Student Name: Robin Boshoven	Supervisor:	Dr. B. Hoogendoorn	Date: 25/08/2017
Student ID #: 406732	Second Assessor:	Dr. A. J. van Stel	

The macro-level determinants of social entrepreneurship and the differences found in their associations across the different phases of social entrepreneurship: nascent social entrepreneurship and new social entrepreneurship

# ABSTRACT

Similar to preceding empirical studies, this paper examines a series of macro-level determinants on the prevalence of social entrepreneurship, using the dataset of the Global Entrepreneurship Monitor (GEM) 2009 Special Study, covering the prevalence of social entrepreneurship across 49 GEM member countries. However, where this study diverges from that of extant literature, is in the examination of how the effects of these determinants may differ across different phases of social entrepreneurship, namely nascent social entrepreneurship and new social entrepreneurship. As such this paper enlists three dependent variables to predict: Early-stage social entrepreneurship, nascent social entrepreneurship. Multiple regression analyses are run to test the influences a total of four potential determinants (economic development, government activism, gender equality and prevalence of commercial entrepreneurship). Our results find that only gender equality and the prevalence of commercial entrepreneurship have significant associations to social entrepreneurship. Additionally, this paper provides evidence showing that there can be differences in the associations of drivers with the two different phases of social entrepreneurship.

#### I. Introduction

With the increase in social awareness from the average consumer (Sangster, 2017) and the fact that there exists a subset of entrepreneurship that caters directly to the social consciousness consumers now look for from businesses today (Zahra, Rawhouser, Bhawe, Neubaum & Hayton, 2008), it is not without reason that social entrepreneurship has been brought into attention in today's business environment. Such is demonstrated with increases in number of social entrepreneurial success stories (e.g. Toms Shoes, Kiva, The Body Shop) and the number of support organisations catering to development of social entrepreneurs (e.g. the Skoll, Schwab and Ashoka foundations). Together, these factors have driven and displayed, at least in part, the growing interest and visibility of social entrepreneurship around the world (Bosma, Schott, Terjesen & Kew, 2016).

However, this interest holds not only in practical settings, but on an academic front as well, with a significant influx of literature and research on the topic - particularly over the last two decades. Though academic interest is eminent, social entrepreneurship as a field of academic inquiry has faced severe foundational impediments. As such, scholarly output thus far has been far from the ideal. Overall, the academic progression of the topic is minimal, and research on social entrepreneurship as a whole is highly perceived to be in its infancy stage (Short, Moss & Lumpkin, 2009; Hoogendoorn, Pennings & Thurik, 2010; Choi & Majumdar, 2014).

It is apparent that much of this stagnation attributes to the lack of a cohesive definition of social entrepreneurship, in which researchers in field are able to firmly agree upon. Instead, what extant literature have served to enforce is the premise that the concept of social entrepreneurship is vague and multifaceted by nature. A rather recent paper by Choi and Majumdar (2014) explicitly labels social entrepreneurship as a contested concept, and therefore deems that a universal definition of social entrepreneurship – that is accepted among different parties - is hardly possible. This lack of a definitive understanding of social entrepreneurship is at the core of the inertia the field exhibits. The most prominent result of this is the current make-up of research, which puts particular focus on defining the key constructs of social entrepreneurship; a topic under constant debate. Consequently, the make-up of research is largely conceptual with a relatively significant absence of empirical studies. For social entrepreneurship to move forward as a field, it is vital that current and future researchers look towards filling this existing gap. This paper too aims to contribute in this mission.

However, that is not to say that no empirical studies already exist. More and more, researchers have begun to steadily close the gap between conceptual and empirical works. As a consequence, the last decade has seen substantial empirical progression. The likely cause: the formulation of a harmonised dataset measuring the prevalence of social entrepreneurship. Compiled in the Global Entrepreneurship Monitor (GEM) 2009 Global Report, researchers have found the adequate means to begin experimenting and exploring with a plethora of empirical topics.

This paper particularly intends to build upon the extant literature that contribute to identifying the drivers of social entrepreneurship (Estrin, Mickiewicz & Stephan, 2013; Griffiths, Gundry & Kickul, 2013; Yiu, Wan, Ng, Chen & Su, 2014; Mendez-Picazo, Ribeiro-Soriano & Galindo-Martin, 2015; Stephan, Uhlaner & Stride, 2015; Hoogendoorn, 2016). We pay particularly close attention to *macrolevel* drivers, due to the belief that there exists an underrepresentation of academic works addressing the macro-level elements of social entrepreneurship (Nicholls, 2008; Short et al., 2009; Hoogendoorn 2016). What makes this all the more confounding, is the growing international nature of social entrepreneurial activity (Zahra et al., 2008). In many countries across the world, social entrepreneurship has become more and more prevalent, up to the point of being coined a global modern movement (Kerlin, 2010).

Existing evidence presents significant variations in the prevalence of social entrepreneurial activity across countries (Bosma & Levie, 2010; Bosma et al., 2016). However, what causes these variations? Are certain countries better incubators for social entrepreneurial activity than others? Explanations for variances between countries is much needed due to the double role social entrepreneurship plays in an economy. Governments and policy makers hold high expectations in entrepreneurship as a means to improve economic well-being (Wennekers, Stel, Thurik & Reynolds, 2005). Being a subset of entrepreneurship, one would hold similar expectations for social entrepreneurship. However, more than economic welfare, the nature of social entrepreneurship induces potential positive impacts in the social welfare of a country. Understanding the causes of variations in the prevalence of social entrepreneurial activity may help countries better equip themselves to accommodate social entrepreneurship, and to reap the potential benefits it holds.

Previous papers have been devoted to identifying macro-level drivers of social entrepreneurship (Estrin et al., 2013; Griffiths et al., 2013; Mendez-Picazo et al., 2015; Stephan et al., 2015; Hoogendoorn, 2016). Though essentially their goals are similar, each brings their own take on the subject. This paper too aims to bring its own contributions.

Where this paper diverges from extant research is in its primary interest in seeing if macro-level drivers have different influences on different phases of social entrepreneurial activity – as opposed to just social entrepreneurial activity as a whole. In accordance with the GEM, the phases of social entrepreneurship are as follows: *nascent* social entrepreneurship (nascent SE), new social entrepreneurship (new SE) and established social entrepreneurship. The main goal in doing this is to try and identify the influential factor(s) that distinguish those who simply intend to become social entrepreneurs, and those who actually become social entrepreneurs. This offers potential benefits for policy maker as it opens doors to the ability to target the specific factors that influence the transition from a nascent social entrepreneur to a new social business owner.

Thus we investigate the following:

What drives social entrepreneurship between countries? Are there differences in the effect drivers have on nascent SE and new SE?

Though we identify three different phases of social entrepreneurship, we forgo the inspection of established SE. Rationale for this is that this paper is more interested in the entry of new social enterprises, due to the fact that identifying changes in the entry of new enterprises is more transparent than identifying the changes within existing enterprises.

This paper essentially performs two sets of tests. The first, tests the following variables to identify whether they are potential drivers of social entrepreneurship as a whole (i.e. there is no distinction between nascent and new SE): Economic Development, Government Activism, Gender Equality, Prevalence of Commercial Entrepreneurship. Following this, we test the same drivers and their effects on nascent SE and new SE separately.

We find that the prevalence of commercial entrepreneurship has an absolute and significant positive association with social entrepreneurship - absolute in the sense that this positive relationship is congruent across all measures of social entrepreneurship. We further find gender equality to have a significant relationship between SEA and new SE, where an increase in gender equality leads to (a) higher rates of SEA and (b) higher rates of new SE. Moreover, this paper provides evidences that there exist differences in how independent variables associate with nascent and new social entrepreneurship. This difference is specifically found to be the case for gender equality.

This paper is structured as follows. First, due to the contested nature of defining social entrepreneurship, we explicitly state the definition of social entrepreneurship we adopt and why. Following this, the theoretical framework of this paper is laid out, followed by a presentation of the data used. Thereafter, we explain the methodology and present results. From there, we discuss the found results and their implications, as well as pre-emptively discuss opportunities for future research. Finally, we discuss the paper's limitations and polish off with a conclusion.

# II. Defining Social Entrepreneurship (GEM 2009 Global Report)

Gallie (1956) first introduces the idea of *essentially contested concepts,* a term used to describe a situation where talk of the *proper use* of a concept inevitably leads to endless disputes among different participating parties. Garver (1978) adds that there is a feeling of dogmatism among parties; the stigma that

each party's understanding of the concept is the correct one, while others are incorrect. Another characteristic identified by Gallie (1956), is that no amount of empirical evidence, linguistic usage or logic can settle these disputes. Choi and Majumdar (2014) later adopts this idea and apply it to social entrepreneurship. They describe how scholar and practitioners have yet to reach a consensus as to what social entrepreneurship is. Instead, the field is littered in several competing definitions and approaches to social entrepreneurship. To date, there exists no unifying conceptual framework. In response to this, Choi and Majumdar (2014) suggests social entrepreneurship be treated as a *cluster* concept, where social entrepreneurship can be defined as a conglomerate of several subconcepts (social value creation, social entrepreneur, social entrepreneurship organisation, market orientation and social innovation). Under this idea, definitions of social entrepreneurship does not need to necessarily contain all sub-concepts. The only compulsory prerequisite is social value creation. Otherwise, researchers are able to pick and choose the sub-concepts best reflecting their understanding of social entrepreneurship. The goal of conceptualising social entrepreneurship as a cluster concept is to better organise the research field. Researchers state their specific understanding of social entrepreneurship, and others who agree with this definition adopt it and base their research off of it. Essentially, the idea is to create different branches of research within the field, based on different understandings of social entrepreneurship.

Thus, it is imperative to properly relay the definition this paper adopts. As we use the data collected by the GEM 2009 Global Report, we adopt their corresponding definition:

# "Social Entrepreneurship as concerning individuals or organisations engaged in entrepreneurial activities with a social goal"

The definition is a broad one, and applying the different sub-concepts of social entrepreneurship, we suggest the definition only explicitly embodies social value creation.

Coinciding with this definition, we further adopt the GEM's measurement of social entrepreneurship that is detailed in a special study found in the GEM 2009 Global Report, authored by Bosma and Levie (2010).

Those well-versed in the works of the GEM are well aware of their basic measure of Earlystage Entrepreneurial Activity (TEA). The 2009 special study introduces the social equivalent this measure, Early-stage of Social Entrepreneurial Activity (SEA), as the measure of social entrepreneurship.

lt. was mentioned before that social entrepreneurship can be divided into a series of phases: nascent SE, new SE and established SE. Not all phases are incorporated into the SEA measure. SEA consists of two components: nascent SE and new SE. Together, these two aggregate to determine SEA.

#### SEA = Nascent SE + New SE

The most prominent difference between the two is that in nascent entrepreneurship the entrepreneur is actively involved in *setting up* a business. In new entrepreneurship, the business has already been established (but not for longer than 42 months). Formal definitions of each measure of social entrepreneurship (as given by the GEM consortium) are described in the Section IV: Data.

III. Theoretical Framework

social entrepreneurship With explicitly defined, we now look towards extant research and discuss notable findings.

Seeing as how this paper follow two lines of research: (a) association of drivers to SEA and (b) the (separated) associations of drivers to nascent SE and new SE; the presentation of hypotheses will reflect this line of thinking. Each hypothesis will be split into two subhypotheses, one pertaining to investigating (a), the other investigating (b).

It is important to note that due to the lack of extant research papers examining the differences between nascent SE and new SE, we use insights from commercial entrepreneurship and what they say about nascent entrepreneurship and new entrepreneurship, to help justify propositions posited in (b). Despite the fundamental differences between commercial and social entrepreneurship, as quoted by Griffiths et al. (2013): "Research in social entrepreneurship can advance quickly by utilising the knowledge gained in the study of commercial entrepreneurship."

# i. Economic Development

In a simple analysis of the data collected in the GEM 2009 Global Report, Bosma and Levie (2010) examine the average SEA rate across the different stages of economic development (factor-driven economies, efficiency-driven economies and innovation-driven economies<sup>1</sup>). They recognise an increase in average SEA rate as economic development improves. Today, this finding still holds some degree of validity, as a later study of the same nature, collated in the GEM 2015 Global Report, finds results congruent to that of the 2009 Report (Bosma et al., 2016).

<sup>&</sup>lt;sup>1</sup> See the appendix A for a list of GEM countries involved in the compilation of the SEA dataset, categorised by the stage economic development

However, beyond directional relationships, it may be astute to consider the magnitude of the increase in average SEA. To better quote Bosma and Levie (2010), in fact there was only a *'slight'* increase in average SEA rate, suggesting the correlation between economic development and SEA to be somewhat weak.

Thus, it is not entirely unexpected that there exists opposing views in the role economic development plays in social entrepreneurship.

Firstly, Bosma and Levie (2010) justify the positive relationship found between economic development and average SEA rate. They suggest that individuals in richer countries may be more inclined to aid the needs of others. This result supposedly stems from the fact that individuals from developed countries have already satisfied their own basic needs, and thus are more aware and open to looking towards the needs of others.

On the other hand, an alternative view adopts the idea that social and environmental issues are more prevalent in developing countries. As issues such as these are primary motivations for establishing social enterprises, one presumes that the demand for social entrepreneurship is greater in developing countries. Assuming that this demand is acted upon, social entrepreneurship should, therefore, be greater in developing countries.

However, the problem with this idea is that it is quite commonplace for social enterprises to serve and create social value for less developed countries, *but* operate in a richer, developed country. As an example, Blake Mycoskie, an American entrepreneur best known as the founder of Toms Shoes, was motivated by the desire improve the poverty situation in Argentina – where poverty extended to the point where many children could not even afford a pair of shoes. However, though Mycoskie's intentions were to improve the social welfare of children in Argentina, it was in Los Angeles where commercial operations were initially set. Even still, today the enterprise is still based in the USA. The same can be said about many other social enterprises (other examples; Charity: Water, Grameen Foundation). In other words, it is not inevitable that a social enterprise will base themselves in the same country for which they aim to create social value for.

Therefore, though developing countries have a prevalence of social greater and environmental issues, we do not expect social entrepreneurship to be higher than it is in developed countries. In fact, we expect that entrepreneurs from developed countries will take on the social and environmental issues of developing countries themselves – likely due to the fact that individuals from developed countries are better equipped with the resources and abilities to establish a social enterprise. Thus, we come to our first hypothesis:

# H1a: Economic Development is positively related to SEA

Long-standing, seminal papers have long since distinguished a U-shaped relationship between the level of business ownership and per capita income – where the *level of business ownership* and *per capita income* reflects a country's level of entrepreneurship and economic development, respectively (Acs, Audretsch & Evans, 1994; Carree, Stel, Thurik & Wennekers, 2002).

A study by Wennekers et al. (2005) takes this notion and adapts it in order to identify whether this relationship is consistent when looking at entrepreneurship dynamically, where the term *dynamics of entrepreneurship* refers to the rate of nascent entrepreneurship and new entrepreneurship<sup>2</sup>. It is found that this U-shape is prevalent in the relationship

<sup>&</sup>lt;sup>2</sup> Where this paper terms 'New Entrepreneurship', Wennekers et al. (2005) labels such as 'Young Business Entrepreneurship'

between dynamic entrepreneurship and economic development. This implies that as a country develops economically, the prevalence of nascent and new entrepreneurship steadily declines until a certain threshold is reached, once this threshold is passed, further increases in economic development now sees a rise of nascent and new entrepreneurship. If we are to visualise this trajectory on a graph where economic development sits on the X-axis and entrepreneurial rate on the Y-axis, we do in fact see a U-shaped, quadratic relationship.

A question that comes to mind is why we see high levels of entrepreneurship at the lower and higher ends of the economic development scale. The underlying answer to this is due to the existence of two different types of entrepreneurships: necessity-driven entrepreneurship and opportunity-driven entrepreneurship. What distinguishes the two is the difference in motivations for pursing entrepreneurial activity. Necessity-driven entrepreneurship refers to situations where individuals pursue entrepreneurship simply because no have no other means of work. Opportunity-driven entrepreneurship is different in that individuals participate in entrepreneurial activity to pursue a business opportunity - that is, they choose selfemployment out of several other work options.

Wennekers et al. (2005) demonstrate that necessity-driven and opportunity-driven entrepreneurship interact differently with economic development. In less developed countries we see high amounts of entrepreneurship as for many, selfemployment is the only means of earning some form of income (necessity entrepreneurship). As economic development increases, the issue of unemployment becomes less severe, and so too does the need to self-employ. Thus, we see a decline in entrepreneurship rate. However, moving towards the upper end of economic individuals development. become less motivated to start business for necessity reasons, and more for opportunistic reasons.

It is important to note that while Wennekers et al. (2005) proposes a U-shaped relationship between economic development and *dynamic entrepreneurship* (thus including both nascent and new entrepreneurship), the authors only explicitly test this relationship with nascent entrepreneurship. Therefore, in quick summary, we assume a U-shaped relationship between economic development and *nascent* entrepreneurship.

However, how does necessity and opportunity driven motivations interact with nascent social entrepreneurship? Intuitively, the major difference between social and commercial entrepreneurs is in the social entrepreneurs primary goal of creating value, not so much for themselves, but for the society as whole. Going back to the Toms Shoes example, Blake Mycoskie saw the needs for shoes for children in Argentina, saw an opportunity to make a difference, and acted on that opportunity. By nature, motivations for social entrepreneurship are not ones out of necessity for work, but are more opportunity-driven with the aim of improving the welfare of others. Thus, we expect that, as opposed to a U-shape relationship, we should see a positive relationship between economic development and nascent SE.

The last question of this section is of the relationship between *new* SE and economic development. Rotefoss and Kolvereid (2005) provide some insight to this. Their paper examines how well a number of factors predict ones likelihood to progress from: (a) an aspiring entrepreneur, (b) to a nascent entrepreneur, and (c) to actually own a new business (we will simply call this a new entrepreneur).

Most relevant, is the finding pertaining to the association of unemployment rate with nascent and new entrepreneurship. It dictates that increases in unemployment rate are associated with increases in nascent entrepreneurship, but with decreases in the proportion of nascent entrepreneurs who transition to new entrepreneurs.

We look at unemployment rate, due to its implicit, but well known relationship with economic development, where less developed countries see higher rates of unemployment and more developed countries see lower rates of unemployment. This relationship allows us to use unemployment as a sort of proxy, and therefore allows us infer a relationship between economic development and new entrepreneurship, for which we now establish that there is support for a positive relationship between the two. In less developed countries, where unemployment is greater, we should expect see greater nascent to entrepreneurship but less new entrepreneurship.

We suspect this positive relationship extrapolates to economic development and new SE. As has already been established, social entrepreneurs are likely to be motivated by opportunity, rather than necessity reasons. While the opportunity to create social value is more prevalent in developing countries, more often than not, developing countries do not have the adequate resources for social entrepreneurs to act upon these opportunities. As previously mentioned, many social enterprises choose to operate in developed countries, and likely the reason for this is that they can better maximise social value creation due to better accessibility of resources.

To summarise, we hypothesis that:

H1b: Economic Development is positively related to both Nascent SE and New SE

#### ii. Government Activism

The role government plays on social entrepreneurship appears to be one of the more favoured and explored determinants in extant literature. In several papers, this driver is one of significant focus (Estrin et al. 2013; Stephan et al.; 2015; Hoogendoorn, 2016). Two major perspectives lie at the core in attempting to explain the effect governments have on social entrepreneurship. Though initially established to explain the size of the non-profit sector, the theories have been adopted and altered to create social entrepreneurial counterparts.

The first of the two is the *Failure Thesis/ Institutional Void*, where the Failure Thesis is the initial perspective relating to the non-profit sector and the Institutional Void perspective is the social entrepreneurial counterpart. To summarise, the two theories advocate that non-profit/social enterprises make up for the gaps in unsatisfied needs left by markets and governments failures to sufficiently provide for such needs. In other words, needs left unprovided cultivates the opportunity for social entrepreneurial activity to take place.

The second theory, the *Interdependence Theory/Institutional Support* perspective, follows a similar structure; Interdependence Theory being the original theory pertaining to non-profit organisations, and Institutional Support as its social counterpart. These theories contradict that of the Failure Thesis/Institutional Void perspective. They suggest that non-profits and social enterprises work in tandem with the government, delivering social value on behalf of the government. As such, part of the government budget may be allocated to the development of social entrepreneurial activity.

However, 'Government activism' is a vague concept, and at first glance the way to measure it is unapparent. For the most part, past studies have measured a Government's level of activity by total government expenditure on welfare as a percentage of GDP (Ferri and Urbano, 2011; Estrin et al. 2013; Hoogendoorn, 2016). Another paper (Stephan et al. 2015) measures government activism based on a country's expenditure as well a percentage of GDP and fiscal freedom. This paper will follow the example of the majority and measure government activism via government expenditure as a percentage of GDP. The aim in doing so, is to collect results that are directly comparable to those papers listed above. From there, we aim act a check, to help strengthen the argument for one of the theoretical standpoints (that is Failure Thesis/Institutional Void and Interdependence Theory/Institutional Support).

Now that our measure of government activism is clearly defined, if we apply Failure Thesis/Institutional Void and Interdependence Theory/Institutional Support, both theories posit different ideas on how government expenditure will affect the prevalence of social entrepreneurship. Failure Thesis/Institutional suggests that Void low government expenditure provides opportunities for social entrepreneurship to foster, and we should therefore find a greater prevalence of social entrepreneurship (in other words, a negative relationship between government expenditure and social entrepreneurship is proposed). Interdependence Theory/ Institutional Support, on the other hand, suggests that governments allocate some of their expenditure to fostering social entrepreneurship. This theory predicts a positive relationship between government expenditure and social entrepreneurship.

We find empirical evidence backing either groups of perspectives. Stephan et al. (2015) and Hoogendoorn (2016) provide evidence for Institutional Support theory and Ferri and Urbano (2011) and Estrin et al. (2013) provide evidence for Institutional Void Theory. The question that remains is what constitutes these contradictory results.

We can think of three possible reason. First, the contradiction may lie in the way government activism is measured. However, as only Stephan et al. measures government activism in a relatively different way, this argument is rather weak. Note that from this point on, further comparisons (in this section) across the aforementioned papers will not include Stephan et al. (2015), due to its difference in the measurement of government activism.

	Measure of Govt. Activism	Supports
Ferri and Urbano (2011)	Govt. Expenditure	Failure Thesis/Institutional Void
Estrin et al. (2013)	World Bank Govt. Expenditure	Failure Thesis/Institutional
( )	Data source: Heritage	Void
Stephan et al. (2015)	Govt. Expenditure <b>and</b> Fiscal Freedom	Interdependence Theory/Institutional Support
	Data source: Heritage Foundation	
Hoogendoorn (2016)	Govt. Expenditure	Interdependence Theory/Institutional Support
	Data source: World Bank	

TABLE	1.	COMPARISON	OF	THE	GOVERNMENT	ACTIVISM
MEASU	JRE	S IN EXTANT EM	PIRI	CAL R	ESEARCH	

Alternatively, differences in countries included in samples may cause discrepancies. However, all papers utilise the dataset collected in the GEM 2009 Special Report to calculate their respective measures of social entrepreneurship. Therefore, even in the case some observations (i.e. countries) are excluded due to the incidence of missing values, samples across papers should be very similar.

Lastly, it may be the measure of social entrepreneurship that causes differences in result across papers. Upon closer inspection, we find that Ferri and Urbano (2011) and Estrin et al. (2013) test government expenditure against the *absolute* level of social entrepreneurship. Hoogendoorn (2016), measure however, uses a of social entrepreneurial activity that is *relative* to total (commercial) entrepreneurial activity. Hoogendorn (2016) reveals that the positive relationship found is likely the result of this relative measure. In light of this, in testing public expenditure against the absolute level of social entrepreneurship, Hoogendoorn (2016) identifies no significant relationships.

Despite, the ambiguity of the effect of government activism on social entrepreneurship, this paper stands by the notion that public expenditure negatively associates with social entrepreneurship. First, two of the four articles listed above provides concrete evidence pointing to a negative Moreover, this paper finds relationship. significant similarities with Ferri and Urbano (2011); from the same measure and source of government activism (government expense as a percentage of GDP), to the same measure of social entrepreneurship (SEA). As such, we expect to find a result similar to that of Ferri and Urbano (2011).

H2a: Government expense (and hence government activism) is negatively related to SEA

However, what of the relationship between Government Activism and nascent and new SE? Once again, we look towards research specified for commercial entrepreneurship.

With regards to nascent entrepreneurship, we find evidence arguing a negative relationship between an extensive welfare state and nascent entrepreneurship. A study by Koellinger and Minniti (2009) explores how high unemployment benefits (a prime example of government spending) crowds out nascent entrepreneurial activity. This comes as no surprise if we once again take into account necessity entrepreneurs, whom of which partake in entrepreneurial activity more out of need, for reasons such as being unemployed and unable to find a job. Higher unemployment benefits reduces the incentives of necessity entrepreneurs to actively participate in nascent entrepreneurial activity.

However, in the context of social entrepreneurship, high unemployment benefits may mean that there is less

for opportunity potential social entrepreneurship as the unemployed – whom of which are one of the many targets social enterprises aim to create value for – are less needy. If there exist little social opportunities for social entrepreneurs to jump at, it is likely that the intention to start a social enterprise would not be there. However, unemployment benefits are just one example of government expenditure on welfare. To base the relationship of government spending and nascent SE on one example would be erroneous. However, intuitively the effects of the other social benefit programs would lead to similar results - those in need of social support would progressively become less needy with greater government spending on welfare, meaning there is less opportunity for potential social entrepreneurial activity. Henceforth, we suspect a negative relationship between government spending and nascent entrepreneurship.

Moving on to new entrepreneurship, Reynolds (1994) discusses how governments can influence new business formation rates in two ways: government spending policy and the provision of 'soft' services.

Looking at what the author has to say about government spending (as this directly aligns with our measure of government activism), Reynolds (1994) suggests that the effects of government spending may have positive or implications negative on new entrepreneurship. On the one hand, government spending could be considered an additional source of demand, and thus encourage new entrepreneurship. While on the other hand, higher levels of government spending may reflect higher local taxes and a higher cost structure for businesses, and as a result may depress the formation of new businesses. Overall, Reynolds (1994) concluded that evidence show little impact of government spending on new entrepreneurship.

Intuitively, while fundamentally there are differences between social and commercial enterprises, governments are not likely to treat social and commercial enterprises significantly differently. While there are some economies that provide benefits solely for social enterprises, where an example would be the implementation of tax incentives in UK (Heaney, 2010), we assume that most economies, particularly LEDC's and MEDC's, are unlikely to create policies targeting social entrepreneurship more than regular entrepreneurship. Therefore, we assume that these Reynolds (1994) conclusion can be extrapolated for social entrepreneurship as well.

H2b: Government Activism has (a) a negative relationship with nascent SE, and (b) no significant relationship with new SE.

#### iii. Gender Equality

Interesting from a more modern, ethical standpoint is the influence gender has on social entrepreneurship. Note that while this can easily be interpreted as a micro-level indicator, we look at the role of gender from a macro perspective, looking at *gender equality* which represents the degree of female participation in a country's work force.

Already extant papers have discussed the impact of gender equality, and under multiple rationale (Wilson and Kickul, 2006; Griffith et al., 2013).

Beginning with Griffith et al. (2013), the authors investigate a wide array of macro-level factors influencing the prevalence of social entrepreneurship. Testing a total of 11 variables, Griffith et al. find the single most significant driver of SEA from their set to be gender equality.

The direction of relationship identified by Griffith et al. (2013) is a positive one. The authors posit that rationale for this simply follows the notion that the increase in

workforce due to active women participation leads to the potential for greater social entrepreneurial activity. However, even the authors are in agreement that this argument in rather weak. Though the result is the same, Wilson and Kickul (2006) provide a more solid justification on why an increase in the labour participation of women would result in a greater prevalence of social entrepreneurship. Females interested in entrepreneurial careers are more likely to be motivated by social motives. This is relative to male entrepreneurs, who instead have the tendency to be motivated by financial returns. Young women who want to succeed financially are unwilling to do so at the expense of making a positive difference.

# H3a: Gender Equality is positively related to SEA

Several papers reinforce the notion that countries with higher degrees of women participation in the labour workforce, benefit from a high prevalence in the level of entrepreneurial activity (Baughn, Chua & Neupert, 2006). Rationale follows that countries more open to the idea of women working cultivate an environment that facilitates the self-perceptions and attitudes of women in such a way that influences the likelihood of pursuing an entrepreneurial career choice (Achtenhagen and Welter, 2003). This increase in 'likelihood of pursuing an entrepreneurial career choice' directly implies an increasing prevalence of nascent entrepreneurship as women participation increases. Pairing this with Wilson's and Kickul's (2006) finding that women who choose to purse entrepreneurship have a higher tendency to pursue social entrepreneurial activity, suggests a positive relationship between nascent SE and higher degrees of female labour participation.

However, while the intention may be there, Verheul, Thurik, Grilo and Van der Zwan (2012) suggest that this may not necessarily transition to actual, or new, entrepreneurship. Minding that the authors refer to commercial entrepreneurship, they find that women exhibit lower preferences for becoming selfemployed, explaining a great part of why women hold a low involvement in selfemployment and entrepreneurial activity. Additionally, gender-based obstacles further impede women involvement in entrepreneurial activity. Women are more likely to underestimate their own skills and knowledge than men are. This is particularly true in activities that are predominantly perceived as masculine, as entrepreneurship is. Women are more inclined to perceive barriers involved with starting up a business, and as a result are less likely to act on their intention to build a new business.

In short, we theorise that a higher degree of women labour participation may have a positive correlation to the prevalence of nascent SE. However, we predict that there will be no significant influences on new SE.

H3b: Gender Equality has (a) a positive relationship with nascent SE, and (b) no significant relationship with New SE.

# *iv. Prevalence of (Commercial) Entrepreneurship*

Though social value creation takes precedence over financial value creation, social entrepreneurship still requires a degree of market orientation, wherein a social enterprise must generates income in order to sufficiently finance their social mission. Recall that market orientation is one of the sub-concepts Choi and Majumdar (2014) list in their paper.

As the ability to generate adequate income is a critical factor for any regular (successful) enterprise, this paper makes the connection that social enterprises are more likely to flourish if they have, or have access to, strong commercial entrepreneurial knowledge and experiences.

In other words, the idea is that if a country already has а strong entrepreneurial environment, we should see a greater prevalence of social entrepreneurship, relative to a country that does not have a refined entrepreneurial environment. We propose this is because the resources, knowledge and experience cultivated from а strong entrepreneurial background is essentially easily transferrable to its social counterpart.

Estrin et al. (2013) propose a different association. They postulate that high national rates of entrepreneurship reduces the opportunities available for social entrepreneurs. Simply put, commercial crowds entrepreneurship out social entrepreneurship. We can think of one impactful reasoning for this. A high prevalence of commercial entrepreneurship may mean strong competition for social entrepreneurs. Today, due to increasing social awareness, it is commonplace quite for commercial enterprises to perform some degree of corporate social responsibility (CSR). While this does not necessarily make them social enterprises, this may take away some of the value social enterprises offer. If we assume commercial enterprises perform enough CSR to compete with the social value social enterprises create, then it may very well be viable that commercial entrepreneurship cannibalises opportunities for social entrepreneurship.

Though it is entirely plausible that both rationale may be in effect, using real life examples, we propose a negative relationship between commercial and social entrepreneurship.

Let us imagine a real market, in this case food production. In food production, in terms of social enterprises, Fair Trade Organisations have been very successful, and the concept of Fair Trade is well known. However, Fair Trade goods tend to be perceived as more of a niche good. Most consumers are unwilling to pay the premium price of goods sitting under the Fair Trade brand, and instead opt for more price sensitive, mass produced goods. Following this:

# H4a: The Prevalence of Commercial Entrepreneurship is negatively related to SEA

In regards to the relationship the prevalence of commercial entrepreneurship has with nascent and new SE, we predict: (a) a positive relationship with nascent SE, and (b) a negative relationship with new SE.

Typically, it is perceived that to become an entrepreneur, one must have a high degree of self-efficacy. Chen, Greene and Crick (1998) finds this to be true, where they conclude that self-efficacy has positive effects on one's likelihood of being an entrepreneur. We predict a positive relationship between commercial entrepreneurship and nascent SE on the basis that a high prevalence of entrepreneurship cultivates an entrepreneurship-friendly environment. If an individual is surrounded in an environment open to the ideas of entrepreneurship, this may have positive effects on ones perception of their own self-efficacy, and therefore influences their perception on the chances to become an entrepreneur. This applies to both commercial and social entrepreneurs.

So, we predict that having a entrepreneurshipfriendly environment nurtures entrepreneurial intentions. However, this may not necessarily apply to the formation of new businesses. Reasonings fall back onto the idea that a high prevalence of entrepreneurship also means high potential competition. This may produce a sort of intimidation factor, and deter nascent entrepreneurs from actually acting upon their intentions.

H4b: The prevalence of commercial entrepreneurship (a) positively correlates to nascent SE and (b) negatively correlates to new SE.

# IV. Data

The following section describes the main sources from which our data was collected. It goes on further to introduce our variables and describe how they are measured. Any data selection processes and transformations are also listed here.

### i. Data Sources

This paper collects data from two primary sources: (a) the GEM 2009 Adult Population Survey (APS) and (b) World Bank Development Indicators.

The GEM is the largest, leading research program pertaining to the study of entrepreneurship. The GEM utilises two data collection tools: the Adult Population Survey (APS) and the National Expert Survey (NES). However, the tool of interest here is the APS which tracks the entrepreneurial attitudes, activities and aspirations of individuals across countries, utilising the same data collection framework in order to compile one harmonious, international-wide dataset. The survey is administrated on an annual basis, with a minimum sample of 2000 randomly selected adults<sup>3</sup> in each participating country.

The data we collect specifically originates from the APS collected in 2009. Unique to this specific timeframe (at least at the time) is a special study exploring social entrepreneurship, a topic not yet extensively delved into by the GEM, nor anv entrepreneurial research group at the time. The special study fashioned a national-level, harmonised dataset, measuring the prevalence of social entrepreneurship across 49 countries – harmonised in the sense that of the method measuring social entrepreneurship is the same across all 49 countries. The primary method of collection comes in the form of the following question used to identify social entrepreneurs:

<sup>&</sup>lt;sup>3</sup> Ages between 18 and 64 years old

"Are you, alone or with others, currently trying to start or currently owning and managing any kind of activity, organisation or initiative that as a particularly social, environmental or community objective?..."

The question covers all activities with social aims, including social or community work, forprofits and non-profit organisations, and incorporated and non-incorporation organisations

From there, follow-up questions test to see which phase of social entrepreneurship participants fall under: nascent, young/new or established entrepreneurs. The dataset outputs fours final measures: (1) nascent social entrepreneurship, (2) new social entrepreneurship, (3) established entrepreneurship and (4) social early-stage entrepreneurial activity (SEA).

It is important to note that the GEM has in fact come out with a succeeding social entrepreneurship report in 2015. However, access to the clean dataset is not immediately available. Therefore, this paper benefits from the use of the readily available 2009 dataset, despite the time of this paper's conception.

#### ii. Dependent Variables

The two-step research plan of this paper gives way to three different dependent variables to be examined: SEA, Nascent SE and New SE.

Social Early-Stage Entrepreneurial Activity (SEA). The social equivalent to the GEM's total early-stage entrepreneurial activity (TEA). It measures the percentage of the adult population (aged 18-64) who are either nascent social entrepreneurs, or are owners/managers of a new social business (i.e new social entrepreneurs).

**Nascent Social Entrepreneurial Activity.** Refers to the percentage of adult population who are actively involved in setting up a social business they will own or co-own. The social business has not yet paid salaries, wages, or any other payments to the owners for more than three months.

**New Social Entrepreneurial Activity.** The percentage of adult population currently owning and/or managing a running social business that has paid salaries, wage, or any other payments to the owners for; more than three months, but not more than 42 months.

#### *iii. Independent Variables*

With the exception of one variable, all independent variables are measured by data points collected by the World Bank Group. The group annually collects data on several development indicators, across countries.

**GDP Per Capita.** GDP per capita acts as our measure of a country's economic development to test hypothesis 1. It is expressed in international dollars using purchasing power parity.

**Government Expenditure.** Government expenditures acts a proxy to measure government activism. It is expressed as a percentage of GDP and are expenses the government pays, for operating activities that provide goods and services. It includes compensation of employees (e.g. wages and salaries), interest and subsidies, grants, social benefits and other expenses such a rents and dividends.

**Gender Equality.** Measured by the female labour force as a percentage of the total workforce. This shows the extent to which women are active in a labour force. To be more specific, the labour force entails people of ages 15 and older, who supply labour for the production of goods and services during a given period.

**Total Early-Stage Entrepreneurial Activity (TEA)**. This measures a country's prevalence of commercial activity. It is defined by the percentage of population between the ages of 18-64, who are either nascent entrepreneurs or business owners-managers of a new business. Unlike the other independent variables, this measure is collected from the GEM 2009 Global Report.

Appendix B provides a table illustrating the bivariate correlations between the dependent variables and the independent variables. Seeing as how we do not observe a high degree of correlation among the independent variables, we do not suspect the threat of multicollinearity. We do find, however, high correlation between SEA, nascent SE and new SE. However, this should pose as no issue as they are included in separate models.

#### iv. Data Selection

Due to the prevalence of missing observations, certain countries are excluded from the original 49. Specifically, observations for Algeria, China, Ecuador, Hong Kong, Panama, Saudi Arabia, Syria, United Arab Emirates and Venezuela are missing. Therefore, these countries are omitted from our data set, leaving us with 40 data points.

#### v. Descriptive Statistics

Appendix C provides descriptive statistics on all dependent and independent variables. Looking at the descriptive statistics three points interest come to mind.

First, is that on average, nascent SE makes up a larger portion of SEA than new SE does. Although, this finding is not surprising. Another point of interest is the minimum value of 0 for New SE. Looking at the data, it is reported that in Malaysia, no one was identified to be a new entrepreneur. No prevalence of new SE is a rather curious finding, calling to question whether there is a mistake in the data. However, considering that Malaysia also appears to have a very low rate of nascent SE (0.2%) leads us to believe that the entrepreneurial scene in Malaysia is still very undeveloped. Lastly, another notable finding is the significant gap between average TEA and SEA (10.3% and 1.9% respectively). Given our proposition that commercial entrepreneurship competes with social entrepreneurship, this gap may provide some insight into evidence that TEA cannibalises SEA. This may have strong implications for our fourth hypotheses.

# V. Methodology

The primary countenance of statistical analysis falls under a forward selection stepwise OLS multiple linear regression, whereby we begin by testing the dependent variable against just one independent variable initially, and then progressively add a single explanatory variable. This continues until all independent variables are accounted for. Seeing as we test four independent variables, we should see four different models. The order of which explanatory variables are added will follow the order in which they were previously introduced. Note this methodology is run three times in total, for each of the three dependent variables.

# VI. Results

The following section discusses the output of the three OLS multiple linear regressions run to predict SEA, Nascent SE and New SE, respectively. Tables 2-4, provide a visual overview of the beta coefficients of the independent variables and their significance. We will first look at the results of the OLS multiple linear regression on SEA, and then compare the results of the OLS multiple linear regressions on nascent and new SE.

# i. Predicting SEA

**GDP per capita.** Results largely point to a nonsignificant association between GDP per capita and SEA. This is found to be the case for models I-III. It is only in model IV where we find a positive relationship, where a 1000 unit increase in GDP per capita leads to a 0.0140% increase in SEA. However, it is important to note that this occurs only at a 10% significance level. Given that the rule of thumb for significance testing is to at most use a 5% significance level, ultimately, we can make no conclusions on the association between GDP per capita and SEA.

**Government Expenditure.** Again, we can make no interpretations and conclusion between this association. Across models II-IV, no significant results were found. What is more, concern lies in the incidence of a negative adjusted R-squared when government expenditure is introduced in model II. This negative adjusted R-square may indicate that that government expenditure does not predict SEA.

**Female Labour Force.** Model III illustrates a significant positive relationship between the percentage of female participation in the labour force and SEA. This finding remains robust in model IV, albeit significance is now at the 10% significance level instead of the 5% significance level. Nevertheless, we judge the results to supports hypothesis 3a.

**TEA.** Results of model IV indicate that TEA is positively and significantly associated to SEA at a 1% significance level, where a 1% increase in TEA leads to a 0.1076% increase in SEA. Considering the relationship found is a positive one, we reject hypothesis 4.

#### ii. Predicting Nascent and New SE

**GDP per capita.** For both nascent and new SE, we find no significant beta coefficients. This is consistent across all models. Therefore, we are unable to interpret any relationships between GDP per capita and nascent and new SE.

**Government Expenditure.** Model II appears to invoke a running issue where the adjusted R-

square takes on a negative a value. This appears to be the case not only in table 2, but also in tables 3 and 4. Once again, this suggests that public expenditure may not be a predictor of either nascent or new SE. However, we are unable to confirm or deny this. As it stands, the only conclusion we can make is that there is no significant associations between government expenditure and nascent or new SE

Female Labour Force. Hypothesis 3b proposed that the percentage of female participation in the labour force has a positive relationship with nascent SE. However, due to the lack of significance found, we can neither support or reject this notion. No relationship can be determined between female labour force and nascent SE. However, we can make interpretations on the relationship between female labour force and new SE. Results show a consistently positive relationship, significant at the 5% level. Consequently, we reject the hypothesis that there is no significant relationship between female labour force and new SE.

**TEA.** Finally, our results provide support for a positive relationship between the prevalence of TEA and both nascent and new entrepreneurship. This supports the part of the hypothesis which predicts a positive relationship with nascent SE, but rejects the latter half of our hypothesis which predicts a negative relationship with new SE. Interestingly, the magnitude of effects is also quite similar between nascent and new SE, where a 1% increase in TEA would lead to an increase of nascent SE by 0.0549 units and new SE by 0.0575 units.

Dependent Variable:	I	II	111	IV
SEA				
Intercept	1.5742***	1.4007**	-0.0046	-1.8810**
GDP per Capita, PPP	0.0140	0.0120	-0.0008	0.0242*
Public Sector				
Expenditure		0.6978	-0.4893	2.0553
(% of GDP)				
Percentage of Female			0.0512**	0.0265*
Labour Force			0.0512	0.0505
TEA				0.1076***
Ν	40	40	40	40
R <sup>2</sup>	0.0303	0.0344	0.1605	0.3928
Adjusted R <sup>2</sup>	0.0048	-0.0178	0.0906	0.3234

Table 2: OLS Multiple Linear Regression Results: Predicting Early-Stage Social Entrepreneurial Activity (SEA)

Table 3: OLS Multiple Linear Regression Results: Predicting Nascent Social Entrepreneurship (Nascent SE)

Dependent Variable:	I	II	III	IV
Nascent SE				
Intercept	0.8841***	0.8944**	0.2751	-0.6830
GDP per Capita, PPP	0.0109	0.0110	0.0054	0.0181
Public Sector				
Expenditure (% of		-0.0416	-0.5647	0.7347
GDP)				
Percentage of			0 0226	0.0151
Female Labour Force			0.0220	0.0151
TEA				0.0549**
N	40	40	40	40
R <sup>2</sup>	0.0368	0.0368	0.0863	0.2085
Adjusted R <sup>2</sup>	0.0115	-0.0152	0.0101	0.1180

#### Table 4: OLS Multiple Linear Regression Results: Predicting New Social Entrepreneurship (New SE)

Dependent Variable:	l	II		IV
New SE				
Intercept	0.7138***	0.5406*	-0.2977	-1.3009***
GDP per Capita, PPP	0.0048	0.0027	-0.0049	0.0085
Public Sector				
Expenditure (% of		0.6967	-0.0114	1.3491
GDP)				
Percentage of			0 0306**	0 2220**
Female Labour Force			0.0300	0.2270
TEA				0.0575***
Ν	40	40	40	40
R <sup>2</sup>	0.0125	0.0270	0.1873	0.4243
Adjusted R <sup>2</sup>	-0.0135	-0.0256	0.1195	0.3585

<sup>4</sup> Rounded to 4 decimal points. \* significant at 10% level; \*\* significant at 5% level; \*\*\* significant at 1% level

#### VII. Discussion

Our first hypothesis aimed to determine the relationship between the prevalence of social entrepreneurship (SEA, nascent and new) and economic development, using GDP per capita as the measure of economic development. On the whole, the effects of GDP per capita appears to be highly insignificant across all three dependent variables. In fact, only one result (Table 2, Model IV) was found to be significant, and even still this was only at a 10% significance level. Ultimately, no significant associations between GDP per capita and all three social entrepreneurship measures were found. In light of this, the conclusion to be drawn here is that hypotheses 1a and b are not supported. The insignificance of results may partly occur due to the issue of time lags, for which we do not account for. GDP per capita is typically characterised as a lagging indicator. Considering this, it may have been astute to use, for GDP per capita, data preceding 2009. Alternatively, another issue may lie in that the countries used in the sample are predominantly MEDCs and HEDCs. Out of the sample of 40, 17 were counted as MEDCs, 16 were counted as HEDCs. Thus, only 7 countries represented LEDCs. Due to this underrepresentation low of developed countries, it may be that the reported association is misinformed and does not accurately capture the effects of economic development on social entrepreneurship. On another note, GDP per capita in itself may be measure of an inadequate economic development. Bosma and Levie (2010) explicitly state a positive relationship between economic development and SEA. However, how they measure economic development is not made clear. There exists several ways to development measure economic (e.g. economic growth, wealth inequality, inflation, gross national product). GDP per capita is just one way. In other words, the results of this paper may not accurately represent the association of economic development on social entrepreneurship. An idea for further studies is to test different measures of economic development on social entrepreneurship. However, more than that a dataset for social entrepreneurship that has a more balanced set of countries across all levels of economic development is imperative.

Next, hypothesis 2 claimed government expenditure would have a (a) positive with SEA (b) a relationship negative relationship with nascent SE and (c) no significant relationship with new SE. Across all three dependent variables we found no significant relationships. Additionally, we consistently find that the initial addition of public expenditure (i.e. the transition from model I to model II) tends to lead to a negative adjusted R-square across tables. Such findings imply that government expenditure is not a predictor of social entrepreneurship. However, this contradicts the findings of extant literature (see section III.ii). The only findings in which similarities are found, is in a supplementary study carried out by Hoogendoorn (2016). Though the results are not recorded in the paper, it was found that the relationship between government expenditure and the absolute level of social entrepreneurial entry was found to have no significant relationship. In attempt to explain for this insignificant relationship, we once again find flaw in the measurement of government expenditure, in that it may be too broad. Our measure of government expenditure included the following: the compensation of employees (e.g. wages and salaries), interest and subsidies, grants, social benefits and other expenses such a rents and dividends. Ideally, our measure of government activism would be government expenditure on social welfare. However, the only existing dataset that measures this is only applied to a small sample of OECD countries (at least to our own knowledge). If we were to utilise this dataset instead, we would lose too many observations for any testing to be relevant. Unfortunately, due to the nature of our results we are unable to provide reliable contributions to the

ongoing debate of the institutional support and void perspective. Thus, further research is still needed on the matter. It is our suggestion that future tests on government expenditure should try to as much as possible measure the expenses specific to social welfare.

The association of the variable of gender equality provides more concrete conclusions. First, we find that a higher percentage of women participating in a country's work force is associated with an increase in total SEA. This is in line with the proposition of hypothesis 3a. Additionally, this result agrees with Griffith et al. (2013). Following this, hypothesis 3b suspected a positive relationship with nascent SE and no significant relationship with new SE. Our results find the opposite. They indicate that an increase in the percentage of females in the labour force has (a) no significant effect on nascent SE and (b) a significant positive effect on new SE. This difference of associations hold important implications. The premise of looking into nascent and new SE was to identify any drivers that explain what triggers the transition of nascent social entrepreneurship to new social entrepreneurship. The finding we see here suggests that gender equality may potentially be one of these drivers. This holds potential policy implication, whereby there is perhaps value in adjusting women work participation as a means to influence social entrepreneurship. However, because of insignificant results exhibited for nascent SE, we cannot yet conclude gender equality to be a driver that influences the transition between phases. To accurately identify if this is in fact true, a significant relationship needs to be identified for nascent SE. Tracking back to the discrepancy found between actual results and to what was expected in hypothesis 3b, the discrepancy may result from fundamental differences between social entrepreneurship and commercial entrepreneurship. In the justification of hypothesis 3b, we utilise knowledge on the influences gender has on commercial entrepreneurship and try to apply

this to social entrepreneurship. The misalignment of results to what we predicted may suggest that ideas from commercial entrepreneurship may not be as transferable to social entrepreneurship as initially thought.

Finally, we come to TEA, the prevalence of commercial entrepreneurship in a country. It was our prediction that commercial entrepreneurship would act in competition to social entrepreneurship, and as such, negative hypothesis 4a proposed а relationship between TEA and SEA. In light of our results, however, we reject this hypothesis. We find a positive relationship, significant at a 1% significance level. Moreover, Hypothesis 4b suggested the following: that TEA has (a) a positive relationship with nascent SE and (b) a negative relationship with new SE. Our results support a positive relationship with nascent SE. However, we reject a negative relationship with new SE. As table 4 indicates, there is in fact a significant positive relationship between TEA and new SE. Thus, we infer that TEA has an effect absolute positive on social entrepreneurship. We refer back to section III.iv which discussed both a potential negative and positive effect of TEA on social entrepreneurship. Initially, we had inferred that the negative effect of high competition from commercial entrepreneurship would would outweigh the positives. However, considering our results, perhaps the benefits of a refined entrepreneurial environment namely the transferability of resources, skills and knowledge - may be the predominant force. As mentioned in Section VI: Results, we find that beta coefficients for nascent and new SE are also very similar. In terms of identifying drivers that distinguish nascent SE from new SE, it is likely that the prevalence of TEA is not one of these drivers. Nevertheless, this result may have some policy implications. Though social entrepreneurship is a growing practice, policy does not often encourage social entrepreneurship. Rather, policy is more inclined to encouraging commercial entrepreneurship. However, considering our results, this may not pose an issue as commercial entrepreneurship may have spillover benefits on a country's level of social entrepreneurship. Thus, continuing to focus policy on commercial entrepreneurship may be more efficient than diversifying that focus, only to reduce policy effectiveness. The saying 'hitting two birds with one stone' comes to mind. However, something to be aware of is the potential for bias from simultaneous causality. Estrin et al. (2013) concludes social entrepreneurship as a driver of commercial entrepreneurship. The fact that our own results label commercial entrepreneurship as a driver of social entrepreneurship calls for concerns of endogeneity.

#### VIII. Further Limitations

Already in the discussion we briefly explain some limitations attached to specific hypotheses. As a quick recollection, these limitations were: failure to account for indicators, potential time lag the underrepresentation less developed of countries in the sample, potentially inadequate measures of economic development and government expenditure and potential simultaneous causality between TEA and social entrepreneurship. This paper, however, realises further faults in this study. First, due to the incidence of missing values the sample size is rather small (40 countries make up the sample of this paper from the original 49). This paired with the predominance of more developed economies in the sample likely has influenced the results of the regression. Secondly, a major limitation for this paper specifically, was in the dependency of commercial entrepreneurial papers in order to make intuitive justifications on the effects certain drivers may have on social entrepreneurship, particularly on nascent and new social entrepreneurship. This dependency stems from the lack of research in social entrepreneurship that looks into differences

between the different phases of social entrepreneurship. As far as we are aware, this paper is the first. Following this, a rather strong assumption was made; that the findings of commercial entrepreneurship is easily transferrable to social entrepreneurship. However, the findings of this paper suggest that this assumption is likely too relaxed. If future works are to take a route similar to that of this paper – that is to further explore nascent and new social entrepreneurship comparative studies detailing the similarities and differences between commercial and social nascent/new entrepreneurship would prove beneficial.

# IX. Conclusion

This paper has two purposes. The first is to expand on what existing works have found in to the drivers of social regards entrepreneurship. The second purpose is more unique in that further tests aim to see if these drivers would be consistent (or alternatively have different effects) across two different stages of social entrepreneurship, namely nascent and new social entrepreneurship. We test four drivers: economic development, government activism, gender equality and the prevalence of commercial entrepreneurship. We find no significant associations for economic development and government activism across all measures of social entrepreneurship, and no significant relationship between gender equality and nascent SE. We do, however, interpret some significant relationships. We find gender equality to have a significant positive association with SEA and new SE. Moreover, our paper finds conclusive results for a significant positive relationship between commercial and social entrepreneurship. This association is consistent across SEA and the two early stages of social entrepreneurship.

It is apparent that additional research is still very much required, made clear by the inconclusiveness found between two out of four of this paper's variables. Moreover, it is not only in this paper where the effects of GDP per capita and public expenditure were undecided (Hoogendoorn, 2016; Griffith et al., 2013, respectively). Additionally, it may be interesting from a policy-making perspective for future research to further explore the factors that distinguish nascent social entrepreneurship from new social entrepreneurship. The findings of this paper already shows there is in fact differences between the two phases of social entrepreneurship (specifically, this paper finds

differences in the female labour this participation rate) and that there is merit in investigating further differences between the two. Moreover, this paper also acknowledges there are fundamental differences between social and commercial entrepreneurship, of which have yet to be intensively explored. This paper has made the first step in conceptualising these possible differences. However, empirical investigations are also necessary. This paper calls for future studies to further explore these topics, first, to diversify the existing make-up of social entrepreneurship research and second to instigate new discussion that will hopefully propel the field forward.

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# XI. Appendix

# Appendix A: Categorised List of Countries by Stage of Economic Development

AlgeriaSaudi ArabiaGuatemalaSyriaJamaicaUgandaLebanonVenezuelaMoroccoWest Bank and GazaEfficiency-Driven EconomiesArgentinaJordanBosnia and HerzegovinaLatviaBrazilMalaysiaChilePanamaChinaPeruColombiaRomaniaCroatiaRussiaDominican RepublicSerbiaEcuadorSouth AfricaHungaryUruguayIranIraneBelgiumNetherlandsFinlandNorwayFranceSloveniaGreeceSpainHong KongSwitzerlandIcelandUnited Arab EmiratesIsraelUnited KingdomItalyUnited States	Factor-Driven Economies	
GuatemalaSyriaJamaicaUgandaLebanonVenezuelaMoroccoWest Bank and GazaEfficiency-Driven EconomiesArgentinaJordanBosnia and HerzegovinaLatviaBrazilMalaysiaChilePanamaChinaPeruColombiaRomaniaCroatiaRussiaDominican RepublicSerbiaEcuadorSouth AfricaHungaryUruguayIranNorwayFranceSloveniaGermanySouth KoreaGreeceSpainHong KongSwitzerlandIsraelUnited Arab EmiratesIsraelUnited KingdomItalyUnited States	Algeria	Saudi Arabia
JamaicaUgandaLebanonVenezuelaMoroccoWest Bank and GazaEfficiency-Driven EconomiesArgentinaJordanBosnia and HerzegovinaLatviaBrazilMalaysiaChilePanamaChinaPeruColombiaRomaniaCroatiaRussiaDominican RepublicSerbiaEcuadorSouth AfricaHungaryUruguayIranNorwayFranceSloveniaGermanySouth KoreaGreeceSpainHong KongSwitzerlandIsraelUnited KingdomItalyUnited States	Guatemala	Syria
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Italy United States	Israel	United Kingdom
	Italy	United States

# Appendix B: Bivariate Correlation between Dependent and Independent Variables

	SEA	Nascent SE	New SE	GDP per capita	Public Sector Expenditure	Female Labour Force	TEA
SEA	1						
Nascent SE	0.8851	1					
New SE	0.7718	0.3931	1				
GDP per capita	0.1740	0.1918	0.1116	1			
Public Sector	0.1231	0.0650	0.1531	0.3653	1		
Expenditure							
% of Female	0.3980	0.2769	0.4208	0.4757	0.4136	1	
Labour Force							
TEA	0.3088	0.1993	0.3356	-0.5423	-0.4950	-0.2050	1

# **Appendix C: Descriptive Statistics**

	Number of	Mean	Std. Deviation	Min	Max
	Observations				
SEA (%)	40	1.89	1.14	0.20	4.24
Nascent SE (%)	40	1.13	0.81	0.17	3.45
New SE (%)	40	0.82	0.61	0	2.41
GDP per capita, PPP (000s)	40	22.43	14.22	1.46	55.46
Public Sector Expenditure (00s, as a % of GDP)	40	0.32	0.11	0.10	0.52
Female Labour Force (as a % of Total Labour Force	40	40.28	9.44	16.80	49.97
TEA (%)	40	10.32	6.74	3.51	33.67

Rounded to the nearest 2 decimal points