing concerning this SDG.

⁹⁰ "Category: Millennium Development Goals," MDG Monitor.

⁹¹ League of Arab States et. al., *The Arab Millennium Development Goals Report: Facing Challenges and Looking Beyond 2015*, 30-32.

⁹² League of Arab States et. al., 33-34.

SDG 5 considers the achievement of gender equality and the empowerment of all women and girls. This SDG was chosen because it is a topic of high interest in regard to the Arab region. Looking at MDG 3, which had the same objective as SDG 5, it can be seen that there has been some progress.⁹³ Although female enrolment levels have risen and, in some countries, they have increased beyond men's enrolment rates, the region still has the lowest female labour participation in the world. This is connected to the marital status and cultural norms about gender roles but also to the market structures and working conditions in the MENA region. Indeed, many women avoid the private sector upon marriage, which points to culturally conservative norms. Observations from Tunisia, Morocco, Jordan and Egypt show that women who want to join the private sector are constrained by the reluctance of employers to bear the cost of maternity leave, women's reluctance to commute and cultural factors such as which occupations and what kind of behaviour perceived as appropriate.⁹⁴ Furthermore, discriminatory laws that partly make women second class citizens still exist in nearly all of the states. It is clear that rising levels of education for women are necessary but not sufficient for removing gender inequality at home and in the labour market.⁹⁵ According to the quantitative part, compliance with this SDG is only related to the Good Governance indicator; however, clearly other factors such as religion, which have not been included in this thesis' model impact this SDG as well and might deteriorate or improve the score despite a high or low level of Good Governance.

SDG 12 is about ensuring sustainable consumption and production patterns, which before was partly covered by MDG 7 (ensure environmental sustainability). Regarding this MDG, progress was rather slow and only a few countries committed to reducing their emissions and protecting their environment.⁹⁶ Decoupling economic growth from resource use is one of the most critical and complex challenges facing humanity today, hence, this SDG is particularly difficult to achieve for many rich countries and transition economies. In general, the Gulf countries have been more wasteful with their resources and also have higher carbon dioxide emissions

⁹³ League of Arab States et. al., 22-25.

⁹⁴ Abbas El-Zein et. al., *The SDGs and the Arab World: Questions about Citizenship, Gender and Conflict* (International Conference on Sustainable Development, 2017), 6.

⁹⁵ League of Arab States et. al., xi.

⁹⁶ "Category: Millennium Development Goals," MDG Monitor.

than the other countries in the region. The high amount of extraction of natural resources will only worsen the issues of resource scarcity in the future. Slowly, more actions towards a greener energy future are being taken, which is dearly necessary.⁹⁷ It is particularly interesting to examine this SDG as according to the results from the previous chapter. In this case, Good Governance does not influence compliance with the SDG. In this case only the GDP per capita does; however, it affects the compliance negatively. The higher the GDP per capita, the lower the score for the SDG. Indeed, it seems that high-income countries are more wasteful than low-income countries.

The following paragraphs will discuss the three SDGs just presented and how well the countries comply with them. The influence of the Good Governance structures and the countries' wealth on compliance with these SDGs will be examined. Moreover, the political and socio-economic situation will be looked at closer to examine whether other factors might hinder compliance with the SDGs.

United Arab Emirates

The UAE are a constitutional monarchy and a federation of seven emirates, which each have its own king or sheikh. The countries gained independence following the Second World War and they were united in 1971 by Sheikh Zayed of Abu Dhabi, whereas Abu Dhabi now serves as a capital. The UAE is to this day governed by the seven sheikhs. The Federal Supreme Council, which consists of the rulers of the emirates, chooses the President and the Prime Minister, while the President is always the ruler of Abu Dhabi and the Prime Minister is always the ruler of Dubai.⁹⁸ This Council also appoints the ministers, while the laws are reviewed by the Federal National Council, which consists of 40 members, half of which are appointed by the Federal Supreme Council and the others by a small electoral college,

⁹⁷ League of Arab States et. al., 35-38, 69.

⁹⁸ Raissa Kasolowsky and Alisatir Lyon, "ACTBOX: What is the UAE's political structure?," Reuters, December 1, 2009, accessed May 10, 2019, <https://www.reuters.com/article/us-dubai-emirates-system/factbox-what-is-the-uaes-political-structure-idUSTRE5B02L620091201>.

which is only elected by some of the Emirati citizens.⁹⁹ This implies that real elections have never been held in the Emirates. However, some steps towards modernisation and a less autocratic regime have been taken.

The rulers have promoted some political and social reforms. Due to the high percentage of foreign nationals, the government has tried to push for more tolerance and equality. Furthermore, to some degree even women's rights are being promoted and women are put in more visible positions. Slow but continuous reforms such as these have aided in maintaining the political stability of the country.¹⁰⁰ The new president, Sheikh Khalifa, who took over the presidency in 2004, has additionally promoted a more pro-Western sentiment in the country.¹⁰¹

Another reason for the country's success despite its closed political system can be attributed to its large oil reserves. Oil was discovered in the UAE in the 1950s. Before that, the economy heavily depended on fishing and the pearl industry. The start of the oil exports in the 1960s quickly transformed the country's society and economy.¹⁰² The country's oil reserves can mostly be found in Abu Dhabi. In contrast to many of its neighbouring countries, the UAE has managed to partly diversify its economy. Whereas Abu Dhabi is the oil centre, Dubai serves as the commercial and financial hub of the region and Sharjah has a growing manufacturing sector. Tourism is also increasing and the UAE heavily invests in fostering this development.¹⁰³

Due to minor reforms the economic security net and the autocratic regime, it was mostly spared from the Arab uprisings. The few activists that called for more political liberalisation were quickly arrested or disappeared. The UAE's wealth partly protects it from economic pressures that have led to uprisings in other Arab coun-

⁹⁹ Ahmed Aly Khedr, "Overview of United Arab Emirates Legal System," January 2018, accessed May 15, 2019, https://www.nyulawglobal.org/globalex/United_Arab_Emirates1.html.

¹⁰⁰ Lori Plotkin Boghardt, *Narratives of Reform in the UAE* (The Washington Institute for Near East Policy, 2016), 2-3.

¹⁰¹ "United Arab Emirates Country Profile," BBC News, May 14, 2018, accessed March 5, 2019, <https://www.bbc.com/news/world-middle-east-14703998>.

¹⁰² "United Arab Emirates Country Profile," BBC News.

¹⁰³ "United Arab Emirates," Freedom House, 2012, accessed May 9, 2019, <https://freedomhouse.org/report/freedom-world/2012/united-arab-emirates>.

tries. The country's per capita income is among the highest in the world, and government reserves ensure that the needs of residents are met, including free housing, health care and education and heavily subsidised energy.¹⁰⁴

As aforementioned, the UAE is one of the wealthiest countries in the world and, moreover, considering its ranking in the Freedom House Index (17), it has a surprisingly high Good Governance Index (70), which can likely be attributed to its stability and rather low levels of corruption.¹⁰⁵ The UAE has already shown its commitment during the MDGs, whereas it has managed to do well in almost all of them. Especially successful were measurements towards higher enrolment rates, maternal and child health have been reduced as well as the spread of many communicable diseases.¹⁰⁶ Hence, it can be expected it also shows a strong commitment to comply with the SDGs.

Indeed, all SDGs have been linked to the country's national agenda pillar and have been aligned with the development plans of the different emirates, whereas the main focus will be on Dubai and Abu Dhabi as they are the principal political and economic hubs.¹⁰⁷ The country has affirmed its commitment to the SDGs at numerous occasions and has also participated at the 2018 High Level Political Forum, during which states can discuss their progress regarding the SDGs and present a report on the advancements. Since the country has a high GDP per capita and a relatively high Good Governance Index, keeping in mind the results from the last chapter, it can be assumed that it exhibits a high compliance with the SDGs. Its overall SDG score is nearly 70%, meaning it has achieved nearly 70% of the goals, supporting the just mentioned assumption.

SDG 3 is coordinated by the Ministry of Health and Prevention and is one of the six pillars of the UAE National Agenda. The standards of the Gulf country's

¹⁰⁴ Ingo Forstenlechner, Emilie Rutledge and Rashed Salem Alnuaimi, "The UAE, the "Arab Spring" and Different Types of Dissent," *Middle East Policy* 19, no. 4 (2012): 54-59.

¹⁰⁵ "UAE named least corrupt country in the Middle East," *Arabian Business*, February 23, 2018, accessed May 13, 2019, <https://www.arabianbusiness.com/politics-economics/390603-uae-named-least-corrupt-country-in-the-middle-east>.

¹⁰⁶ League of Arab States et. al., 3-39.

¹⁰⁷ United Arab Emirates National Committee on SDGs, *UAE and the 2030 Agenda for Sustainable Development: Excellence in Implementation* (United Arab Emirates National Committee on SDGs, 2017), 29.

health care are generally considered rather high and has benefited from fast economic growth. In 2017, the UAE donated nearly 9% of the Federal Budget to the health sector and it continues to invest heavily.¹⁰⁸ Already in 2014, there were around 80 hospitals in the UAE, and it has become a hub for medical tourists.¹⁰⁹ Indeed, the country has made noteworthy improvements regarding the reduction of child mortality and the current rate is 6 per 100,000 live births. Whereas the UAE also has low rates concerning HIV, tuberculosis and malaria,¹¹⁰ it has started to struggle with health issues arising from non-communicable diseases such as diabetes and child obesity.¹¹¹ Nevertheless, a number of campaigns and targets have been set up to address these issues. The Arab nation also aims to provide universal health coverage to all its citizens and regularly offers free vaccinations. These measures and other preventive care have contributed towards rendering people more health conscious.¹¹²

It can easily be seen that SDG 3 heavily depends on the wealth of a country in order to fund the establishments of hospitals, organise campaigns, etc. but it is also important to have institutions in place that can execute these plans and organise health campaigns. The UAE has clearly managed to use its administrative and monetary resources efficiently as it scored nearly 90% in the SDG 3 overall score, whereas the median score is 77%. This implies that the findings from the quantitative part are in line with the qualitative findings because a higher GDP per capita and a high Good Governance Index induce a higher compliance with SDG 3.

SDG 5, as seen in the previous chapter, is only dependent on Good Governance and although the gender equality in the UAE is still lacking, it has one of the best scores in the region. Under the constitution, women and men formally have

¹⁰⁸ United Arab Emirates National Committee on SDGs, *UAE and the 2030 Agenda for Sustainable Development: Excellence in Implementation*, 39.

¹⁰⁹ "Healthcare providers," The Official Portal of the UAE Government, December 16, 2018, accessed March 15, 2019, <https://government.ae/en/information-and-services/health-and-fitness/healthcare-providers>.

¹¹⁰ "Good Health and Well-being," The Official Portal of the UAE Government, December 17, 2018, accessed March 15, 2019, <https://www.government.ae/en/about-the-uae/leaving-no-one-behind/3goodhealthandwellbeing>.

¹¹¹ United Nations, *United Nations Common Strategic Framework for the United Arab Emirates 2016-2021 Supporting Equitable and Sustainable Development to Further UAE Ambitions as a Global Leader* (United Nations, 2016), 8.

¹¹² United Arab Emirates National Committee on SDGs, 57-58.

the same rights but there are still numerous discriminations. Women, for instance, are not allowed to travel without the consent of their husbands or fathers; wives are required to obey their husbands and violence against women mostly remains unreported or is ignored.¹¹³ The government has, nonetheless, attempted to include more women in public life. In 2012 the UAE made it compulsory for government agencies to include women as well as men and as of 2016, 23% of the seats in national parliaments were held by women.¹¹⁴ This agenda was also taken up in the private sector in 2016 and currently women make up 66% of public sector workers. The UAE also founded the Gender Balance Council in 2015, which aims to enhance gender equality across government entities. Furthermore, the UAE has invested in increasing women's education levels in the last years, which has resulted in one of the highest female-to-male university enrolment ratios in the world. However, the high ratios might also be related to the fact that more men than women study abroad as women are not allowed to travel without authorisation from their male guardians. Besides, as women are often neither expected nor allowed to work, they end up studying longer than men.¹¹⁵

It can be seen that Good Governance impacted some of the advances made in this area, such as the quotas in government, the creation of the Gender Balance Council and the support of female education. Yet, this progress is hindered by other factors and the dominant one in this case seems to be religion and culture. Religion seems to be an obstacle in the achievement of gender equality due to the country's adherence to Sharia, no political participation and the limited number of civil organisations. In particular, Sharia law does not allow the emancipation of women or their protection as intra-marital rape and domestic violence are not forbidden by law. The median score for gender equality is 67.9% and the UAE is slightly below it; whereas it tends to be a good performer for most of the other SDGs. However, for the just-mentioned reasons it has not managed to perform well in regard to this SDG. In relation to the model, this means Good Governance does increase compliance but other factors that have not been included in the model can act as a disturbing factor.

¹¹³ International Federation for Human Rights, *Women's rights in the United Arab Emirates* (International Federation for Human Rights, 2010), 5-6.

¹¹⁴ United Arab Emirates National Committee on SDGs, 47.

¹¹⁵ United Nations, *United Nations Common Strategic Framework for the United Arab Emirates 2016-2021 Supporting Equitable and Sustainable Development to Further UAE Ambitions as a Global Leader* (United Nations, 2016), 7.

SDG 12 is concerned with sustainable production and consumption, which has, for a long time, not been addressed in the state. The UAE is an ever-growing country with high consumption levels, multiple economic activities and high population growth, which is reflected in its actions. Indeed, on average an Emirati produces nearly 3 kg of waste per day, whereas Europeans only produced a little over 1 kg.¹¹⁶ Food waste is a particularly big concern in the UAE as it has to rely on imported goods due to a limited amount of domestic production. Estimations, however, state that around a third ends up on landfill sites. This does not only affect the climate through air pollution caused by the imports but also leads to food waste. More than 3.5 million tonnes of food are wasted every year.¹¹⁷ The UAE has started a food bank to counteract this situation. The food bank can give surplus from supermarkets or hotels to impoverished citizens. The importance of sustainable production and consumption is also targeted through the school curricula and public awareness campaigns.¹¹⁸ The UAE has also introduced waste-to-food projects, which convert waste into heat or electricity.¹¹⁹ Moreover, the country tries to reduce the amount of water used in agricultural production through modern irrigation systems.¹²⁰ Although the UAE has begun to make commitments to improve the situation, it is still one of the largest waste producers but these steps might help the country in the future.

The UAE has a score of 44%, which is well below the median of 73.3%. This is in accordance with the model. More waste is mostly produced when the country has means to do so. This means that more developed countries such as the UAE are faced with this issue. A more developed society desires broader diversity when it comes to consumption and production. To satisfy these needs, many goods have

¹¹⁶ "UAE seeks end to status as one of world's largest waste producers," Gulf Business, May 9, 2018, accessed May 11, 2019, <https://gulfbusiness.com/uae-seeks-end-status-one-worlds-largest-waste-producers/>.

¹¹⁷ Shayan Shakeel, "Waste reduction movement gains traction in UAE hospitality industry," Arabian Business, September 19, 2018, accessed February 27, 2019, <https://www.arabianbusiness.com/travel-hospitality/404621-waste-reduction-movement-gains-traction-in-uae-hospitality-industry>.

¹¹⁸ United Arab Emirates National Committee on SDGs, 111-112.

¹¹⁹ "Energy Efficiency," UAE SDGs, accessed April 29, 2019, <http://uaesdgs.ae/en/goals/responsible-consumption-and-production>.

¹²⁰ "Responsible Consumption and Production," The Official Portal of the UAE Government, December 23, 2018, accessed March 16, 2019. <https://www.government.ae/en/about-the-uae/leaving-no-one-behind/12responsibleconsumptionandproduction>.

to be imported. Nevertheless, many of these goods, especially food, are often wasted. The big financial means of the country have also allowed it to massively invest in the building sector, the energy sector and the tourism sector, which also uses up a lot of resources. For a long time, the environmental impact of these actions was not considered, but only whether they are profitable or not. Therefore, in this case, the GDP per capita has a negative effect on compliance.

Overall, in two out of the three SDGs discussed, the UAE behaved as predicted in the previous chapter, namely SDG 3 and SDG 12. Due to its Good Governance score and the high GDP per capita the establishment of a proper health care system went smoothly. SDG 12 shows that a country's wealth can hinder its approach to sustainability. Especially in the UAE, economic growth and resource use have been deeply intertwined. Newer approaches will likely enable the country to grow through renewable resources that are less harmful to the environment and again create workplaces. Regarding SDG 5, the UAE does not do as well as it should according to the quantitative analysis, but it does relatively well in comparison to other countries in the region. The UAE has reaffirmed the assumption that SDG 5 is not only impacted by the Good Governance structure but also by cultural factors and probably also historical factors.

In conclusion, the model has worked fine when looking at the UAE's case. Nevertheless, it is questionable whether the rather repressive regime will be able to continue to work without real support from its people and without women. It, however, seems to be doing well regarding compliance with most socio-economic issues. In the near future, the country will also have to increase its commitment to the environment.

Morocco

The kingdom of Morocco, currently ruled by King Mohammed VI, is a Muslim majority country, which has been independent from Spain and France since 1956. The initial cooperation between political parties and the King at the time, Moham-

med V, ended quickly, and it became evident that the King was not willing to introduce a constitutional monarchy.¹²¹ His son, Hassan II, who came to power in 1961, continued to enhance his monarchical powers and only allowed political parties that were loyal to the throne. The changing international environment in the 1990s, together with internal and external pressure led to an economic and political opening of the country. Consequently, Hassan II introduced a number of simple political reforms. Despite the repression and Human Rights abuses under his rule, he was often praised for keeping the nation stable.¹²² After his death in 1999, his son Mohammed VI succeeded to the throne, and the modest political reforms initiated by his father gained momentum.¹²³ The most significant changes include giving more freedom to the press, creating a public discussion of the appalling Human Rights practices under his father and granting more rights to women. In terms of economic improvements, he focussed mainly on liberalisation and modernisation, including rural electrification. Despite the significance and pace of these political reforms, the expectations of a smooth transition to democracy were not fulfilled, neither were the expectations of the end of repressions and persecution.¹²⁴ The modernisations, however, also positively affected the economy to some extent.

During the colonial period, Morocco's economy focussed mostly on agriculture and a partly on industrial products.¹²⁵ Nowadays, the Moroccan economy is comparatively liberal, and the service sector makes up for more than half of the GDP. The sectors with the highest growth rates are the tourism and the textile industry. It has managed to become one of the largest economies in the Arab world that is not dependent on oil. Furthermore, it receives huge support from the EU through its financial aid system. Despite these advances, the Moroccan society is characterised by inequalities and high unemployment rates; indeed, more than 40%

¹²¹ Mark Gasiorowski et. al., *The Government and Politics of the Middle East and North Africa* (Westview Press, 2016), 522.

¹²² Patricia Campbell, "Morocco in Transition: Overcoming the Democratic and Human Rights Legacy of King Hassan II," *African Studies Quarterly* 7, no. 1 (2003): 38-42.

¹²³ Kristina Kausch, "The European Union and Political Reform in Morocco," *Mediterranean Politics* 14, no. 2 (2009): 165-6.

¹²⁴ Pamela Abbott and Andrea Teti, *Literature Report for Morocco, Algeria, Tunisia, Libya, Egypt, Jordan and Iraq* (University of Aberdeen, 2016), 12.

¹²⁵ George Joffé, "Morocco's Reform Process: Wider Implications," *Mediterranean Politics* 14, no. 2 (2009): 151-164.

of young people are unemployed, whereas around 80% work in the informal sector.¹²⁶

Due to its societal and economic difficulties Morocco was not completely unaffected by the Arab Spring movements. The protesters demanded constitutional reform, more social justice and the reduction of the King's powers.¹²⁷ Mohammed VI, however, was quick to introduce minor reforms to calm down the protests.¹²⁸ He accepted changes proposed by a commission; for instance, he ceded his divine rights as a sovereign and he agreed to nominate a prime minister.¹²⁹ The new constitution also formally recognised the language and culture of Morocco's ethnic Berbers, which reduced one longstanding grievance that had also fuelled the country's revolution.¹³⁰ In reality, though, the King retained ultimate power, showing how adept the regime is at handling situations that threaten its position.¹³¹

At the same time, Morocco is trying to reform its socio-economic situation and has already achieved some success when dealing with the MDGs. Morocco has achieved significant progress over the timeframe of the MDGs, regarding the reduction of poverty rates, child and maternal mortality and an increase in the level of education.¹³² Its biggest issues were and still are the huge disparities between the different regions and particularly between the rural and the urban areas. In Drâa-

¹²⁶ Charlotte Bozonnet, "Le Maroc, pays le plus inégalitaire d'Afrique du Nord," *Le Monde Afrique*, May 1, 2019, accessed May 9, 2019, https://www.lemonde.fr/afrique/article/2019/05/01/le-maroc-pays-le-plus-inegalitaire-d-afrique-du-nord_5457031_3212.html.

¹²⁷ Alejandro López, "Moroccan Government Fears Outbreak of Mass Protests," *World Socialist Web Site*, February 03, 2011, accessed March 16, 2019, <https://www.wsws.org/en/articles/2011/02/moro-f03.html>.

¹²⁸ Thierry Desrues, "Mobilizations in a hybrid regime: The 20th February Movement and the Moroccan regime," *Current Sociology Monograph* 61, no. 4 (2013): 414.

¹²⁹ "Moroccan Monarch Pledges Reform," *Al Jazeera*, March 09, 2011, accessed March 22, 2019, <https://www.aljazeera.com/news/afrika/2011/03/201139204839521962.html>.

¹³⁰ Paul Adrian Raymond, "Morocco's Berbers Urge Broader Reforms," *Al Jazeera*, May 06, 2014, accessed March 20, 2019, <https://www.aljazeera.com/indepth/features/2014/03/moroccos-berbers-urge-broader-reforms-2014357321228806.html>.

¹³¹ Denis J. Sullivan and Sarah A. Tobin, *Understanding Today's Middle East: Peoples & Places of the Arab* (Boston Consortium for Arab Region Studies, 2014), 2-6.

¹³² Abdelghni Lakhdar, "Sustainable Development: What Strategy for the SDGs in Morocco?," *Ideas for Development*, June 11, 2018, accessed March 16, 2019, <https://ideas4development.org/en/mdgs-morocco/>.

Tafilalet, for example, historically one of Morocco's poorest regions, access to healthcare lags behind other regions by as much as 30 percentage points.¹³³

Morocco's Good Governance Index is in the middle range, so a medium amount of compliance can be expected. It also has a relatively low GDP per capita but as the GDP per capita is often less influential than the Good Governance Index effect, it should not hinder the country's compliance. Indeed, in 2018, Morocco has managed to gain an overall score of 66.3, which means that it has achieved 66% of the goals, which is in line with its Good Governance Index and the GDP per capita. This score even makes it the top performer in Africa.

Morocco's visible commitment to comply also seems quite good. The country attended the High Level Political Forum in 2016 and it is committed to attending the High Level Political Forum again in 2020.¹³⁴ The fact that Morocco voluntarily wrote a national review regarding the SDGs can be seen as an indicator of its commitment to them and in the review it also reinforced that the SDGs will play an important role in the development politics of Morocco in the next 15 years. According to the review, consultations have shown that sectoral strategies in Morocco are already committed to reaching some of the targets proposed by the SDGs. Although the government in Morocco is interested in complying with and working towards the SDGs, a problem seems to be the lack of a comprehensive and clear approach.¹³⁵ Health care in Morocco, for example, is still not available to everyone. Around 60% of Moroccans have health care coverage, however, the access is uneven. In general, access to the health care system is imbalanced, as there are around 130 hospitals provided by the government but more than 300 private ones, which are only accessible to a few. Additionally, the rural areas in particular have difficulties with health care access as there is a lack of health professionals and nearly a quarter of the population lives more than 10 kilometres away from a primary care centre. To counteract this situation in the short term, mobile health centres have been established

¹³³ Intissar Fakir and Sarah Yerkes, "Governance and the Future of the Arab World," Carnegie Endowment for International Peace, accessed April 18, 2019, <https://carnegieendowment.org/2018/10/16/governance-and-future-of-arab-world-pub-77501>.

¹³⁴ The Permanent Mission of Morocco to United Nations Department of Economic and Social Affairs, February 6, 2019, New York, https://sustainabledevelopment.un.org/content/documents/21672Morocco_letter_VNR_2020.pdf.

¹³⁵ Marina El Khoury, *Post-Project Evaluations for The United Nations Democracy Fund* (United Nations Democracy Fund, 2018), 17.

to provide patients in remote areas with better services.¹³⁶ Furthermore, many vaccinations, like those for malaria and tuberculosis, are offered free of charge. Indeed, the nation has managed to reduce the number of communicable diseases, but the percentage of non-communicable diseases has increased.¹³⁷ The country also still has too few medical staff; there is not even 1 doctor for every 1000 inhabitants. Nevertheless, more doctors are being trained but still not enough. Looking at births, only around 73% are attended by skilled health personnel, hence, it is not surprising that maternal and child mortality rates are rather high. The maternal mortality rate is as high as 121 per 100,000 live births. The country, nonetheless, has enough resources to increase the coverage, as it receives aid from the European Union and other organisations, but it is missing the personnel and the know-how to execute the plan.¹³⁸

Although the situation might seem worse than in the UAE or developed countries, Morocco has an overall score of 74% for this SDG, which is actually around the median and in line with Morocco's means of a lower middle-income country with a medium high Good Governance Index. SDG 3 compliance is increased by a high GDP per capita and a high Good Governance Index. Morocco has a medium Good Governance Index, which suggests that it is relatively committed to complying, but this commitment might be hindered by bad governance structures. This seems to be exactly the case in Morocco. It has partly managed to circumvent its financial issues due to financial aid, which it mostly receives from the European Union. However, without better governance structures, the money might not be used where it should be and the plans to implement a good health system cannot be fully executed. Good Governance structures are also for crucial SDG 5.

¹³⁶ "Access to health care broadens in Morocco," Oxford Business Group, 2019, accessed May 11, 2019, <https://oxfordbusinessgroup.com/overview/forward-steps-access-care-has-broadened-and-infrastructure-improved-challenges-remain>.

¹³⁷ "Developments and challenges in Morocco's push towards universal health care," Oxford Business Group, 2019, accessed May 11, 2019, <https://oxfordbusinessgroup.com/overview/increasing-coverage-developments-and-persisting-challenges-push-towards-universal-health-0>.

¹³⁸ Zoe H. Robbin, "Lack of Doctors Makes Morocco's Health Coverage Plan Useless," The Globe Post, June 07, 2018, accessed March 18, 2019, <https://theglobepost.com/2018/06/07/health-care-morocco-insurance/>.

The Moroccan Constitution contains a commitment to the prohibition of gender discrimination and highlights the equality between men and women. Furthermore, in general child marriage is forbidden and in contrast to the UAE, women do not require a male guardian to travel or have some decisions sanctioned. Nevertheless, rape within marriage is not considered a crime and polygamy is still allowed under certain circumstances. Women legally also have the right to equal pay for the same work as men and to get paid maternity leave, but they are restricted from working in certain sectors, such as mining, and despite legislations, they often receive less pay for similar work.¹³⁹ In Morocco especially education is an issue since it is still lacking in many areas and girls, particularly those in the rural areas, are at a disadvantage. According to statistics, nearly 80% of girls in the rural areas aged 12-14 are not receiving an education. Hence, there are also fewer job opportunities for women in the rural areas due to their lack of education and their location. In some cases, employers are also reluctant to hire women. However, since the Arab Spring, more women are included in parliament and political positions.¹⁴⁰ Overall, 66% of men but only 25% of women are working in the formal economy.¹⁴¹

The overall SDG score is 43%, which is well below the median of 67.9%. The problem in this case is not only the Moroccan culture that discriminates against women but also the fact that quality education is not accessible for many, especially not for women. Besides, education is an important variable included in the calculation of SDG 5, which can partly explain the country's low score. Besides, more women work in the informal sector than the formal one, which is also not included in the calculations. Overall, SDG 5 is a variable dependent on many factors, but Good Governance can help push countries in the right direction. In contrast to the UAE's case, religion seems to play a smaller role regarding the gender disparities. It appears that the general lack of education and government actions heavily impact SDG 5 in Morocco.

¹³⁹ UNFPA Morocco, *Morocco & Gender Justice & The Law* (United Nations Population Fund Morocco, 2018), 8-9.

¹⁴⁰ Meriem El Haitami, "Women in Morocco: political and religious power," Open Democracy, January 31, 2013, accessed May 13, 2019, <https://www.opendemocracy.net/en/5050/women-in-morocco-political-and-religious-power/>.

¹⁴¹ Anta Ndoye et. al., "Morocco: Reducing Gender Inequality Can Boost Growth," IMF News, March 1, 2017, accessed April 29, 2019, <https://www.imf.org/en/News/Articles/2017/03/01/NA030117-Morocco-Reducing-Gender-Inequality-Can-Boost-Growth>.

Sustainable Consumption and Production in Morocco is included in its National Framework, but to achieve it the nation also receives aid from the EU. One programme, for example, aims at rendering businesses more resource efficient and use greener production methods.¹⁴² Sustainable Consumption is particularly highlighted in relation to Morocco's agricultural policy and promoting consumers' awareness of the possibility of buying environmentally friendly goods.¹⁴³ There are also projects that support hotels in the country in reducing their ecological footprint, reducing the water consumption and using more organic products. One of Morocco's biggest issues lies with waste. As of 2016, only around 85% of urban household waste was collected¹⁴⁴ and the overall recycling rate was merely 10%, whereas in the EU nearly 30% of the municipal waste was recycled in 2016.¹⁴⁵ Furthermore, in Morocco recycling is mainly possible due to "trash pickers" who collect recyclables on the street in order to sell them to landfill sites.¹⁴⁶ Some measures have already been taken to tackle some of these issues. Probably the most outstanding measure in Morocco was a complete ban on plastic bags, which came into effect in 2016.¹⁴⁷ The number of bags distributed has been drastically reduced; nevertheless, many people still give them out for free at markets.¹⁴⁸ The African country is also receiving aid and loans totalling 500 million dollars from the World Bank. Goals set by the two

¹⁴² "UNIDO recognized for support for resource-efficient and cleaner production in Morocco," UNIDO, May 8, 2019, accessed May 2, 2019, <https://www.unido.org/stories/unido-recognized-support-resource-efficient-and-cleaner-production-morocco>.

¹⁴³ "Sustainable Consumption and Production: Morocco Launches National Plan and Sectorial Plans on Building and Food," EU Neighbours South, December 9, 2016, accessed April 29, 2019, <https://www.euneighbours.eu/en/south/stay-informed/news/sustainable-consumption-and-production-morocco-launches-national-plan-and>.

¹⁴⁴ "Modernisation of Morocco's Waste-management Infrastructure Receives International Support," Oxford Business Group, July 30, 2018, accessed October 7, 2018, <https://oxfordbusinessgroup.com/analysis/waste-not-international-financing-supports-modernisation-waste-management-infrastructure-and>.

¹⁴⁵ "Municipal Waste Statistics," Eurostat, July 2018, accessed October 7, 2018, https://ec.europa.eu/eurostat/statistics-explained/index.php/Municipal_waste_statistics#undefined.

¹⁴⁶ Bénédicte Florin and Mustapha Azaitraoui, "The Small Hands of Moroccan Recycling," The Conversation, September 26, 2018, accessed October 9, 2018, <http://theconversation.com/the-small-hands-of-moroccan-recycling-74878>.

¹⁴⁷ Sebastian Rosemont et. al., "Lessons from the Countries Fighting to Kick the Plastic Bag Addiction," Earth Day Network, April 24, 2018, accessed October 10, 2018. <https://www.earth-day.org/2018/04/20/lessons-from-the-countries-fighting-to-kick-the-plastic-bag-addiction/>.

¹⁴⁸ Carin van Uffelen, "Morocco Proves: Ban on Plastic Bags Is Pointless without Enforcement," Plastic Soup Foundation, July 02, 2018, accessed October 8, 2018, <https://www.plasticsoupfoundation.org/en/2018/07/morocco-proves-ban-on-plastic-bags-is-pointless-without-enforcement/>.

parties are, for example, increasing recycling by 20% by 2020, improving working conditions, restoring landfill sites and the inclusion of informal workers.^{149,150}

Despite its waste problem, the country scores relatively well on the SDG. At 71% the score is a little bit lower than the median and, indeed, matches the country's data exactly. Although the country has to improve its measures concerning waste, it does not have a huge industry; hence, many of the products are still produced without a huge impact on the environment. Furthermore, even the trash is picked up by humans and not cars, meaning its air pollution rates are relatively low. If Morocco manages to maintain its economic growth its production and consumption might end up being less responsible due to the link to the industry, which will have to be built. As the score is in the middle-range, and the GDP per capita is in the middle range as well, the model seems to fit.

In general, Morocco's performance was as expected in regard to SDG 3 and SDG 12. In both cases it performed averagely, which matches its Good Governance Index and the GDP per capita. If the country manages to better its governance structures, the health care system, for example, will quickly be improved. However, this would need the political will from the upper class and the king. Regarding SDG 5, the country does not do as well as it should according to the quantitative analysis, as its score is well below the median. This reaffirms the presumption that other factors apart from Good Governance influence the emancipation of women and their integration into society. The country has so far managed to keep the environment relatively clean. Nevertheless, more socio-economic problems within the country, such as the exclusion of the Berbers, need to be tackled through the SDGs as well so that the country can advance properly. The model appears to be useful and has provided accurate data looking at this Arab country.

¹⁴⁹ "Solid Waste Management," World Bank, September 2018, accessed October 10, 2018, <http://www.worldbank.org/en/topic/urbandevelopment/brief/solid-waste-management>.

¹⁵⁰ Catherine Hansen, "Waste Management in Morocco," EcoMENA, November 13, 2017, accessed October 10, 2018, <https://www.ecomena.org/waste-management-morocco/>.

Iraq

After the first World War and the fall of the Ottoman Empire, Iraq became a British Protectorate in 1920. The Iraqi monarchy was established a year later, and the country regained its independence in 1932. The monarchy, however, only lasted until the 1950s when it was overthrown in a military coup. General Saddam Hussein acceded to the Presidency in 1979 and ruled the country dictatorially until the collapse of his regime, which was caused by a US-led military action in 2003. According to the constitution, Iraq has since then been a democratic federal republic.

Despite the new government, violence in Iraq increased and violence between the Iraqi Sunni and Shia factions became evident.¹⁵¹ In 2006, the Sunni organisation Al-Qaeda bombed the Al-Askari Mosque, a Shia holy site. This resulted in a number of Shia reprisals against Sunnis followed by Sunni counterattacks. The violence only started to decline again in 2008-2009. Nevertheless, the Shias continued to exclude other sectarian groups, which led parts of Al-Qaeda to regroup and found ISIS. In 2014, ISIS had taken control of a third of the country. Between 2015 and 2017, Iraqi security forces, supported by the US, gradually retook territory from ISIS and in 2018 the government regained control over Iraqi territory and national elections were held. The new president is a Kurdish politician, the speaker is a Sunni law maker, and the new prime minister is Shia, which is a step in the right direction towards the inclusion of all sectarian groups. The current cabinet, however, is regarded as highly technocratic.¹⁵² Furthermore, strengthening governance, dealing with corruption and socio-economic reforms are crucial to the country's long-term success and stability, which so far has not happened.

Originally, Iraq's biggest sector was the agricultural sector, until the discovery of oil at the beginning of the 20th century. The country has since become highly dependent on the oil sector and it is one of the largest oil producers in the world.¹⁵³ The damage done to the infrastructure due to the conflicts is a challenge for the

¹⁵¹ "Iraq Country Brief," Australian Government Department of Foreign Affairs and Trade, April 18, 2019, accessed April 29, 2019, <https://dfat.gov.au/geo/iraq/Pages/iraq-country-brief.aspx>.

¹⁵² Sarhang Hamasaeed and Garrett Nada, "Iraq Timeline: Since the 2003 War," United States Institute of Peace, February 14, 2019, accessed April 29, 2019, <https://www.usip.org/publications/2019/02/iraq-timeline-2003-war>.

¹⁵³ "Iraq," Coface, February 2019, accessed May 9, 2019, <https://www.coface.com/Economic-Studies-and-Country-Risks/Iraq>.

country but it allows for the provision of more services and job opportunities to the population. The economy is also mostly state-run and around 90 percent of government revenues and more than 60 percent of the GDP come from the oil sector.¹⁵⁴ The economy, however, will continue to suffer due to uncertainty. The political risks following the elections are still unknown and could hinder economic growth in the short term.¹⁵⁵

Due to obvious difficulties within the country, it was not spared by the Arab Spring either. In 2011, Iraqis started to demonstrate against the government due to its inability to better people's lives, the presence of corruption and the foreign occupation. The protests were even cross-sectarian. Nevertheless, over time the protests became fiercer and led to the Iraqi civil war in 2014.¹⁵⁶

Iraq has slowly realised that at least some of its socio-economic problems can be elevated through the SDGs; hence, it has started to commit itself to the fulfilment of the SDGs. Indeed, the country has not submitted a progress report since 2008,¹⁵⁷ neither for the MDGs, nor for the SDGs, but it promised to present its first Voluntary National Review report at the High-Level Political Forum in 2019. When the MDGs were first introduced, Iraq's compliance with them was not terrible and some improvements were made regarding the reduction of poverty. The levels of education were increased too, especially looking at girls' enrolment rates.¹⁵⁸ Yet, the rise of ISIS has reversed much of the progress Iraq has managed to achieve since the 2000s. For example, by 2015, more than two million children had dropped out of school.¹⁵⁹ The violence, furthermore, had detrimental effects on the health and well-being of Iraqi citizens.

¹⁵⁴ Valeria Vilvarado and Sara Bittar, *Gender Profile – Iraq: A situation analysis on gender equality and women's empowerment in Iraq* (Oxfam International, 2018), 5.

¹⁵⁵ "Iraq's Economic Update - April 2019," The World Bank, April 1, 2019, accessed May 14, 2019, <http://www.worldbank.org/en/country/iraq/publication/economic-update-april-2019>.

¹⁵⁶ Nasim Ahmed, "Iraq after the Arab Spring," Middle East Monitor, January 19, 2016, accessed March 13, 2019, <https://www.middleeastmonitor.com/20160119-iraq-after-the-arab-spring/>.

¹⁵⁷ "Global Initiative Towards a Sustainable Iraq," United Nations Development Programme, accessed April 29, 2019, <https://sustainabledevelopment.un.org/partnership/?p=1536>.

¹⁵⁸ UN Country Team in Iraq, "Progress in Iraq: The Millennium Development Goals – Iraq," ReliefWeb, March 13, 2013, accessed April 2, 2019, <https://reliefweb.int/report/iraq/progress-iraq-millennium-development-goals>.

¹⁵⁹ Chris Caruso, "Preparing Iraq's Next Generation for Sustainability," World Association for Sustainable Development (WASD), April 12, 2017, accessed April 8, 2019, <https://www.wasd.org.uk/blog/preparing-iraqs-next-generation-for-sustainability/>.

In 2017, the government produced a National Development Plan of Iraq that is aligned with the goals of the SDGs.¹⁶⁰ These recent efforts combined with the improvement of the governance structure and the gradual revitalisation of the economy might lead Iraq on the path of achieving some of the SDGs. Until now, this pledge to compliance has not been reflected in the SDGs. Due to violent periods, low accountability and high levels of corruption, Iraq has a very low Good Governance Index (8.9). There are not many countries with a similarly low Good Governance Index, only North Korea and Venezuela perform similarly bad. Owing to its oil reserves, the country has a GDP per capita of 17,659, which is close to the median (13,583). Hence, according to the findings from the last chapter, Iraq's compliance with the SDGs is expected to be rather low, due to the lack of a functioning economy and bad institutions that are not only highly corrupt but are also missing the *savoir-faire* concerning some socio-economic situations.

Iraq used to have one of the highest medical standards in the region, but the years of conflict and Saddam Hussein's actions, which drastically cut the health budget, left Iraq's health system nearly completely shattered. Many hospitals and health facilities were destroyed, and hospitals have been running short of staff as well as medical supplies. In particular, women and their children are lacking the care needed. Besides this, national coverage regarding immunisations have declined and especially those living in the rural areas are affected. The development of children is in some cases also hindered by the prevalence of malnutrition and undernourishment.¹⁶¹ However, the country still suffers from bad living conditions, poor hygiene, a lack of water and explosive traps. This is joined by the distress that has been caused by the violence.¹⁶² Most people have lost relatives or friends and young children, in particular, continue to suffer from mental illnesses due to the traumata. Some might even be unable to uphold jobs or provide for their families in

¹⁶⁰ "Aligning Development Plans with Sustainable Development Goals," Iraq Business News, October 30, 2018, accessed April 29, 2019, <http://www.iraq-businessnews.com/2018/10/30/aligning-development-plans-with-sustainable-development-goals/>.

¹⁶¹ "Health and Nutrition," UNICEF, 2018, accessed May 18, 2019, <https://www.unicef.org/iraq/what-we-do/health-and-nutrition>.

¹⁶² "Deep Inequality Continues to Shape the Lives of Children in Iraq," UNICEF, November 19, 2018, accessed April 29, 2019, <https://www.unicef.org/press-releases/deep-inequality-continues-shape-lives-children-iraq>.

the future.¹⁶³ The country is, however, receiving aid by international organisations, which are trying to rebuild the system. The organisation USAID together with the Ministry of health, for example, is trying to create an accessible health system. Health organisations have, moreover, provided vaccinations and first aid to people.¹⁶⁴

Management issues, a lack of medication, and a lack of expertise in parts of the country all impede the delivery of a decent health care system. The SDG 3 score for Iraq is only 64.2% and, therefore, well below the median of 76.7%. According to the quantitative part, the result is not surprising as compliance with SDG 3 is greatly impacted by a Good Governance structure, which Iraq clearly does not have. The high GDP per capita in this case is not as useful without the administrative structures to implement the reforms. Particularly, more centres have to be established that aid people in dealing with their traumata. Hence, in this case consequences due to the wars might be other aspects which impact the SDG score.

Women in particular had to suffer under the conservative culture, economic sanctions and armed conflicts. In the years to come the main problems will be unequal educational opportunities and access to the labour market. Officially, the constitution calls for equality among its citizens, prohibits discrimination and guarantees universal suffrage to men and women.¹⁶⁵ The constitution also highlights the importance of Islam and that no law can be in contradiction to the religion.¹⁶⁶ Furthermore, the legacy of ISIS continues the treatment of women as second-class citizens and also hinders the emancipation of women. Many women are married against their will at a young age and also endure emotional and physical abuse and attacks against women, whether on social media or on the street, often remain unreported.¹⁶⁷ Women who are politically active are being targeted the most. They are

¹⁶³ Sophia Akram, "It's Time We Acknowledge Iraq's Mental Health Crisis," *The New Arab*, March 18, 2016, accessed April 29, 2019, <https://www.alaraby.co.uk/english/comment/2016/3/18/its-time-we-acknowledge-iraqs-mental-health-crisis>.

¹⁶⁴ "Improvement to Healthcare in Iraq," *Borgen Magazine*, February 8, 2019, accessed May 17, 2019, <https://www.borgenmagazine.com/improvement-to-healthcare-in-iraq/>.

¹⁶⁵ Valeria Vilvarado and Sara Bittar, *Gender Profile – Iraq: A situation analysis on gender equality and women's empowerment in Iraq*, 11.

¹⁶⁶ Vilvarado, Valeria and Bittar, Sara, 12.

¹⁶⁷ Tafan Kareem, "It's Hard Being a Women in Iraq," *Fair Observer*, July 26, 2017, accessed May 15, 2019, https://www.fairobserver.com/region/middle_east_north_africa/womens-rights-iraq-middle-east-gender-based-violence-world-news-54702/.

also often discouraged from participating as voters as they are regarded as incapable of participating in public life.¹⁶⁸ Nevertheless nearly a quarter of the seats in parliament are held by women.¹⁶⁹ A big issue regarding political participation is that women are still less educated than men, despite their improving literacy rates as well as their increasing enrolment rates. To this day, a quarter of women are illiterate, whereas only around a tenth of men are illiterate.¹⁷⁰

Conservative and progressive forces within Iraq are pulling in different directions regarding women's rights in the country. Iraq's score of 44.7 is 23 points below the median and roughly the same as Morocco's, which is rather surprising due to the high difference between the two Good Governance indices. Nonetheless, the score is more fitting for Iraq than Morocco due to its low Good Governance Index. The slightly higher score in the case of Iraq might be the post-war mentality of women to fight for their rights but also the fact that they have to work to provide for their families as their husbands or sons are often deceased or wounded, hence, the employment might be higher. Furthermore, there are more educational opportunities for women in Iraq, which influences the score of the SDG. Overall, the score seems to be adequate if not slightly higher than expected.

The Iraqi government has also made chemical and waste management a national priority.¹⁷¹ The problem of waste in Iraq is due to urban and peri-urban populations as well as the trash of factories and farms.¹⁷² A challenge for the country is also dealing with the waste following the destruction of some of the waste infrastructure, while the waste production within the country increases. Hence, the waste often ends up on unregulated sites, which is detrimental for the water system,

¹⁶⁸ "Persistent Gender Inequality in Iraq Calls for Coordinated Efforts in Developing 2nd National Action Plan on Implementing Resolution 1325," UN Assistance Mission for Iraq, October 3, 2018, accessed May 12, 2019, <https://reliefweb.int/report/iraq/persistent-gender-inequality-iraq-calls-coordinated-efforts-developing-2nd-national>.

¹⁶⁹ Vilvarado, Valeria and Bittar, 6.

¹⁷⁰ Vilvarado, Valeria and Bittar, 5-15.

¹⁷¹ "Iraq Raises the Bar to Strengthen Its Capacity to Manage Chemicals and Waste," UN Environment. October 15, 2018, accessed April 29, 2019. <https://www.unenvironment.org/news-and-stories/story/iraq-raises-bar-strengthen-its-capacity-manage-chemicals-and-waste>.

¹⁷² Jassim Mohammed Musheb, "The Economics of Waste Recycling in Iraq: Wasted Resources and Lost Opportunities," *European Journal of Economics and Business Studies* 4, no. 2 (2019): 91.

people's health and the environment in the long-term.¹⁷³ As the country is also a large oil producer it also has many industrial, agricultural and oil-field spills.¹⁷⁴ Nevertheless, more landfills and proper recycling sites are being planned,¹⁷⁵ but the Iraqi consumers are not involved in the process and currently not conscious enough. These problems were greatly exacerbated during the last decades following the on-going conflicts.¹⁷⁶ Due to the war and the negligence of the agricultural sector, the country also depends on food imports.¹⁷⁷ Import dependency is particularly high in regard to sugar, oils, rice and dairy products.¹⁷⁸ It is, however, self-sufficient in the production of vegetables, fruits and meat.¹⁷⁹ It can be assumed that the effect of companies is low as a lot of infrastructure and many firms were destroyed during the time of the conflicts. Nonetheless, the country has to be careful in regard to the reliance on the exploitation of oil to rebuild the economy.

Overall, Iraq performs well concerning this SDG. Its score is 76.3%, which is slightly higher than the median. As Iraq has a medium high GDP per capita, this score fits the results from the last chapter rather well. Although the country struggles with a waste problem, according to the score, it seems to be making improvements in the area. It now has the chance to rebuild its economy in a greener and more sustainable way.

Overall, the country did roughly as predicted by the last chapter, nevertheless, it has performed badly considering its developments before the conflicts. Its health care system has particularly suffered under the continuous political and social volatility and bad governance as well as a weak economy. This, however, did not impact SDG 12, as its performance in this case is that bad and around the

¹⁷³ Ashraf Yahya Alnajjar, "Waste Management in Iraq," BioEnergy Consult, January 30, 2019, accessed May 19, 2019, <https://www.bioenergyconsult.com/waste-iraq/>.

¹⁷⁴ "Cleaning up after ISIS: How Iraq's New Chemicals Team Is Trying to Undo Years of Conflict Pollution," UN Environment, December 5, 2018, accessed April 19, 2019, <https://www.unenvironment.org/pt-br/node/24015>.

¹⁷⁵ Ashraf Yahya Alnajjar, "Waste Management in Iraq."

¹⁷⁶ Jassim Mohammed Musheb, "The Economics of Waste Recycling in Iraq: Wasted Resources and Lost Opportunities," 91.

¹⁷⁷ "Preventing Violent Extremism," Iraq Recovery and Resilience Programme, 2019, accessed April 19, 2019, <http://uniraqrrp.org/components>.

¹⁷⁸ "National Strategic Review of Food Security and Nutrition in Iraq," ReliefWeb, October 31, 2018, accessed May 15, 2019, <https://reliefweb.int/report/iraq/national-strategic-review-food-security-and-nutrition-iraq>.

¹⁷⁹ "Food Assistance Fact Sheet – Iraq," USAid, November 20, 2018, accessed April 20, 2019, <https://www.usaid.gov/iraq/food-assistance>.

median, which is in accordance with its GDP per capita. The emancipation of women in the country is lacking but this is also not surprising and it might increase again with the general upswing of the country. Indeed, Iraq is the country that performed the most like the model anticipated as it had a low score regarding SDG 3 and SDG 5 and a high one concerning SDG 12.

In conclusion, the chapter allowed the testing and reaffirmation of the hypotheses, but it also investigated what other factors might influence states' compliance. As evident in all three countries, gender equality which, according to the model depends on the Good Governance Index, is also influenced by cultural factors, in particular, religion and traditions. This can easily be seen in other regions of the world as well. In most countries, society and traditions are hindering the full emancipation of women.

Health systems depend less on society and more on the capability of the state to organise, plan and oversee the system. Proper governance structures need to be in place to establish a decent health care system and thwart corruption so that the money is used in the places where it should be. Besides, the state has to be wealthy enough to support these plans as well. Conflicts can, certainly, disrupt a good system as well, which often results in the collapse of Good Governance structures and the economy.

Sustainable living is interestingly disrupted by the wealth of a nation. In fact, the more possibilities people have, the more they desire. This is highlighted by this SDG as more developed countries are less interested in sustainable production and consumption but want to increase their wealth without thinking about their economy. Slowly, this might change as the richer states can more easily switch to green energy, however, at the moment, vast monetary resources appear to affect their interest in the environment despite good or bad governance structures. Indeed, there are many other political, societal and economic factors that can hinder states' compliance, but the analysis has shown that the two factors serve well as representators of political and economic factors.

Conclusion

This thesis aimed at analysing what factors increase or decrease compliance with the SDGs. For this purpose, compliance literature and development literature were reviewed first; indeed, these two parts of the literature were chosen as they are deeply intertwined with the question. It became clear that there are different angles from which one can consider compliance, and there are those scholars who are more convinced of its benefits and others who see it merely as a power game. It was concluded that liberalism is the most realistic worldview and the most suitable one for this thesis. Indeed, the liberal approach focuses on the domestic structures of a country that increase compliance with International Law and for the SDGs to be successful, they have to be implemented on a national level aligned with national policies. Thus, this approach is the most fitting. The second part of the literature focused on development literature and what aspects are proposed by various academics to increase development within a country. Governance structures as well as the wealth of a country have been found to most likely foster national implementation dynamics and contribute to the success of the goals. These hypotheses have in a next step been tested.

To test the hypotheses, the data of most countries that have committed themselves to the SDGs and their GDP per capita and their Good Governance structures were collected. The Democracy Index was chosen as control variable for the Good Governance Index and the Trade Openness of a country for the GDP per capita; then linear regressions were done for 16 SDGs. In 10 out of the 16 cases the hypothesis that Good Governance improves compliances was affirmed. In 5 cases both variables, the Good Governance Index and the GDP per capita were found to foster compliance. Regarding SDG 6 (Clean Water and Sanitation) and SDG 9 (Industry, Innovation and Infrastructure), the Democracy Index was also somewhat important; for SDG 9 the Trade Openness was also statistically significant but not to a high degree.

The validity of the findings was then examined by looking at three case studies, namely three countries in the MENA region. One SDG from each of the three domains was chosen, namely, SDG 3 (health and well-being), SDG 5 (gender

equality) and SDG 12 (sustainable consumption and production). Indeed, the countries' scores were mostly as the quantitative chapter suggested.

Overall, this thesis contributed to the literature on SDGs and what factors increase or hinder implementation. The quantitative part showed the validity of the hypotheses which was further highlighted by the case studies. The main finding is that Good Governance structures are a key aspect for the implementation of the SDGs and, hence, should be promoted. States should be stimulated to improve their institutions and administration so that the implementation of the SDGs can follow more easily. More research should be done in identifying other structures that can incentivise states to better their governance structures and increase their economic situation without destroying the environment as for now wealth seems to be an advantage but it can also be hinderance in development due to corruption or unequal distribution.

It has, however, also become clear that other variables, which are not included in this thesis also affect compliance. It is obvious that the two variables cannot completely explain compliance but mostly provide a thought-provoking impulse to consider other factors, which need to be accounted for when promoting the SDGs. In the case of SDG 5 (gender equality), culture is clearly also an important factor. These are obviously more difficult to measure and identify. Other factors could be the size of a country and compliance with other international agreements as well as the homogeneity of a country.

Furthermore, the calculation of the scores is often difficult and unbalanced. Especially, for SDG 5 new methods might be needed. It seems like it overemphasises the education opportunities for women and neglects their activism in the countries. This is especially important as gender issues are vital for a country's development. Women are needed to advance the economy and the country as a whole. But it is not only developing countries, which need to keep this in mind. Equality between the genders is imperative for all countries and for the overall progress and compliance with the SDGs. Further research should, therefore, focus on how to incentivise countries to implement Good Governance Structure but also how the inclusion of women can be facilitated.

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Appendix

Data collected

Country	GG¹⁸⁰	GDP¹⁸¹	FHR¹⁸²	IT¹⁸³	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17
<i>Afghanistan</i>	8	2017	26	51	64	40	38	7	25	49	52	31	4	65	39	82	88	48	51	55
<i>Albania</i>	53	13345	68	78	100	49	81	85	73	93	82	56	27	60	75	74	75	39	75	61
<i>Algeria</i>	21	15440	35	60	100	51	77	78	49	62	80	54	29	89	69	82	91	44	62	74
<i>Angola</i>	16	6814	26	52	60	44	31	45	62	57	36	49	8	45	44	81	87	43	64	47
<i>Argentina</i>	52	20537	83	25	100	69	81	89	78	100	86	61	38	40	84	70	89	44	51	57
<i>Armenia</i>	42	10176	45	87	99	54	77	88	70	73	94	56	29	50	76	81	92	48	60	60
<i>Australia</i>	91	52373	98	42	100	60	95	96	80	87	84	87	82	77	85	51	23	55	38	59
<i>Austria</i>	92	52137	94	105	100	80	94	82	77	94	89	88	80	88	84	51	83	52	65	66

¹⁸⁰ Refers to Good Governance Index

¹⁸¹ Refers to GDP per capita

¹⁸² Refers to Freedom House Report

¹⁸³ Refers to International Trade = Trade % of GDP

<i>Azerbaijan</i>	28	18076	12	91	100	58	74	90	68	76	86	61	39	68	79	77	82	48	66	57
<i>Bahrain</i>	45	50057	12	140	100	67	89	84	58	33	89	86	50	62	62	74	56	41	53	47
<i>Bangladesh</i>	22	4620	45	35	97	47	60	64	57	77	43	63	18	77	39	77	81	51	55	42
<i>Belarus</i>	32	20003	21	134	100	60	81	93	82	95	83	79	32	86	81	82	91	48	70	60
<i>Belgium</i>	84	48245	95	169	100	81	93	89	84	77	86	85	73	94	84	52	79	47	75	59
<i>Belize</i>	40	8501	86	112	85	58	74	83	61	90	89	56	19	37	71	64	85	25	42	74
<i>Benin</i>	38	2426	82	68	46	49	47	39	43	58	11	64	8	36	50	81	84	42	62	57
<i>Bhutan</i>	69	9540	55	79	100	49	70	48	46	74	84	64	29	68	75	74	93	45	58	56
<i>Bolivia</i>	28	7477	67	57	95	50	69	77	78	96	67	72	20	49	79	75	88	48	71	77
<i>Bosnia & Herzegovina</i>	40	13491	55	95	100	66	79	80	54	100	65	51	25	82	61	72	89	11	61	82
<i>Botswana</i>	72	17965	72	74	81	36	62	76	67	76	46	50	30	0	85	58	68	48	70	79
<i>Brazil</i>	44	16154	78	24	97	68	78	77	68	98	90	68	45	26	79	70	90	60	56	66
<i>Bulgaria</i>	60	23156	80	131	98	62	80	85	74	76	83	75	39	62	77	66	86	58	91	69
<i>Burkina Faso</i>	37	1996	60	52	71	35	47	18	36	55	8	54	12	78	52	80	90	48	66	59

<i>Burundi</i>	9	732	18	38	0	41	46	54	69	68	0	44	5	67	52	83	84	48	72	63
<i>Cabo Verde</i>	68	7316	90	114	83	47	75	63	62	82	80	65	26	37	78	80	87	46	62	62
<i>Cambodia</i>	25	4335	30	125	100	52	61	61	63	81	35	47	20	91	74	81	73	34	43	54
<i>Cameroon</i>	16	3828	22	41	75	50	43	63	59	66	47	56	10	43	40	81	95	47	68	57
<i>Canada</i>	95	49651	99	64	99	66	94	99	81	75	91	86	76	79	82	53	66	54	52	63
<i>Central African Rep.</i>	8	712	9	44	0	32	22	16	36	60	2	22	1	19	32	77	77	48	89	50
<i>Chad</i>	8	2415	18	74	43	31	26	18	28	51	1	46	3	53	49	77	86	48	76	54
<i>Chile</i>	79	25978	94	56	100	69	87	84	67	94	88	78	44	27	80	74	92	63	50	74
<i>China</i>	42	18110	14	38	100	72	80	74	76	90	69	83	59	60	69	73	69	33	59	54
<i>Colombia</i>	45	14943	65	34	96	57	81	76	72	98	85	57	28	22	81	75	87	54	54	61
<i>Congo</i>	14	767	21	159	20	40	51	57	61	53	35	45	12	29	59	78	93	53	90	50
<i>Congo (Democratic Rep.)</i>	5	6799	17	75	7	35	38	54	41	53	33	40	4	59	48	80	93	11	61	44
<i>Costa Rica</i>	69	17559	91	66	100	57	87	83	78	91	92	71	36	35	90	73	91	62	62	71
<i>Côte d'Ivoire</i>	29	4178	51	66	78	45	36	35	40	68	47	64	25	47	57	77	96	36	71	61

<i>Croatia</i>	67	26221	86	100	99	73	86	85	72	83	84	73	51	70	81	68	92	68	79	73
<i>Cyprus</i>	78	39973	94	134	100	57	92	93	71	77	86	71	54	77	77	40	76	45	75	25
<i>Czechia</i>	80	37371	93	152	100	69	92	91	73	87	87	81	63	92	87	71	88	52	84	49
<i>Denmark</i>	93	52121	97	103	99	78	95	96	85	89	89	87	87	97	89	55	87	51	76	87
<i>Djibouti</i>	20	3786	26	108	87	37	55	14	41	52	25	45	8	45	68	79	72	31	48	76
<i>Dominican Republic</i>	43	18424	67	53	100	53	69	72	74	80	83	65	28	33	80	79	91	58	67	50
<i>Ecuador</i>	32	11718	60	42	96	50	77	78	80	97	84	68	29	36	90	73	89	63	57	80
<i>Egypt</i>	23	13366	26	45	99	53	72	75	47	64	88	48	34	38	55	73	92	52	67	53
<i>El Salvador</i>	39	8041	70	73	99	49	79	67	70	90	81	62	16	39	79	75	91	33	60	61
<i>Estonia</i>	85	34096	94	152	99	64	89	93	77	87	81	82	65	72	89	61	82	82	77	51
<i>Eswatini (Kingdom of)</i>	32	11020	16	111	39	51	49	59	56	69	48	33	17	0	78	78	53	48	45	89
<i>Ethiopia</i>	20	2332	12	31	87	41	47	30	55	66	30	66	12	45	60	79	81	48	55	52
<i>Finland</i>	96	46430	100	77	100	67	97	90	89	94	94	83	86	98	91	52	77	63	69	70
<i>France</i>	81	45775	90	63	100	76	93	91	87	90	95	81	76	86	90	55	85	61	71	71

<i>Gabon</i>	25	18496	23	75	98	52	53	66	54	77	71	56	26	47	54	78	90	54	85	53
<i>Gambia</i>	32	2792	41	47	50	43	48	30	36	60	22	53	15	44	60	94	83	48	62	63
<i>Georgia</i>	64	11485	64	113	98	53	74	96	67	90	77	68	30	33	88	74	87	63	60	70
<i>Germany</i>	90	52559	94	87	100	78	94	98	82	86	88	90	81	84	91	55	88	44	78	77
<i>Ghana</i>	54	6452	83	74	91	55	55	61	54	67	52	72	29	59	55	78	91	57	69	57
<i>Greece</i>	58	29123	85	68	98	67	89	86	70	86	87	60	49	51	78	47	78	59	73	54
<i>Guatemala</i>	28	8436	56	46	91	40	71	64	59	83	59	60	14	20	79	75	91	43	41	52
<i>Guinea</i>	18	2310	41	147	68	45	37	19	37	54	12	51	7	83	56	79	95	54	75	62
<i>Guyana</i>	43	8519	74	104	95	60	65	77	65	92	73	58	15	37	85	44	63	51	59	65
<i>Haiti</i>	13	1864	41	75	73	34	47	38	42	61	13	43	3	62	32	78	93	33	38	100
<i>Honduras</i>	28	5212	46	102	80	46	75	64	71	87	67	65	14	27	83	76	91	59	56	73
<i>Hungary</i>	68	31903	72	172	99	71	86	85	68	86	85	77	50	76	83	69	94	52	78	50
<i>Iceland</i>	93	55917	96	90	100	75	96	94	92	85	99	91	76	99	89	52	89	28	33	65
<i>India</i>	46	7874	77	41	96	40	59	65	36	70	54	61	33	49	56	82	81	53	46	51

<i>Indonesia</i>	46	13230	64	40	96	50	62	77	62	86	64	71	24	35	65	79	89	47	42	46
<i>Iran</i>	22	19557	18	49	100	53	79	85	48	51	79	64	34	65	75	68	73	62	67	50
<i>Iraq</i>	9	17659	31	76	99	34	64	26	45	47	79	41	7	62	64	76	86	27	50	51
<i>Ireland</i>	89	78785	96	208	100	79	94	91	75	85	87	93	70	85	83	46	90	53	69	32
<i>Israel</i>	71	37972	79	59	100	64	95	94	81	67	90	88	75	50	82	47	88	36	41	52
<i>Italy</i>	68	39637	89	60	98	72	92	91	74	83	88	73	62	70	72	57	82	43	81	59
<i>Jamaica</i>	59	9447	77	83	100	49	82	67	71	89	79	66	25	37	87	78	84	24	50	75
<i>Japan</i>	89	44227	96	31	99	76	94	95	62	91	88	86	82	77	74	56	85	56	67	57
<i>Jordan</i>	49	9433	37	93	100	46	78	85	49	31	87	44	43	56	72	75	90	32	58	74
<i>Kazakhstan</i>	39	27550	22	61	100	52	73	85	77	90	75	72	40	62	84	55	73	48	57	48
<i>Kenya</i>	32	3691	48	37	70	49	49	57	69	55	30	69	29	36	69	80	79	50	54	62
<i>Kuwait</i>	46	67000	36	98	100	65	85	75	56	50	87	78	46	62	45	29	44	37	55	53
<i>Kyrgyzstan</i>	26	3844	37	102	99	62	71	85	65	86	84	62	16	79	89	74	87	48	68	67
<i>Lao</i>	28	7925	12	76	90	55	50	55	72	84	39	71	14	61	71	79	87	45	48	47

<i>Latvia</i>	75	29901	87	122	99	66	84	91	72	85	86	80	48	77	83	69	84	56	76	48
<i>Lebanon</i>	25	14684	43	68	100	46	80	73	48	68	87	52	37	70	65	77	83	44	53	56
<i>Lesotho</i>	41	3494	64	125	28	48	35	56	73	73	25	36	12	0	69	79	80	48	71	99
<i>Liberia</i>	24	1418	62	123	64	38	42	9	40	60	0	53	5	84	36	83	81	54	53	72
<i>Lithuania</i>	78	34826	91	161	99	67	85	97	75	83	71	79	53	50	80	67	82	56	79	48
<i>Luxembourg</i>	95	106704	98	424	100	69	95	88	74	86	67	88	75	88	95	34	81	52	55	51
<i>Macedonia</i>	50	15709	58	125	96	63	79	82	69	93	75	53	33	49	68	66	86	48	68	76
<i>Madagascar</i>	23	1630	56	74	3	29	42	46	74	48	4	49	6	32	67	76	91	52	50	54
<i>Malawi</i>	33	1199	63	65	18	43	43	54	62	71	2	49	6	44	65	84	74	48	63	73
<i>Malaysia</i>	60	30860	45	136	98	55	83	89	58	84	84	83	59	43	87	70	85	45	41	57
<i>Mali</i>	24	2384	44	62	68	40	37	5	33	70	10	50	12	74	57	76	88	48	62	61
<i>Malta</i>	85	45606	92	249	100	63	92	92	65	81	87	89	43	65	82	56	92	51	61	65
<i>Mauritania</i>	25	3990	30	111	95	50	49	25	34	68	38	32	7	86	26	81	81	57	49	55
<i>Mauritius</i>	75	23699	89	98	100	50	82	83	61	69	86	85	29	39	90	53	62	53	26	62

<i>Mexico</i>	38	20602	62	78	97	56	82	82	76	60	80	65	37	15	81	74	88	58	42	62
<i>Moldova (Republic of)</i>	39	7305	61	113	100	63	77	86	77	90	85	67	27	93	78	82	96	48	63	81
<i>Mongolia</i>	51	13447	85	117	100	48	68	87	71	81	38	82	21	73	55	72	74	45	61	53
<i>Montenegro</i>	54	19043	67	106	100	56	78	89	64	92	83	64	30	63	71	53	75	38	28	100
<i>Morocco</i>	42	8933	39	84	100	51	74	65	43	76	77	50	33	62	76	71	88	48	73	71
<i>Mozambique</i>	21	1291	52	113	24	37	35	43	59	51	36	36	13	49	64	85	81	65	63	70
<i>Myanmar</i>	20	6511	31	48	91	52	55	64	62	77	36	62	17	61	59	78	83	38	50	59
<i>Namibia</i>	61	11229	77	84	71	34	56	69	86	72	38	51	29	0	77	70	66	61	68	89
<i>Nepal</i>	26	2905	55	52	96	48	59	59	64	78	53	59	14	83	47	84	92	45	67	63
<i>Netherlands</i>	94	56383	99	161	100	76	95	91	83	91	85	88	84	95	89	52	71	40	79	49
<i>New Zealand</i>	98	40135	98	51	100	70	93	95	84	89	93	89	69	76	81	55	88	57	34	65
<i>Nicaragua</i>	29	5683	44	97	97	44	77	69	83	88	64	65	16	47	85	78	91	45	62	63
<i>Niger</i>	25	1217	49	50	51	33	41	7	37	66	2	52	6	82	55	78	74	48	53	74
<i>Nigeria</i>	17	6027	50	26	38	48	35	32	44	74	30	61	15	9	43	76	91	39	74	50

<i>Norway</i>	97	74356	100	69	100	66	97	97	89	85	97	85	80	100	88	36	62	65	59	90
<i>Oman</i>	58	46584	23	99	100	52	86	80	37	29	79	63	47	62	73	61	75	63	38	58
<i>Pakistan</i>	23	5680	43	26	98	38	51	43	34	50	66	40	22	58	48	79	91	51	67	42
<i>Panama</i>	56	25674	83	88	100	50	78	79	66	86	81	71	34	25	86	71	88	50	51	28
<i>Paraguay</i>	36	13395	64	66	99	66	74	75	68	97	86	68	21	43	76	71	88	48	44	68
<i>Peru</i>	47	14224	73	47	97	60	80	83	75	96	76	61	29	42	73	73	87	64	59	56
<i>Philippines</i>	41	8936	62	72	96	52	59	84	72	84	64	69	27	35	71	82	91	54	52	52
<i>Poland</i>	72	31939	85	105	100	66	88	88	77	83	82	80	50	54	77	71	88	45	84	49
<i>Portugal</i>	85	32006	97	85	99	63	91	84	84	82	90	82	57	57	84	56	89	54	53	57
<i>Qatar</i>	63	130475	24	88	100	59	89	84	55	29	79	57	60	62	36	57	44	37	45	52
<i>Romania</i>	58	26447	84	85	95	61	81	82	69	94	83	73	38	30	84	66	93	56	81	59
<i>Russian Federation</i>	27	29267	20	47	100	49	77	94	72	93	85	65	46	54	84	71	80	52	60	54
<i>Rwanda</i>	53	2280	23	51	57	37	61	57	82	70	6	64	20	27	60	82	86	48	64	65
<i>Saudi Arabia</i>	45	55943	7	63	100	46	83	87	44	39	83	75	50	62	41	55	58	53	55	59

<i>Senegal</i>	49	3651	75	57	68	52	57	21	51	82	46	56	15	53	60	82	86	42	71	70
<i>Serbia</i>	51	17555	73	114	100	68	81	89	75	98	78	64	37	72	80	63	84	48	47	75
<i>Sierra Leone</i>	28	1620	66	74	62	38	29	42	46	49	2	49	8	70	44	82	86	48	66	60
<i>Singapore</i>	89	100345	52	322	99	71	94	95	72	86	91	93	88	61	95	43	60	12	35	27
<i>Slovakia</i>	73	35130	89	189	99	75	88	90	73	90	88	76	53	84	81	61	76	52	79	50
<i>Slovenia</i>	79	36746	93	155	100	72	92	92	84	87	90	80	60	100	85	58	92	50	80	57
<i>South Africa</i>	57	13675	78	58	66	52	54	76	83	76	70	51	46	0	81	63	83	59	45	84
<i>Spain</i>	75	40139	94	66	99	63	94	88	83	85	91	74	68	69	88	61	89	48	57	55
<i>Sri Lanka</i>	47	13397	55	51	100	45	79	91	54	82	54	79	20	37	72	67	88	54	61	47
<i>Sudan</i>	5	4232	8	22	78	15	53	17	39	41	41	32	13	66	43	75	83	56	60	67
<i>Suriname</i>	46	15105	78	130	73	55	75	79	67	89	87	67	28	37	82	67	72	63	72	81
<i>Sweden</i>	95	52984	100	86	99	73	97	95	90	93	98	86	90	100	90	57	85	55	61	96
<i>Switzerland</i>	97	64649	96	119	100	72	97	93	83	94	94	89	93	80	97	37	87	52	56	51
<i>Tajikistan</i>	11	3415	11	57	97	40	68	90	55	75	88	55	15	68	78	81	76	48	68	67

<i>Tanzania</i>	32	3444	52	33	63	39	47	53	74	58	16	62	17	60	64	79	89	57	52	54
<i>Thailand</i>	44	19476	31	123	100	55	77	75	65	95	77	75	43	59	79	71	80	50	61	56
<i>Togo</i>	22	1746	47	101	48	48	47	53	43	58	15	59	8	40	47	82	88	38	80	68
<i>Trinidad and Tobago</i>	57	32254	81	99	100	51	77	84	72	87	76	76	29	37	74	69	62	46	59	100
<i>Tunisia</i>	44	12372	70	99	99	50	76	78	60	45	86	46	33	61	62	80	86	55	66	74
<i>Turkey</i>	40	27956	32	54	100	56	84	80	53	68	81	63	50	41	73	71	87	37	49	64
<i>Turkmenistan</i>	11	19527	4	54	100	52	67	69	62	60	67	74	10	65	69	76	66	48	56	0
<i>Uganda</i>	32	2498	37	43	68	40	47	60	61	68	6	61	26	62	41	80	93	48	65	56
<i>Ukraine</i>	29	9283	62	104	100	69	69	89	69	97	87	63	26	99	79	70	92	44	55	71
<i>United Arab Emirates</i>	70	69382	17	173	100	65	88	82	60	32	85	86	65	62	67	44	32	58	58	100
<i>United Kingdom</i>	87	45705	94	62	100	74	93	100	83	93	88	89	81	72	91	52	81	54	60	42
<i>United States</i>	85	62606	86	27	99	75	90	92	76	91	88	88	85	48	87	37	65	50	44	57
<i>Uruguay</i>	79	23274	98	40	100	66	83	83	74	85	95	71	40	50	85	63	84	46	32	75
<i>Uzbekistan</i>	17	7665	7	69	93	65	77	93	68	67	79	47	22	65	86	77	91	48	62	77

<i>Viet Nam</i>	41	7510	20	200	99	66	75	81	80	88	72	73	25	78	69	73	79	47	45	70
<i>Yemen</i>	3	2377	13	34	34	21	47	35	15	42	55	12	7	62	49	72	96	60	60	67
<i>Zambia</i>	38	4104	55	71	28	35	50	64	66	65	43	54	16	45	64	78	85	48	68	51
<i>Zimbabwe</i>	11	2788	30	50	65	32	48	66	79	63	39	59	15	56	76	78	85	48	68	77

Regression Results

SDG 1 – No Poverty

1. Regression 2. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.491	0.447	0.314	0.163	
Type III - Sum of Squares	3425.485 20952.468	667.352	493.175	369.312	
Standardised Coefficient	0.512 0.491	0.155	-0.145	-0.074	
Pr > t	0.006 < 0.0001	0.217	0.288	0.357	
Adjusted R ²					0.247 0.236

SDG 2 – Zero Hunger

1. Regression 2. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.741	0.653	0.555	0.364	
Type III - Sum of Squares	1004.936 3985.771	480.877 695.386	17.180	60.079	
Standardised Coefficient	0.508 0.567	0.237 0.237	0.049	0.054	
Pr > t	0.0004 0.003	0.014 0.003	0.637	0.378	
Adjusted R ²					0.566 0.569

SDG 3 – Good Health and Well-Being

1. Regression 2. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.782	0.718	0.533	0.317	
Type III - Sum of Squares	3546.027 7835.446	1502.305 2543.037	136.517	89.247	
Standardised Coefficient	0.662 0.552	0.290 0.314	-0.095	-0.045	
Pr > t	< 0.0001 0.001	0.001 < 0.0001	0.304	0.406	
Adjusted R ²					0.652 0.652

SDG 4 – Quality Education

1. Regression 2. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.663	0.577	0.454	0.264	
Type III - Sum of Squares	5401.821 37228.994	630.077	365.227	51.310	
Standardised Coefficient	0.663 0.663	0.152	-0.126	-0.028	
Pr > t	< 0.0001 < 0.0001	0.156	0.279	0.685	
Adjusted R ²					0.448 0.436

SDG 5 – Gender Equality

1. Regression 2. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.623	0.400	0.545	0.194	
Type III - Sum of Squares	2135.330 14553.417	77.764	62.510	10.529	
Standardised Coefficient	0.627 0.623	-0.080	0.079	-0.019	
Pr > t	0.0003 < 0.0001	0.478	0.524	0.794	
Adjusted R ²					0.381 0.385

SDG 6 – Clean Water and Sanitation

1. Regression 2. Regression	Good Governance	GDP per capita	Democracy Index	Trade Openness	Goodness of fit
Correlation Matrix	0.454	0.120	0.555	0.120	
Type III - Sum of Squares	904.157 9025.629	1409.713	1557.669	89.326	
Standardised Coefficient	0.377 0.381	-0.317	0.363	0.051	
Pr > t	0.034 < 0.0001	0.008	0.006	0.501	
Adjusted R ²					0.323 0.201

SDG 7 – Affordable and clean energy

1. Regression 2. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.601	0.564	0.408	0.199	
Type III - Sum of Squares	4116.617 9144.724	2969.015 3931.595	136.236	915.859	
Standardised Coefficient	0.486 0.406	0.278 0.266	-0.065	-0.099	
Pr > t	0.004 < 0.0001	0.015 0.005	0.598	0.172	
Adjusted R ²					0.387 0.386

SDG 8 – Decent Work and economic growth

1. Regression 2. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.779	0.664	0.566	0.327	
Type III - Sum of Squares	2705.158 7169.625	389.744 715.676	30.308	0.397	
Standardised Coefficient	0.694 0.633	0.177 0.200	-0.054	-0.004	
Pr > t	< 0.0001 < 0.0001	0.048 0.007	0.580	0.949	
Adjusted R ²					0.616 0.621

SDG 9 – Industry, Innovation and Infrastructure

1. Regression 2. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.874	0.836	0.569	0.298	
Type III - Sum of Squares	6964.350 12709.854	4756.205 7192.510	536.556	1345.550	
Standardised Coefficient	0.744 0.563	0.414 0.424	-0.152	-0.141	
Pr > t	< 0.0001 < 0.0001	< 0.0001 < 0.0001	0.010	< 0.0001	
Adjusted R ²					0.864 0.844

SDG 10 – Reduced Inequalities

1. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.277	0.366	0.146	0.278	
Type III - Sum of Squares	2.274	2233.379	0.441	1182.413	
Standardised Coefficient	0.014	0.294	-0.005	0.137	
Pr > t	0.944	0.030	0.976	0.114	
Adjusted R ²					0.126

SDG 11 – Sustainable Cities and Communities

1. Regression 2. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.650	0.396	0.546	0.304	
Type III - Sum of Squares	3565.793 16100.734	685.250	9.487	433.785	
Standardised Coefficient	0.802 0.650	-0.237	-0.030	0.121	
Pr > t	< 0.0001 < 0.0001	0.030	0.797	0.084	
Adjusted R ²					0.433 0.418

SDG 12 – Responsible Consumption and Production

1. Regression	Good Govern- ance	GDP per cap- ita	Democracy Index	Trade Open- ness	Goodness of fit
Correlation Matrix	-0.741	-0.813	-0.498	-0.359	
Type III - Sum of Squares	137.048	3224.501	69.947	25.625	
Standardised Coefficient	-0.198	-0.646	-0.104	0.037	
Pr > t	0.091	< 0.0001	0.227	0.464	
Adjusted R ²					0.703

SDG 13 – Climate Action

1. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	-0.219	-0.461	0.070	-0.128	
Type III - Sum of Squares	138.266	1731.656	950.072	171.986	
Standardised Coefficient	-0.213	-0.508	0.410	0.102	
Pr > t	0.242	< 0.0001	0.002	0.193	
Adjusted R ²					0.277

SDG 14 – Life below Water

Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.196	0.023	0.222	-0.069	
Type III - Sum of Squares	278.479	189.796	7.462	171.023	
Standardised Coefficient	0.348	-0.193	0.042	-0.118	
Pr > t	0.096	0.168	0.784	0.191	
Adjusted R ²					0.056

SDG 15 – Life on Water

Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	-0.028	-0.100	0.052	0.105	
Type III - Sum of Squares	21.162	292.389	141.572	735.790	
Standardised Coefficient	-0.075	-0.188	0.143	0.191	
Pr > t	0.722	0.187	0.358	0.037	
Adjusted R ²					0.023

SDG 17 – Partnerships for the Goals

1. Regression	Good Govern- ance	GDP per cap- ita	Democracy In- dex	Trade Open- ness	Goodness of fit
Correlation Matrix	0.444	-0.135	0.112	-0.051	
Type III - Sum of Squares	437.956	1385.526	0.481	0.210	
Standardised Coefficient	0.300	-0.360	0.007	0.003	
Pr > t	0.154	0.012	0.962	0.975	
Adjusted R ²					0.037