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Contemporary Economic and Management Studies in Asia and Africa

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National Social Benefit Systems and Entrepreneurial Intentions: A Cross-National and Cross-Level Analysis

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[1] The authors acknowledge this is an original work and are responsible for any errors.

Announcements:

- CIK 2020 Conference – October, 20th – 22nd, 2021, Online, Joint collaboration with SINGEP, Brazil
- CIK 2020 Conference – October 1st - 3rd 2020, Online, Joint collaboration with SINGEP, Brazil
- CIK 2019 Conference – April 17th - 21st 2019, MIT, Cambridge, USA
- CIK 2018 Conference – March 4th - 7th 2018, ESCA and UM5, Casablanca and Rabat, Morocco
- CIK 2017 Conference – April 14th - 16th 2017, MIT, Cambridge, USA
- CIK 2016 Conference – March 15th - 17th 2016, The American University in Cairo, Egypt
- CIK 2015 Conference – April 24 - 26th 2015, Harvard University, Cambridge, USA
- CIK 2014 Conference – January 9th - 11th 2014, Hult International Business, Dubai, UAE
- CIK 2012 Conference – October 15th - 17th 2012, Hult International Business, Cambridge MA
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CYRUS CHRONICLE JOURNAL (CCJ):
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He will be assisted by an editorial board consisting of distinguished members from world-class institutions of higher learning, practice and industry.

We invite authors to submit their papers and case studies to Editor@Cyrusik.org. We will have a quick turn-around review process of less than two months. We intend to begin with two issues per year consisting of about 5-8 papers and case studies per issue, with fall 2015 being the first issue. A selected number of papers submitted to the CIK conference will be double-blind reviewed for inclusion in **THE CCJ**. We intend to have special issues on themes that are within the scope of Journal. Also, we will have invited guest issues.

THE CCJ: An imprint of the CYRUS Institute of Knowledge (CIK)

Background:

This is a historical time for developing and emerging markets, and The Cyrus Chronicle Journal intends to offer what is most urgently needed. There is no question that organizations and businesses that are capable of analyzing and applying advanced knowledge in management

sciences and development are in high demand, especially during transitional periods. It is an unusual time in the target regions and the world. A time which requires active intellectual participation and contributions. It is the era of revolution in terms of advances in communication, technology. It is a time for intellectuals, entrepreneurs, and philanthropists to help enlighten minds, and therefore enrich the quality of life for millions. It is a time to focus intensely on the historical characteristics, achievements, human and natural resources, and the significant deficit in development, management sciences, and democracy in these regions. CIK's vision, "to cultivate the discourse on human capital potentials for better living," is the appropriate response to current challenges, and the journal is a platform for sharing the perspectives of scholars and practitioners with a wider audience.

CIK associates tend to have a foot in two worlds. First, most of the associates possess a wealth of intellectual and experiential knowledge, which is enhanced by their active involvement in business, consulting, scholarly research, and collegiate teaching. Second, some associates are sons and daughters of the afore mentioned regions and possess an ethnic identity, language skills, and the insights only embraced by insiders. Third, most of the CIK board of directors' members and associates are well-known scholars, members of editorial boards of journals, and editors. CIK possesses depth, breadth, and a competitive edge to successfully manage a reputable, double blind peer-reviewed journal. CIK is committed to developing knowledge that positively contributes to the life of the world's citizens. CIK is a charitable, educational, and scientific organization that has been in operation since 2011. CIK is a secular and non-partisan organization and has many scholars and practitioner as member.

Editor's Introduction

Since inception in 2012, the ***Cyrus Institute of Knowledge*** has held five annual meetings. Three years ago, we published the first volume of its flagship journal, ***Cyrus Chronicle Journal (CCJ): Contemporary Economic and Management Studies in Asia and Africa in conjunction with the 2016 annual conference.***

The Institute has had seven successful international conferences since its inception. These conferences have been hosted at institutions in the United States (MIT, Harvard, Hult), and internationally (Hult - UAE, American University in Cairo, and ESCA in Morocco). Several institutions of higher education have collaborated and supported these conferences. Please see CIK website for information about these institutions. We greatly appreciate their support! *The CIK 2020 Conference was held* ***Online*** *and in collaboration with International Symposium on Project Management, Innovation and Sustainability (SINGEP) during Oct. 1-3.*

Generally, conference participants come from at least 15 different countries and 35 institutions, organizations, and companies. Please see CIK website for details. Some of plenary sessions had up to 150 participants. The best papers presented at these conferences have traditionally been accepted for publication in the Journal, along with additional articles by prominent scholars.

The acceptance rate of *CCJ* is generally less than 20%. Our aim is to publish the highest quality papers after they pass through our strict review process. CIK colleagues and conference participants have proposed and suggested special issues of the journal, which is based on core topics (i.e., entrepreneurship, innovation, ethics, and sustainable development) and/or country specific ones. Therefore, we welcome articles that meet these characteristics.

Now we welcome you to read the fifth volume issue 1(CCJ.V5.1). The journal intends to cover scholarship pertaining to emerging economies in Asia, Africa, and other emerging economies.

Scholarship dealing with these regions tends to be either ignored or misunderstood, and there are limited outlets for scholars who work in these countries to share their scholarly outputs. Focusing on these two continents will help researchers from these regions - which together account for the largest portion of the world population and growth. The *CCJ* intends to fill these gaps. An examination of our mission may shed some light on this question. The primary purpose of the journal is four-fold:

1. To share and promote knowledge of economic, management, and development issues facing countries of Asia and Africa and other emerging markets. Focusing on assessment, evaluation, and possible solutions help advance these countries, which also have the largest populations. Development challenges are global; virtually all countries face challenges concerning economic development, sustainability, food and water, population and environmental degradation. Yet no country gains by shunning opportunities that globalization can provide, with the possible exception of a few countries whose leaders lack a full understanding of the opportunities that globalization can offer. To take advantage of such opportunities, knowledge is the primary requisite.This journal aspires to make a contribution to this body of knowledge.

2. To encourage the generation and dissemination of knowledge by local scholars whose access to mainstream academic outlets may be limited. There are many scholars from academic, public and private sector organizations whose first-hand knowledge of problems and solutions is not being shared for lack of an appropriate outlet for dissemination. The *CCJ* seeks to provide an opportunity for spreading such knowledge.

3. Academic scholarship emanating from the region under the journal's coverage tends to get lost in the academic jungle where the pressure of "publish or perish" leaves behind the younger and less experienced members. This journal will provide a venue for the scholars with first-hand knowledge of these areas. By publishing in *CCJ*, they could make important contributions to the body of management and development scholarship on which the journal will continue to concentrate. The *CCJ* will provide a platform for established as well as younger scholars who might collaborate with them in their research.

This fifth volume, issue 1, of the *Cyrus Chronic Journal*, contains three articles. Articles from established scholars and policymakers that cover the gamut from Asian to Latin America. As part of our mission to advance knowledge we will continue to include reviews of major scholarly books relevant to the Journal readers.

On the journal's operational side, we want to make the publication more accessible to a wide audience across the world, and so, consistent with the 21st -century trend toward electronic media, we will continue to publish this journal online. To maintain rigor and originality, articles submitted to the journal will nevertheless undergo the standard double blind review process. Reviewers' anonymous comments are shared with authors, as appropriate. Submission guidelines and procedures are delineated on the journal's website: http://www.cyrusik.org/research/the-cyrus-chronicle

As the first editor of the journal, I am pleased and proud to accept this challenge. I bring some experience; my first editorial assignment was as an undergraduate student at the then Pahlavi University in Shiraz, Iran, a top-ranking institution in the region. A few students and I founded and published *Danesh-Pajouh* (knowledge seeker). In those days when freedom of expression

was severely limited, we managed to publish one issue in March 1965 before the censors put a stop to the enterprise.

Years later, while directing a doctoral program in international business in Texas in the early 2000's, I also served as the co-editor - and eventually editor - of the *International Trade Journal* (ITJ) until my retirement in 2013. Under my leadership, the *ITJ* acceptance rate fell below 10%.

Publishing an academic journal is simply a labor of love. The rewards are many-fold and include working alongside a dedicated team of colleagues – Nader Asgary, Alf Walle, Nancy Black Sagafi-nejad, Dina Frutos-Bencze, reviewers, and the entire editorial Board. In addition, of course, we thank our contributors who have trusted their work of scholarship to be published in a new but growing and promising publication. They have spent many hours working to polish and prepare for the journal for publication.

In this fourth issue, we have already reached a threshold of about 20% in acceptance. Still, *CCJ* needs your support and so I ask for your help in the following ways:

- **We are interested to offer special issues based on themes and country case studies. Your support, suggestions, and contributions are welcomed;**
- **Contribute articles, case studies, and book reviews and commentaries;**
- **Encourage your colleagues to do the same;**
- **Encourage promising young scholars – especially those from developing and emerging economies from China to the northern tip of Africa – to submit their works to our journal;**
- **Spread the word, especially in countries where CCJ can be most effective;**
- **Cite the articles published in this journal in your own research when applicable;**
- **Attend the annual conferences of the Institute (http:/www.Cyrusik.org the physical platforms that serves as an annual spawning ground for articles that may ultimately be published in this journal;**
- **Give us your feedback by telling us how we can further promote and improve the journal.**

Welcome to *ITJ*, and thank you.

Tagi Sagafi-nejad, Editor

Abstract
In this study, we examine how social benefit systems (public and private social expenditure) may influence entrepreneurial intentions, and how it may moderate the relationship between fear of failure and entrepreneurial intentions. Our cross-level model of 97,012 people from 32 countries demonstrates that individuals in countries with high levels of public social expenditure are less likely to show entrepreneurial intentions because they compare and contrast the safety net provided by social systems versus risk associated with starting a business. In addition, the results show that higher levels of private social spending weaken the negative impact of fear of failure on entrepreneurial intentions.

Keywords: Social Benefit Systems, Entrepreneurial Intentions, Cross-National and Cross-Level Analysis, Private Social Spending.

1. Introduction

There is an emergent wave of literature suggesting that intentions play an imperative role in the decision to become an entrepreneur and start a business (Baron, 2004; Liñán, 2004; Liñán & Chen, 2009; Shaver & Scott, 1991). Entrepreneurship scholars recommend that institutional environment may influence the entrepreneurship process (El Jadidi et al., 2017; Jennings et al., 2013; Knight & Cavusgil, 2004), including entrepreneurial intentions (Liñán, 2004; Liñán & Chen, 2009; Shinnar et al., 2012). In terms of entrepreneurial behavior and perceptions, formal institutions, (i.e., situational elements) may influence the startup decision (Liñán, 2004). In this cross-national study, we examine the effect of social benefit systems on the decision to become an entrepreneur.

Although governments differ in their utilization and redistribution of wealth, in the domain of institutional theory the focus is on social benefit (welfare) systems that provide benefits (Cullen et al., 2014). Benefits can include safety nets that protect people from the vicissitudes of the market and act as a shield against the competitive forces that embody capitalist structures. Distribution of such benefits as health care, welfare programs, and housing may thwart the structures that motivate self-achievement in terms of business activities. In this study, our central research question is: how do social benefit systems influence entrepreneurial intentions across countries?

We contend that social benefit arrangements have an impact on entrepreneurial intentions because potential entrepreneurs compare and contrast the role of available safety nets *versus* the level of risk associated with business opportunities (Smith et al., 2019). In order to examine this argument, we built a model to show the effects of social benefits on an individual's entrepreneurial perception. Our model is structured on two novel social benefit arrangements proposed by Adema, Fron, and Ladaique (2012); namely (1) Public Social Expenditure and (2) Private Social Expenditure. The distinction between public and private relies on whoever controls the relevant financial flow. In public social expenditures, social spending is controlled by the government (different levels of government and social benefit funding) in the form of social insurance and assistance payments. All other social benefits not provided by the government are considered private. We assess two sets of effects: (1) the direct effects of public and private social expenditure on an individual's entrepreneurial intentions and (2) the multilevel interaction effects of social benefits on an individual-level relationship of "fear of failure to start

a business" on entrepreneurial intent. Our dataset, the Global Entrepreneurship Monitor (GEM), offers a distinguishing set of cross-national and cross-level data for empirical assessments. Hypotheses are analyzed using Multilevel Modeling (MLM) techniques. Specifically, individuals in countries with a high level of public social spending are shown to be less likely to harbor entrepreneurial intentions. The findings also suggest that private social expenditure weakens the negative relationship between fear of failure to start a business and an individual's entrepreneurial perception.

This study contributes to entrepreneurship scholarship domain in three respects. First, studying the impact of social benefit systems on entrepreneurial intentions sheds new light on comparative research on entrepreneurship, as a growing number of scholars seek to understand how institutional forces affect different paths to entrepreneurship (Jennings et al., 2013). We demonstrate how the formal institutional features of public and private social expenditure may shape entrepreneurial perceptions across countries. Second, we test novel dimensions of social benefit arrangements. Research has addressed only part of the system containing employee/employer contributions, not that of the government. We empirically explore and test entrepreneurial intention and argue that private expenditure may have interaction effect with entrepreneurial intentions. In this way, we try to fill a research gap concerning whether and how such perceptions across nations are affected by formal institutions. Finally, we apply multilevel modeling to investigate the cross-level impact of social expenditures on individual perceptions. Such a multilevel cross-country design can clarify the design of previous studies (e.g., Hessels, Van Gelderen, & Thurik, 2008a, 2008b; Wennekers, Wennekers, Thurik, & Reynolds, 2005), allowing us to determine the validity of results and uncover cross-level institutional impacts.

2. Theoretical Background

Institutional theories such as new institutional economics (Williamson, 1998) and new institutional sociology (DiMaggio & Powell, 1983) suggest that institutions may both limit and allow agents' activity (J. Hessels et al., 2008a; White et al., 2018). Specifically, some formal institutions, welfare institutions that provide social benefits such as unemployment wages in particular, can affect entrepreneurship including productive and unproductive activities (Asgary, 2016; Henrekson, 2011). Past studies have focused on how different social benefit arrangements may discourage entrepreneurial activity, especially innovative and growth type of entrepreneurial activity (Henrekson, 2005). These, however, are still inadequate when it comes to the study of entrepreneurship intent.

2.1 Fear of Failure and Entrepreneurial Intention

The decision to undertake an entrepreneurial activity may be seen as voluntary and logical (Krueger et al., 2000). Entrepreneurship consists of activities that take place over time (Kyrö & Carrier, 2005). Entrepreneurial intentions, therefore, would be the first step in the extensive process of establishing a business venture (Lee & Wong, 2004). Other factors such as values, desires, and beliefs can affect how entrepreneurial activity is carried out (Liñán & Chen, 2009).

The theory of planned behavior (Ajzen, 2012) posits that cognitive factors called motivational "antecedents" may affect intentions. Time limitations, difficult goals, and social pressure are *situational elements* that can influence startup intentions. Attitude toward a start-up, subjective norms, and perceived behavioral control are three *motivational factors*, or antecedents,

that affect behavior (Liñán, 2004). Among these, perceived behavioral control has a greater impact on forming entrepreneurial intentions (Shinnar et al., 2012). Perceived behavioral control is "*the perception of the ease or difficulty of becoming an entrepreneur*" (Liñán & Chen, 2009). Although the concept is similar to self-efficacy, it constitutes a broader range of perceptions about behavior controllability in addition to the feeling of being able to do a task. At the same time, other factors may act as barriers to entrepreneurial intentions; Liñán and Chen (2009) for example, suggest that fear of failure, lack of support (financial, technical, emotional), and lack of competence can negatively affect the intentions to start a business.

Fear of failure and the decision to start a business have been studied by economists who have focused on the relationship between entrepreneurial decisions and risk aversion (Arenius & Minniti, 2005). Since most people are risk averse (Tabesh et al., 2019) and the perceived (rather than objective) fear of failure (Weber, 1997) is an imperative element of the risk associated with entrepreneurship, the likelihood of starting a successful business can be influenced by changes in a perceived fear of failure. Arenius and Minniti (2005) found that those who fear failure of a new business are only two-thirds as likely to start a venture as those who do not. Wagner's (2007) results show a direct association between risk aversion and entrepreneurial intentions. In terms of gender difference, he suggests that fear of a business failure occurred in 44% percent of men and 56% of women. However, Shinnar et al. (2012) could not find a moderating effect of gender on the relationship between perceived fear of failure and entrepreneurial intention across countries. Regarding the impact of cross-cultural and formal institutions, the relationship between fear of failure and entrepreneurial intention has received limited attention.

2.2 Social Benefit Systems and Entrepreneurship Across Countries

Socialist governments offer security nets to their citizens, often intervening to regulate and direct production through wealth redistribution as they pursue goals such as equality in society and maintaining security rather than profits (Parboteeah & Cullen, 2003). In contrast, capitalist governments focus on building a "self-serving economic structure that allows everyone to achieve his/her personal profit" (Ralston et al., 2008). In capitalist institutional logic, the market rewards individual efforts. People in capitalist societies do not benefit from widespread safety nets and economic equality, which socialist systems provide through controlled wages and redistribution of benefits (Turner, 1997).

The relationship between entrepreneurship and social benefits has generally been regarded as contrary points of view. Parker and Robson (2004) found that average income tax rates could predict entrepreneurship activity, while benefit replacement rates (reservation wages)[2] significantly influence rates of self-employment. Steinberger (2005) suggests that the degree of entrepreneurial activity declines in response to the generosity of welfare systems. The safety net provided by social benefits can have an impact on the types of business that entrepreneurs are willing to start (Henrekson, 2005). Both necessity- and opportunity-based types of entrepreneurship are affected by the impact of safety nets on reservation wages (Moghaddam, 2015). Safety nets offer a substitute source of income at a reasonable level. They may discourage opportunity-based entrepreneurship since new businesses often initially generate wages below

[2]The "lowest wage rate at which a worker would be willing to accept a particular type of job" (Siebert, 1997).

the level covered by safety nets. Thus, individuals have less financial urgency to start a business in countries with generous welfare systems (Wennekers et al., 2005) because the opportunity costs of setting up a personal business are relatively high compared with wages from self-employment at initial steps (S. Hessels et al., 2007). In countries with higher levels of social benefits, employers face higher wages due to large social benefit contributions required for their workers. Thus, reducing employers' contributions to social benefit arrangements may lead some to consider entrepreneurial activities.

Koellinger and Minniti (2009) found that high levels of unemployment benefits were negatively associated with nascent entrepreneurship, regardless of the entrepreneurial motivation (necessity vs. opportunity) and type (innovative vs. imitative). In particular, good unemployment benefits were likely to reduce the overall entrepreneurial propensity across countries. Developing a new measure called "economic redistribution," Cullen et al. (2014) examined how the interaction of governmental policies that provide health care, welfare programs, and housing as security nets and national cultural dimensions may influence entrepreneurship propensity. They found that performance orientation, assertiveness, individualism, and family collectivism combined with a more redistributive economic system led to lower rates of opportunity-based entrepreneurship.

Another approach suggests that social benefits positively affect entrepreneurial activity through a risk-sharing effect (Steinberger, 2005). Generous welfare systems may influence self-employment by providing a safety net in case of business failure (Wennekers et al., 2005). Where entrepreneurs favor autonomy or wealth/income motives, high levels of social benefits can reduce the perceived risk of business failure. For example, Hessels et al. (2008b) found that welfare systems positively affect necessity motives (where they hypothesized a negative relationship). Benefits in countries with generous social benefit systems tend to be high, so that alternative employment opportunities are not widely available, leading people to engage in necessity-motivated entrepreneurial activities.

Thus, there are mixed findings for the relationship between social benefit systems and entrepreneurial activities and intentions. Most studies have focused on the actual steps in the entrepreneurship process, but few concentrate on entrepreneurial intentions. Intention to start a business is different from actual entrepreneurship. True entrepreneurs must carry out certain actions such as business plan development, funding, and market research in order to start a business. This is not necessarily the case for those who merely intend to start a business (Bosma et al., 2012). In other words, those who think about starting business may give up the idea and do not continue the entrepreneurial process due to several potential barriers such as lack of confidence, resources, and support.

2.3 Public Vs. Private Social Expenditures

Overall, socialist countries offer higher levels of social benefits, while the capitalist structure leaves it to members of society to provide funding for their benefits. Organization for Economic Cooperation and Development OECD) SOCX defines social expenditures as *"The provision by public and private institutions of benefits … in order to provide support during circumstances which adversely affect their welfare, …"* (Adema et al., 2012). According to the OECD, social expenditures are comprised of (a) Old-age pensions, early retirement, home-health and residential services for the elderly; (b) Survivor

pensions and funeral payments; (c) Incapacity-related benefits – care services, disability benefits, benefits accruing from occupational injury and accidents; (d) Health spending on in- and outpatient care, medical goods, preventive services; (e) Family-child allowances and credits, childcare support, income support during leave, sole parent payments; (f) Active labor market policies – employment services, training, employment incentives, integration of the disabled, direct job creation, and start-up incentives; (g) Unemployment compensation, early retirement for labor market reasons; (h) Housing allowances and rent subsidies; and (i) Other social policy areas – non-categorized cash benefits to low-income households, other social services such as food subsidies, which are prevalent in some non-OECD countries (Adema et al., 2012).

A persistent issue in this stream of research (e.g., Henrekson, 2005; Hessels et al., 2008b; Sternberg & Wennekers, 2005) is that the definition and measures of the welfare structure lack clarity. Most studies have borrowed measures from the World Competitive Yearbook (WCY), which focuses on employers and employees and calculates a percentage of beneficiaries' contributions per GDP. Although the WCY may be considered a reliable source of information, it does not take into account the role of governments in shaping social welfare structures. Governments derive funds for welfare systems from sources other than employer contributions, a factor ignored by the WCY. In most societies, people pay into social benefit through a mandatory deductible from their paychecks, and their employers provide the rest. Governments add other monetary sources to contributions to increase the number, quality, and accessibility of social benefits. Thus, the quality of a welfare system can be attributed to the differences in government and employee/employer contributions.

The aim of this study is to see whether government contributions (public social expenditure) differ from employee/employer contributions (private social expenditure) in their impact on entrepreneurial intentions. According to the OECD Social Expenditure database (OECD SOCX), France has the highest government contribution among OECD countries, while the United States features the highest contributions of private parties (see Figure 1).

Insert Figure 1 here

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3. Hypotheses Development

3.1 Effect of Social Benefit Systems on Entrepreneurial Intentions

We start with the premise that higher levels of public social spending dampen entrepreneurial intentions of individuals. Drawing on institutional anomie theory, states where public social spending is high provide security nets to individuals which in turn safeguard citizens from both reaping the benefits of sound business decisions in the market and facing the wrath of the market when decisions are wrong (Cullen, Parboteeah, & Hoegl, 2004; Messner & Rosenfeld, 1997). We argue that such policies would demotivate individuals' entrepreneurial intentions because they restrain individuals from reaping the full, arguably supra-normal returns from their intentions and effort. Further, they do not provide enough Incentive to individuals for exploring new ideas, taking market risks, and earn revenues from the same because they deliver a reasonable amount of support with which people can 'make do'.

Indeed, scholars have found that not only entrepreneurial activity declines with the subsidies provided by welfare systems but also the nature of business activity changes in view of such

policies (Henrekson, 2005; Steinberger, 2005). We contend that higher levels of public social spending discourage entrepreneurial tendency since new businesses often initially generate wages below the level covered by safety nets. Individuals will have less financial urgency to start a business in countries with generous welfare systems (Wennekers et al., 2005) because the opportunity costs of setting up a personal business are relatively high compared to wages from self-employment in the initial stages (S. Hessels et al., 2007). Further, social benefits serve as an alternative source of income which is often higher than the cost of effort, time, and spirit of starting a business (S. Hessels et al., 2007). In essence, generous social benefits serve as an opportunity cost against starting a new venture, and they discourage individuals from contemplating starting a business.

H1a: In countries with higher levels of public social spending, individuals are less likely to have entrepreneurial intentions.

We believe private social spending may also provide security and safety net that public social spending my provide through private institutions where individuals contribute over time. Similar to the arguments developed for hypothesis 1a above, countries with higher contributions by employees and employers may lead to less interest in entrepreneurial activities (Wennekers et al., 2005). In essence, potential entrepreneurs will be discouraged from having entrepreneurial intentions because a new business generally has wages quite below the level offered by a safety net that is often provided by an employer, and individuals assume social benefits will provide sufficient backing in the future.

H1b: In countries with higher levels of private social spending, individuals are less likely to have entrepreneurial intentions.

3.2 The Interaction Effect of Social Benefits and Fear of Failure

Social benefits can influence entrepreneurial intentions as a moderator of the relationship between individual perceptions and starting a new business. This study takes earlier findings and explores the individual factor to test the effect of the fear of business failure on entrepreneurial intention. Although fear of failure has been studied at the individual level, little attention has been paid to its interaction with national benefit structures or the effects such an interaction may have on entrepreneurial intentions.

In terms of cross-level interaction, this study expects that a higher level of public social spending will lead to a decrease in entrepreneurial intentions. Since most people are risk averse and the perceived fear of failure is an imperative element of the risk associated with entrepreneurship, the desire to start a business may be influenced by perceived fears of failure (Weber, 1997). Those with higher risk tolerance may perceive a lower degree of failure (Douglas & Shepherd, 2002). While being employed or receiving unemployment (one example of social benefit) may represent different perceived levels of risk, starting a business embodies riskier efforts.

Prospect theory suggests that "*people normally perceive outcomes as gains and losses, rather than as final states of wealth or welfare"*(Kahneman & Tversky, 1979), where gains and losses are described relative to some reference points (framing effect). If people perceive that

they are in the gains condition, which means they earn more than the reference point, they tend to be more risk averse because they become more sensitive to potential future failures than potential success. Those who perceive the losses condition, on the other hand, tend to be more risk taking because they want to come back to the break even (reference point). In other words, whether a person frames a condition as related to gains or losses impacts his or her attitude toward engaging in a risky behavior such as entrepreneurship activity (Hsu et al., 2017). Therefore, absolute financial gain is not necessarily the primary factor in choosing entrepreneurship, rather financial gains relative to a feasible alternative such as paid employment or generous unemployment wage can impact business venture decision. We suggest that individuals who perceive that generous social benefits provide greater utility than the expected results they could achieve if they choose to pursue entrepreneurial activity would be in the domain of gains. Consequently, they will be more risk averse according to prospect theory. Conversely, people who receive tighter social benefits that do not provide enough utility and is smaller than the expected payoffs from self-employment would be in the domain of losses and therefore less risk averse.

People will incline toward risk averseness and choose generous welfare structures that offer a safety net favoring inaction (e.g., day-to-day employment and receiving unemployment benefits) over 'risk prone' actions of entrepreneurial activity. Building on the above, we argue that in countries where public social expenditure is prevalent, individuals' fear of failure will further attenuate entrepreneurial intentions. That is, countries where public social expenditure is high and individuals are generally fearful of failure, entrepreneurial intentions will be even lower. Also, there is a positive correlation (.56, $p<.01$) between public social spending and uncertainty avoidance (Hofstede, 2001), meaning that in countries that have better social benefits, overall risk aversion is higher. In sum, in countries with a high level of public social expenditure, individuals having a high degree of the fear of failure will be less willing to consider starting a business.

> *H2a: In countries with a higher level of public social expenditure, individuals with a higher fear of failure are less likely to have entrepreneurial intentions.*

For similar reasons to the public expenditures effect on entrepreneurial intention, higher levels of private social expenditure mean that people must contribute more in order to meet required social benefit expectations. The more accepting of risk, the more likely an individual will consider becoming an entrepreneur, since as an entrepreneur he/she will be the main recipient of the firm's profits (Douglas & Shepherd, 2002). Because personal contributions are deducted from a paycheck, people have a greater sense of the cost. Prospect theory posits that people are more risk averse when they encounter probable loss (Kahneman & Tversky, 1979) and less willing to become involved in risky activities. Thus, in countries in which the level of private social expenditure is high, people with a fear of failure are less willing to engage in entrepreneurial intentions.

> *H2b: In countries with a higher level of private social expenditure, individuals with a higher fear of failure are less likely to have entrepreneurial intentions*.

4. Methodology

4.1 Individual and country level data

All individual-level data came from the Adult Population Survey (APS), Global Individual Level Data 2005 to 2012 (Bosma et al., 2012), as provided by the GEM database. All country-level data were extracted from the OECD SOCX database for 1980–2014 (Adema et al., 2012; OCDE, 2014).

The GEM APS sample included adults 18 and older, covering 1,363,683 observations across 84 countries (Bosma et al., 2012). This study features reliable measures of the dependent variables as well as the individual independent variable for a subset of 32 nations. Because OECD SOCX only provides information for 32 countries, the other 52 countries in the GEM database were omitted. The resulting dataset includes individual data for 97,012 people and national social expenditure data from 32 countries. The size of the subsets ranged from 1,002 individuals in New Zealand to 21,900 individuals in Spain. For a robustness check, we compared countries with available data with those omitted from the list and found no significant difference between entrepreneurial intentions ($t(31) = 0.429$, $p < 0.671$). In other words, there was no material difference between selected countries and those not selected; although, the major economies had a higher gross domestic product (GDP) and level of entrepreneurship. Despite wide coverage, the OECD sample under-represents African and Middle Eastern countries. OECD has 37 countries, but the majority are from Europe, North and South America and East Asia (See the list of the countries in Figure 1). Secondary data have both strengths and weaknesses; thus, variables with established validity were used and, where possible, confounding effects were removed by controlling for such variables as GDP and cultural values.

4.2 Dependent Variables

The dependent variable is the intention to start a business (Bosma et al., 2012). Respondents to the GEM Adult Population Survey were asked whether "*alone or with others, you expect to start a new business, including any type of self-employment, within the next three years*?" Intentions to start a business differ from nascent entrepreneurship. For entrepreneurs, certain activities such as business plan development, financial planning and marketing activities must be accomplished in order to get a business off the ground, something that is not necessarily true for those who simply intend to start a business (Bosma et al., 2012). The average proportion of entrepreneurial intention as a percentage of total observations was 12.5%, with the largest percentage in Chile (36.6%) and the smallest in Japan (2.3%).

4.3 Individual-level Independent Variable: Fear of failure

Previous studies based on the GEM used single items as proxies for focal variables rather than full measurement scales. The measure of fear of failure came directly from the GEM Adult Population Survey. A binary item asks the following question: "Would fear of failure would prevent you from starting a business?" (Bosma et al., 2012). This study used a measure that has been validated by past research (e.g., Shinnar et al., 2012). The use of binary variables and single items may generate certain limitations (Ding et al., 2015). Although secondary data may have less elasticity and accuracy than primary data, their application is common, particularly in pooled cross-country research that examines many nations and has a large sample size (e.g., Parboteeah, Hoegl, & Cullen, 2008).

4.4 Country-level Independent Variables: Public and Private social expenditure

Unlike previous research, this study proposes a new measure of social benefit systems. Most studies focusing on the impact of social benefit systems on entrepreneurship use the World Competitiveness Yearbook (Henrekson, 2005; J. Hessels et al., 2008a, 2008b; Sternberg & Wennekers, 2005). The WCY separates the share of employers and employees and calculates the percentage of contribution per GDP. However, it does not cover all contributors to social spending as it focuses on private party contributions. Governments also provide funding from sources other than employer contributions, something the WCY ignores. Because the aim of such studies is to see the impact of institutional factors on entrepreneurial activity and because governments are the primary designers of social benefits, the government contribution should be considered separately.

In measuring of social expenditure by OECD SOCX, the contribution by the government is separated from that of other parties. The distinction between public and private social protection is the basis of whoever controls relevant funds, i.e., public institutions or private institutions. In public social expenditure, social spending is controlled by the government as social insurance and social assistance payments while benefits not provided by the government are considered private (Adema et al., 2012). Sickness benefits financed by compulsory employer and employee contributions (receipts) to social insurance funds, income support during parental leave paid by a public insurance fund, direct payments by employers to absent employees legislated by the government or legally required continued wage payments by employers to fathers on paternity leave are examples of public social spending. Pensions paid to former civil servants through autonomous funds, parental leave by employers or life insurance are often considered private social spending (Adema et al., 2012). In this study, public and private social expenditure are based on OECD SOCX data which is a continuous scale for 32 countries (see Table 1).

Insert table 1 here

4.5 Control Variables

Individual-level control variables from the GEM database were age, education, gender, household income, work status, and GEM wave, as research has shown these factors related to entrepreneurial intentions (Shinnar et al., 2012). At the country level, we used the GDP measured in terms of Purchasing Power Parity (Oskooee & Bahmani, 2016) from the Central Intelligence Agency database. GDP can affect decisions, as a country's wealth determines its engagement in investment activities and the general institutional environment. In subsequent tests for robustness, we examined possible confounding effects of cultural values, with specific attention paid to dimensions of culture and social benefit arrangements.

4.6 Analyses

For this study, a Multilevel Modeling (MLM) data analysis technique was applied to avoid Type-1 errors. Because we deal with nested data, the MLM approach is most appropriate to analyze interactions at a different level of analysis (Heck & Thomas, 2015). In earlier research, the scale of measuring intention was at the country level (aggregate), which ignored variation at the individual level and makes multilevel modeling a necessity because traditional analysis models can produce excessive Type I errors and biased parameter estimates (Peugh, 2010). This

study proposes a two-level model, which separates variation within and between countries. In this way we can have a better understanding of the role played by social benefits in terms of motivation. We used Bernoulli HLM to examine the hypotheses which applies the logit link function.

5. Results

5.1 Hypothesis Testing

This study estimates four hierarchical linear models to test the hypotheses. First, the null model with no independent variable was examined. The analysis of the null model shows that the intraclass correlation is 0.1, which means there is enough variability within each country as required by the multilevel data analysis (Geiser, 2013). The design effect is high (100.12) because the average of observations for each cluster is roughly 2,000. This shows the necessity for using a multilevel analysis.

Variables were incrementally added, as shown in Table 3. Hypothesis 1a predicts that in countries with a high level of public social expenditure, individuals are less likely to have entrepreneurial intentions. The results of Model 2, shown in Table 3, suggest that the level of public spending is significant and negatively related to entrepreneurial intention (β= -0.047, $p < 0.01$). Therefore, Hypothesis 1a is supported. Hypothesis 1b predicted a negative relationship between private social expenditure and entrepreneurial intent. The empirical results for Model 1b presented in Table 3 show no significant relationship between private social spending and intention to start a business (β= -.031, p= 0.230). Therefore, Hypothesis 1b is not supported.

Insert Table 2 here

Hypothesis 2a predicts that public social expenditure will positively moderate the relationship between fear of failure and self-employment. Fear of failure is negatively associated with entrepreneurial intentions, as seen in previous studies (Liñán, 2004). The results of Model 3 show that public social expenditure and fear of failure do not significantly interact to influence the intention to start a business (β= -0.005, p = 0.4). Therefore, this interaction does not support Hypothesis 2a, according to which the level of public social expenditure has a positive moderating effect. Interestingly, private social expenditure was found to positively moderate the relationship between a perceived fear of failure and entrepreneurial intention (β=0.036, $p <0.1$), as shown in Table 3 (Model 3). As a result, Hypothesis 2b is supported.

5.2 Robustness of the interaction effects of the institutional factors

Because institutional factors may correlate with important national-level variables, observed effects may be caused by confounding country variables. To discard this option and validate robustness, GDP was added to the model. After controlling for GDP, the interaction effects of social benefits persisted. These are therefore unlikely to arise from the wealth of a country.

Insert Table 3 here

To remove possible confounding effects of culture, five individual cultural characteristics were added: power distance, individualism-collectivism, uncertainty avoidance, masculinity, and

future orientation (Hofstede et al., 1993). The effects of public and private social expenditure persisted even given these cultural dimensions. Therefore, the effects of social expenditure were not seen to be caused by cultural effects.

6. Discussion

According to entrepreneurship research, in addition to self-efficacy, social/institutional factors may explain perceptions and behaviors regarding new business ventures (Ding et al., 2015). To extend these, researchers have sought to evaluate entrepreneurship and institutional factors as well as national cultural dimensions (Jennings et al., 2013). In this study we try to establish the validity of cross-national research using fear of failure as an individual-level predictor and public and private social expenditure as country-level predictors of entrepreneurial intention.

6.1 Theoretical Contributions

This study offers several theoretical implications. Compared with earlier studies, this study used MLM models to represent country-level effects on the intention to start a business and found strong support for hypotheses that public social spending plays an important role in determining entrepreneurial intention across countries. In other words, government spending on social welfare systems may have a direct impact on entrepreneurial intentions. This research extends our understanding of how social benefit systems affect entrepreneurial intentions across countries. The fear of failure in starting a new business and its impact on entrepreneurial intentions confirm the findings of earlier studies (Liñán, 2004; Liñán & Chen, 2009; Shinnar et al., 2012).

Prior studies on entrepreneurship and social benefit systems, including comparative literature, have focused on the impact of this intuitional factor on nascent entrepreneurship. However, scholars have not taken entrepreneurial intentions into account. Utilizing macro theories such as institutional theory, and micro level theory such as prospect theory, this study sheds light on how social benefit programs may affect self-employment decision. The explanation of this process fills a research gap by offering an understanding of the interaction between entrepreneurs' perceptions and the institutional environment, since most studies performed at the country level focused on entrepreneurial activities.

The results of cross-level interaction effect show that higher levels of private social spending may weaken the negative impact of the fear of failure on the intention to start a business. In other words, an individual places more value on his/her own contribution compared to that of the government. Thus, in countries with higher levels of private social expenditure, the fear of failure is lower because people are aware of what comes out of their pockets after receiving a paycheck, while they seem indifferent to the government's contribution. When people see the personal costs of health, retirement, or housing benefits, they prefer to take more risk and start a business so they can make up part of these costs. Finally, the findings do not support the interaction effect of public spending and fear of failure on entrepreneurial intentions.

6.2 Practical implications, future research directions, and limitations

The results of this research have implications for future studies and practitioners. First, they suggest that the intention to become an entrepreneur and start a business is affected not only by

cognitive factors, such as motivational "antecedents," or recurrently worked subjective norms such as culture, but also by formal institutions. Future scholars may wish to test the novel aspects of social expenditures (public and private) in association with other phases of the entrepreneurship process. In addition to the commonly used measure of social benefit, future projects could focus on how a subject's employment status can affect his/her intentions, given the level of benefits available. Future research may determine that public and private expenditure can add independent value. While this study considers only welfare systems, future projects could examine other formal institutions that affect entrepreneurial intentions. It may be valuable to distinguish between the processes by which institutions exercise their impact (Jennings et al., 2013).

In almost every developing country, promoting formal and informal institutions is a central way of achieving economic development (Ding et al., 2015). However, scholars and policymakers must consider the accumulated effects of institutional transformation. Certain well-enhanced country-level policies such as increasing public contributions have been found to be unrelated, if not harmful, to nascent entrepreneurship (OCDE, 2014). Regarding the risks associated with starting a new business, policymakers could focus on mechanisms that enhance private contributions to society in order to induce individual entrepreneurship.

Although this project offers appealing points, there are certain limitations to the research. First, the binary variables applied to entrepreneurial intentions only explain a tendency to think about entrepreneurship. Future studies should include more advanced measurements; replication with different measures also would help vouch for the results found in this study. Second, the application of GEM data to investigate global entrepreneurial intentions cannot fully capture the extent and depth of measurement. The variables used in this study are single-item predictors and designed for practical reasons. By utilizing highly valid variables (e.g., Liñán & Chen, 2009), we contend we are justified in developing single-item variables since resource and situational limitations constrain the application of scale (Ding et al., 2015). Nevertheless, the hypotheses may benefit from more enhanced surveys and case studies. Finally, the cross-sectional data do not allow for a clear causality relationship. This could be a fertile path for future study, specifically as we offer comprehensive theoretical arguments for the relationships and offer likely alternative explanations. Future work could apply a longitudinal or experimental analysis and different institutional factors such as regulation or political ones, in order to confirm our findings.

7. Conclusion

While the institutional force of public social spending plays an important part in forming entrepreneurial intentions, private social expenditure may weaken the impact of risk aversion on such perceptions. The cross-country results offered in this research show that entrepreneurial intentions may be affected by the existence of formal social welfare programs.

REFERENCES

Adema, W., Fron, P., & Ladaique, M. (2012). Is the European Welfare State Really More Expensive ? *OECD Social, Employment and Migration Working Papers, Nº124*, *124*(2011), 1980–2012. https://doi.org/10.1787/5kg2d2d4pbf0-en

Ajzen, I. (2012). The theory of planned behavior. *Handbook of Theories of Social Psychology: Volume 1*, *50*(2), 438–459. https://doi.org/10.4135/9781446249215.n22

Arenius, P., & Minniti, M. (2005). Perceptual variables and nascent entrepreneurship. *Small Business Economics*, *24*(3), 233–247. https://doi.org/10.1007/s11187-005-1984-x

Asgary, N. (2016). Role of Institutions in Sustainable and Socially Equitable Development. *Cyrus Chronicle Journal*, *1*(1). http://www.cyrusik.org/wp-content/uploads/2016/11/Role-of-institutions-in-sustainable-and-socially-equitable-development.pdf

Baron, R. A. (2004). The cognitive perspective: a valuable tool for answering entrepreneurship's basic "why" questions. *Journal of Business Venturing*, *19*(2), 221–239.

Bosma, N., Coduras, A., Litovsky, Y., & Seaman, J. (2012). Gem manual, A report on the design, data and quality control of the Global Entrepreneurship Monitor. *Global Entrepreneurship Monitor*, 1–95. http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:GEM+Manual#2

Cullen, J. B., Johnson, J. L., & Parboteeah, K. P. (2014). National Rates of Opportunity Entrepreneurship Activity: Insights From Institutional Anomie Theory. *Entrepreneurship: Theory and Practice*, *38*(4), 775–806. https://doi.org/10.1111/etap.12018

DiMaggio, P. J., & Powell, W. W. (2000). The iron cage revisited institutional isomorphism and collective rationality in organizational fields. *Advances in Strategic Management*, *17*, 143–166. https://doi.org/10.1016/S0742-3322(00)17011-1

Ding, Z., Au, K., & Chiang, F. (2015). Social trust and angel investors' decisions: A multilevel analysis across nations. *Journal of Business Venturing*, *30*(2), 307–321. https://doi.org/10.1016/j.jbusvent.2014.08.003

Douglas, E. J., & Shepherd, D. a. (2002). Self-employment as a Career Choice: Attitudes, Entrepreneurial Intentions, and Utility Maximization. *Entrepreneurship Theory and Practice*, *26*(3), 81–90. https://doi.org/10.4337/9781783479801.00025

El Jadidi, J., Asgary, N., & Weiss, J. W. (2017). Cultural and Institutional Barriers for Western Educated Entrepreneurs in Morocco. *Cyrus Chronicle Journal*, *2*, 61–75.

Geiser, C. (2013). Data analysis with Mplus. In *Methodology in the social sciences*. Guilford Press. http://uml.idm.oclc.org/login?url=https://search.proquest.com/docview/1284064362?accountid=14569%0Ahttp://primo-pmtna01.hosted.exlibrisgroup.com/openurl/UMB/01UMB_INS

T/umb_services_page??url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:book&genre=book

Heck, R. H., & Thomas, S. L. (2015). An Introduction to Multilevel Models. In *Routledge*.

Henrekson, M. (2005). Entrepreneurship: A weak link in the welfare state? *Industrial and Corporate Change*, *14*(3), 437–467. https://doi.org/10.1093/icc/dth060

Henrekson, M. (2011). Entrepreneurship and Institutions. *SSRN Electronic Journal*, *28*(4), 717–742. https://doi.org/10.2139/ssrn.996807

Hessels, J., Van Gelderen, M., & Thurik, R. (2008a). Drivers of entrepreneurial aspirations at the country level: The role of start-up motivations and social security. *International Entrepreneurship and Management Journal*, *4*(4), 401–417. https://doi.org/10.1007/s11365-008-0083-2

Hessels, J., Van Gelderen, M., & Thurik, R. (2008b). Entrepreneurial aspirations, motivations, and their drivers. *Small Business Economics*, *31*(3), 323–339. https://doi.org/10.1007/s11187-008-9134-x

Hessels, S., van Stel, A., Brouwer, P., & Wennekers, S. (2007). Social Security Arrangements and Early-Stage Entrepreneurial Activity. *Comparative Labor Law and Policy Journal*, *28*(4), 743–774.

Hofstede, G., Hendrik, G., & Hofstede, G. (1993). *Geert Hofstede Research experiences*. 1–9.

Hsu, D. K., Wiklund, J., & Cotton, R. D. (2017). Success, Failure, and Entrepreneurial Reentry: An Experimental Assessment of the Veracity of Self-Efficacy and Prospect Theory. *Entrepreneurship: Theory and Practice*, *41*(1), 19–47. https://doi.org/10.1111/etap.12166

Jennings, P. D., Greenwood, R., Lounsbury, M. D., & Suddaby, R. (2013). Institutions, entrepreneurs, and communities: A special issue on entrepreneurship. *Journal of Business Venturing*, *28*(1), 1–9. https://doi.org/10.1016/j.jbusvent.2012.07.001

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Choices, Values, and Frames*, 17–43. https://doi.org/10.1017/CBO9780511803475.003

Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, *35*(2), 124–141.

Koellinger, P., & Minniti, M. (2009). Unemployment benefits crowd out nascent entrepreneurial activity. *Economics Letters*, *103*(2), 96–98. https://doi.org/10.1016/j.econlet.2009.02.002

Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, *15*(5), 411–432. https://doi.org/10.1016/S0883-9026(98)00033-0

Kyrö, P., & Carrier, C. (2005). Entrepreneurial learning in universities: Bridges across borders.

In *The dynamics of learning entrepreneurship in a cross-cultural university context* (pp. 14–43). University of Tampere.

Lee, S. H., & Wong, P. K. (2004). An exploratory study of technopreneurial intentions: A career anchor perspective. *Journal of Business Venturing*, *19*(1), 7–28. https://doi.org/10.1016/S0883-9026(02)00112-X

Liñán, F. (2004). Intention-based models of entrepreneurship education. *Piccola Impresa / Small Business*, *2004*(3), 11–35.

Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship: Theory and Practice*, *33*(3), 593–617. https://doi.org/10.1111/j.1540-6520.2009.00318.x

Moghaddam, K. (2015). The ingredients of a success recipe: An exploratory study of diaspora opportunity entrepreneurship. *The Ingredients of a Success Recipe: An Exploratory Study of Diaspora Opportunity Entrepreneurship*, *4*(2), 162–189. https://doi.org/10.1108/SAJGBR-08-2014-0058

OCDE. (2014). Social Expenditure Update - Social spending is falling in some countries, but in many others it remains at historically high levels. *Social Expenditure Update*, *November*, 1–8. http://www.oecd.org/els/soc/OECD2014-Social-Expenditure-Update-Nov2014-8pages.pdf

Oskooee, M. B., & Bahmani, S. (2016). The Rial-Dollar Exchange Rate and Purchasing Power Parity Theory. *Cyrus Chronicle Journal*, *1*(1), 24–29.

Parboteeah, K. P., & Cullen, J. B. (2003). Social institutions and work centrality: Explorations beyond national culture. *Organization Science*, *14*(2), 137–148. https://doi.org/10.1287/orsc.14.2.137.14989

Parboteeah, K. P., Hoegl, M., & Cullen, J. B. (2008). Managers' gender role attitudes: A country institutional profile approach. *Journal of International Business Studies*, *39*(5), 795–813. https://doi.org/10.1057/palgrave.jibs.8400384

Parker, S. C., & Robson, M. T. (2004). Explaining International Variations in Self-Employment: Evidence from a Panel of OECD Countries. *Southern Economic Journal*, *71*(2), 287. https://doi.org/10.2307/4135292

Peugh, J. L. (2010). A practical guide to multilevel modeling. *Journal of School Psychology*, *48*(1), 85–112. https://doi.org/10.1016/j.jsp.2009.09.002

Ralston, D. A., Holt, D. H., Terpstra, R. H., & Kai-Cheng, Y. (2008). The impact of national culture and economic ideology on managerial work values: A study of the United States, Russia, Japan, and China. *Journal of International Business Studies*, *39*(1), 8–26. https://doi.org/10.1057/palgrave.jibs.8400330

Shaver, K. G., & Scott, L. R. (1991). Person, process, choice: The psychology of new venture

creation. *Entrepreneurship Theory and Practice*, *16*(2), 23–45.

Shinnar, R. S., Giacomin, O., & Janssen, F. (2012). Entrepreneurial Perceptions and Intentions: The Role of Gender and Culture. *Entrepreneurship: Theory and Practice*, *36*(3), 465–493. https://doi.org/10.1111/j.1540-6520.2012.00509.x

Smith, A. W., Moghaddam, K., & Lanivich, S. E. (2019). A set-theoretic investigation into the origins of creation and discovery opportunities. *Strategic Entrepreneurship Journal*, *13*(1), 75–92. https://doi.org/10.1002/sej.1299

Steinberger, T. (2005). Social security and entrepreneurial activity. *CSEF Working Papers*, *January*. http://ideas.repec.org/p/sef/csefwp/130.html

Sternberg, R., & Wennekers, S. (2005). Determinants and effects of new business creation using global entrepreneurship monitor data. *Small Business Economics*, *24*(3), 193–203. https://doi.org/10.1007/s11187-005-1974-z

Tabesh, P., Tabesh, P., & Moghaddam, K. (2019). Individual and contextual influences on framing effect: Evidence from the Middle East. *Journal of General Management*, *45*(1), 30–39. https://doi.org/10.1177/0306307019851337

Turner, J. H. (1997). *The institutional order*. Addison-Wesley.

Wagner, J. (2007). What a Difference a Y makes-Female and Male Nascent Entrepreneurs in Germany. *Small Business Economics*, *28*(1), 1–21. https://doi.org/10.1007/s11187-005-0259-x

Weber, E. U. & R. A. M. (1997). Perceived Risk Attitudes: Relating Risk Perception to Risky Choice. *Management Science*, *43*, 123–144.

Wennekers, S., Wennekers, A., Thurik, R., & Reynolds, P. (2005). Nascent entrepreneurship and the level of economic development. *Small Business Economics*, *24*(3), 293–309. https://doi.org/10.1007/s11187-005-1994-8

White, G. O., Hemphill, T., Weber, T., & Moghaddam, K. (2018). Institutional origins of WOFS formal contracting: A judicial arbitrariness perspective. *International Business Review*, *27*(3), 654–668. https://doi.org/10.1016/j.ibusrev.2017.11.002

Williamson, O. E. (1998). The Institutions of Governance. *American Economic Review*, *88*(2), 75–79. https://doi.org/10.2307/116896

Figure 1. Public and Private Social Spending

OECD SOCX 2011

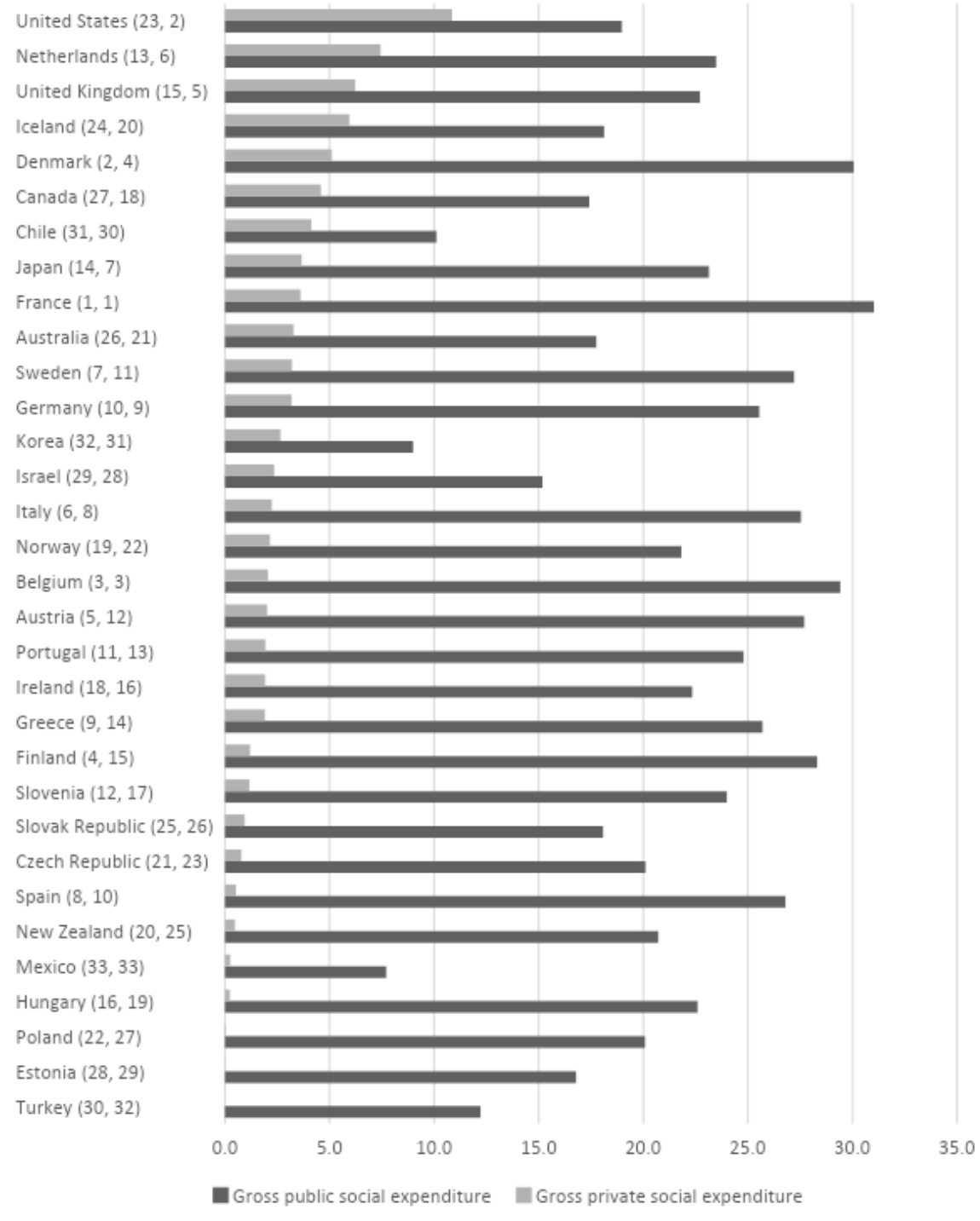

Table 1. List of the 32 countries

Country	Country Private Expenditure	Country Public Expenditure	Country GDP (Million)
Australia (26, 21)	3.28	17.75	1,141,000
Austria (5, 12)	2.01	27.70	405,100
Belgium (3, 3)	2.06	29.42	494,900
Canada (27, 18)	4.59	17.42	1,634,000
Chile (31, 30)	4.13	10.11	423,300
Czech Republic (21, 23)	0.79	20.11	338,000
Denmark (2, 4)	5.11	30.06	258,800
Estonia (28, 29)	0.02	16.79	37,630
Finland (4, 15)	1.20	28.31	224,900
France (1, 1)	3.62	31.03	2,666,000
Germany (10, 9)	3.19	25.55	3,860,000
Greece (9, 14)	1.91	25.70	286,600
Hungary (16, 19)	0.24	22.60	259,000
Iceland (24, 20)	5.95	18.13	15,190
Ireland (18, 16)	1.92	22.34	305,000
Israel (29, 28)	2.35	15.18	285,300
Italy (6, 8)	2.24	27.54	2,175,000
Japan (14, 7)	3.67	23.14	4,843,000
Korea (32, 31)	2.66	8.99	1,853,000
Mexico (33, 33)	0.25	7.71	2,230,000
Netherlands (13, 6)	7.44	23.48	840,500
New Zealand (20, 25)	0.48	20.72	167,900
Norway (19, 22)	2.15	21.82	357,000
Poland (22, 27)	0.05	20.08	1,007,000
Portugal (11, 13)	1.94	24.79	290,300
Slovak Republic (25, 26)	0.94	18.08	161,300
Slovenia (12, 17)	1.17	24.00	63,780
Spain (8, 10)	0.52	26.80	1,618,000
Sweden (7, 11)	3.20	27.21	474,800
Turkey (30, 32)	0.00	12.22	1,596,000
United Kingdom (15, 5)	6.22	22.71	2,702,000
United States (23, 2)	10.85	18.97	18,040,000

Table 2. Statistics and correlation matrix.

	Mean	S.D.	1	2	3	4	5	6
1. Age	43.19	14.807						
2. Education	1005.93	549.983	-.112**					
3. Income	2.13	.808	-.086**	.236**				
4. Employment	15.41	7.904	.190**	-.168**	-.264**			
5. Gender	1.52	.500	.042**	-.004	-.115**	.091**		
6. Fear	.46	.498	-.059**	-.030**	-.025**	-.022**	.078**	
7. Intention	.13	.331	-.159**	.040**	.034**	-.058**	-.079**	-.067**

**P<.01

	Mean	S.D.	1	2	3	4	5	6	7
1. GDP	22.36	40.37							
2. Power Distance	48.38	18.59	-.056						
3. Individualism	59.73	17.82	.429	-.486					
4. Masculinity	48.20	22.20	.238	.112	.105				
5. Uncertainty Avoidance	70.84	20.23	-.234	.579	-.674	.134			
6. Long-term Orientation	50.58	18.96	-.209	.130	-.038	.204	.210		
7. Private Expenditure	2.64	2.76	.723	-.345	.595	-.067	-.563	-.180	
8. Public Expenditure	22.85	5.81	-.130	-.174	.231	-.097	.061	.191	-.116

Table 3. Multi-level data analysis results

	Model 1	Model 2	Model 3	Model 4
Level-1 Variables				
Age	-0.037***	-0.037***		
Education	0.000***	0.000***		
Income	-0.011	-0.011		
Employment	0.014	0.014		
Gender	-0.453***	-0.453***		
GEM Wave	-.0178	-.358		
Fear of Failure	-0.426***	-0.425***		
Level-2 Variables				
GDP	0.000	0.001	0.001	-0.001
Private Social Expend		-0.031	-0.064+	-0.027+
Public Social Expend		-0.047**	-0.044**	-0.036***
Power Distance				0.003
Individualism				0.000
Masculinity				-0.002
Uncertainty Avoidance				0.007
Long-term Orientation				-0.007**
Cross-Level Interaction				
Private Social Exp × Fear			0.036+	0.024+
Public Social Exp × Fear			-0.005	-0.004
Intercept	-0.263+	-1.333**	1.842***	1.960***

+p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001