FÉLAGSFRÆÐISVIÐ

Iceland as Norm Entrepreneur

Implementing Innovation in the Measurement of Economic Progress

Thesis towards an MA degree in International Political Economy

Student: Johanna E. Van Schalkwyk
Supervisor: Auður H. Ingólfsdóttir

Spring Semester – 2016

HÁSKÓLINN Á BIFRÖST
BIFRÖST UNIVERSITY

HÁSKÓLINN Á BIFRÖST

BIFRÖST UNIVERSITY

Staðfesting lokaverkefnis

til meistaragráðu

Lokaverkefnið

Iceland as Norm Entrepreneur: Implementing Innovation in the Measurement of Economic Progress

eftir

Johanna E. Van Schalkwyk

1303732409

hefur verið metið og varið á málsvörn

frammi fyrir dómnefnd tveggja dómnefndarmanna

samkvæmt reglum og kröfum Háskólans á Bifröst

og hefur hlotið lokaeinkunnina _____ .

_____

Stimpill skólans

Iceland as Norm Entrepreneur: Implementing Innovation in the Measurement of Economic Progress

Johanna E. Van Schalkwyk

30 ECTS thesis submitted in partial fulfillment of a

Magister Artium Degree in International Political Economy

Supervisor: Auður H. Ingólfsdóttir

School of Social Sciences

University of Bifröst

May 2016

ABSTRACT

Concerns have been raised internationally about the environmental and social sustainability of policies focused solely on economic growth. Economic growth is most often represented by gross domestic product (GDP), the most universal economic indicator. GDP, however, through its inherent flaws, presents a skewed impression of actual contributions to the economy, as well as giving a positive value to, amongst other things, harmful environmental events.

In the last few decades, there has been rising dissatisfaction with the prominence of GDP and how this may steer public policy and private enterprise in a direction detrimental to a sustainable future for humanity. This thesis explores the flaws of GDP and the possibility of Iceland acting as a norm entrepreneur in the implementation of much called for innovation in measuring economic progress.

Nordic countries have been known to effect greater social and political change on an international platform than their size would suggest. The findings of this research show that Iceland can have a role to play in implementing innovation in economic measurements. However, the question remains whether a relatively young republic, which is still battling with its own national identity in the global arena, can muster the political will to do so.

Keywords – economic growth, gross domestic product, innovation, measurement, economic progress, norm entrepreneur

ACKNOWLEDGEMENTS

Standing on the shoulders of giants allows one to see as yet undefined silhouettes and shapes in the far distance. I am grateful and in awe of all the work on this subject matter that had been done before I even knew it existed and to which I am now making my humble contribution. Hopefully it's a step in the right direction.

During the Arctic Circle Assembly in 2014, I first heard Auður Ingólfsdóttir use the phrase "norm entrepreneur" and I've been captivated ever since. Thank you Auður for being a thorough, dedicated, organised and, above all else, inspirational supervisor of this project.

The staff and faculty at Bífröst have been exemplary. Sincere thanks for your guidance and support.

A special word of thanks to Prof. Brynhildur Davíðsdóttir, for generously giving of her limited time and patiently sharing her vast knowledge in my pursuit of this subject.

To my fellow students who happily tried to make sense of everything I was trying to say in two languages during the MA course, and who generously shared their wisdom and thoughts with me, I'd like to extend my heartfelt thanks.

Without the generous time my interviewees invested in my pursuit of understanding the topic, as well as the wonderful discussions and helpful suggestions and information shared by everyone in our political economy group, this thesis would never have seen the light of day. Thank you Hlynur, Diddi, Helga Margrét and Bragi and especially you, Högni and Candice, for walking the extra mile with proofreading and criticism. Alwin-Jon, thank you for digging in during the last stretch!

Finally, my family and friends, and especially my husband and children, have made many sacrifices during the research and writing of this paper. Your support, love, patience, and interest made the long slog worthwhile. I am, as always, forever indebted to you Björn, Ariadne, Embla and Harpa.

The time has finally come to say: Bly kalm, ons gaan braai!

TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

1. INTRODUCTION

"I hold a firm belief. We will not change our ways unless we change the way we measure our economic performance."

Nicolas Sarkozy

1.1. PROJECT DESCRIPTION

Most modern economies, advanced as well as emerging, are growth-based economies. This means that their economic progress is defined not by the quality or value of the products or services they produce, but rather by what it contributes to a country's growth, as measured by gross domestic product (GDP). Many macro-economic policies are aimed at increasing GDP, which can be described as the total value, in monetary terms, of all final goods and services produced in an economy. GDP, in other words, measures the quantifiable output of an economy. It does not, in strict terms, measure all economic activity, including that which is non-monetarized, nor account for a society's welfare or actual progress in the form of innovation or quality of life.

There is growing evidence that a growth-based economy with macro-economic policies largely focused on increasing the GDP, without due consideration to all factors involved in the functioning of that economy, may have a long-term detrimental effect on a sustainable future for humanity (Klein, 2014; Costanza et al., 2009; Daly & Cobb, 1989). It can be reasoned that factors that are not included as a positive in calculating the GDP, such as childcare done by parents, or not deducted for having a negative effect, such as the costs of depleting natural and human resources in the production of goods and services, may be deterring humankind's progress towards sustainability,

Additionally, GDP as we know it today, was created at a time of war and therefore made to account positively for military expenditure (Coyle, 2014). As such, it may be argued that the resulting positive accounting for military expenditure in the GDP may inadvertently encourage a continued need for the use of military products and services. As Stiglitz, Sen and Fitoussie (2010) state in their commissioned report on GDP,

Mismeasuring our Lives – Why GDP doesn't add up: "What we measure affects what we do. If we have the wrong metrics, we will strive for the wrong things." (p.xvii)

Globally, the shortcomings of GDP have increasingly become the topic of wide research and critique, ranging across a number of broad political, economic and academic platforms. Initiatives include

- The Commission on the Measurement of Economic Progress and Social Progress, appointed by the former French President Nicholas Sarkozy and led by prominent economists Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi (Stiglitz et al., 2010).
- The 2007 high-level conference titled "Beyond GDP", hosted by the European Commission, European Parliament, Club of Rome, Organisation for Economic Co-operation and Development (OECD) and World Wildlife Foundation. These partners continue cooperation on exploring ways of redefining and measuring economic progress in the light of wellbeing for humanity at large (Beyond GDP, 2015).
- Calls by high-ranking officials such David Cameron, British Prime Minister, and Ban Ki-Moon, UN Secretary General, to move beyond GDP as the main measure of economic progress (Beyond GDP, 2015).

Growing international attention has also been given to developing and adopting other forms of measuring economic progress, such as the green GDP, the Index of Sustainable Economic Welfare (ISEW) and the Genuine Progress Indicator (GPI), as well as a number of composite indexes that do not generate a monetary value. Amongst these, the most well-known global index is the United Nations Human Development Index (HDI). Other indices include the OECD's Better Life Index (BLI), compiled and published for its 34 member countries, plus important partners.

Though it appears to have become commonly accepted that statistical forms of measurement underlying decision-making need to be adapted in order to reflect the challenges faced by humanity today, the pace of change in that field seems to be too slow. As with all innovation, trends and changes in international politics often need a country, or a number of countries, to act as entrepreneurs to take the first steps towards

setting new norms. The Scandinavian countries,[1] and in particular Sweden, have at times affected trends in international relations by acting as norm entrepreneurs, especially regarding environmental norms, multilateral security and global welfare (Ingebritsen, 2006).

In recent years, researchers have been giving more attention to ideational and normative conceptions of politics and how states "are not only pursuing territorial expansion, material wealth, and the maximization of power on a global scale, but are also concerned with reputation, identity, and community." (Ingebritsen, 2006, p.274) Though Nordic countries have never had the military or political might to force change, they often attract attention for appearing at the top of the list for a number of indices. For instance, in 2014, Nordic countries took five of the first ten seats of the OECD Better Life Index, (OECD Better Life Index, 2014), five of the first 24 seats (out of 195 countries) in the UN Human Development Index (Human Development Report, 2015) five of the first eight places in the Social Progress Index (Social Progress Imperative, 2015). Additionally, the Nordic countries are ranked in the first five seats of the Global Gender Gap Index 2014 (World Economic Forum, 2014), with Iceland taking first place.

Despite its diminutive population size of 332,529 (Statistics Iceland, 2016) and only relatively recently achieving the status of independent republic,[2] Iceland can also be said to have influenced international relations through the setting of social and political norms. Iceland played an instrumental role in assisting the newly formed state of Israel in becoming a member of the United Nations in 1949 and by, in somewhat similar fashion, being the first Western European state to recognise Palestine as an independent state in 2011. Iceland was the first country to elect a woman as Head of State when Vigdís Finnbogadóttir was elected president in 1980 and it was the first country to appoint an openly lesbian prime minister to office when Jóhanna Sigurðardóttir was elected to lead the Social Democrat/Left Green coalition government in 2009.

[1] For the purposes of this research project, Scandinavian countries are defined in their broadest understanding as Norway, Sweden, Denmark, Finland and Iceland. When reference is made to Nordic countries, it includes the aforementioned Scandinavian countries, plus Greenland and the Faroe Islands.

[2] Iceland obtained self-rule on 1 December 1910 and full independence from Denmark on 17 June 1944.

In recent years, Iceland has been touted as a type of economic "poster child" for its fast recovery after the devastating economic crash of 2008. Additionally, Iceland's prosecution and jailing of bankers for illegal banking practices leading up to the crash has received a lot of international attention.

In other fields, Iceland has also become an international leader in the innovation of green energy, specifically geothermal energy, and sustainable fishing practices. Given the importance of energy sources and the sensible utilisation of natural resources in developing sustainability for the future, Iceland is in an ideal position to investigate and perhaps implement policies aimed at establishing a sustainable economy, a status that is not within easy reach of most industrialised nations. Yet, rather contradictorily, Iceland's ecological footprint is so large that if all humans displayed the same patterns of consumption as Icelanders, we would need six Earths to fulfil our needs (Daviðsdóttir, 2013).

Iceland, therefore, finds itself in a similar position to most modern economies: needing to find a balance between economic growth and sustainability, and then deciding how to account for both. However, just as with most other modern economies, Iceland is sluggish to adapt its statistical methods and measurements to be more representative of all contributions to the economy. Such fundamental changes in measurement may promote policies more clearly aimed at wellbeing and sustainability, rather than plain economic growth.

Steps have been made in this direction. In March 2012, a parliamentary resolution was passed on advancing a green economy (Alþingi, 2012). A subsequent parliamentary report stated that it is 'urgent' that Iceland should research and adopt the GPI[3] concurrent with the GDP in order to better measure sustainable economic progress and guide economic policy (Alþingi, 2013). However, no further progress, politically or otherwise, appears to have been made since that time.

It can be said that the situation in Iceland perhaps reflects the general inertia on the side of policy-makers worldwide with regard to the much-needed implementation of innovation in the measurement of economic progress. Though a number of

[3] The GPI – Genuine Progress Indicator – functions similar to the GDP, but includes a number of other aspects such as unpaid household work. Most importantly, it accounts for resource depletion in the process of production.

governments and non-governmental institutions have been putting some effort into supporting innovation in this field, the overall process seems to lack both the political will as well as the dedication to search for practical solutions. In the meantime, GDP, and whether it's growing or not, still pushes policymakers to throw their weight behind growth-inducing policies. This continued focus on growth may, in the long run, restrict rather than enable a sustainable future for humankind.

1.2. RESEARCH QUESTION AND AIM OF RESEARCH

The goal of the research is to explore whether Iceland, as a small state, is in a position to forge new paths in the measuring of economic progress.

The research is guided by the main research question:

> **How can Iceland, as a small state, play a role in the international implementation of innovation in measuring economic progress?**

Exploring this research question is really a query in three parts. Firstly, the primary method of measuring economic progress, the gross domestic product (GDP), is evaluated in terms of its success in providing a comprehensive overview of modern economic progress and societal wellbeing. Secondly, international innovation in the measurement of economic progress is explored. Finally, Iceland's position as an international norm entrepreneur is examined and defined

Consequently, the sub-questions to the main research question are as follows:

a. How effective is the Gross Domestic Product (GDP) in terms of providing a comprehensive overview of economic progress and societal wellbeing?
b. What international innovation is taking place in the measurement of economic progress?
c. To what extent can Iceland be defined as a norm entrepreneur?

1.3. THEORETICAL PERSPECTIVE

Norms and the role they can play in international relations is deeply based in the social theory of constructivism, which holds that the world and its systems are socially constructed and that norms and ideas play a distinctive role in shaping change, which, in its turn, shapes norms and ideas (Barnett, 2014).

Viewed through the lens of constructivism, GDP could be called a social fact. Social facts are "those facts that are produced by virtue of all the relevant actors agreeing that they exist" (Ruggie, 1998: p.13). Just as with democracy and capitalism, GDP only continues being a fact "as long as relevant social institutions and collective beliefs maintain its role within society." (Pfefferle, 2014, p.6). It is therefore not an inevitable fact, such as rain and death, but a socially constructed one.

Since its inception around 80 years ago, GDP has become the international 'norm' for measuring, comparing and projecting countries' economic growth. An unprecedented amount of manpower and resources, across nations and borders, has been invested in developing and standardising this indicator, based on the United Nations Systems of National Accounts. It is often perceived to be a simple and useful number, which can give the public and policymakers a clear indication of a nation's progress and economic standing or potential.

However, it can be argued that this inaccurate application of a social construct such as GDP can give a 'skewed' impression of the true wellbeing of a country and its economy. This may lead to misguided policy-making.

For instance, socially beneficial activities such as housework or childcare by parents do not contribute to the calculation of GDP at all. Yet events or activities that are harmful or detrimental, such as the production of lethal pesticides or the devastating Deepwater Horizon oil spill in the Gulf of Mexico, contribute positively to an increase in GDP. In this respect, the effect of continued economic growth, as measured by GDP, on long-term environmental sustainability is of special concern (Klein, 2014).

Considering the issue of measuring a country's economic wellbeing and/or progress, constructivism implies that the tools used to that extent, though based in physical reality (i.e. the monetary value of goods and consumption as in GDP), are ultimately social

constructs and need to be approached as such. In other words, human society has created them and human society can change them.

In the respect of bringing about social change through norms, Ingebritsen (2002) suggests that the Nordic states (Norway, Sweden, Denmark, Finland and Iceland) have gained a proportionately high prominence in affecting international policy regarding environmental issues related to sustainable development, conflict resolution and international aid and can therefore be categorised as norm entrepreneurs.

Given its small size, its advanced infrastructure, and its position as a geographical and at times cultural bridge between the United States and Europe, it is worth exploring what role Iceland, as a small state, has to play in affecting new norms regarding the measurement of economic progress, thus laying the groundwork for policymaking aimed at establishing more sustainable and equitable economic growth internationally.

1.4. METHODOLOGY

The main research question and its three related tenets, as posed in Chapter 1.2., were explored through qualitative research based in the paradigm of phenomenography. Phenomenography is the "empirical study of the limited number of qualitatively different ways in which various phenomena in, and aspects of, the world around us, are experienced, conceptualised, understood, perceived and apprehended" (Marton as quoted by Ashworth & Lucas, 1998, p.415). According to Reed (2006), phenomenography is more concerned with the relationship the subject has with the phenomenon, whereas phenomenology is more concerned with the phenomenon itself.

In order to fulfil the aims of this study, the method of purposive sampling was employed. Purposive sampling allows for the selection of participants based on how the participants contribute to the goal of the research, rather than selecting according to pre-decided numbers. This approach is described in more detail in Chapter 3.

Twelve individual interviews and one focus group were conducted. Discussions were based on five open-ended questions, derived from the main research question and sub-questions. The questions are included in Appendix 1.

The method of open coding was employed to cluster the themes arising from the interviews and focus group discussion.

The research methodology is discussed in greater detail in Chapter 3.

1.5. PURPOSE OF RESEARCH

Arguably, one of the world's biggest challenges today is how to ensure a sustainable future for humankind in the face of rapid climate change and related socio-political issues. The dependency on GDP as the main economic indicator inevitably leads to economic policies focused on growth, regardless of the effects it may have on the climate or communities (Klein, 2014).

One way of addressing the challenge of sustainability is to shift the focus of the measurement of economic progress away from the overarching influence of the GDP, towards measurements more contributive to viable social, environmental and economic policies.

For a variety of reasons, Iceland is in a unique position to explore the formal implementation of innovation in measuring economic progress:

a. It is a small state, but wealthy and technologically advanced. Due to the short bureaucratic distance between government institutions and citizens, it may be possible to implement changes to structures much faster, as implied by President Ólafur Ragnar Grímsson in his inaugural speech in 2006: "Small states could serve as a sort of laboratory, particularly in the areas … most likely to prove crucial in human development in the years ahead" (Bailes & Þorhallsson, 2014, p.127).
b. Bearing in mind that Iceland is one of the original twenty OECD states, it benefits from having an infrastructure comparable to most rich industrialized states, though on a much smaller scale. It can therefore be assumed that the results of implementing innovation in measuring economic progress could be measured and observed much more rapidly and effectively.
c. Given its previous experience as a norm entrepreneur in the fields of international relations and the development of renewable energy, and its position as a geographical and at times cultural bridge between the United

States and Europe, Iceland can serve as a type of cross-continental 'incubator' of innovation in measuring economic progress.

If Iceland is successful in implementing more innovative forms of measuring economic progress, it can lay the groundwork for the transition of other industrialised countries from focusing on pure growth economics to developing sustainable economic policies, thereby bringing about the desired shift towards social and environmental sustainability.

1.6. THESIS STRUCTURE

Chapter 1 serves as an introductory chapter to the thesis, describing the research project, research question, aims, theoretical perspective, research methods and purpose.

Chapter 2 explores the theoretical context by investigating GDP as measurement of economic progress, international innovation in the field of economic progress and finally, the term norm entrepreneur and how it is manifested in Scandinavia and Iceland specifically.

Chapter 3 involves the methodology, describing the participants of the research, the research design and approach, the description of research methods, data collection and data analysis, which leads into a discussion on validity and reliability, followed by an evaluation of the researcher's status and ethical concerns. It concludes with the questions for data collection by way of interviews.

The research findings are presented in Chapter 4, revealing the major themes that emerged from the interviews.

Chapter 5 sees a general discussion of the findings, also expounding on the limitations and implications, future recommendations and ending with the conclusion, after which the reader can find the bibliography and the appendix.

2. THEORY AND CONTEXT

Chapter 2 discusses the three main tenets of this thesis in the context of theory and literature.

The chapter is divided into three parts. The first sub-chapter focuses attention on GDP, its history, flaws, and how it is calculated. The second sub-chapter provides an overview of innovation in the measurement of economic progress. This sub-chapter also includes an extensive discussion on barriers to the implementation of innovation. The third, and last, sub-chapter sheds light on Iceland's position as a norm entrepreneur in the context of research on the subject.

Research and published material available on the topics of sub-chapters 2.1 and 2.2 proved to be extremely voluminous, wide-ranging and sometimes even contradictory and controversial. As a result, and for the sake of a more comprehensive overview, sub-chapters 2.1 and 2.2 make up the largest parts of Chapter 2.

2.1. MEASURING ECONOMIC PROGRESS: GDP

For centuries, attempts have been made to measure collective production, output and income. Yet not until the technological advances of the 20th century did it become possible to collect, calculate and analyse large swaths of statistical data in a feasible fashion. Initial attempts were driven by either "intellectual curiosity" or the "desire for control" (Karabell, 2014, p.57). In other words, the one goal of measuring production, output and income was to classify, define and explore the nature of economic behaviour and activities. The other goal was to find ways of creating and extracting revenue for the crown or the state to engage the management of people and resources, often with the purpose of funding acts of offense or defence in times of social or political upheaval.

The leading economic indicators we have today are the direct consequence of the search for information to guide decision-making that started centuries ago. GDP, unemployment, inflation and a host of other statistical numbers are all the result of man's attempts at better defining, predicting and controlling his environment.

For the purposes of this research, the focus is firmly on GDP, widely accepted and interpreted as indicative of an economy's health through growth or contraction. As a

result of its prominence, GDP has also come to be seen as the sign of an economy's progress and the wellbeing of its participants, though growth, progress and wellbeing are not empirically interchangeable entities.

Chapter 2.1 is divided in three sections: GDP's history, how it is measured and finally concerns and criticisms.

2.1.1. GDP: Its purpose and past

Gross domestic product (GDP) is the "most widely used measure of economic activity." (Stiglitz et al., 2010, p.23). A common definition, such as provided by Van den Bergh (2009, p.117), is that GDP is "the monetary, market value of all final goods and services produced in a country over the course of a year". GDP basically adds together a nation's personal, or private, consumption (what households pay for goods and services), government expenditures (public spending on infrastructure and services etc.), investment (also called net capital formation) and net exports (exports minus imports) (Costanza et al., 2009). The basic formula used is

$$\mathbf{Y = C + I + G + (X - M)\ *}$$

*Y stands for GDP, C is Consumption, I is Investment, G is Government expenditure and X is exports, while M is imports.

GDP's origins date back to the period of economic upheaval signified by the Great Depression in the 1930s. During this period and into the 1940s, the GDP and Systems of National Accounts (SNA) methodologies were created by the US and the UK Treasuries. Nobel Laureate Simon Kuznets played a pivotal role in the development of the GDP and SNA. The GDP as measurement of economic activity was subsequently employed by President Roosevelt's government in an attempt to gain support for the creation of policies designed to bring the US out of the depression. Thereafter it was used to show the US's economic resilience so far as proposed participation in WWII was concerned (Costanza et al., 2009).

At the Bretton Woods Conference in 1944, world leaders from 44 allied nations gathered to discuss ways in which to "speed up economic progress everywhere, aid political stability and foster peace." (Costanza et al., 2009, p.5). From their deliberations, and guided by great minds such as John Maynard Keynes, it was decided that growing the world economy through international trade would be the best path to ensure their goals. At this meeting, the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD – now part of the World Bank) were founded. The concurrent development of the GDP and SNA influenced discussions at Bretton Woods and led to the GDP becoming the primary measure of economic progress from there on, up to the present moment (Costanza et al., 2009).

At this time, the single number distilled from the SNA was the Gross National Product (GNP), the forerunner of GDP, which didn't come to replace GNP fully before 1991 (Karabell, 2014). The difference between GNP and GDP is simply that GNP represents all production owned by the nationals of a certain economy, regardless of where the production takes place, while GDP represents all production in an economy within the defined political borders of that economy, regardless of the nationality of the owners of the production or production facility. For example, the goods produced by IKEA in South Korea would be included in Sweden's GNP, but not in its GDP. Conversely, a factory producing goods for IKEA in South Korea would have its output included, provided it is defined as final and not intermediate, in South Korea's GDP, but not in its GNP.

It could be said that one of the main causes for the shift from GNP to GDP is globalization. It is unlikely that any of the original developers of the SNA could ever have foreseen the extent to which the globalization of corporate interests, subsequent economic activities and the mobility of capital would come to defy the limitations of national borders in the late 20th and early 21st centuries.

The reasoning behind GDP becoming the preferred indicator is understood to be because it "relates more closely to other indicators of the domestic economy, such as prices (inflation) and employment, as well as non-governmental statistics such as home sales and consumer sentiment." (Karabell, 2014, p.158). Yet both GDP and GNP still have a role to play as indicators, depending on the country in question. Due to its

international reach, there is not a big difference between GNP and GDP for a country such as the USA. Resource-rich nations in Africa, however, with huge investment by foreign entities in, for example mining, may sport high or increasing GDP, but a lower GNP.

Since the time of developing and implementing the Systems of National Accounts from which GDP is calculated, international organizations such as the United Nations have taken the lead in developing standardized methodology internationally, starting with the original SNA published in 1953 (Coyle, 2014).

Though its initial purpose was to provide statistical information, GDP has since become a much more integral and powerful topic of public and political discourse, especially with regard to policy-making. Accurate or not, it has become a simple, generally accepted "truth" that a rising GDP is good, and a decreasing, or stagnant GDP is bad.

The increase or contraction of this supposedly objective number has led to the rise - and fall - of presidents, governments, and any number of economic policies and policymakers. During the heat of the United States presidential campaign in 1992, the incumbent George H.W. Bush was told by his economic advisers that economic growth in the second quarter would be around 1,5 percent whereas the first quarter had growth of 2,7 percent. The president went pale and responded: "This is the worst news I've ever heard." (Karabell, 2014, p.51). George Bush Snr. went on to lose the election to Bill Clinton.

2.1.2. GDP: a short overview of how it is measured

As Diane Coyle says in her book *GDP: A Brief but Affectionate History*, "there is no such entity as GDP out there in the real world waiting to be measured by economists. It is an abstract idea." (2014, p.24). Consequently, national income cannot be considered a "primary fact" but is an "empirical construct" (Richard Stone as quoted in Coyle, 2014, p.24).

GDP, quite simply, is supposed to represent the sum of all that is spent in an economy. All the data in GDP is recorded in monetary form, according to the market

price. Where the market price is not available, other methods are used to impute a monetary estimate.

GDP is most often calculated on a national basis, using at least one, but most often a combination of all three the following methods: 1. the production, or value-added, approach, 2. the income approach, and 3. the expenditure, or final demand, approach.

Table 1

Three Ways to Measure GDP

I. Value-added (or production) approach	*2005 share (percent)*
Gross Output (gross sales less change in inventories)	183.5
Less: Intermediate inputs	83.5
***Equals:* Value added for each industry**	**100.0**
II. Income (by type) approach	
Sum of Compensation	56.6
Rental income	0.3
Profits and proprietors' income	17.6
Taxes on production & imports	7.4
Less: Subsidies	0.5
Interest, miscellaneous payments	5.5
Depreciation	12.9
***Equals:* Total domestic incomes earned**	**100.0**
III. Final demand (or expenditures) approach	
Sum of Consumption of final goods and services by households	70.0
Investment in plant, equipment, and software	16.7
Government expenditures on goods and services	19.0
Net exports of goods and services (exports — imports)	—5.7
***Equals:* Final sales of domestic product to purchasers**	**100.0**

Source: J.Steven Landefeld, Eugene P.Seskin, and Barbara M. Fraumeni, "Taking the Pulse of the Ecoonomy: Measuring GDP," Journal of Economic Perspectives 22, no.2 (2008):193 – 216.

The United Kingdom's Office of National Statistics (2013) explains the different approaches to calculating the estimates as follows:

- The **production** estimate is "based on the value of final output in the economy less the inputs used up in the production process." (Office for National Statistics, 2013). In order to avoid double counting, final output is defined as the value of a final product. In other words, the intermediate goods produced

for use in another product, such as car tyres, car audio systems and engineering expertise for a car, form part of the overall price of the final product: the car. To get a clearer estimate, value added at different stages of production is calculated and aggregated through a method called gross value added (GVA) and then adjusted for taxes and subsidies. This gives the final GDP estimate.

- The **income** estimate "measures the incomes earned by individuals (for example, wages) and corporations (for example, profits) directly from the production of outputs (goods and services)." (Office for National Statistics, 2013). This information is obtained from data regarding quarterly operating profits, employee earnings, employer surveys, as well as data from tax sources.
- The **expenditure** estimate is "based on the value of total expenditure on goods and services, excluding intermediate goods and services, produced in the domestic economy during a given period." (Office for National Statistics, 2013). This data is collected by way of household and business surveys and other data on government expenditure and the purpose of this estimate is to record the "value of spending by corporations, consumers, overseas purchasers and government on goods and services." (Office for National Statistics, 2013).

In a perfect world, with perfect data, these three approaches would, individually, produce the same estimates, just as income and expenditure should, in theory, balance according to the circular flow model of the economy (Figure 1). The range of statistical surveys and datasets that the estimates are based on, however, means that the results differ. Therefore, the estimates from all three approaches are usually combined to become the final published estimate of GDP. Additionally, as GDP is generally estimated on a quarterly basis first, much of the data used is not yet available at the time the estimates are made. As a result, GDP figures are revised regularly and adjusted accordingly, as new data becomes available and when the annual GDP figures are concluded.

Individual countries may opt for different methods in approaching the data, depending on government capacity, resources, public and private infrastructure and opportunities for data collection. On top of that, allowances have to be made for adjustments due to seasonal fluctuations and inflation, amongst other things, and these

aspects need to be considered when different time periods are compared to each other. For instance, nominal GDP growth, often the result of inflation, should not be confused with real GDP growth. Statisticians aim to avoid this by using complicated methods of inflation adjustment in order to show real growth. However, depending on the formula of choice, the result may be "strikingly different "real" conclusions." (Coyle, 2014, p.31)

Figure 1

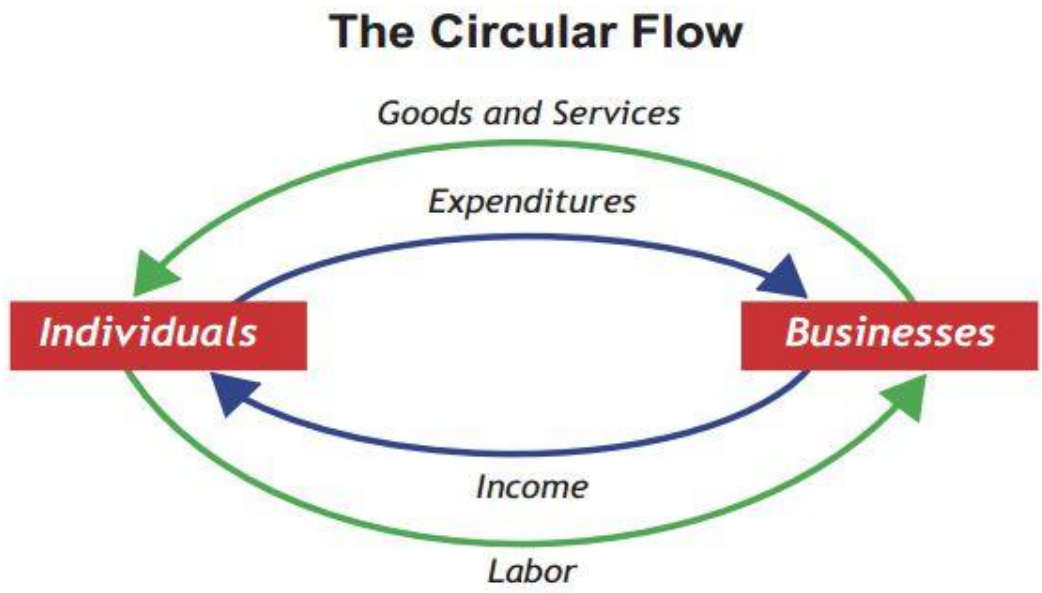

Figure 1. The Circular Flow.

Source: Coyle, D. (2014). GDP: A brief but affectionate history. Princeton University Press, New Jersey.

Most countries follow the guidelines as set forth by the SNA, the System of National Accounts as endorsed and published by the United Nations. However, regional variations exist. European countries, for example, follow the ESA, the European System of National and Regional Accounts.

The most recent update to the methodological framework of the SNA was published in 2008. Its European counterpart, the ESA 2010, followed two years later and finally replaced the ESA 95 (dating from 1995) in September 2014. The most recent changes to the ESA include counting research and development expenditure, as well as expenditure on weapons systems, as investment (Eurostat, 2016).

These are but a few of the methodological and statistical changes that are regularly made to the standardized SNA in order to better reflect the changing nature of activities in the real economy. Most often, this leads to an increase in GDP. For instance, the implementation of ESA 2010 has led to a 3.7% rise in GDP for the EU – 28 in 2010, 2.3% as a result of methodological changes and 1.4% as a result of statistical improvements (Eurostat, 2016).

Sometimes these methodological or statistical changes can cause rather large and meaningful adjustments to GDP figures. When Italian statisticians began including estimates of the unofficial economy in their figures in 1987, the size of the economy literally increased by about a fifth overnight (Coyle, 2014, p.106). In 2013, the US Bureau of Economic Analysis (BEA) announced that they had started including research and development expenses in the GDP, and, as a result, adjusted the size of the US economy with 400 billion dollars. This is a figure "larger than the GDP of more than 100 countries." (Karabell, 2014, p.4).

When methodological changes such as these are made, GDP is typically revised as far back as is statistically possible. The 2013 shift in the way the BEA measures economic output in the US, for instance, was revised all the way back to 1929 (Karabell, 2014).

GDP is often referred to as a simple form of measurement which allows for clear comparison between countries, as well as regions.[4] Yet, in practice, producing a country's GDP as a simple statistical percentage is an extremely time-consuming, manpower heavy and statistically demanding process, especially with regard to the collection, analysis and processing of data.

Regardless of how difficult it is to produce, GDP is the one statistic that can be found in all of the proverbial four corners of the Earth. For instance, though GDP was originally, at inception in the 1930s, only calculated in a small number of more advanced countries, the 2014 list of GDP figures by country published by the United Nations included 220 country and independent territory listings (United Nations Statistics Division, 2016). GDP is even calculated for the small country of Bhutan,

[4] GDP figures are often also calculated for smaller regions, such as individual states in the United States, or for larger regions, such as all OECD countries combined or even global GDP.

though publicly Bhutan claims to focus its policy-making on its Gross National Happiness index.

The methods of statistical data collection, analysis, calculation and presentation have become increasingly sophisticated and standardized across borders. A point in case: the first UN guide to the SNA, published in 1953, had fewer than 50 pages. The latest SNA guide dating from 2008 has 722 pages, not including the widely used commentary on the SNA, which has 400 pages. This means a very small number of people have a proper understanding of exactly how the GDP is constructed (Coyle, 2014).

GDP is, without a doubt, the economic indicator that carries the most weight when it comes to political and economic decision-making. All countries expend considerable time and effort on collecting data and calculating their GDP and, with the help of standardized systems of national accounts, all countries are compared internationally according to their GDP (Van den Bergh, 2009, p.120). However, the question arises as to what extent countries with limited resources and funding are left at a disadvantage as a result of comparison based on the standardized methodology imposed on them externally.

2.1.3. GDP today: concerns and criticisms

The inherent shortcomings of GDP, twinned with its heavy impact on policy-making, has led to growing dissatisfaction with the way GDP is used as a one-size-fits-all number to describe the state of a nation's welfare and economic progress. Leading economists, including various Nobel laureates, have voiced their concerns. Amongst them are Simon Kuznets, James Galbraith, Paul Samuelson, Amartya Sen and Herman Daly (Van den Bergh, 2009). Politicians such as former French president Nicholas Sarkozy and UN Secretary-General Ban Ki-Moon have also expressed concern that GDP is contributing to misguided economic policies (Beyond GDP, 2015).

Though it is still generally accepted that GDP can give a broad indication of the rate of wealth accumulation as expressed in monetary terms of production and expenditure within a country, lists of practical, philosophical and even ethical concerns about GDP abound. Van den Bergh (2009) summarized a number of criticisms of GDP as follows:

- Principles of proper accounting

- not dividing clearly between costs and benefits and not correcting for 'changes in stocks and supplies'

- Intertemporal considerations

-'economics does not offer support for GDP as a measure of social welfare'

- Lexicographic preferences

- basic needs are not accounted for in favour of the counting of 'luxury services and material goods'

- Empirical studies of happiness

- certain studies show that, despite GDP growth, the 'increase in mean welfare stagnated or even reversed … in most western OECD countries'

- Income distribution, relative income and rivalry for status

- GDP per capita refers to average income and ignores changes in 'the income distribution, even though an uneven distribution implies unequal opportunities for personal development and wellbeing'

- Formal versus informal economy

- only activities and transactions with a market price is counted, neglecting informal transactions outside of markets

- Environmental externalities and depletion of natural resources

- "the capital depreciation associated with environmental change (fish stocks, forests and biodiversity) and the depletion of resource supplies (fossil energy and metal ores) are missing from the GDP calculation."

(Van den Bergh, 2009, p.118 – 120)

Coyle (2014) neatly groups these, and other concerns, into three categories, describing GDP's inability to:

a. reflect the *complexity* of the globalized modern economy in the form of the pace of innovation and the introduction of new goods and services, including complicated production chains stretching across borders
b. quantify *productivity* as expressed in the increasingly large contribution that services and non-physical products, such as "free" online activities, make to advanced economies.

c. account for *sustainability* issues regarding the depletion of resources and assets, which, in their turn, threaten the potential of further growth as expressed by GDP.

Coyle's three broad categories, together with comments on GDP's arbitrary inclusivity, its effect on policy-making, the misrepresentation of globalized capital leakage and the danger of a one-size-fits-all metronomic, form the basis of a more detailed discussion on criticism and concerns below.

Arbitrary inclusivity

GDP was never intended to become an expression of the general state of economic wellbeing of a nation (Kuznets, 1941; Costanza et al., 2009). It was always only intended to be an aggregate measure of specific factors related to a nation's capacity for production of goods and services. Even at its inception, Kuznets listed a number of things not measured by the GDP, such as services of housewives and other family members (Kuznets, 1934, p.3 - 5). This means that the GDP does not, and was never intended to, provide a comprehensive overview of all economic activity, instead only measuring a "narrow segment of society's activity." (Costanza, 2009, p.8).

The seemingly arbitrary nature of what is included in the GDP is a particular bone of contention for critics of the GDP and has led to a number of vocal, published protests. One such protest is Marilyn Waring's ground-breaking book, *Counting for Nothing: What Men Value And What Women Are Worth*, in which she breaks down step by step the fallacy of a measure of economic production that seemingly ignores most everything done by half the world's population: women.

Ironically, it is often claimed that childcare and housework done in the home (most often by women) cannot be included in the GDP because it would be too difficult to measure it. Yet paid housework and paid childcare are market priced activities. Given the existence of relative market prices, in theory unpaid housework could then also be measured by surveys and imputed, just as many other economic statistics. Some argue that such household production (housework and childcare) is own-production and therefore should not be included in GDP. Yet what farmers consume from their own-

production is measured through surveys and included in the GDP (Waring, 1999). Additionally, own-property "rents" are imputed for the homes people own and live in, even though no market trade is taking place and they own their homes (Coyle, 2014).

Time-use surveys done in some countries have shown that the "scale of this informal, unpaid work is significant: it accounts for more than half of all the time people spend working. If this is valued at money wages paid for similar work, it is equivalent to 1.85 times the size of the conventional national product figures for the United Kingdom in 2001." (Coyle, 2014, p.108). It brings to mind the question: how empirically representative is a constructed measure of economic productivity if it so easily excludes so much actual economic activity?

A "wellbeing" compass for policy-making?

Through the way GDP is used, it has become identified with social welfare, hence often substituted by the phrase 'standard of living' (Van den Bergh, 2009). Therefore the aim of increasing GDP is accepted as a valid argument on which to build policy. Governments use positive changes in GDP as an indicator of success or in order to justify policies to encourage growth as defined by the GDP, and internationally the IMF and World Bank use it in relation to policies and funding of projects (Costanza, 2009).

How much exactly GDP influences policy making is a debatable issue, yet the importance of GDP is often illustrated by, for example, the amount of media coverage it receives, how widespread it appears in governmental documents on the economy, and the fact that central banks "generally formulate their interest policy on the basis of expectations about growth and inflation" (Van den Bergh, 2009, p.120).

To illustrate how important a measurement the GDP is, one only needs to look at the plight of Andreas Georgiou who, in 2010, during the international recession which affected Greece particularly badly, was appointed head of Elstat, at the time the new official statistics agency in Greece. Mr Georgiou had attempted to correct the previously misrepresented figures on the ratio of the budget deficit to GDP. These misrepresented figures were very useful during the 'boom' times in the run-up to the recession, when a constantly increasing GDP size helped to encourage lenders' view of the borrower's capacity to repay their loans. Greece could procure more loans, but these dealings were built on misinformation, as Mr Georgiou eventually pointed out. For his

efforts, he has been rewarded with criminal charges and a parliamentary enquiry (Coyle, 2014).

It is clear that the misrepresentation of GDP has profound effects on the decisions taken by governments, which, in their turn, have a decisive effect on the wellbeing of the general population. Karabell (2014), claims that "all of Europe has been locked in a downward spiral because of economic policies that are based on the relationship between debt and GDP." (p.5) More will be said on this relationship in Chapter 2.2.5.

Complexity and financial services

Originally, Kuznets had not wanted to include services in GDP at all, as theoretically, you deliver a service, but you produce a good, and GDP was supposed to indicate the aggregate value of production. In the end, services were included and, as the advanced economies have, to a large extent, exported their production activities to emerging economies, services have grown to form an increasingly large part of GDP in the advanced economies. But here comes the crunch: in today's advanced economies, what exactly is a service and what is a product? Is a YouTube video, available for free online, a service or is it a product? And since it is free, can it even be quantified and included in GDP? If the person who is putting it online is not an employee of YouTube, how is the value created in this process accounted for?

This crisis of definition is particularly complicated in the financial services sector. In the original 1953 SNA (in the UK) the contribution of the financial services industry to GDP was negligible, or even negative. Finance was considered rather unproductive because the "interest flows … were broadly treated as an intermediate input …of the finance sector and therefore netted out of the sector's final value-added contribution to GDP" (Coyle, 2014, p.102). However, in an attempt to account for the financial sector in GDP, methods were developed that, slowly but surely, started including a measurement of the financial services sector in GDP. Even so, up to today, it is not yet clear whether these services make any valid contribution to actual production in the economy whatsoever.

The preferred method for calculating this contribution is called FISIM (financial intermediation services indirectly measured) and was introduced in the UN SNA in

1993 (Coyle, 2014). FISIM "compares banks' borrowing and lending rates on their loan and deposit portfolios to a risk-free 'reference rate', such as the central bank's policy rate, and multiplies the difference by stock of outstanding balances in each case" (Coyle, 2014, p.100) This method presents tremendous practical difficulties, but has somehow become part and parcel of how GDP is calculated. Though it makes sense "as a way of measuring the service provided by banks in taking on risk" (Coyle, p.101), the downside is that this method records increased risk-taking as real growth in financial services. It begs the question: Can risk-taking by banks truly be considered economic output?

Additionally, FISIM and the practical accounting difficulties it presents have led to the size of the financial services sector as part of GDP being overstated considerably. For example, instead of the financial sector making up 9% of UK GDP in 2008, the true figure is closer to 6 – 7.5% (Coyle, 2014). Further research reveals that the size of the financial sector may have been overstated by one-fifth, or even as much as one-half (Coyle, 2014).

Aside from ethical issues regarding the validity of the financial sector as a 'productive' sector, and the practical questionability of how its contribution is accounted for, there are also major social implications: political leaders base their policies on what they believe their key industries need. If the financial sector is overstated in importance as a key industry, political leaders may end up using taxpayers' money to bail out banks or institute questionable policies such as quantitative easing to try and bolster the delivery of financial services when, in reality, it is still not even clear what exactly, if anything, this sector is producing in the real economy.

Complexity, geography and productivity

Most of the criticism of GDP has focused on what is, arbitrarily, not included in the estimates. Some criticism, however, has been squarely aimed at what, in fact, GDP does measure, and where the resultant gains go.

Much has been written about the global product chain that delivers products such as coffee, iPhones and T-shirts to the advanced economies. However, the political

economist John Smith points out that “only a small fraction of its final selling price will appear in the GDP of the country where it was produced while the greater part of it appears in the GDP of the country where it is consumed” (2012, para.32). Smith presents the question: is GDP truly representative of the value of labour and production? Large Western corporations make use of cheap labour in other parts of the world to maximise profits and efficiency. But how is this represented in the GDP of the different countries involved?

The intricate relationships between large, Western corporations and the foreign production facilities that supply them, make for an unbalanced representation of value added as represented in market price in GDP. For instance, hundreds of thousands of Chinese workers work very long hours to assemble iPhones, but the fact that the final product is priced and consumed abroad means that all this economic activity hardly shows up in China’s GDP. A study done by the Asian Development Bank in 2010 concluded that an iPhone manufactured for $178.96 abroad and sold for $500 in the US, yielded “a gross profit of 64 percent to be shared between entities such as Apple, its distributors, and the US government, all of which appears as “value added” within the United States” (Smith, 2012, para.10). That means all the productive work put into making the actual iPhone counts much, much less than the act of selling it. Added to that, if foreign workers become more productive, i.e. producing more iPhones faster for the same wages, the profit margin in the consumer country becomes even larger. Thus improved productivity in the supply chain, provided that wages hold low, increases GDP in the consumer country but not in the country of production.

GDP’s inability to make an equal distribution between the production process (where value is added) and the act of consumption (where value is captured) is another grave cause of concern, leading John Smith to state: “To the extent that it does, GDP departs ever further from being an objective, more-or-less accurate approximation of a nation’s product (indeed, it never was), and is instead a veil that conceals the increasingly parasitic and exploitative relation between northern capitals and southern living labor - in other words the imperialist character of the global capitalist economy.” (2012, para.38).

Productivity and technology

An increase in productivity, often as the result of technological innovation, is generally considered one of the major drivers of growth. Thus the invention of the steam engine, electricity and how it is distributed, new and faster methods of transport and the automation of factory production have all had major effects on increases in productivity. In fact, productivity in advanced economies is at an all-time high (Brynjolfsson, 2013). However, since the financial crisis in 2008, GDP growth in most advanced economies has, at best, been sluggish.

A large part of the problem may very well be the simple fact that GDP simply is not designed to accommodate the kind of economic activity that, since the advent of the World Wide Web, has become commonplace. According to Brynjolfsson (2013), 300 billion dollars per year of "free" goods and services on the Internet such as Wikipedia, Google and Skype, are not accounted for in GDP.

Brynjolfsson elaborates by saying that "we have created more wealth in the past decade than ever, but for the majority of Americans, their income has fallen." and goes on to call the period we are living in "the great decoupling of productivity from employment, of wealth from work." (Brynjolfsson, 2013, para.12). Considering that GDP consists of trade data presented as market transactions which is derived not just from market prices, but also from company employment surveys, we have to wonder whether in an age of rapidly changing business models, many based on "free" products, GDP can truly account for what's really being produced, bought and sold – if at all.

Sustainability

The effect of growth-based economics, as supported by the focus of politicians, economists and schools of economics on growth as defined by the GDP, is particularly of concern regarding its impact on the environment. As Van den Bergh (2009) points out, "the capital depreciation associated with environmental change (fish stocks, forests and biodiversity) and the depletion of resource supplies (fossil energy and metal ores) are missing from the GDP calculation" (p.120).

GDP in no way accounts for the cost of depleting nature in the process of producing goods or services. In fact, positive GDP growth can be incurred from activities that are potentially harmful to the environment, such as the production and use of disposable items, for example nappies, plastic bottles, cutlery and so forth. These activities have grave consequences regarding pollution, both during the production phase and subsequent waste disposal after use, yet add positively to economic output as represented in the GDP.

In the area of environmental disaster, something such as the 1989 Exxon-Valdez tanker spill, which polluted the ocean with oil for miles, killed marine life, endangered migratory shorebirds and ruined local people's health and way of life, actually contributed tremendously to the GDP. The main reason for this is that the clean-up cost from such an oil spill is not recorded as an economic liability by the GDP. Lacking any other form of monetary measurement to account for it, a disaster for nature can easily count as a boon for man-made economics (Eisler, 2007). One cannot look at it otherwise than as an inverted form of incentive, encouraging behaviour that is not conducive to the welfare of man or nature in the long run.

It is concerns about the negative impact inherent to the growth of GDP, regardless of the cost to the environment and its indifference to long-term consequences, which lead to doubts whether GDP can even be said to represent economic progress at all.

Globalized Leakage

The circular flow of the economy model (Figure 1) implies that there is equilibrium in the economy: what is produced is consumed, money that is earned will become money that is spent. This may well have been very true when GDP was devised as the straightforward expression of the flow of income, production and expenditure. But, in a world of inter-related global economic flows, where money is earned in one country and spent in another, the model's flows and lines become considerably fuzzier.

According to common economic principles, money can enter the circular flow through injections, such as investment, government spending and exports. Money can also leak from the circular flow through savings, taxes and imports (Figure 2). In a perfect world (or a closed economy), the money spent on imports will equal the money

earned on exports (also called the balance of trade). Taxes will flow directly back to the taxpayers through government spending, and savings will find their way straight back into the circular flow through investment.

Note that the equation for GDP is **Y = C + I + G + (X – M).** Including S (Savings) and T (Taxes) separately would mean double counting as T is supposed to be equal to G (Government spending) and I (Investment) is equal to S. However, this is not always the case in a globalized world and the concern here is mainly S.

Private savings are constituted of dividends, stocks, bonds, bank deposits etc. – basically any money that is left over after consumption. Public savings would be whatever the government has left over from tax revenues minus government expenditure (also called the budget surplus).

It is important to note that there has been a global trend towards multinational corporations and the owners of capital expanding their share of the cake through acquisitions, mergers and increasing income derived from dividends, interest and profits from the sale of, for example property, or the trade in shares. Much of this is not accounted for in GDP.

In their discussion on current accounts in their textbook on International Economics (2014), Krugman, Obstfeld and Melitz mention the "Mystery of the Missing Deficit" (p.357). They present a graph showing that the global current account was mostly negative from 1980 to 2003, changed in 2004 and has been positive from 2005 to 2012. In this context, it is useful to know that in the balance of payments (current) accounts, exports and imports are divided into three categories: goods trade (also called merchandise), services such as tourist expenditures and shipping fees, and income. The last category (income) can be described as "made up mostly of international interest and dividend payments and the earnings of domestically owned firms operating abroad" (Krugman et al., 2014, p.361). This raises the question: If there is a surplus in the balance of payments, why is global GDP growth so sluggish? Where is the excess money, and why is it not boosting economic growth?

Technically and despite globalization, the cost that flows from one country should balance the income that flows to another. Yet income from interest, dividends and other returns on capital are generally taxed at a lower rate than salaries, which makes for an unequal flow of capital in the amounts injected and leaked in the circular flow of

economies. This situation becomes even more acute when income is not taxed at all, as is the case when funds are stored in so-called offshore tax havens.

Thomas Piketty, amongst others, argue that owners of capital (both physical and financial) have experienced a marked increase in returns and that the return on capital is always significantly more than the general growth in an economy (Naim, 2014). Additionally, Krugman, Obstfeld and Melitz (2014) point out that "accurate measurement of international interest and dividend receipts is particularly difficult" (p.364). It is difficult to account for it in the current accounts and it is just as difficult to account for the imbalance between savings and investment in the limitations posed by the GDP.

In an age of borderless capital, offshore banking and the profitable trading of financial products, private savings in the form of excess capital or dividends is leaking out of domestic economies and not re-emerging in the form of productive investment. In theory, I and S cancel each other out and should be equal. In practice, governments are struggling with sluggish GDP growth rates because the excess funds are going somewhere else, for example into financial speculation or stored in opaque offshore accounts.[5] Savings traded and stored in these ways do not serve as productive investments conducive to economic growth and make a minimal contribution to the circular flow of the economy. In other words, this does not mean there is no real economic growth in the form of innovation, output or activity. It just means that because GDP counts investment as savings, there is no proper accounting for the leaking of savings and the inequitable distribution of wealth. This has a decisive impact on the way GDP accounts for growth. Globalized leakage is visually illustrated in Figure 2.

[5] It is estimated that between $21 trillion and up to $32 trillion is stashed in offshore tax havens (Stewart, 2016).

Figure 2

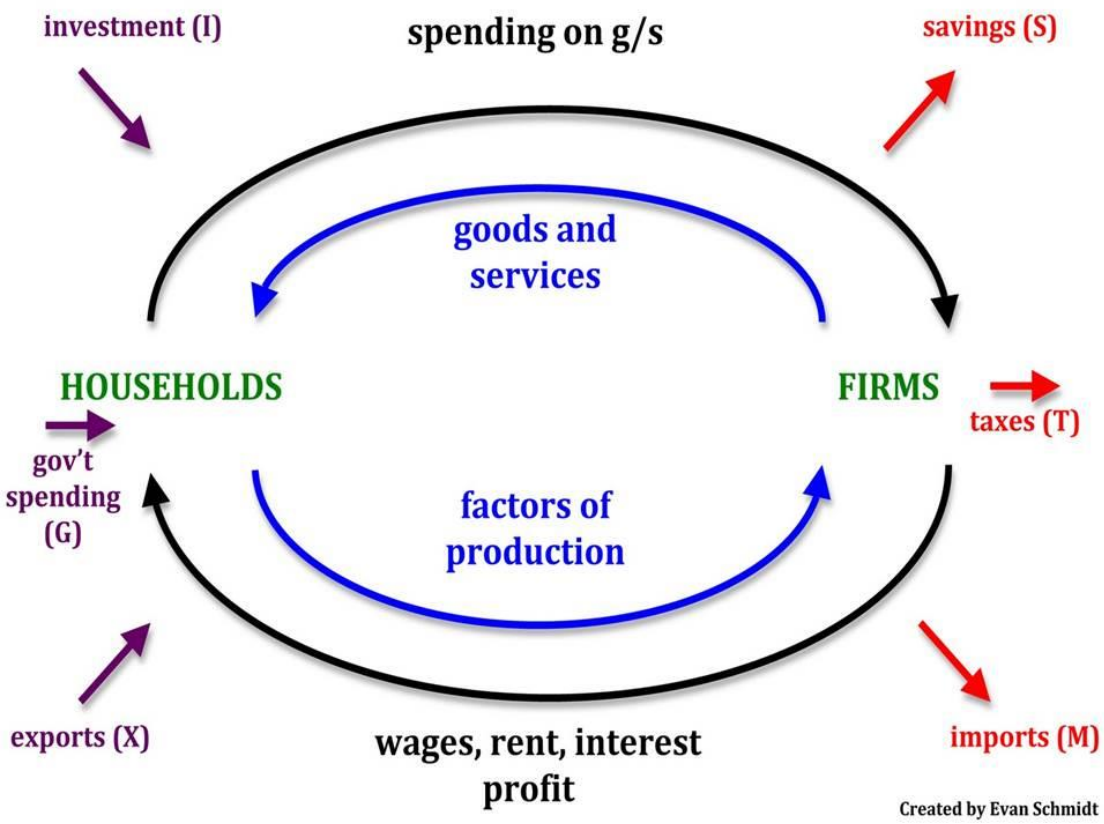

Figure 2 – Circular flow of the economy showing injections and leakages.
Source: Evan Schmidt

One size fits all?

The final point of criticism focuses on public and political reliance on a single figure of comparison and the myth that it is a simple number. In fact, there is nothing simple about the GDP at all. Though it may be published as a simple number, the processes that make it so are anything but. Huge international efforts, as presented in the SNA 2008 and the ESA 2010, are made to try and keep up with the rapid changes in information and communication technologies, where and how production and expenditure take place, changes to intellectual property products and services and the globalization of financial assets, services and other economic systems. One has to ask: in the age of Big Data and technology, what is the point?

Some reason that the GDP and other leading indexes are "an artifact of a world before the Web." (Hoenig as quoted by Gertner, 2010, para.38). In the meantime, trying to produce the standardized statistics required by international institutions can often

place a great burden on all countries, as described in greater detail in Ch.2.1.2. And to what end, exactly?

Karabell in his book *Leading Indicators: A Short History of the Numbers that Rule Our World* (2014), argues that the leading national indicators such as GDP, unemployment, inflation, Consumer Price Index (CPI) and so forth are far too general to be of use and that not one of them "was designed to carry the weight they now do. They were not invented to be absolute markers of whether we are doing well or poorly, whether our nations are succeeding or failing, and whether our governments are visionary or destructive" (p.241). These blunt, indiscriminate single numbers set in motion blunt, indiscriminate policies that do not address specific needs, often vastly different from one locality to the next. As a result, funding is too often misspent or ineffectual.

Though leading indicators are better than nothing and, as limited tools, can provide some form of guidance, the unfortunate reality is that they are too often taken at face value and held up "uncritically as absolute mirrors of reality." (p.247). Karabell concludes: "No one number will suffice. That is the key limitation of GDP: not its methodology, not what it includes or excludes, but the very fact that it attempts to distill into one picture complicated, ever-changing economic systems" (p.247).

In itself, if GDP were only used in terms of what it measures, some could say it is a useful tool. But as GDP is used as a one-size-fits-all metronomic for everything from economic growth to economic progress to social welfare, it gives grave concern for the implications for future generations of policymakers sticking to a misdirected and misapplied form of measurement.

2.2. INTERNATIONAL INNOVATION IN MEASURING ECONOMIC PROGRESS

Modern methods of recording or measuring the economy date as far back as 1665 when a British official by the name of William Petty "produced estimates of the income and expenditure, population, land and other assets of England and Wales" (Coyle, 2014, p.8). This was done in order to determine whether the country had the economic resources to fight a war.

Since then, many different methods and measures have evolved to collect and interpret statistics related to economic and social progress. Even the word *statistics* has the same origin as the word *state* and "originally referred to the collection of figures regarding the state, specifically taxes" (Coyle, 2014, p.8). Therefore, even though a lot of emphasis is placed on GDP, it is important to note that from the very beginning, there have indeed been, and still are, very many methods of measuring the economy, and consequently human welfare and social progress.

For the purposes of this research, innovation in measuring economic progress is broadly divided into four categories:

a. Adding new layers to GDP, such as Green GDP.
b. Producing non-monetary composite indices, mainly to augment GDP or shift the focus to wellbeing economics.
c. The development of more comprehensive econometric alternatives to replace GDP, such as the ISEW or GPI.
d. Dashboard indicators and Big Data.

These forms of innovation are described more thoroughly below, followed by a discussion on barriers to the implementation of innovation.

2.2.1 New Layers to GDP: Green GDP

Improvements are constantly being made to the way GDP is measured in an attempt to produce a statistic that better reflects changing times, technology and economies. Additionally, attempts have been made to include how resources are being utilized to better give an indication of the sustainability of growth. One of the "layers" added is called Green GDP. As Mutert simply put it in 2010, the Green GDP is an "economic growth index that quantifies and calculates the environmental consequences of that growth." (Para.1). It measures these consequences by monetizing "the effects of the loss of biodiversity and the costs of climate change" (para. 5).

The main problem with Green GDP, just as with GDP in general, is what to include, and how to include it. However, it can be argued that Green GDP's measurements are

even more speculative than GDP in general, as it deals with future costs that are not known today.

China is said to be the only country to have put considerable effort into developing Green GDP in an attempt to derive clearer policy guidance on the environmental effects of the tremendous economic growth that it has experienced in the last three decades. Despite high hopes for developing and using Green GDP at all stages of government (Liu and Diamond, 2008), it appears as if China has all but abandoned Green GDP due to its unfavourable growth rate results in many provinces (Mutert, 2010).

2.2.2 Non-monetary composite indices

Acknowledging the shortcomings of GDP has led to the development of a number of non-monetary composite indices more focused on wellbeing economics. Arguably the most well-known of all of these is the Human Development Index (HDI), which has been published by the United Nations for the last 25 years, or since 1990. The 2014 HDI included 188 countries (Human Development Report, 2015).

The HDI aims to show that the availability of life choices for all humans is what defines human development. Economic growth contributes to this, but is a means to an end, not the end goal itself. The HDI looks at the following aspects: health and longevity, education and knowledge and standard of living. The average achievement in these key dimensions is aggregated into a composite index, forming the final summarized measure. It is important to note, though, that the HDI does not provide any commentary on poverty, inequality, human security, empowerment and such (Human Development Report, 2015).

Other composite indices include the Organization for Economic Cooperation and Development's (OECD) Better Life Index. This index compares wellbeing across the 34 OECD member countries, plus Brazil and Russia. Wellbeing is compared by collecting and analysing data on 11 topics: housing, income, jobs, community, education, environment, civic engagement, health, life satisfaction, safety, work-life balance. The results of each of these topics are based on 1 - 4 indicators. E.g. the data gathered on environment is based on air pollution and water quality and the results on safety are based on assault rate and homicide rate. The data and analyses are presented through a user-friendly interactive website.

As with the HDI the results of the Better Life Index do not provide good insight into poverty and issues of equality.

Other composite indices include the Happy Planet Index, which calculates data on life expectancy, experienced wellbeing together with an ecological footprint (Happy Planet Index, 2016) and the Social Progress Index. The Social Progress Index uses 52 indicators to compile data on how well countries provide for basic human needs, foundations of wellbeing (e.g. access to knowledge and ecosystem sustainability) and opportunity, such as personal freedom and choice (Social Progress Imperative, 2015).

Last, but by no means least, on this short list of composite indices, is the tiny country of Bhutan's Gross National Happiness Index (GNH). Though this little country's decision to produce an index based on happiness had originally attracted derision from international commentators, the increased concern over the effects of climate change has unleashed more positive discussions on the purpose and methodology of GNH (Zhong, 2015).

The Bhutanese do surveys involving 33 indicators, such as access to telephones and freedom of speech. These are spread over nine domains: psychological wellbeing, health, education, culture, good governance, community vitality, ecological diversity and resilience, and living standards.

The goal of the GNH is not to create happiness. Instead it is to create the conditions conducive to happiness (Conley, 2010). Avoiding the pitfall of aiming for GDP growth and giving broader credence to all the different facets that contribute to citizens' overall welfare, allow for more innovative policy-making. Thus the GNH supports government policies that impact less negatively on the environment as well. Bhutan is, today, carbon negative and has pledged to remain carbon neutral (Tobgay, 2016). In this case, it is quite possible to refer to Bhutan as an example of a small state that has acted as a norm entrepreneur in the field of measuring economic progress.

2.2.3 Comprehensive alternatives to GDP

According to Cook (2014) there are a range of economic metrics that are considered more comprehensive than GDP, especially in terms of including data on environmental impacts. These include the "Net Domestic Product (NDP), Measure of Economic

Welfare (MEW), Sustainable Measure of Economic Welfare (SMEW), Environmentally Adjusted Domestic Product (EADP), Genuine Savings Index (GSI), Sustainable National Income (SNI), Index of Sustainable Economic Welfare (ISEW), and finally the GPI."[6] (p.32).

Van den Bergh (2009) though, considered the ISEW, GPI and Sustainable Net Benefit Index (SNBI) to be the most influential monetary economic indicators that attempt to fulfil a similar function as GDP. He also continues to describe the SNI and GSI as a type of 'green GDP' indicator that is based on GDP, but mainly amended for accounting environmental factors.

A range of research has been done on either developing these methods of measurement or simply exploring their feasibility as an alternative to GDP, such as studies by Cook (2014), Kubiszewski et al. (2013), Costanza et al. (2009), Van den Bergh (2009), Stiglitz et al. (2010) Hecht (2005), Lawn (2003) and more.

Though there appears to be rising consensus about the inability of GDP to act as a one-size-fits-all metronomic, there are many different theories on which measurements are best suited to replace it, or if it needs to be replaced at all.

Kubiszewski et al. (2013) and Costanza et al. (2009) hold that the GPI is, indeed, the most comprehensive and viable alternative to GDP. Van den Bergh (2009) comes to the conclusion that there is no 'ideal alternative' to GDP at present and the ones that are available, "do not succeed in systematically repairing the list of shortcomings of GDP". (p.125) He instead holds that "regardless of the availability of perfect alternatives, it seems wise anyway to remove the GDP indicator as it is seriously misleading information." (p.127)

Hecht (2005) points out that the one thing all these measures have in common is their simplicity. According to her, it is important to bear in mind that macro indicators by and of themselves can only 'wave a flag', but that we need far more investigative research to determine what is really going on. "For this reason, many analysts focus increasingly on gathering the data with which to understand underlying phenomena and place less emphasis on designing a few simple aggregate indicators to provide a meaningful 'big picture' (Hecht, 2005, p.225).

[6] Genuine Progress Indicator.

2.2.4 Dashboard indicators and Big Data

Stiglitz et al. (2010) state that due to the complexity of modern economics, it is impractical to expect one measurement to fulfil all expectations regarding economic progress. They also hold that the time is ripe to "shift emphasis from measuring economic production to measuring people's wellbeing," but in the "context of sustainability" (Stiglitz et al., 2010, p.10).

Instead of replacing one measurement such as GDP with another, similar measurement, they make 12 recommendations meant to improve the quality of indices and the way we measure our economic, as well as social, progress. They suggest a 'dashboard' of economic indicators to better assess options for sustainable development. Metrics should be included to cover at least seven categories: health, education, environment, employment, material wellbeing, interpersonal connectedness and political engagement. Additionally, measures should also include the distribution of material wealth and economic and environmental sustainability.

However, the recommendations stop short of indicating precisely which indicators should be included, rather likening the Stiglitz et al. report to "open-source software, posted online for anyone to download, discuss and modify" (Gertner, 2010, para.25).

Progress has been made on the development of a dashboard of indicators. The Australian Bureau of Statistics publishes a range of metrics called Measures of Australia's Progress or MAP (Measures of Australia's Progress, 2013). MAP aims to help Australians answer the question: "Is life in Australia getting better?". MAP groups indicators into four domains: society, economy, environment, and governance and then explores a number of issues under each theme to ascertain the extent of progress in these different fields. Progress is defined by MAP as "life improving or getting better" (Measures of Australia's Progress, 2013). Four simple symbols next to each of the fields under the main domains indicate either progress, regress, no great change or a data gap, in which case no headline indicator exists for a particular field. MAP's main categories are illustrated in Figure 3.

Figure 3

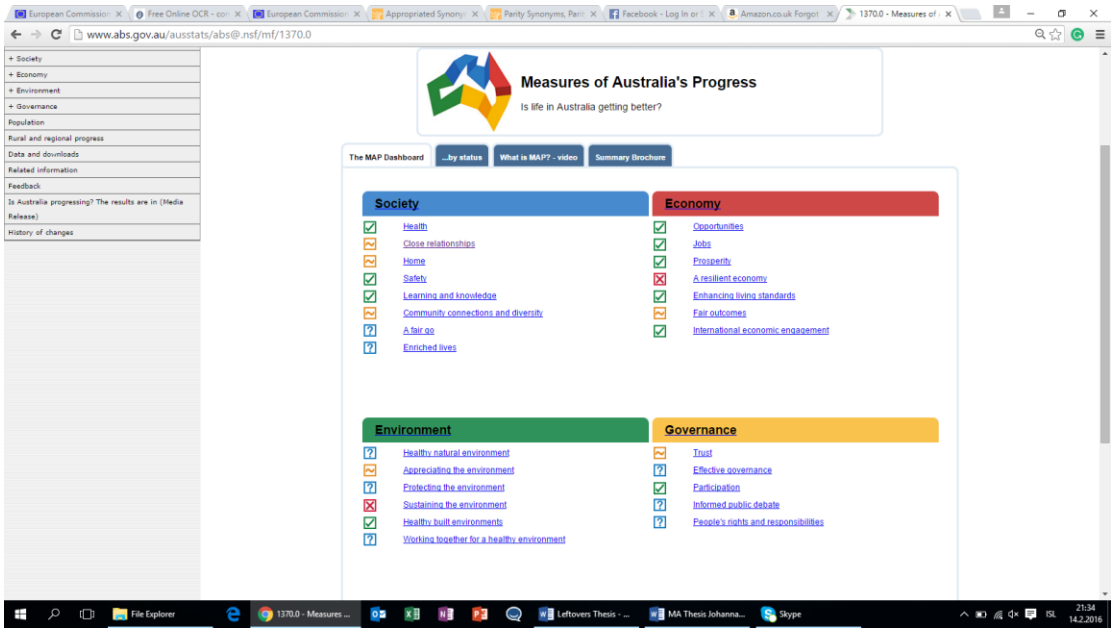

Figure 3 – Measures of Australia's Progress Dashboard

In his book, *Leading Indicators: A Short History of the Numbers that Rule Our World* (2014), Zachary Karabell takes the discussion one step further by calling for 'bespoke' indicators. These are indicators tailor-made to answer the questions of the individuals, businesses, communities, organizations and governments that need to use them.

According to Karabell, the solution to what to do with our leading indicators is not to simply replace them with other, equally limiting national numbers, but to fully utilize the age of Big Data and technology to collect and supply information that can be mined as and when needed: "With the immense ease of computing tools, with the capacity to scan the web for information, and with the plethora of information floating through our ether daily, we can do that, and we must" (p.249).

It appears as if Karabell is not alone in his quest. Since 2003, a project to find ways to better assess national progress has been evolving in the United States. Progressing to become a non-profit, nonpartisan organization, the project has adopted the name The State of the USA (SUSA) and aims to publish "a free website to provide every American with a single place to track progress across a range of national concerns, as

determined by independent polling and research as well as expert and public input" (The State of the USA Mission, 2016). SUSA crosses the political, public and private divide in order to unite the forces of government, business and academia for the purpose of developing a Key National Indicator System (KNIS). KNIS will form the basis from which Americans can seek the data needed for informed decision-making, for individual, business and governmental purposes.

It is clear that the aims of projects such as SUSA and MAP overlap, yet there are differences in methodological approaches, as well as the scope and depth of data and levels of interactive accessibility.

2.2.5 Barriers to implementing innovation

Despite this extensive range of innovation, GDP still appears to have an indestructible hold on economic statistics, economic activities and not the least, the psyche of public and popular discourse on everything to do with the state of the economy, and how it is progressing.

Italian economist and statistician, Enrico Giovaninni, identified the following six barriers to the implementation of innovation beyond GDP in the report produced by the UK All-Party Parliamentary Group on Wellbeing Economics (Giovaninni, 2015, para.6):

- "a lack of democratic legitimacy for indicators that have not been agreed democratically and have not yet built up public support;
- the crisis has kept the priority on conventional economic fixes;
- organisational change is needed to create an integrated approach that cuts across departmental boundaries;
- institutional resistance to change reinforces dependence on traditional models;
- technical disagreements remain on how to define indicators;
- a shortage of analytical tools holds back integrated and innovative economic policy making."

These barriers form the basis from which to explore general resistance to implementing innovation in this final section of Chapter 2.2.

Spoilt for choice, better the devil you know

Chapter 2.2.1 – 2.2.4 provide an overview of the large range of innovation taking place in the field of economic indicators. However, with innovation comes not only cooperation, but also competition and conflict. So many different incentives are ongoing: Europe's Beyond GDP, the United Nation's Human Development Index, the OECD's Better Life Index, GNH, GPI, and so on. Additionally, literally hundreds of different indices assessing everything from child poverty, to gender equality, to wages, infrastructure, security and corruption –- are in the process of being developed. All of these can be said to have an effect on individual and collective wellbeing. Additionally, any number of organizations, ranging from public to private to non-governmental and non-profit, are vying for attention to their index and what it offers. Who should use what, and when and how?

In a time of crisis, especially in the uncharted territory experienced since 2008, as Giovaninni (2015) points out, there is great pressure to find quick solutions. Faced with so many choices and little political leeway, politicians and businesses easily fall back on implementing policies, deciding budgets and appropriating funds based on good, old, familiar GDP and associates.

How do we compare thee?

Karabell (2014) describes a widespread belief that GDP is an easy number, a simple go-to figure that allows for a clear comparison between nations and economies. As explained in Chapter 2.1.2, GDP is anything but simple. One has to question whether the quality of GDP calculations in advanced Austria and GDP calculations in war-ravaged Sierra Leone is really comparing the same thing on a basis of equality. Not only are these countries in no way comparable in terms of the *nature* of its economic output, but it is also in no way on equal footing regarding their *capacity* to conduct complicated and technically advanced measurements. Are GDP comparisons between

countries really comparing apples and apples, or are they comparing olives and bananas?

As Giovaninni (2015) points out, one of the barriers to innovation is the lack of technical agreement on how to define indicators. This means that the perceived standardized comparison that GDP offers between countries makes it both harder for nations to discard GDP as a form of measurement, or adopt other measures that do not have the universally accepted status of GDP.

The evidence presented by Smith (2012) and discussed in Chapter 2.1.3 adds to misgivings on the credibility of GDP as a form of comparison between nations. The way GDP is calculated provides for a very biased and misrepresented image of how, and where, value is truly added in the production of goods and services – in favour of the advanced economies. Discrepancies between GNP and GDP, as pointed out by Karabell (2014), compounds this crisis of credibility.

Karabell refers to the "the myth of national numbers that reflect national realities" (2014, p.245) and holds that this myth "distorts how we attempt to solve these problems collectively and inhibits how we meet our challenges individually" (p.245).

This begs the question: Is comparing nations on the basis of a complicated, resource-heavy single number that leans towards favouring advanced nations, truly justifiable? Additionally, does the end result of a thoroughly flawed form of comparison really justify the amount of funding and resources required to produce the GDP?

In too deep

At the last count, GDP was available for 220 countries and territories around the world (United Nations Statistics Division, 2016). Aside from national offices of statistics in most of these countries, global GDP figures are also regularly supplied by the World Bank, the International Monetary Fund, the United Nations and a host of international organizations. Literally hundreds of thousands of people are involved worldwide in collecting, processing and statistically analysing the data underlying the respective GDPs.

Producing and comparing national GDP figures on an international basis has become an enormous, global battery of distributed, yet coordinated activities. There is no doubt

that the reach of GDP is far, deep and extremely entrenched on many levels of government and society.

Since the reliance on GDP (and other leading indicators) is so deeply embedded in the public and private practices and psyche, it is not strange that, as Giovaninni (2015) indicates, institutional resistance to change exists. In order to bring about a change in institutional perspective, democratic legitimacy is needed, which is another key barrier to change as denoted by Giovaninni (2015).

Moving beyond GDP in a democratically legitimate fashion and ensuring that all international participants have a voice and are heard, is a task of monumental proportions. On top of that, moving the focus of the actual statistical work away from the devils we know (GDP and associates) towards new methodologies, requires a globally united approach that needs to be built on a strong, democratic base. If one considers that the widespread coordinated use of GDP seen today has been 80 years in the making, it stands to reason that change will not happen overnight. Building up public, political and institutional support for change is a long-term goal. In the meantime, it is understandable that there is broad reluctance to throw out the familiar GDP baby with the murky statistical bathwater.

Pulling the rug from under the feet of finance

Karabell (2014) states that there is very little use in national GDP for individuals, families and small businesses. Whether national GDP is increasing or decreasing will, for instance, not tell you what field of study to pursue, where to find a job, or how you should add value to your small business. One, so-called simple, GDP figure will, however, tell you whether interest rates on loans are likely to change and whether your ability to increase credit, i.e. make more debt, will improve. This is due to the symbiotic relationship between growth as expressed by GDP, and debt as a percentage of GDP.

GDP is, in essence, nothing but a (flawed) expression of output growth. Economic growth is necessary to combat unemployment, raise incomes, pay for pensions and social welfare, and, very importantly, for the state to service its debt (Jung, 2009). The rate at which debt is created and sustained, in its turn, centres on monetary policy.

Historically, the gold standard served as a benchmark for the United States, as the leading world economy, from which to gauge monetary policy success. For a number of econo-political reasons, the gold standard was removed in 1972, eventually to be replaced by the sound-dollar standard in the early 1980s which "served as an anchor for other countries looking for a monetary reference point." (Rickards, 2014, p.123).

However, after years of money creation through deregulation in the financial world, neither the gold standard nor the dollar standard exist as a reference point today. Instead, the primary deficit sustainability framework (PDS) is used. Borrowing costs (B), real output (R), inflation (I), taxes (T), and spending (S), also called BRITS, make up the key factors of the PDS. The total value of goods and services produced in an economy is defined as (R+I), or real output plus inflation, and also goes by the name nominal gross domestic product (NGDP). The primary deficit is defined by taxes minus spending (T - S).

Rickards (2014), calls the primary deficit "the excess of what a country spends over what it collects in taxes" (p.124). He goes on to explain:

> In calculating the primary deficit, spending does *not* include interest on the national debt. This is not because interest expense does not matter; it matters a lot. In fact, the whole purpose of the PDS framework is to illuminate the extent to which the United States can afford the interest and ultimately the debt. Interest is excluded from the primary deficit calculation in order to see if the other factors combine in such a way that the interest is affordable. (p.124).

It has to be taken into account that in determining PDS, interest on debt is included in the B of the formula (borrowing costs).

The purpose of PDS is, in the context of the USA, quite simply, to ascertain whether $(R + I) – B > |T – S|$, in which case U.S. deficits are sustainable or whether $(R + I) – B < |T – S|$, in which case U.S. deficits are not sustainable.

In other words, if economic output minus interest expense is greater than the primary deficit, it means the US deficits are sustainable because the US economy is paying interest and a bit extra to pay down debt. However, if economic output minus interest

expense is less than the primary deficit, a debt crisis will evolve over time as deficits engulf the economy. Rickards concludes:

> To a point, what matters is not the debt and deficit *level* but the *trend* as a percentage of GDP. If the levels are trending down, the situation is manageable, and debt markets will provide time to remain on that path. Sustainability does not mean that deficits must go away; in fact, deficits can grow larger. What matters is that total debt as a percentage of GDP becomes *smaller*, because nominal GDP grows *faster* than deficits plus interest. (p.124).

Another aspect to this GDP debate, is the effect GDP growth has on interest rates. Whenever rapid growth takes place in an economy (as expressed in GDP), central banks try and control inflationary pressure through raising federal interest rates. According to basic economic models, "an increase in real GDP (i.e. economic growth) will cause an increase in average interest rates in an economy. In contrast, a decrease in real GDP (a recession) will cause a decrease in average interest rates in an economy" (Creative Commons, 2012, para.6). Therefore it may be concluded that, as part of an overall fiscal policy regime, governments are dependent on the calculation of GDP purely to inform central bank interest rate decisions.

Some evidence also poses the question of whether GDP figures can give owners of equity an indication of where to invest their money. Clearly, if GDP has a positive correlation with interest rates, investing wealth in an economy with positive growth rates (as expressed in GDP) will maximise your returns through high interest. For example, despite capital controls, international investors have been conducting carry trade with government bonds in Iceland. What this involves is basically using loans with low interest rates (or capital) to buy Icelandic bonds that have particularly high interest rates by international standards. In this way, investors can make their debt work for them and profit well above the borrowing costs involved in taking low interest loans in another currency (Júlíusson, 2016).

The possibility that GDP growth prospects have a role to play in investor's decisions is supported by the findings of Wade and May from the Schroders asset management

group, who found "a significant relationship between equity returns and expected GDP growth" (Wade and May, 2013, p.1).

Wade and May refer to a 2011 study done by O'Neill, Stupnytska & Wrisdale and conclude: "O'Neill and his colleagues found changes to consensus expectations for future GDP growth to have a significant impact on equity returns, with equity returns functioning as a leading indicator of GDP growth in many countries" (p. 5). This poses the question of whether investment took place because of expected growth, thereby driving up eventual real growth, or whether equity returns increased as a result of real growth which occurred regardless of growth expectations.

Giovannni (2015) stated that one of the barriers to implementing innovation in measurement was the fact that integrated and innovative economic policy making was hampered by a lack of analytical tools. This is all the more true for the world of finance and capital markets. GDP and its relationship with national debt, interest rates, central bank fiscal policy tools and return on equity is at the core of a broader discussion on barriers to implementing innovation, especially with regard to replacing or discarding GDP as a measure of economic growth. Though it may have been true in the so-called golden age from 1945 to 1975 that an increase in real GDP concurred with an increase in standards of living, the times have changed. Whether or not GDP increases or decreases in 21st century economies has very little bearing on actual progress in an economy, whether innovation is taking place, whether quality of life is improving or whether median incomes are increasing. We do not, any more, need national GDP figures for the sake of international comparison, parity or even to broadly inform us on the state of economic progress. Yet without GDP, and especially GDP as we know it, the world of finance and capital markets will be lost in a jungle of debt without any point of reference to show them the way forward.

2.3 ICELAND AS NORM ENTREPRENEUR

2.3.1. Norms and norm entrepreneurs

The study of norms in international relations is deeply embedded in the social theory of constructivism, though it is not the only theory to recognise the importance of

international norms. Constructivism emerged as a social theory within the discipline of international relations during the last gasps of the Cold War, when the reigning theories of neo-realism and neo-liberalism, focused as they are on individualism and materialism, failed to explain why the great communist experiment seemingly voluntarily threw in the towel.

Both neo-realism and neo-liberalism hold that agents' behaviour is determined by the protection or the furthering of their interests, while constructivism, on the other hand, holds that the world and its systems are socially constructed and that norms and ideas play a distinctive role in shaping change, which, in turn, shapes norms and ideas. Constructivism focuses its attention on global change and transformation and especially on "how norms become internationalized and institutionalized, influencing what states and non-state actors do and their ideas of what is legitimate behaviour" (Barnett, 2014, p.156).

Norms can be described as "standards of appropriate behaviour for actors with a given identity" (Barnett, 2014, p.164). All societies have norms, but not all societies share the same norms, even within the same state. Conversely all states have norms, even though not all states share the same norms. Increased individual and international global interaction in the last decades, precipitated by vast improvements in communication and transport technology, however, have led to an escalation in norm transference. Norms related to human rights, trade, arms control and the environment, have become ever more internationalized and even institutionalized.

Finnemore and Sikkink (1998) identified the three stages of the life cycle of norms. First there is *norm emergence*. This is the stage where a new norm (or set of norms) is introduced to a society by norm entrepreneurs, who are described as agents "having strong notions about appropriate or desirable behaviour in their community" (Finnemore and Sikkink, 1998, p.896). To challenge existing behaviour or even laws, agents often engage in inappropriate, or even illegal, behaviour to draw attention to their cause, such as was observed during the suffragette movement (Ramirez, 1997). Agents often employ the use of organizational platforms to further their cause, especially in order to engage powerful actors: "Norm entrepreneurs …need to secure the support of state actors to endorse their norms and make norm socialization a part of their agenda" (Finnemore and Sikkink, 1998, p.900). Once enough states have been

convinced of the importance of adopting a new norm, the norm reaches a 'tipping point', or 'threshold' after which a '*norm cascade'* takes place, which is the second stage in the life cycle of norms.

The second stage relates to the rapidity in which, after the tipping point has been reached, more states adopt these new norms, often even without domestic pressure to do so. Some would liken this occurrence to a form of international 'peer pressure'.

The third stage is *internalization* of the new norm. This is when the norm is becoming so de rigeur, or internalized by actors, that it makes "conformance with the norm almost automatic" (Finnemore and Sikkink, 1998, p.904).

2.3.2. Scandinavian countries as norm entrepreneurs

Scandinavian countries, in the broadest understanding as meaning Sweden, Denmark, Norway, Finland and Iceland, are, on a global scale of comparison, small in many ways. They have rather diminutive population figures, relatively limited geographic scope, not a great diversity of resources and proportionately small economies. Additionally, they would be considered militarily weak, or in Iceland's case, militarily non-existent.

Internationally, therefore, it could easily be claimed that, when looking only at quantifiable factors such as military capacity, economic status and geographical or population size, these countries do not have much international sway. On the contrary, "Scandinavia has consistently and actively sought to influence more powerful states in establishing and strengthening global norms of cooperation" (Ingebritsen, 2002, p.11).

The Scandinavian states have gained a proportionately high prominence in affecting international policy regarding environmental issues related to sustainable development, conflict resolution and international aid and can therefore be categorised as norm entrepreneurs (Ingebritsen, 2002).

Not much empirical research exists on the role of small states, such as the Scandinavian countries, in influencing international policy, but recent research conducted by Magnúsdóttir and Þorhallsson (2011) on the effect Nordic European Union (EU) states have on agenda-setting at the EU [7], delivers empirical evidence and

[7] The research was based on interviews conducted with Nordic officials, officials from other member states and Commission officials at the EU.

a clear theoretic indication that the Nordic member states (Sweden, Finland, Denmark) "are perceived as being able to influence the EU's Environmental Policy to a greater extent than objective factors such as their population size would indicate" (Magnúsdóttir & Þorhallsson, 2012, p.214).

Scandinavian states have played an especially enlarged role in setting the trend with regard to protecting the environment (Ingebritsen, 2002). For instance, ground-breaking work was done under the leadership of Dr Gro Harlem Brundtland when the United Nations World Commission on Environment and Development presented its report, *Our Common Future*, in 1987. Since that time, the term 'sustainable development' has become a dominant feature of global development policy (Ingebritsen, 2002).

However, Ingólfsdóttir (2014) warns that Nordic states such as Iceland, Norway and Greenland can easily find themselves in a dilemma when attempting to set ambitious environmental targets in terms of, for example, reducing carbon emission, but then find that those policies conflict with economic interests. In order for Scandinavian countries to have an effect on the international arena, it is therefore essential for these countries to lead by example.

2.3.3. The case of Iceland

Limited research has been done on Iceland's position as a norm entrepreneur specifically. Most currently existing related research refers to Iceland's international participation as a small state or as part of the Nordic/Scandinavian contingent with regard to setting norms (Bailes & Þorhallsson, 2014; Ingebritsen, 2006; Magnúsdóttir & Þórhallsson, 2011).

In recent years, Iceland has, however, entered the international media arena independent of the Nordic countries in a number of ways. During the first years of the 21st century, the media spotlight turned to newly "minted" Icelandic entrepreneurs in banking and business, participating in what was called the Viking "outvasion" (directly translated from *útrás* in Icelandic). Media scrutiny intensified when the whole Icelandic economy collapsed spectacularly in October 2008, at the beginning of the global financial meltdown. As a result, Iceland's economic collapse and subsequent measures

to deal with it have become the subject of a large number of books and academic studies.

In March 2010, the Eyjafjallajökull volcanic eruption halted international air traffic, once again catapulting Iceland into the international limelight. Iceland, with a population and economy so many times smaller than all the major powerful countries in the world, once again managed to have an effect on international events in ways not representative of its size.

Despite the disastrous economic collapse of 2008, the Icelandic economy recovered unexpectedly quickly, returning to growth in 2011 (Bowers, 2013), a fact which was covered by many large international newspapers, such as the *The Guardian* (Bowers, 2013), *The New York Times* (Anderson, 2015) and *Der Spiegel* (Mingels, 2014), to name but a few, and has even led to the coining of the phrase "to do an Iceland" by Nobel Prize winning economist, Paul Krugman (Krugman, 2013).

In the general political arenas, the unexpected success of the grassroots political movement, the Pirate Party, as recorded from March 2015 to February 2016, has raised international interest. Despite it being the party with the smallest number of representatives in the Icelandic parliament, the Pirate Party in this period garnered more than one third of support as expressed in surveys done by independent operators such as Gallup (Morgunblaðið, 2016) and, managed to push through the repeal of the blasphemy law in Icelandic parliament in July 2015 (Mackey, 2015).

Though one must be careful to equate these events to Iceland setting norms, it does add to the discussion on how Iceland and Icelandic trends are perceived internationally. Iceland can, however, be more formally conceived as setting trends with regard to fisheries, renewable energy and gender equality.

Iceland is often claimed to be a leader in the field of fisheries management through its use of the individual transferable quota (ITQ), though there doesn't seem to be absolute consensus about the validity of this particular system in terms of protecting fish stocks (Chu, 2009), or the positivity of its long-term effect on the Icelandic fishing communities (Benediktsson & Karlsdóttir, 2011).

In terms of renewable energy, Iceland is often also touted to be playing a leading role, considering that it derives 82% of its energy from renewable sources (Orkustofnun, 2009). It remains unclear, though, whether this is due to its fortuitous

location on a very active geothermal source, due to its advanced development of technology to extract such sources for its own benefit, or due to political prowess in mining a renewable source of energy for environmentally sound reasons.

So far as social issues are concerned, Iceland can, however, without a shadow of doubt be credited with being the first country to elect a woman as Head of State when Vigdís Finnbogadóttir was elected president in 1980. It was also the first country to democratically elect an openly lesbian prime minister to office when Jóhanna Sigurðardóttir became Prime Minister of the Social Democrat/Left Green coalition government in 2009. Unfortunately, there is no consensus among scholars about the "role that choice plays in norm-based behaviour … and about the role persuasion plays in normative processes." (Finnemore & Sikkink, 1998, p.917).

Contrary to its small size, politically, economically and geographically, it is clear that Iceland is in a position to explore and perhaps even establish new social trends, or norms. One final example may very well be mired in the negative. Of all the countries so negatively impacted by reckless financial markets that led to the economic meltdown in 2008, Iceland is credited with being one of the very few OECD countries to have charged, sentenced and jailed bankers for their role in the events leading to the crash of 2008 (*The Economist*, 2013). It remains to be seen, however, whether this 'norm' will survive the three stages of the life cycle of norms and become part of a more standardized international approach to pursue accountability in banking practices worldwide.

3. METHODOLOGY

3.1. RESEARCH PARTICIPANTS

In order to fulfil the aims of this study, the method of purposive sampling was employed. Purposive sampling involves the selection of participants not based on pre-decided numbers, but rather on how the participants contribute to the goal of the research (Halldórsdóttir and Davíðsdóttir, 2013).

For the purpose of this study, a number of interviewees were approached, categorised as follows:

1. Academics that can shed light on one or more of the topics mentioned above.
2. Current and former, municipal and national policymakers from the main political parties with representatives in parliament, i.e. the Independent Party, Progressive Party, Social Democrats, Left Green Party, Bright Future and the Pirate Party. Policymakers are included due to their favourable political positioning in terms of the effect they have on setting and implementing economic policy.
3. Students with interdisciplinary backgrounds, representative of policymakers of the future.
4. Representatives from Statistics Iceland, to gain perspective on the measurement of GDP in Iceland and the feasibility of alternative forms of measuring economic progress.

All in all, twelve individual interviewees, all Icelandic nationals, agreed to participate. Additionally, five graduate students - three foreign nationals and two Icelandic - formed part of a focus group. The gender ratio was ten men and eight women.

Individual interviewees included four current members of parliament, one vice member of parliament, one current member of the Reykjavík City Council, two former municipal officials, two economists and one graduate student of political economy. Additionally, an official from Statistics Iceland provided essential information on the measurement of economic progress in Iceland.

3.2. RESEARCH DESIGN AND APPROACH

The main research question "**How can Iceland, as a small state, play a role in the international implementation of innovation in measuring economic progress?"** possesses three basic tenets to be explored:

1. The effectiveness of gross domestic product (GDP) in terms of providing a comprehensive overview of economic progress
2. International innovation in the measurement of economic progress
3. Iceland as a norm entrepreneur

Points 1 and 2 above were largely explored in Ch.2, but were included in the interviews and focus group with the purpose of putting Point 3 in relative context. The primary data collected in the interviews and focus group is mainly focused on Point 3, and how Points 1 and 2 relate to Point 3 in the view of the participants.

In order to study the relationship between Iceland as a norm entrepreneur and implementing innovation in measuring economic progress, the method of phenomenography was employed. Phenomenography can be defined as the "empirical study of the limited number of qualitatively different ways in which various phenomena in, and aspects of, the world around us, are experienced, conceptualised, understood, perceived and apprehended" (Marton as quoted by Ashworth & Lucas, 1998, p.415). It was developed by Ference Marton and his colleagues at the University of Gothenburg in Sweden in the 1970s and 1980s.

It is important at this point to distinguish between the methods of phenomenography and phenomenology. Marton proclaimed that in phenomenography, the aim is to study the variation of peoples' conceptions of a given phenomenon in the surrounding world, whereas the "object of research in phenomenology is people's lived experience of a phenomenon in phenomenology" (Larsson and Holmström, 2007, p.59).

Phenomenography is more concerned with the relationship the subject has with the phenomenon, whereas phenomenology is more concerned with the phenomenon itself (Reed, 2006). This is also called a second-order approach to research, rather than the

first-order approach which is more concerned with observing and describing the phenomenon itself, as is often the case in the positivist approach.

3.3. DESCRIPTION OF RESEARCH METHODS

To determine the general perception of Iceland as a possible norm entrepreneur and if, or how, Iceland can contribute to implementing innovation in the measurement of economic progress, qualitative data was collected through a number of in-depth one-on-one interviews with academics, politicians and future policymakers, as well as a focus group consisting of graduate students.

According to Larsson and Holmström (2007), data from "20 informants is usually enough to discover all the different ways of understanding the phenomenon in question" (p.57) when using phenomenography as a research method. This researcher found that saturation was reached with 17 participants and the decision was made to conclude the research participation as a result.

The interviews revolved around discussions based on five, open-ended questions (Appendix 1). Apart from the focus group, all the other interviews were largely conducted in Icelandic. All possible care was taken to ensure that all translations from English to Icelandic or Icelandic to English are as accurate as possible.

Interviews were recorded, transcribed and analysed to determine particular patterns and/or themes that could provide valuable insight into the subject matter. To ensure credibility, a member check was done to determine whether the researcher and the interviewee had the same understanding of the content of the interview. This was done during the interview. No follow-up interviews were required.

3.4. DATA COLLECTION AND ACCESS TO DATA

Contact with individual interviewees was mainly established through email. After interviewees agreed to be interviewed, suitable arrangements were made for meeting up. In two cases, interviewees could not meet in person and the interviews were conducted telephonically.

The focus group was arranged with the help of Professor Brynhildur Davíðsdóttir and Bjargey Guðbrandsdóttir, the Programme Coordinator for the Environment and Natural Resources Graduate Programme at the University of Iceland. Students were alerted to the request and five students signed up voluntarily: three foreign nationals and two Icelandic. All other interviewees were Icelandic.

All interviewees participated on a voluntary basis. Care was taken that interviewees were fully informed as to the nature of the research, the voluntary nature of their participation, their right to withdraw at any time, as well as their right to confidentiality.

3.5. DATA ANALYSIS

There are different ways of carrying out phenomenographic analysis (Larsson & Holmström, 2007). For this study, the method of analysis described by Lin (2011) was employed.

All interviews were transcribed verbatim. The verbatim transcripts of the interviews were studied, marking the parts and particularly the keywords pertaining most prominently to the research topic.

The method of open coding was employed to cluster the themes arising from the interviews and focus group discussion. Content specific similarities and differences were identified by comparing the marked parts and keywords, thus identifying categories of descriptions that provide insight to the understanding of the research topic.

3.6. VALIDITY AND RELIABILITY

For discussing the quality of qualitative research, Lincoln & Guba (1985) used the phrases credibility as representative of internal validity, transferability to describe external validity, dependability to represent reliability and confirmability when referring to objectivity. Given that phenomenography calls for very open-ended interviews with few questions in order to allow participants to be as forthcoming as possible, the following methods, as detailed by Lincoln and Guba in 1989, were employed to increase the credibility of the research:

1. Prolonged engagement and persistent observation - allowing enough time to interview and analyse effectively.
2. Negative case analysis - exploring if and why a particular participant stands out, i.e. has a markedly different perception than the rest of the group.
3. Member checks - confirming with participants whether a mutual understanding of the experience of the interview and data exists.

(Halldórsdóttir & Davíðsdóttir, 2013)

In order to ensure transferability, it is important to establish that the research findings occur within the context of the research itself, that the findings concur with the data it is built upon and to determine whether those the research pertains to find that the findings have meaning and applicability for them. The findings should also be firmly grounded in the topic of research and display both typical and non-typical aspects (Halldórsdóttir & Davíðsdóttir, 2013).

One of the most important methods of determining dependability (reliability) is when research can be repeated and lead to the same conclusion (Halldórsdóttir & Davíðsdóttir, 2013). However, due to the nature of qualitative research, it is often not desirable nor possible to repeat the research under exactly the same circumstances. Lincoln and Guba (1985) suggested that dependability can be increased if another researcher can follow the decision trail of the original research and come to a similar conclusion.

Though it is unlikely that qualitative research can ever be completely objective, Eisenhart and Howe (1992) posed five questions the researcher can ask himself to increase confirmability (objectivity):

1. How well do the research questions, methods of data collection and methods of data analysis concur?
2. How successful are data collection and data analysis?
3. How well is the current status of knowledge in the field explained and how well is the contribution of new knowledge to the subject presented?
4. How important is research in this particular field and how ethical was the research conducted?
5. How good is the research on the whole?

(Translated from Halldórsdóttir & Davíðsdóttir, 2013).

3.7. RESEARCHER'S STATUS AND ETHICAL CONCERNS

The methods of measuring economic progress and how governments go about it are rather standard statistical activities in most countries in the world, Iceland included. The researcher therefore has nothing to gain personally or financially from investigating how Iceland can play a role in exploring and implementing innovation.

It is, however, the researcher's personal view that GDP is inherently inadequate to be used as the dominant measure of economic progress with regard to the setting of policy, though some may consider it useful for determining a country's annual output in terms of production and consumption.

The researcher has made all effort possible in trying to phrase questions for interviewees in such a way that her own opinion does not need to affect their answers. That said, it is clear from the title of the thesis and the main research question that this study concerns the feasibility of implementing innovation in measuring economic progress, which therefore indicates criticism of the existing measures.

With regard to participant confidentiality, all participants received clear information on the purpose of the research and all participants agreed to the recording of the interviews. Though no participant demanded it, the decision was made to keep identities confidential in order to allow for freer, unfettered discussion. All participants are guaranteed anonymity.

3.8. QUESTION DRAFT FOR DATA COLLECTION

Typically, phenomenographic interviews are semi-structured with only a few pre-determined questions, unlike the usual qualitative interviews. That doesn't mean that the interviews lack focus, as the object is "held central to the interviewer's focus at all times and guides the interview situation" (Reed, 2006, p.5). The interviewer is therefore mainly concerned with following up and allowing the interviewee to give voice to all aspects of their experience as thoroughly as possible.

Meaningful context matters, though, where the participants feel they are involved in something ‘meaningful for the interviewer and interviewee to explore together’ (Marton, 1996, p.171, as quoted in Reed, 2006).

All of the individual interviews, as well as the focus group discussion, were based on a list of 5 open-ended questions designed to elicit broad discussion on the concept of Iceland as a norm entrepreneur and on ways of measuring economic progress. The five base questions are included in Appendix 1.

4. RESEARCH FINDINGS

This chapter presents the key insights derived from 12 individual interviews and one focus group session.

4.1. INTERVIEWS AND INTERVIEWEES

The interview process involved 17 people. There were twelve individual interviews and one focus group. The interviewees were selected as representative of groups of people that either possess knowledge of the topic, or are in a current or future position to affect policy-making.

Interviewees can roughly be divided into politicians, academics and students, as well as an official from the Icelandic Office of Statistics. Participants are described in more detail in Chapter 3.

Though none of the interviewees requested anonymity, it was decided not to identify individuals in order to achieve a non-ideological overview of participants' responses. When required, interviewees are referred to by the initial P, A or S followed by a number: P denotes politician, A denotes academic and S denotes student. The numbers were assigned in no particular order. The only exception is Statistics Iceland, which is referred to as Statice.

The interviews were conducted in English and/or Icelandic, but the interviewees were free to respond in the language they felt most comfortable to use. Most interviewees, apart from the focus group, responded in Icelandic. The researcher made every possible effort to ensure that all translations from English to Icelandic or Icelandic to English are as accurate as possible.

Following data analysis, the following themes came to light:

- Iceland's status as a norm entrepreneur in the international arena
- GDP as a form of measuring economic progress
- Good/alternative ways of measuring economic progress
- How realistic is the possibility of Iceland setting international norms for measuring economic progress?

Results from the research interviews are discussed in detail and according to the above themes in this section.

4.1.1 Iceland's status as a norm entrepreneur in the international arena

Interviewees responded on a scale from very positive, to positively negative when considering the concept of Iceland as a norm entrepreneur. Though most interviewees felt that Iceland could definitely be considered a leading country in a limited number of fields, they almost always offered reservations as well. Aspects that interviewees felt could qualify Iceland as a norm entrepreneur in any way are better described in the following paragraphs.

Equality and human rights

The majority of interviewees agreed that Iceland is very much standing on the forefront of developments regarding equality in the form of women's rights and lesbian, gay, bisexual and transgender (LGBT) rights. P5 and P7 also included minority rights in this group, but A1 pointed out that Iceland takes an awful long time to ratify international human rights treaties, which reflects badly on the country if it is to be considered a leader in the field.

Everyone agreed that Johanna Sigurðardóttir, as the first openly lesbian prime minister in the world, could be considered setting a norm. In this light, Vigdís Finnbógadóttir also broke the mould for women. However, P2 reflected that these women's achievements are still the exception, not the rule in Iceland, so it is questionable whether the country really has managed to set a new norm.

A1 mentioned that Iceland was one of the first countries to give women the vote, but also took pains to point out that this was part of a greater movement happening at the time, so one can hardly give Iceland any exclusive credit.

P4 brought up the view that tolerance is a particularly strong norm-setting quality exhibited in Iceland. For instance, alcoholism is not a taboo as it is in many other countries. That, amongst other things, makes Iceland a symbol of tolerance. P6 on the

other hand, claimed that Iceland was more tolerant towards issues and people of other races far from home, e.g. Palestine, and stated unequivocally that, contrary to its international image, Iceland is a very racist country that treats immigrants such as the Polish as 2nd class citizens.

Political perspective

S1 felt that international norm entrepreneurship applied to Iceland to a very high degree and used examples involving presidential leadership since Iceland achieved independence from Denmark in 1944. He pointed out how the constitution after 1944 set a precedent for the direct election of a president as the head of the republic. He went on to point out the election of Vigdís Finnbógadóttir as first female president[8] and finally how the current president, Ólafur Ragnar Grímsson, created a 'media event' out of taxpayers paying private debt in the Icesave debacle, thereby setting a precedent for direct public involvement regarding the distribution of public funds in the wake of a financial crisis.[9]

Iceland as a political norm entrepreneur was not a sentiment voluntarily voiced by other interviewees, though most everyone felt that Vigdís Finnbogadóttir becoming president was a breakthrough for women in the international political arena.

The environment

Several interviewees considered Iceland to be a leader in geothermal energy. Yet P2 voiced concerns that Iceland is only considered so positively because of the abundance of geothermal energy compared to the very small population size. As is, the demands of the population do not overshoot the availability of clean, green energy. As soon as Iceland would come under pressure to provide for a large population such as other

[8] Though this was not the focus of discussion, it is important to note that Vigdís Finnbógadóttir was the first female president in Europe, not the world, but she was the first female president in the world to be democratically elected.

[9] President Grimsson himself claimed that the Icesave referendum had affected people's views around the world regarding the concept of developing democracy to bring direct power to the people (Bergmann, 2014)

countries need to do, it will come to light that Iceland is, indeed, not much of a leader in the field.

A1 felt that Iceland has not really been showing due consideration and cooperation in terms of battling climate change internationally. Instead, Iceland has been following an opportunist policy solely based on setting its own terms, often using the size of its population or its green energy as leverage for opting out of, or getting special deals on international agreements intended to curb CO2 emissions and climate change. In this regard, A1 referred to an analysis by Auður H. Ingólfsdóttir of Icelandic policies in climate change negotiations during the period 1990 – 2005.[10]

To further illustrate Iceland's environmental irresponsibility, A1 mentioned an environmental disaster that had been caused by previous government policies. Farmers were paid to dig ditches to dry up moors in order to secure more farmland. Much of this land has never been used as farmland, but the carbon dioxide released by these exposed ditches is a great threat to the atmosphere. Yet there's little effort put into reversing the damage.

A1 felt that, due to Iceland's small size, the international community did not really put up a battle, but rather relented to Iceland's demands just to have the country "on board".

Several other interviewees also felt Iceland was lacking in the field of environmental awareness, especially with things such as recycling. Though a number of interviewees pointed out that Iceland had all the potential to be a leader in the field of green electricity and electric vehicles, general consensus appeared to be that currently, if anything, Iceland was rather well behind other nations environmentally than a leading force of any kind.

Fisheries

P8 and P2 pointed out that Iceland can be considered a leader in developing methods and technologies to responsibly manage fisheries and to optimize fish processing

[10] This analysis was published in the book Uppbrot hugmyndakerfisins in 2008 and indicated that Iceland, as a small state, has had an historical tendency to act more as a free rider than a role model in matters pertaining to environmental responsibility.

techniques and fish products. This was not a view expressed voluntarily by other interviewees.

General perspective

At least half the interviewees felt that Iceland was less of a norm entrepreneur than a norm follower. P8 was convinced that Iceland has rarely been the source of actual innovation, but has rather followed progress from abroad. P1 stated clearly that Iceland could learn more from others than others can learn from Iceland. S4 claimed that Iceland can only truly be considered a norm entrepreneur as part of the greater group of Nordic countries, a statement supported by A1 and A2. A2 also stated that she did not think the world at large has any interest in following Iceland's lead in anything, but would pay much more attention if it was a precedent set by other Scandinavian countries.

P7, on the other hand, maintained that Iceland's voice is heard internationally and that the world listens. At the same time, she was concerned about the way greed and corruption manifests itself in political decisions in Iceland, a point also raised by P6, P2, P4 and P3. P3 went so far as to claim that cronyism, especially in the protection of special interests, could be considered the biggest problem Iceland faces today.

Whether or not Iceland can be considered a true norm entrepreneur was probably most clearly reflected on by the focus group. The three foreign nationals from the focus group discussed how Iceland is presented to the outside world and how they experienced the country before they came to study here, as well as how friends react to Iceland back home. Iceland is believed to be a progressive, socially and environmentally advanced country that champions women's rights, survived the financial crash of 2008, and jailed irresponsible bankers.

Though some of this may be true in some ways, the focus group was unanimous that this was a very romanticised view of Iceland, and does not represent a true image. Iceland is a far more complex country and less of an egalitarian paradise than the image of it that is projected internationally

4.1.2 GDP as form of measuring economic progress

The interviewees brought several perspectives on GDP to the fore, pointing out both the flaws and the value of the measurement. The following sub-themes emerged regarding GDP.

GDP is simple and useful – or is it?

There was general agreement that GDP is a useful figure in terms of indicating activity in the economy and to give an idea of how much is being produced and whether the economy is growing or not. More often than not, interviewees perceived GDP as a simple number and believed that it provides an easy base for international comparison.

At the same time, several interviewees expressed their concern about how complicated GDP is. S4 felt that it is "misunderstood", adding that "I think people think, like I did, that it represents something else than it really does." She felt that even though it is often used by politicians as a type of proof that things are going better,your average countrymen don't really know what's behind it.

This view was supported by S6, who used to live in Beijing and stated that he went to China in part because he had heard how high Chinese GDP was and wanted to go see this GDP-wonder for himself. Even though his decision was based on GDP, he did not understand what it meant then, and feels that he still doesn't understand it now.

In the same vein, both S1 and P8 were concerned that it is unclear what exactly GDP measures. P8 pointed out that even the term itself is confusing, more so in Icelandic "Hvað þýðir vergur? Þannig orðið sem slíkt er ill skiljanlegt. (What does "gross" mean? Thus the term itself is hard to understand.)". This conflict of terminology was echoed by P6, who also felt the Icelandic term "vergur" was misleading.[11]

A1 held that GDP, despite its flaws, was a very good general indication of standard of living, a view also expressed by P2, who added that economic growth is very important and should be encouraged.

P6 felt that the purchasing power of the middle classes would make for a much better platform of comparison, but stressed the fact that when one mentions GDP, everyone

[11] "Vergur" is a rather specialized word not often used in Icelandic and therefore not commonly understood by your average Icelander.

knows what you are talking about. It is a number and approach that has an international mandate and is endorsed and accepted by governments worldwide. This sentiment was aired by most of the interviewees, i.e. GDP might not be the best number, but it is the one we know.

In that respect, Statice revealed the extent of international cooperation on the matter of calculating GDP. Iceland is party to internationally standardized systems of national accounts, more specifically the ESA 2010, which is the European version of the UNSNA. All statistics gathered by Iceland is submitted to Eurostat, from where it is further processed and distributed.

According to Statice, Iceland does not yet fulfil all the requirements contained in the ESA 2010. Statistics Iceland dedicates much of its manpower to data collection and processing for the standardised system of national accounts. The end result of the national accounts data collection and processing may be a seemingly simple GDP number, but the reality of how that number is produced is an extremely complicated and resource-heavy affair. It is very difficult for small countries with limited resources to keep up with the demands set forth through the international standardised system of national accounts such as the UNSNA and the ESA. There is little to no leeway for innovation and initiative.

Many respondents iterated the need for determining what lies behind the numbers in GDP, the need to dig deeper and define the true implications of the numbers. Both A2 and S1 questioned how debt is represented in GDP and on what it is based, with A2 stating that when it appears as if GDP is increasing, it is very important to determine whether it is increasing, for example, due to government spending based on debt, because then it would just be ‘fake’.

GDP equals progress and wellbeing, or not

All respondents agreed that in their understanding of it, an increase in GDP is often equated with an increase in general wellbeing in a nation, though an increase in GDP does not necessarily mean that the quality of life has improved for everyone in a country. It just basically indicates an increase in production and consumption.

P8 and S2 mentioned that it is hard to know when consumption as measured by GDP has increased, whether that means everyone's participating in this or whether it is limited to a particular group of people who have the funds to do so. P8 mentioned that "if people say GDP is increasing then one believes something is better, but I don't feel it myself and nor does anyone close to me." This statement was also supported by S2, who used Canada as an example where statistically, the country shows growth, but in reality, the population feel as if they are in recession.

A1, P2 and P7 pointed out that though GDP does not equate wellbeing or happiness, there is a direct correlation between higher GDP and a higher standard of living.

P4 felt that there are too many other factors that may contribute to an individual's quality of living to just attribute it to high GDP and that an increase in consumption as measured in GDP is not necessarily a healthy or good thing. P4 mentioned that research has shown that during a recession, people often feel happier because they spend more time outdoors and with their families.

P7 and P4, as well as the great majority of interviewees, took pains to point out that an increase in GDP can in no way be equated with an increase in happiness for most individuals.

GDP is flawed

Several interviewees expressed awareness of the well-documented ways in which GDP is flawed, such as it giving no indication of the negative effects of environmental disaster or that it does not account for housework done at home. GDP's inability to account for depletion of natural resources was a particular source of concern for the majority of interviewees.

P7 felt that GDP does not give a clear enough picture and should be supported by a lot more quantitative research. S1 said that GDP tells a "very small story". P3 felt that too much focus on "Excel sheets" does not tell you how resources are divided. A1 indicated that as improvements are constantly made to GDP, such as including numbers on the illegal economy, he does not understand why figures on work done at home cannot be included since a lot of GDP data are estimates derived from surveys. It is technically possible.

P6 insisted that GDP is a terrible measurement. He used the example of Qatar, which has the highest GDP in the world, yet is not reflected in the standard of living of most people in Qatar. P6 went on to claim that calculating GDP is, first and foremost, to the benefit of the world's richest 1%. He supported this statement by stating that from 1982, 96% of the increase in productivity in the United States went into the pockets of the richest 1%, and only 4% went into the pockets of the other 99%.[12]

P6's biggest concern, however, was that GDP basically reflects "turnover", so to speak. The "gross" approach to calculating GDP skews reality. Figures expressed as net instead of gross income should give a far better indication of the true state of a nation's economic affairs. Additionally, P6 was adamant that aggregates and averages as expressed in GDP give the wrong image of real economic activity, which must really be expressed in median numbers for realistic comparison.

A2 mentioned that GDP is just "money", and therefore a safe measurement that avoids value-driven comparisons or commentary. This sentiment was not shared by all interviewees. S6 felt that economic measurements are hard to separate from cultural ideas or narratives. He used the example of the UK where he felt people

> are being told now that the problems of economic growth are we spend too much money on healthcare, too much money on this and that and that people are lazy and all these things that have nothing to do with actual economic growth whatsoever. They're just kind of social arguments thrown in. It's very hard to look at progress without … some kind of prejudice.

GDP as political leverage

Several interviewees mentioned that GDP seems to be a number easily bandied about by politicians to either confuse an issue or make claims for political

[12] These numbers were brought up by P6 during the interview. No sources for these numbers were offered during the interview, but a quick check revealed that there is research to support this statement in general, as far as the USA is concerned at least. According to a report published by the Economic Policy Institute (Gould, 2014), from 1979 – 2013 productivity in the USA rose by 64.9%, but hourly compensation only rose by 8,0%. The report further shows that the top 1% of earners cumulatively gained 153,6% between 1979 and 2012, far more than the growth in productivity and 4 times the average wage growth. The report suggests that the "excess" productivity went to higher corporate profits and capital and business owners accumulating increases in income.

leverage. A2 stated that she thought "politicians and stuff, when they're trying to show how well the economy is doing, they'll never say oh we've got this much equality, they'd usually just say, yes, unemployment is down, we've got you know, … the GDP's grown, but that's why it's something about the economy and not talking about social wellbeing."

P1 said GDP is a good number for politicians when it can show figures "going up". P8 viewed it as a number that can be "played with". P4 went a step further by saying that he has "sometimes experienced this obsession with economic statistics as a certain type of person and politician's approach to scare others off with 'unpleasantness',[13] indicating that figures such as GDP can be used to obfuscate discussions and divert attention from issues.

GDP – local or worldwide?

S1 claimed that GDP is a good measurement for determining economic growth on a worldwide basis, but that it is a poor measurement for describing growth and progress on a national basis because

> if you're looking at the whole world that is in your glass, then GDP is a good thing to look at because that's in economic terms because, of course, then there's no competition. There's only one world and it's growing and you want it to grow fast and that's GDP. But if you're in a nation and that particular nation is drowning in debt, eh, as an element in this growth of the whole world economy, that is good for the winners of the world economy that you are looking at GDP and not looking at your own debt or your infrastructure or something else… so, so really the debate of whether or not GDP is a good measurement or not, it goes down to the very core of whether or not world trade and open world business is good for everybody and not just good for some nations or private enterprise, not good for human societies.

[13] P4 used the Icelandic word "leiðindi", which can refer to a number of things, but most often is used in the context of people or things that are dull, uninteresting, unpleasant or plain boring.

S1's words imply that countries might not 'see the forest for the trees', as the saying goes, as the focus on GDP might prevent individual countries from paying attention to other ways of improving their citizens' standard of living and their countries economic viability, or lead them to take on too much debt in an attempt to increase economic growth as measured by GDP.

In this vein, A1 raised concern that pressure to comply with internationally standardized statistical methodologies leads to offices of statistics discontinuing or adapting statistics that are relevant to a specific country. One example, in Iceland's case, is a statistic on company business outcomes that, from 2011, was adapted to international standards. As a result, the statistic is now far less meaningful for research and policy in an Icelandic context than it used to be.

GDP must be viewed in context

S1 stated that "you need much more information than GDP if you want to run a society with some success." This view was voiced by the majority of interviewees, who made it clear that GDP should never be viewed independently. It is just one economic measurement and should only ever be considered within the context of a range of other statistics, such as unemployment, equality, utilization of natural resources, child poverty, spending patterns, public and private debt levels, purchasing power, especially purchasing power of the middle class, the status of capital and current accounts, and so forth. P5 felt that the Icelandic parliament considers many of these factors and does not focus on GDP growth exclusively. Everyone agreed, though, that positive GDP growth does carry a lot of economic and political weight.

4.1.3 Good/alternative ways of measuring economic progress

The respondents mentioned a broad range of good ways to measure economic progress, which are summarized in the following paragraphs.

P6 and P5, amongst others, mentioned purchasing power and disposable income as a measure of economic progress. P6 stressed that purchasing power parity is too flawed and that disposable income of the middle classes gives a better account.

A2, S1 and P6 felt thorough analysis of a country's capital and current accounts is paramount.

P8 said that the extent to which municipal social services are being utilized gives good information on general levels of prosperity. The rate at which individuals turn to municipalities for assistance is considered a valuable indicator by P8 as it is the last stop for individuals in need of financial assistance, after unemployment benefits and other state-sanctioned assistance options have been exhausted.

In a way, P1 concurred with this by stating that economic progress should be measured from the "bottom up". In other words, it should be measured by the number of people who are destitute or living from hand to mouth, with little to spare. This view concurs with P3, who felt that if the infrastructure functions well and serves most people well, then the economy is doing well.

P1 mentioned the "gender lens" used by the City of Reykjavík when making up the city budget, and contemplated whether GDP and other measurements should be viewed through a "gender lens" to see how it affects different groups in society.

P7 stressed the need for moving away from quantitative research towards qualitative research and analysis, which can assist better with policy-making regarding the economy.

P4 pointed out that the goal of economic progress should be happiness, a sentiment shared in varying degrees by a number of other interviewees. For instance, S5 and S2 echoed P4's sentiment by saying that we should re-evaluate what the economy is, and what its purpose should be.

P1, P4 and the majority of other interviewees mentioned quality of life as a main indicator of economic progress. Interviewees mentioned how citizens' quality of life can be measured through aspects as diverse as education, healthcare, the job market, child poverty, hobbies, access to swimming pools, use of psychiatric drugs, infant mortality rates, sustainability, inequality, gender equality and more.

When all the above points and suggestions are taken in account, it is clear that quality of life and economic progress seem to be closely linked for most respondents. In most instances, the range of life choices available to an individual appear to indicate the quality of life in a society, and consequently how much economic progress has taken place. In S2's words "if people can do what they want to do, other than being forced to just get by, that's economic progress to me."

Alternative ways of measuring economic progress

The majority of interviewees were not familiar with alternatives to the GDP, such as the Index of Sustainable Economic Welfare (ISEW) or the Genuine Progress Indicator (GPI). Hardly anyone was aware of a parliamentary resolution passed on 20 March 2012 (Alþingi, 2012) stating that Iceland should adopt the GPI concurrent with the GDP in order to measure economic progress and guide economic policy.

Even though the average interviewee's knowledge on alternatives to GDP could best be described as scanty, almost everyone seemed to bring up the small country of Bhutan's Gross National Happiness Index (GNH). The reasons for this awareness is unclear, but it does beg the question as to whether Bhutan can, in fact, already be described as a small state norm entrepreneur in this field.

Respondents A3, A1, S6 and others questioned the qualitative basis of data collection and methodology of the GNH and the fact that its results were not expressed in monetary terms, which affected its ability to serve as a simple comparison between countries. They felt that this precluded it from serving as a replacement to the GDP.

More than half the interviewees had reservations about replacing GDP with another, equally flawed. measurement. They felt that regardless of which measurement is used, it would never be possible to cover all aspects of an economy, and therefore all measurements should always be considered in a broader context.

Important points

P7 and P8 both considered consensus, especially political consensus, an important part of the discussion on how the economy should be measured. This view was confirmed by A1, who pointed out that the reason GDP remains so influential is that there is broad,

international consensus on its use. It will be very hard, if not impossible, for an alternative measurement to achieve the same level of acceptance.

Profoundly, S5 stated that "I think maybe the whole thing is also to reinvent what the economy actually is instead of thinking about how we should measure the economy." This was reiterated by S2, who claimed: "If we change how we define the economy, we'll need to change the metric measuring it. We've got the cart before the horse, so to speak."

P8 proclaimed that regardless of how and what nations decide to measure nationally or internationally, it is important that economic measurement keeps track of the times and develops concurrently, and that general consensus is essential as to how to measure economic progress:

> With the evolution of society … employment practices and such … it ought to be important to also find new measurements. There ought to be development in economics in the same way, and people have to search for new ways to find better measurements that are more comprehensive … than an average representative of no one. I mean today there are so many outside of this supposed prosperity and poverty is increasing and inequality is increasing. Current figures don't appear to measure that. GDP doesn't measure it. So it is important to implement a measurement that people can have consensus about. If people aren't satisfied with a measurement, then there will always be arguments. We need to be in agreement, a metre is a metre, and so I think it matters a lot to find, find this measurement that measures general prosperity for the most citizens. What measurement that should be, I don't know.

4.1.4 How realistic is the possibility of Iceland creating international norms for measuring economic progress?

Most of the interviewees felt that Iceland could very well take a leading role in experimenting with implementing innovation in measuring economic progress, bearing in mind some reservations and restrictions. The interviewees' perspectives are discussed in this section.

P2, A3, S1, P8, P5, S5 and S6 all mentioned that the smallness of the Icelandic population and economy, coupled with the relatively advanced infrastructure and easy bureaucratic access, could make it a useful testing ground for innovation in measuring economic progress. However, at the same time, they also mentioned that the smallness of the country could easily count against the validity of any of the findings. Different issues brought up by these interviewees are summarized as follows.

Firstly, conclusions could be skewed due to the small size of the economy. Secondly, the margin of error in an economy such as Iceland's would be too big to produce realistic results worthy of replication in a bigger, more complex economy. Thirdly, it would be a very expensive project for a small country to embark on and difficult to secure funding.

P3, P4 and P7 also felt that Iceland could, and in P4's words, "should", make an effort to explore innovation. S1, P7 and P4 specifically referred to political will, and particularly cross-political participation as essential for success. According to them, a lot of political decision-making in Iceland appears to still be aimed at increasing growth through "old" industries such as farming, fishing and aluminium production that can produce short-term positive economic results. To illustrate the point, P4 referred to how negative the discussion around artists' salaries[14] is every year, but no one bats an eyelid over the huge subsidies for research related to fishing and farming.

A1 thought it could be an interesting experiment to try out, but was concerned about the validity of taking up any kind of measurement that has little to no international comparison or endorsed methodology.

S3 and S2 both mentioned the possibility of making it an internationally supported academic research project, thereby removing it from the direct auspices of government and involving international expertise in the research.

P1 and P6 were not positive about the prospect at all. P1 clearly stated that Iceland is not a leader, rather a follower. P6 was adamant that Iceland should not attempt being a leader, ever: Iceland's biggest problem up to today is unique Icelandic solutions that lead to unique Icelandic problems. P6 believed the Icelandic pension fund system as

[14] Annual state-funded salaries awarded to a number of artists in Iceland, while they are working on specific projects.

the perfect example of a special Icelandic solution that is a failure, and went on to say that Iceland's needs are much better met by adopting the best international practices - there's no need to be a torchbearer of any kind.

S4, though more positive than P6, had a few words of caution:

> In Iceland, we often fall into the trap of thinking, ah, we're the best. We can do this on our own, differently from anyone else, instead of maybe we should do a better job of looking what other countries are doing and try to incorporate those into what we want to do. We kind of always want to go our own way, and that can fail, badly.

Even so, S4 felt that Iceland could very well launch an experiment, but only with international support. S4's statement corresponds with S3 and S2's mention of an international cooperative project, an option which P2 and S1 also felt would be the only way Iceland could possibly properly explore and experiment with innovation in measuring economic progress.

Perhaps appropriately, the people with experience, Statice, should have the final word in this section. Though wanting to be positive about innovation, but living the realities of compiling national statistics on tight budgets every day, Statice had a very sobering perspective: there simply is no money and no manpower. Iceland already only produces the bare essentials in domestic and international statistics. There is no room for experimentation. And even if there were, the public would never accept the government expending huge amounts of money on testing out new statistical measures. It would be nice, but, according to Statice, it's just never going to happen.

5 DISCUSSION AND CONCLUSION

Chapter 5 provides a discussion and possible answers to the original research questions. The discussion, conclusion, limitations, implications and recommendations presented in this chapter are built on the analysis and insights gained from Chapter 2 and Chapter 4.

5.1 GENERAL DISCUSSION OF FINDINGS

The discussion on the findings has been broken down into three sections, representing the three tenets of the original research question: **How can Iceland, as a small state, act as an international norm entrepreneur in the implementation of innovation in measuring economic progress?**

The findings are discussed under the headings of GDP as a measurement of economic progress, other forms of measuring economic progress and Iceland as international norm entrepreneur.

5.1.1 GDP as measurement

The statement that gross domestic product (GDP) is the "most widely used measure of economic activity" (Stiglitz et al., 2010, p.23) is confirmed by the findings of this research. Respondents were all very familiar with the concept, but professed varying degrees of knowledge. Aside from two academics and one politician, most respondents felt they had a rather limited grasp of exactly how GDP is calculated or how much it is used in deciding economic policy. This concurred with expectations.

Despite not having extensive knowledge of GDP, respondents readily accepted the "myth", as Karabell (2014) calls it, of single numbers being representative of "national numbers that reflect national realities." (p.245). That said, many were aware of some of the GDP's major inherent flaws, such as its failure to account for resource depletion or the seemingly arbitrary inclusivity of measurable products and services. However,

most respondents referred to it as a “simple” number, and each and every interviewee appeared to believe that GDP is an important measure of comparison between countries.

This concurs with the researcher’s expectations, based on the literature review in Ch.2.2.5. GDP has become so deeply entrenched in the psyche of the general populace, not to mention just about every economic calculation or publication, that it has become an accepted truth that it is a simple way of effectively comparing economic output in vastly differing national environments. This belief exists regardless of compelling evidence to the contrary, as discussed in Ch.2.1.3.

Additionally, apart from the practical reservations by Statistics Iceland, interviewees displayed little awareness of the magnitude of standardized international operations involved in the calculation of GDP and what effect these externally imposed requirements have on the limited statistical resources of a large number of countries. Subsequently, the myth of GDP serving as a simple and impartial method of making international comparisons between countries remains the general accepted perception, however far removed from reality it may be.

Also concurring with the researcher’s expectations was the concerns many interviewees did, in fact, raise about the validity of GDP. A lack of clarity, bordering on confusion, as to exactly what GDP measures, were indicated in the findings, as was the importance of delving deeper into what exactly lies behind the numbers represented in the GDP.

Many respondents were aware that the GDP only measures limited aspects of a society’s economic activities. This concurs with concerns voiced by Kuznets (1934), Costanza (2009) and Stiglitz (2010), to name but a few. Concurrent with concerns voiced by Eisler (2007), Klein (2014) and others, the interview findings also indicated the limitations of the GDP in making a distinction between bad expenditure, such as the environmental effects of an oil spill, or good expenditure, such as building a hospital.

The interview findings suggested caution when it comes to equating an increase in GDP with a general increase in social wellbeing or prosperity, especially the extent to which it is used politically to claim economic progress or improvement of social conditions when there are contradictory numbers, such as rising poverty or inequality,

that negate the supposed success of an increase in GDP. This is supported by the literature of, amongst others, Van den Bergh (2009) and Costanza (2009).

Apart from indirect comments by respondents S1, A3 and P6, the strong correlation between debt and GDP did not enter the discussion. Consequently, and corresponding with the literature research in Ch.2.1.3, the possibility of whether GDP could be redundant in the age of Big Data and technology, also did not enter the discussion. However, the majority of respondents did exhibit awareness of the inherent flaw in GDP, as mentioned in Ch.2.1.3, by which it seemingly arbitrarily records only monetary 'market-based' economic activity, and does not include other valuable economic activity such as household work.

As discussed in Ch.2.1.3, and brought up by interviewee A1, the arguments that it is technically difficult to estimate household work and that GDP should not include 'own production', simply doesn't hold water. Some commentators point out that the inclusion of financial services by way of the very complicated FISIM[15] mechanism actually present a much bigger technical challenge than imputing the contributions of work. In fact, Norway used to include household work in its GDP, a practice that was only discontinued when it had to comply with standardized systems of national accounts and compare its own statistics to less progressive countries (*The Economist*, 2016). Though Coyle (2014), contemplated whether household work is deliberately left out because it is done by women, closer inspection of the symbiotic relationship between GDP, debt and interest provides a more plausible, and perhaps disturbing, explanation.

GDP estimates are used by central banks to determine interest rates. Growth needs to exceed debt plus the cost of interest for an economy to stay afloat.[16] When the Bureau of Economic Analysis (responsible for statistics in the USA) recently calculated a version of GDP that included unpaid housework, GDP from 1965 to 2010 increased. However, the average nominal growth rate over those 45 years, with unpaid housework included, was 6.7 %, which is lower than the official 6.9%. In other words, unpaid housework is, quite possibly, not included in GDP because it simply lacks the potential for growth. Its inclusion may very well hamper an economy's ability to sustain enough

[15] See the section in Chapter 2.1.3 on complexity and financial services.
[16] See Chapter 2.2.5 on barriers to implementing innovation.

growth to repay its debts, or the ability to incur further debts against potential future growth. This modern, heavy reliance on debt is what some pundits like to refer to as the 'debtoconomy'.

Thus it may be concluded that the decision as to what should or should not be included in GDP is less concerned with matters of equality, the environment, productivity or even providing a comprehensive account of economic activity. The main motivation for inclusion appears to be a particular product or service's potential for growth. As a result, it may not be amiss to claim that the will to overcome technical challenges to inclusion in GDP calculations may very well be determined by the potential of a product or service to generate enough future growth to incur, and subsequently cover, debt and interest.

As a case in point, it is telling that, despite Kuznet's protestations at the very beginning against including arms in GDP, from ESA 2010 expenditure on weapon systems will be counted as investment (Eurostat, 2016). Increased global terrorism and security threats may contain promising potential for economic growth.

The first sub-question of this research is **"How effective is the Gross Domestic Product (GDP) in terms of providing a comprehensive overview of economic progress?"** Based on the findings of this research, specifically with regard to the theoretical context as presented in Chapter 2.1.3, it is clear that GDP is not at all effective any more in providing a comprehensive overview of economic progress in the 21st century. However, as described in the barriers to implementing innovation in Chapter 2.2.5 and discussed in Chapter 4.1.2, GDP is deeply embedded in the psyche of your average countrymen, as well as in the practices of government offices, academia, and business. Regardless of its efficacy, it will not be discarded overnight.

Yet, as long as our societies remain beholden to GDP, unpaid housework, childcare, nature and a host of other things that matter to a healthy, strong and sustainable economy and happy society, will remain forever unaccounted for and therefore considered less valuable to our progress. By continuing the reliance on the use of this single indicator, we run the risk of feeding policies geared towards fuelling growth in the service of debt, instead of advancing growth in the service of a sustainable future for mankind.

5.1.2 Other forms of measuring economic progress

The literature review in Chapter 2 revealed a call towards exploring alternatives to the GDP by a number of academics, such as Joseph Stiglitz and Amartya Sen, as well as some prominent politicians such as Nicholas Zarkosy. Additionally, a parliamentary resolution that was passed on 20 March 2012 (Alþingi, 2012) stated that Iceland should adopt the GPI concurrent with the GDP in order to measure economic progress and guide economic policy. It therefore came as somewhat of a surprise when the interview findings indicated that few of the interviewees were familiar with any of the most well-known alternatives to GDP.

On the other hand, the interview findings also confirmed that all the respondents considered the importance of including a broad range of measurements to determine a country's economic progress. Most significantly and as discussed more thoroughly in Chapter 4, all the respondents indicated quality of life, measured in various ways, as an important factor when evaluating the progress and/or success of a country's economy.

These findings concur with research by Stiglitz, Sen and Fitoussi (2010) which claim that the best way to measure economic progress would be to employ a dashboard of indicators instead of a one-size-fits-all version to replace the GDP. It also concurs with much of the current innovation in measuring economic progress, such as MAP, SUSA, the HDI, GNH, OECD Better Life Index and more.[17]

One of the most significant findings in this part of the research are two related opinions expressed by a number of the respondents. Firstly, two of the respondents called on a rethinking of the economy and what purpose it serves. Only when society knows what it wants the economy to be, will it be possible to find effective ways of measuring it.

Secondly, two other respondents stated that nations and people should strive towards consensus on what and how they want to measure economic progress. As was pointed out in Chapter 2.2.5, the lack of consensus on any measurement apart from GDP, poses a significant barrier to the implementation of innovation in measuring economic

[17] Measuring Australia's Progress, The State of the USA, Human Development Index, Gross National Happiness, Organisation for Economic Cooperation and Development Better Life Index.

progress globally. Not having a clearly defined, legitimate democratic mandate regarding the purpose of the economy as a whole, further troubles the waters.

In conclusion, the answer to the sub-question **"What international innovation is taking place in the measurement of economic innovation?"** indicates a wide variety of innovation taking place, instigated mostly by governments and multinational institutions. Most of this innovation is characterised by a drive towards measuring economic progress through improvements to the general quality of life for citizens. However, with an increasingly globalised blurring of borders and business and constantly multiplying international umbrella institutions and organisations, it might very well better serve the purpose of governments, corporations and citizens to first reach consensus on what matters most in a given economy - and then determine how it should be measured.

5.1.3 Iceland as international norm entrepreneur

Though the interviewees agreed that Iceland could be considered a leader in some fields, the findings of this research indicate that it is not necessarily a country that can be said to be looked upon as a norm entrepreneur in general. This agrees with the lack of research in the field of Iceland as a norm entrepreneur independently, as researchers such as Ingebritsen (2002) have mainly focused on a broad category of Nordic countries.

Generally speaking, Iceland garnered a lot of international attention for its Viking "outvasion" in the early 2000s, which then came crashing down spectacularly in 2008. Its seemingly rapid economic recovery, populist decisions such as that by President Grimsson to refer the issue of Icesave repayments to a general referendum (Bergmann, 2014) and the jailing of former bankers may be said to have contributed to 'saving some international face' in terms of setting norms. Even so, there is as yet no clear indication that these events have had any enduring effect on other countries' interest to follow in Iceland's footsteps. However, international norms aren't changed overnight, so these events may very well still be categorised as the first stage of the life cycle of norms, *norm emergence* (Finnemore and Sikkink, 1998) and their longevity will only be determined as time goes on.

Respondents were generally positive about Iceland's practical ability to experiment with innovation in measuring economic progress, mostly due to the small size of its economy. That said, strong doubts were raised about political will and whether positive results in Iceland could be replicated in a bigger economy. Additionally, the unforeseen practical burden and expense of upholding standardized international systems of national accounts, was highlighted by Statistics Iceland and can most certainly be seen as putting a proverbial spanner in the works.

These reservations did not come as a surprise, as Iceland is a unique combination of rapid technological advance and economic prosperity combined with rather immature political and social development. Added to that, it is a country with a small homogenous population and undiversified industries, yet quite sophisticated infrastructure. It can hardly be described as your 'average' country.

Iceland's reluctance to participate on equal footing regarding climate change negotiations, coupled with the views voiced by several interviewees that Iceland can only ever lead (or follow) with a little help from abroad, led to a perspective not originally considered in the design of the research. It is a confirmation of what Eirikur Bergmann (2014) refers to as Iceland's (and Icelanders') postcolonial identity. This can better be described as Iceland and Icelanders propensity to veer between a nationalistic defiance, counteracted by a "wish to be recognised as an equal in the modern international system" (p.151). The duality of the interviewees' response, summed up as 'Yes, Iceland could surely do this, but on the other hand, Iceland really shouldn't, or at least not without help from outside', concurs with this theory on postcolonial identity and the almost juvenile insecurity of a young, small republic still trying to find its footing in the world.

The answer to the third sub-question **"To what extent can Iceland be defined as a norm entrepreneur?"**, really lies in how Icelanders perceive Iceland. The so-called postcolonial identity could affect the desire to implement innovation. It could either serve as encouragement for exploring new paths, or it could make Icelanders fearful of the way they are perceived in a greater international context. This could lead the political powers that be rather to stick to the generally accepted economic rules, than have the courage to go against the grain.

5.2 LIMITATIONS AND IMPLICATIONS

A number of limitations came to light during the execution of this research. Firstly, there is a vast amount of literature available on economic measurements, but very little on norm entrepreneurs, especially in the case of Iceland. As a result, the range of both the literature and field research tipped towards economic measurements.

Secondly and leading on from the first point, this research project is characterised by a topic that is ambitious in range. The three-pronged scope of the project, focusing on GDP and its flaws, innovation in measuring economic progress as well as Iceland as a norm entrepreneur, is a vast task and perhaps too cumbersome for one 30 ECTS MA thesis. Conversely, qualitative research based on a phenomenographic approach may also have complicated, instead of simplified, matters.

Thirdly, research on GDP, combined with the prominence of GDP in public discourse on the economy, means that a large part of the research interviews became dedicated to the facts and flaws of the GDP. Views on the GDP ended up forming at least one third, if not more, of the research in this project, easily manoeuvring itself into the forefront and forcing the main topics of norm entrepreneurship and innovations in measuring economic progress aside.

5.3 THE FUTURE: RECOMMENDATIONS

In the light of the financial crash of 2008, it became evident that how a nation views the purpose of its economy affects individuals' economic behaviour. Lots of easy credit, lax regulations and an atmosphere conducive to reckless spending most certainly played a role in the decisions individuals and governments made in the run-up to the crash. Additionally, the free flow of money across borders, as we have seen, left the small Icelandic economy and therefore the Icelandic public with all their investments in the local currency, quite vulnerable and exposed. Exorbitant interest rates and excessive inflows and outflows of currency exacerbates the situation. As a result, survey after survey indicates that trust between the general population and its political leaders is at an all-time low.

Current practices that encourage short-term growth and gains at the expense of the environment and fiscal stability need to be discussed: Is this what the general population wants?

The original research question asked how Iceland, as a small state, can act as a norm entrepreneur in the implementation of innovation in measuring economic progress. From analysing the findings of this research, it is recommended that the Icelandic community and politicians explore innovation in measuring economic progress by way of seeking a democratically legitimate mandate. It is essential that a cross-political platform be created for open discourse between government, business, the public and academia on the topic of the economy. Whose needs must the economy serve? How? And how must progress be calculated and measured?

In this way, Iceland can, indeed, act as a norm entrepreneur by instigating a back-to-basics conversation between the different stakeholders of the country's economy. A process reminiscent of the national conventions on the new constitution comes to mind. Another example of a possible format could be the design of the Arctic Circle Assembly that takes place in Reykjavík each year. In the spirit of innovation, many different forms for this process can exist. However, the objective should be to give representatives of the different stakeholders the opportunity to voice their views and reach consensus on the goals of the economy, and how its progress should be measured.

5.4 CONCLUSION

GDP is not perfect, but it will have to do for now. Or will it?

When this researcher discovered that GDP did not account for unpaid household work, yet counted cleaning up after environmental disasters as a positive, she set out to explore alternatives to GDP and investigate whether Iceland could serve as a type of norm incubator for implementing alternatives to GDP. Those were the original goals of this research. However, as the research progressed, GDP demanded more attention.

Like the common cold, most people just seem to accept GDP as a fact of life. But, unlike the common cold, GDP is not a natural occurrence. It is a man-made construct

that has far-reaching implications for the way mankind organizes its societies and distributes its resources.

What this researcher discovered in the course of literature and field research, is that, contrary to popular belief, GDP is not a 'simple' number or a good measure of comparison between nations. Additionally, when digging into the rationale behind what is, and is not included in GDP, the harmful consequences of policies solely based on triggering economic growth for the purpose of servicing debt become apparent.[18]

GDP is fundamentally flawed, of that there is no question. It is not at all suitably representative of economic activity in any given country, and, with rapid technological changes, it is becoming even less so.[19]

The extent to which GDP is fundamentally flawed is perhaps the most unexpected finding of this research project. Furthermore, the popular belief that GDP is a simple number making for a good comparison between countries is contradicted by the findings of this research. It is evident that GDP is becoming an increasingly poor, if not simply misguided frame of reference for governments and individuals regarding economic decisions. In the light of this information, the question arises whether the enormous amounts of money and manpower governments spend on producing GDP is justifiable.

Putting the fatally flawed GDP aside, how does this research answer the main research question: **How can Iceland, as a small state, play a role in the international implementation of innovation in measuring economic progress?**

Based on the findings as presented in this thesis, this researcher concludes that Iceland may very well have a successful role to play in implementing innovation with regard to measuring economic progress. Recommendations to this effect are made in Chapter 5.3.

In summary, three aspects form the basis of fundamental innovation in measuring economic progress. Firstly, single number alternatives to GDP will not solve the problem. Increasingly complex societal needs demand a larger variety of data and analysis options. All modern countries will increasingly need to derive data and policies

[18] Please refer to the discussion on the relationship between debt, interest rates and GDP in Ch.2.2.5 and globalized leakage in Ch.2.1.3.
[19] Please refer to Ch.2.1.3 for arguments to support this statement.

from a broad range of preferably customized indicators. Thus GDP does not need to be replaced. It needs to be discontinued. The days of one-size-fits-all numbers are dated.

Secondly, and contrary to original expectations, innovation in measuring economic progress does not mean simply trying out other indicators. Instead, innovation means going back to the core and redefining the purpose of any economy: how it serves its people. In this respect, Iceland could most certainly act as a norm entrepreneur in establishing a broad, citizen-based, democratically legitimate platform from which to explore its economy and how its people want to see it progress.

Thirdly, and leading on from the second point, it is absolutely essential to seek political and public consensus regarding the goals of a given economy, and how to measure its success.

Iceland can implement innovation. However, it is in the hands of politicians to display the political will to do so. Going against the grain of established practices is the goal of a norm entrepreneur. Iceland may have, at times, appeared to do exactly that, either voluntarily or accidentally. Whether it can choose to take this path consciously and intentionally, though, given its youthful insecurity as expressed in its postcolonial identity, will pose a whole new challenge for this young republic and the people who govern it.

BIBLIOGRAPHY

Alþingi, (2012). *Þingsályktun um eflingu græna hagkerfisins á Íslandi*. Retrieved on 4 September 2015 from http://www.althingi.is/altext/140/s/1020.html

Alþingi (2013). *AÐGERÐAÁÆTLUN um eflingu græna hagkerfisins á Íslandi – Lokaskýrsla.*

Anderson, J. (2015, July 3). How Iceland Emerged from Its Deep Freeze. *The New York Times*. Retrieved on 11 February 2016 from http://www.nytimes.com/2015/07/05/business/international/how-iceland-emerged-from-its-deep-freeze.html

Ashworth, P. & Lucas, U. (1998). What is the 'World' of Phenomenography? *Scandinavian Journal of Educational Research, Vol.42,* No.4, 415 – 431.

Bailes, Alyson J.K., & Þórhallsson, B. (2014). "Small States"; a Theme in Icelandic Political Science and Politics. *Nordiques, 27,* 117 – 131.

Barnett, M. (2014). Social constructivism. *The globalization of world politics*. Oxford: Oxford University Press.

Benediktsson, K. & Karlsdóttir, A. (2011). Iceland: crisis and regional development - Thanks for all the fish? *European Urban and Regional Studies 18,* 2, 228–235.

Bergmann, E. (2014). *Iceland and the International Financial Crisis*. London Palgrave: Macmillan.

Beyond GDP. (2015). *Key Quotes.* Retrieved on 27 October 2015 from http://ec.europa.eu/environment/beyond_gdp/key_quotes_en.html

Bowers, S. (2013, October 6). Iceland Rises from the Ashes of Banking Collapse. *The Guardian*. Retrieved on 11 February from http://www.theguardian.com/world/2013/oct/06/iceland-financial-recovery-banking-collapse.

Brynjolfsson, E. (2013). The key to growth? Race with the machines. *TED 2013*. Retrieved on 16 February 2016 from http://www.ted.com/talks/erik_brynjolfsson_the_key_to_growth_race_em_with_em_the_machines/transcript?language=en

Chu, C. (2009). Thirty years later: the global growth of ITQs and their influence on stock status in marine fisheries. *FISH and FISHERIES, 10*, 217–230.

Costanza, R., Hart, M., Posner, S., & Talberth, J. (2009). Beyond GDP: The need for new measures of progress. *The Pardee Papers*, *4*, 46.

Cook, D. (2014). *Accounting for the Utilisation of Energy Resources within the Genuine Progress Indicator.* MS Thesis, University of Iceland, Reykjavík, Iceland.

Conley, C. (2010). Measuring what makes life worthwhile. *TED 2010*. Retrieved on 21 March 2016 from http://www.ted.com/talks/chip_conley_measuring_what_makes_life_worthwhile

Coyle, D. (2014). *GDP: A brief but affectionate history*. New Jersey: Princeton University Press.

Creative Commons. (2012). *Effect of a Real GDP Increase (Economic Growth) on Interest Rates.* Retrieved on 14 February 2016 from http://2012books.lardbucket.org/books/policy-and-theory-of-international-finance/s10-11-effect-of-a-real-gdp-increase-.html

Daly, H.E. & Cobb, J. (1989). *For the common good: Redirecting the economy toward community, the environment, and a sustainable future*. Boston, MA: Beacon Press

Daviðsdóttir. B. (2013). Aldrei fórna meira fyrir minna. Retrieved on 4 September 2015 from http://aldarafmaeli.hi.is/afmaeli/aldrei_forna_meira_fyrir_minna

Eisler, R. (2007). *The Real Wealth of Nations*. San Fransisco: Berret-Koehler Publishers.

Eurostat. (2016). Eurostat statistics explained: European System of National and Regional Accounts – ESA 2010. Retrieved on 7 February 2016 from http://ec.europa.eu/eurostat/statistics-explained/index.php/European_system_of_national_and_regional_accounts_-_ESA_2010

Finnemore, M. and Sikkink, K. (1998). International Norm Dynamics and Political Change. *International Organization*, *52*, 887-917.

Gertner, J. (2010, May 13). The Rise and Fall of the G.D.P. *New York Times Magazine*. Retrieved on 13 February 2016 from http://www.nytimes.com/2010/05/16/magazine/16GDP-t.html?_r=0

Giovaninni, E. (2015). *European policy makers need to look beyond GDP to promote well-being*. Retrieved on 27 September 2015 from http://europesworld.org/2015/06/19/european-policy-makers-need-look-beyond-gdp-promote-well/#.VglaOOztmkp.

Gould, E. (2014). Why America's Workers Need Faster Wage Growth – And What We Can Do About It. *Economic Policy Institute*. Retrieved on 15 April 2016 from http://www.epi.org/publication/why-americas-workers-need-faster-wage-growth/

Happy Planet Index. (2016). Retrieved on 21 March 2016 from http://www.happyplanetindex.org/about/

Human Development Report. (2014). *Statistical Annex.* Retrieved on 10 February 2016 from http://hdr.undp.org/sites/default/files/hdr_2015_statistical_annex.pdf

Human Development Report. (2015). *Human Development Index*. Retrieved on 21 March 2016 from http://hdr.undp.org/en/content/human-development-index-hdi

Halldórsdóttir, S. & Davíðsdóttir, S. (2013). Réttmæti og áreiðanleiki í megindlegum og eigindlegum rannsóknum. *Handbók í aðferðafræði rannsókna*, (bls. 211 – 227). Akureyri: Háskólinn á Akureyri.

Hecht, J.E. (2005). *National Environmental Accounting: bridging the gap between ecology and economy*. USA: RFF Press.

Ingebritsen, C. (2002). Norm Entrepreneurs: Scandinavia's Role in World Politics. *Cooperation and Conflict: Journal of the Nordic International Studies Association*. *Vol. 37*, 1, 11 – 23.

Ingebritsen, C. (Ed). (2006). *Small States in International Relations*. University of Washington Press, Seattle. *International Journal of Qualitative Studies on Health and Well-being*, *2007*, 2, 55-64.

Ingólfsdóttir, A.H. (2014). Environmental security and small states. *Small states and international security, Europe and beyond*. Routledge: New York.

Jung, A. (2009, September 22). The Cult of GDP: Can Economies Function Without Growth? *Spiegel Online International*. Retrieved on 9 January 2016 from http://www.spiegel.de/international/business/the-cult-of-gdp-can-economies-function-without-growth-a-650520.html

Júlíusson, Þ.S. (2016, February 2). Tugmilljarða króna vaxtamunaviðskipta í fyrra. *Kjarninn*. Retrieved on 14 February 2016 from http://kjarninn.is/skyring/2016-02-02-tugmilljarda-krona-vaxtamunavidskipti-i-fyrra/

Karabell, Z. (2014). *The Leading Indicators: A Short History of the Numbers that Rule Our World*. New York: Simon and Schuster.

Klein, N. (2014). *This Changes Everything: Capitalism vs The Climate*. New York: Simon and Schuster.

Krugman, P. (2013, March 21). Cyprus: The Sum of All FUBAR. *The New York Times.* Retrieved on 11 February 2016, from http://krugman.blogs.nytimes.com/2013/03/21/cyprus-the-sum-of-all-fubar/

Krugman, P.R., Obstfeld, M., and Melitz, M.J. (2014). *International Economics*. Harlow, England: Pearson.

Kubiszewski, I., Costanza, R., Franco, C., Lawn, P., Talberth, J., Jackson, T. and Aylmer, C. (2013). Beyond GDP: Measuring and achieving global genuine progress *Ecological Economics* 93, 57–68.

Kuznets, S. (1941). *National Income and its Composition: 1919-1938*. National Bureau of Economic Research, New York.

Landefeld, J.S., Seskin E.P., & Fraumeni B.M. (2008). "Taking the Pulse of the Economy: Measuring GDP," *Journal of Economic Perspectives 22*, no.2, 193 – 216.

Larsson, J. & Holmström, I. (2007). Phenomenographic or phenomenological analysis: does it matter? Examples from a study on anaesthesiologists' work. *International Journal of Qualitative Studies on Health and Well-being. 2007, 2*, 55-64.

Lawn, P. (2003). A theoretical foundation to support the Index of Sustainable Economic Welfare (ISEW), Genuine Progress Indicator (GPI), and other related indexes. *Ecological Economics. Volume 44*, 1, 105–118.

Lin, H.M. & Niu, H.J (2011). A Phenomenographic Approach for Exploring Conceptions of Learning Marketing among Undergraduate Students. *Business and Economic Research*, 2011, Vol. 1.

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. Newbury Park: Sage.

Liu, J. and Diamond, J. (2008). Revolutionizing China's Environmental Protection. *Science*, *Vol.319*, 37 – 38.

Magnúsdóttir, G.L. & Þorhallsson, B. (2012). The Nordic States and Agenda-Setting in the European Union: How Do Small States Score? *Stjórnmál & Stjórnsýsla* 1. tbl.,7. árg. 2011, 203-224

Mackey, R. (2015, March 3). Led by Pirates, Iceland Legalizes Blasphemy. *New York Times*. Retrieved on 11 February from http://www.nytimes.com/2015/07/03/world/europe/led-by-pirates-iceland-legalizes-blasphemy.html?_r=0

Marton, F. (1994). Phenomenography in T. HUSEN and T.N. POSTLETHWAITE (Eds) *International Encyclopedia of Education*, Vol. 8 (Oxford, Pergamom)

Measure of Australia's Progress. (2013). *What is MAP?* Retrieved on 14 February, 2016 from http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1370.0~2013~Main%20Features~What%20is%20MAP%3f~67

Mingels, G. (2014, January 10). Out of the Abyss: Looking for Lessons in Iceland's Recovery. *Der Spiegel*. Retrieved from http://www.spiegel.de/international/europe/financial-recovery-of-iceland-a-case-worth-studying-a-942387.html

Morgunblaðið. (2016, February 1). Píratar með mest fylgi í tíu mánuði. Retrieved on 11 February, 2016 from http://www.mbl.is/frettir/innlent/2016/02/01/piratar_med_mest_fylgi_i_tiu_manudi/

Mutert, E. (2010). *Alternative Indicator: Green GDP*. Retrieved on 21 March 2016 from http://www.marketplace.org/2010/12/03/business/economy-40/alternative-indicator-green-gdp

Naim, M. (2014, May 27) The Problem with Piketty's Inequality Formula. *The Atlantic.* Retrieved on 11 February 2015 from http://www.theatlantic.com/international/archive/2014/05/the-problem-with-pikettys-inequality-formula/371653/

OECD Better Life Index Rankings. (2014). Retrieved on 27 January 2016 from http://www.oecdbetterlifeindex.org/#/11111111111.

Office for National Statistics (2016). *Understanding GDP and how it is measured*. Retrieved on 10 February 2016 from http://www.ons.gov.uk/ons/rel/elmr/explaining-economic-statistics/understanding-gdp-and-how-it-is-measured/sty-understanding-gdp.html

O'Neill, D. & Dietz, R. (2013). *Enough is Enough: Building a Sustainable Economy in a World of Finite Resources.* San Franciso: Berret-Koehler.

Orkustofnun. (2009). *Meet Iceland – A Pioneer in the Use of Renewable Resources*. Retrieved on 17 February 2015 from http://www.nea.is/media/utgafa/H71-OS-veggspj-baeklingur.pdf

Pfefferle, T. (2014) Climate Change Politics through a Constructivist Prism. *E-International Relations Students*. Retrieved on 4 September 2015 from http://www.e-ir.info/2014/06/18/climate-change-politics-through-a-constructivist-prism/

Reed, B. (2006). Phenomenography as a way to research the understanding by students of technical concepts. *Núcleo de Pesquisa em Tecnologia da Arquitetura e Urbanismo (NUTAU): Technological Innovation and Sustainability*. Sao Paulo, Brazil, 1-11.

Rickards, J. (2014). *The Death of Money: The Coming Collapse of the International Monetary System*. New York: Penguin.

Ruggie, J. G. (1998). *Constructing the World Polity: Essays on International Institutionalization*. London: Routledge.

Smith, J. (2012). The GDP Illusion. *Monthly Review*. Volume 64, Issue 03. Retrieved on 7 February 2016 from http://monthlyreview.org/2012/07/01/the-gdp-illusion/

Social Progress Imperative. (2015). *Which countries placed in the top 10 and bottom 10 on the 2015 Social Progress Index*? Retrieved on 27 January 2016 from

http://www.socialprogressimperative.org/blog/posts/which-countries-placed-in-the-top-10-and-bottom-10-on-the-2015-social-progress-index)

Social Progress Imperative. (2015). *Social Progress Index 2015*. Retrieved on 21 March 2016 from http://www.socialprogressimperative.org/data/spi#data_table/countries/dim2/dim1,dim2,dim3

Statistics Iceland. (2016). Population figures. Retrieved on 10 February 2016 from http://px.hagstofa.is/pxis/pxweb/is/Ibuar/Ibuar__mannfjoldi__1_yfirlit__Yfirlit/MAN00000.px/table/tableViewLayout1/?rxid=49cb7b79-0473-4028-bc98-831b6c6a36a1

Steward, H. (2012, July 21). Wealth doesn't trickle down – it just floods offshore, research reveals. *The Guardian*. Retrieved on 16 April 2016 from http://www.theguardian.com/business/2012/jul/21/offshore-wealth-global-economy-tax-havens

Stiglitz, J., Sen, A. and Fitoussi, J.P. (2010). *Mismeasuring our Lives: Why GDP doesn't add up*. New York: The New Press.

Tobgay, T. (2016). This country isn't just carbon neutral – it's carbon negative. *TED 2016*. Retrieved on 21 March 2016 from http://www.ted.com/talks/tshering_tobgay_this_country_isn_t_just_carbon_neutral_it_s_carbon_negative/transcript?language=en

The Economist. (2013). *Blind justice*. Retrieved on 19 February 2015 from http://www.economist.com/news/finance-and-economics/21577064-why-have-so-few-bankers-gone-jail-their-part-crisis-blind-justice

The Economist. (2016). Free exchange: A proper reckoning. *The Economist*. Volume 418, Number 8980.

The State of the USA. (2016) *Mission*. Retrieved on 14 February 2016 from http://www.stateoftheusa.org/about/mission/

United Nations Statistics Division. (2016). National Accounts Main Aggregates Database: *Per Capita GDP in US Dollars: All countries for all years, sorted alphabetically*. Retrieved on 6 February, 2016 from http://unstats.un.org/unsd/snaama/dnllist.asp

Van den Bergh, J. & Antal, M. (2014). *Evaluating Alternatives to GDP as Measures of Social Welfare/Progress*. WWWforEurope.

Van den Bergh, J.C.J.M. (2009). The GDP Paradox. *Journal of Economic Psychology 30*, 117 – 135.

Wade, K. and May, A. (2013). GDP growth and equity market returns. *Schroders*. Retrieved on 27 September 2015 from https://www.schroders.com/staticfiles/Schroders/Sites/Americas/US%20Institutional%202011/pdfs/Equity-Returns-and-GDP.pdf

Waring, M. (1999). *Counting for Nothing: What Men Value and What Women Are Worth.* University of Toronto Press: Toronto.

World Economic Forum. (2014). *Global Gender Gap Report Rankings 2014*. Retrieved on 27 January 2016 from http://reports.weforum.org/global-gender-gap-report-2014/rankings/

Zhong, R. (2015, December 16). In Bhutan, Gross National Happiness Trumps Gross National Product. *Wall Street Journal*. Retrieved on 21 March 2016 from http://www.wsj.com/articles/in-bhutan-gross-national-happiness-trumps-gross-national-product-1450318359

APPENDIX

APPENDIX 1 – RESEARCH INTERVIEW QUESTIONS

1. Nordic countries have, at times, been described as 'norm entrepreneurs', in other words, countries that are instrumental in setting international norms, especially in terms of human rights and environmental sustainability. In your opinion, how does this apply to Iceland?
Ísl.: Norðurlöndum hefur stundum verið lýst sem frumkvöðlum, með öðrum orðum, lönd sem hafa sýnt frumkvæði í að skapa alþjóðlega staðla, einkum varðandi mannréttindi og umhverfismál. Hvernig á þetta við Ísland að þínu mati?

2. In your experience, what is the best way to measure to what extent economic progress has taken place?
Ísl.: Hvernig er best að mæla efnahagsþróun, að þínu mati?

3. What are your thoughts on gross domestic product (GDP)?
Ísl.: Hver er þín skoðun á vergri landsframleiðsla (GDP) sem mælieiningu?

4. What are your thoughts on alternative methods of measuring economic progress? (E.g. the Genuine Progress Indicator (GPI), Sustainable National Income (SNI) etc.)
Ísl: Hver er þín skoðun á öðrum mælieiningum svo sem "Genuine Progress Indicator (GPI), Sustainable National Income (SNI) o.s.frv."?

5. The main research question for this study is: "**How can Iceland act as an international norm entrepreneur in the implementation of innovation in measuring economic progress?"** What are your thoughts on this?
Ísl.: Aðalspurning í þessari rannsókn er: "Hvernig getur Ísland haft frumkvæði í að innleiða nýbreytni í mælingu á hagþróun?" Hver er þín skoðun á því?

APPENDIX 2 – CONSENT FORM

TITLE OF RESEARCH PROJECT:

Iceland as International Norm Entrepreneur: Implementing Innovation in Measuring Economic Progress

DETAILS OF PROJECT: This research forms part of Johanna E. Van Schalkwyk's MA research project. The main aim of this research project is to explore how Iceland, as a small state, can act as an international norm entrepreneur in the implementation of innovation in measuring economic progress.

The project is run by Johann E. Van Schalkwyk under the supervision of Auður H. Ingólfsdóttir, Assistant Professor.

The researcher would like to have your permission to use the results of the interview in her pilot study and also to use quotes. Full anonymity will be secured. Please note that you have the right to withdraw your consent at any time. You also have the right to refuse to answer any questions without giving any reason.

If you have any questions regarding your interview, concerns regarding the research or any dissatisfaction, you may report them in confidence to:
Auður H. Ingólfsdóttir, University of Bífröst, 311 Borgarnes, Iceland
Telephone: +354 4333000 Email: audurhi@bifrost.is

CONFIDENTIALITY: Interview recordings and transcripts will be held in confidence. They will not be used other than for the purposes described above and third parties will not be allowed access to them except as may be required by the law. Any references to

the interviewee in articles or papers written will use a pseudonym and not their real name and will change all identifying details.

CONSENT: I confirm that I allow Johanna Van Schalkwyk to use results from my interview and use anonymous quotes in her research. I understand the above information and voluntarily consent to my participation in the research project: *Iceland as International Norm Entrepreneur: Implementing Innovation in Measuring Economic Progress*

NAME OF RESPONDENT:_____

SIGNATURE OF RESPONDENT: _____

EMAIL AND/OR PHONE: _____

DATE: _____ ***SIGNATURE OF INTERVIEWER:*** _____