

# Can Entrepreneurship boost sustainable development in fragile countries?

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"I know Haiti will be a great country again. I am working hard for it and I believe that God	
hasn't forgotten about Haiti. Maybe I won't see it but I know it will happen."  Claude Tornier, President of VIJICAF in Carrefour, Haiti	

# **Abstract**

Title: "Can Entrepreneurship boost sustainable development in fragile countries?"

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Fragile countries pose an intricate challenge for governments and traditional aid approaches: they continue to struggle overtime with low resilience and vulnerability, and are now accounting for a growing share of the world's poor. When every other method has failed, can entrepreneurship be the key ingredient for turnaround?

For countries trapped in fragility, little has been researched or elaborated upon. We studied what current authors said about entrepreneurship and fragility, and which diagnoses could we take from the (short) available data. We ran a multiple linear regression that uses three World Bank Doing Business Indicators for "Starting a Business" – number of required procedures, cost and starting days- plus seven coded dummy variables accounting for years and type of country to predict the State Fragility Index (SFI from the Center for Systemic Peace). The data sample includes fragile countries, countries that managed to recover out of fragility, and low-income countries that have never experienced fragility for the years between 2004 and 2010. Along with this analysis we conducted several interviews with field experts in the subject.

We discovered that according to the SFI there are 28 highly and extremely fragile countries, which have warily shown any progress in the past two decades. For these countries aid methods should focus on technical assistance rather than on financial, and in improving local capability and easing the business environment: in our regression we found that the SFI variability can be explained in 86% by the predictor variables, which led us to conclude that policy-making in fragile countries should definitely focus in easing entrepreneurial activity. We were successful in constructing a sequential process through which these entrepreneurial activities would lead to development in fragile settings with the help of a framework. To construct this framework we worked upon the findings from a model recently created, applying the principles of Expeditionary Economics for the specific case of Pakistan, by the Kauffman Foundation, whilst integrating the Entrepreneurship Framework Conditions from the Global Entrepreneurship Monitor, and the Entrepreneurship Model from Carre and Thurik (2002). From this research we draw one conclusion: is high-time both international bodies and governments regarded entrepreneurship as a key driver of sustainable development in fragile settings.

# Resumo

Os países frágeis representam um desafio complexo para os governos e para os tradicionais modelos de ajuda externa: estes estados continuam a lutar com a sua condição de vulnerabilidade e pouca resiliência. Quando todas as abordagens têm falhado, será que o empreendedorismo pode constituir a chave para o problema?

Pouca pesquisa tem sido realizada à luz deste tema. Nós estudámos o que a presente literatura cobre sobre empreendedorismo e fragilidade, e fomos ver que diagnósticos conseguiamos adiantar com os dados disponíveis. Fizémos uma regressão linear múltipla usando três indicadores do World Bank Doing Business Indicators da secção de "Starting a Business"- número de procedimentos, custos e tempo necessário para abrir um negócio-, mais sete variavéis dummy referentes aos anos e tipo de país, para prever o State Fragility Index (SFI do Center for Systemic Peace). A amostra incluiu países fragéis, países que conseguiram recuperar e países de baixo rendimento que nunca experienciaram fragilidade no período de tempo entre 2004 e 2010. A par deste exercício realizámos várias entrevistas com professionais cuja área se relaciona com o nosso tema.

Descobrimos que existem actualmente 28 países fragéis (de acordo com o SFI) e que estes têm mostrado pouco ou nenhum progresso nas últimas duas décadas. Para estes países a ajuda externa deveria focar-se em assitência técnica em vez de dispensar apoio financeiro. Esta assistência deveria ter como prioridade o mellhoramento da capacidade governativa local assim como o facilitamento do clima empresarial: na nossa regressão encontrámos que a variabilidade do SFI podia ser explicada em 86% pelas variavéis independentes, o que nos ajudou a concluir que deveria haver uma atenção redobrada em facilitar actividades empreendedoras. Com sucesso conseguimos construir um processo sequencial através do qual o fenómeno de empreendedorismo pode levar ao desenvolvimento sustentável de países frag+eis, e fizémo-lo com a ajuda duma framework. Para desenhar esta framework recuperámos ensinamentos de três modelos: o do Kauffman Foundation desenvolvido para o caso do Paquistão, o do Global Entreprneeurship Monitor e o trabalhado por Carre e Thurik (2002). Desta nossa pesquisa e framework construída retiramos uma conclusão que consideramos basilar para os novos tipos de abordagem a países fragéis: grande parte da resposta para estes estados reside na capacidade que a força empreendedora da população tem de levar o país em frente.

# **Motivation**

The complexity clouding fragility has always baffled me, and ultimately has prompted me to experience such utterly different environment. Following old longings, past September I fled to Haiti as a collaborator of the Social Enterprise "Local Insight Global Impact" to accompany the launch of the pilot phase of a surveillance epidemiological system called Safe Haiti.

The project's necessities demanded a direct contact with the community and its struggles, and offered me a deeper insight on the effects of the unrestrained unemployment rate, the uncoordinated presence of international organizations, the dependence of the communities on these foreign actors, the prevalence of an informal market, the corruption in official entities, the lack of provision of public resources and services (roads, water, schooling, and healthcare, etc.) and the security problems.

Facing this fragmented scenario one would see no hope in the horizons of Haitians. Apparently there was all this international effort and resources allocated to this island. There were a countless number of organizations and independent bodies in the field, record inflows of money were disbursed to the Government and global wide awareness was raised around Haiti's fragile situation. Still, there was no hope. Even with high levels of commitment and financial help, these people were carrying heavy burdens just to conduct their daily lives. So what was missing?

I wondered if the missing ingredient was a boost in the population's entrepreneurial spirit. If the ruling actors and institutions were not finding the solution for the country's breakthrough, could the population itself be able to gather strength and climb their way to better living standards? On my return to Portugal I decided to take this question as a prompt for my thesis research, and investigate the role of entrepreneurship in fragile countries.

# **Acknowledgments**

It came with great pleasure to realize that I definitely went for the right option when deciding to major in Strategy and Entrepreneurship. The working process for this document started in Haiti but the learning I take out of it follows me in my consequent professional and personal engagements.

I would like to thank to Professor Susana Frazão Pinheiro for defying and allowing me to work with Safe Haiti, and for the mentorship throughout my work. I owe much gratitude to Professor Maria João Cortinhal, whose incredible availability in helping with the statistical analysis was remarkable and inspired me.

My sincere thanks to Donna Kelley, Aldi Saboer Surianingrat, Alejandro Caravia and Philip Harding, who were kind enough to share their much valuable insight and knowledge with me.

An obvious and hopefully big enough thanks to my family and friends, whose support was and will always, be the cornerstone of my work.

And finally thank you, João. Not only for sharing the unbelievable experience in Haiti, but specially for reminding me every day the basic premise behind this research: things can be done in a better way.

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# Introduction

In this research we look into the phenomenon of Entrepreneurship in fragile countries. Although this subject has undoubtedly gained more awareness in the past years, neoclassical theory doesn't cover it at much extent. Even the UN Millennium Development Goals make no reference to key expectations of people in fragile states such as justice, jobs and citizen security. Our aim is then to understand if entrepreneurship can be a vibrant driver for the economy to flourish and consequently become a cylinder for development in failing states.

Poverty is rapidly reducing worldwide. The past five years have witnessed the unprecedented figure of half a billion people rising up the \$1.25-a-day poverty threshold<sup>1</sup>. The World Bank in its last yearly review of countries income classification has estimated<sup>2</sup> the gross income for developing regions to be 30 per cent in 2010, a significant upgrade from the 18 per cent in 2000. This is mainly due to the higher growth rates that developing economies have witnessed, 6.8 compared to 1.8 per cent in high-income nations<sup>3</sup>. In short, this means good news: low-income countries can find their way out of the poverty trap.

However, such hope is not present across all developing countries as some are still marginalized from the opportunities that arise with globalization and carry the heavy burden of being identified as failing states. Depending on the measure taken there are 30 to 40 states denoted as fragile- Africa hosting the majority of these cases, followed by Asia and then by the Pacific Islands, Latin America and the Caribbean. This represents almost a billion people leaving in fragile contexts. Their condition is often inherited either from a prior or active cycle of conflicts, the natural resource curse, political transitions, deteriorating governance environments, poor governance or situations of continued crisis. In fact, no low-income or conflict-affected country has yet achieved a single UN Millennium Development Goal (UNMDG).

They are struggling to grow out of poverty and have consistently shown asphyxiated attempts to enter in a development path that leads to a more integrated and homogenous society, a well functioned and ruling government, and a sustained economy that nurtures state independence and strength.

<sup>&</sup>lt;sup>1</sup> Source: World Bank

<sup>&</sup>lt;sup>2</sup> These estimates were all taking reference to Gross National Income

<sup>&</sup>lt;sup>3</sup> Source: World Bank

Moreover, there is an increase in the share of poor who live in fragile countries. In deed these

countries expected to host half of the global number of people living under poverty by 2015

(Chandy et al, 2011). Such fact is signaling the failure of international engagement and is motif

for growing concern with these nations. The approaches and models have to be deployed in

congruence with the specificities of fragile cases. Despite the wide coverage and expertise

applied to this subject, the truth is fragility still remains as an unsolved puzzle: how can it be

fixed?

We were determined to understand if the missing link could reside in the actual individuals

and their entrepreneurial activities. We wanted to understand first, if the minimum conditions

were guaranteed for entrepreneurs to engage in projects; second, if such ventures could bring

a significant impact in the community or even for the whole country; and finally if it could push

the economy forward, bring the society together and pressure the government to become

more responsive. Putting in another way, it was our objective to understand if

entrepreneurship could be integrated in a New Development Framework, offering an

alternative for the current unsuccessful approaches and achieving a virtuous circle of

development and growth.

We then engaged in an exploratory research to first understand which are the current fragile

countries and how has their fragility status evolved overtime. For these countries we then

went to look within the data available, if there was any relationship between the variability of

fragility and entrepreneurship. Lastly we gather the knowledge collected from the research

and several interviews conducted to design a New Development Framework that would help

us in understanding if Entrepreneurship can and should be prioritized as a vital element for a

sustained turnaround for development in fragile countries.

For such we outlined the following research questions:

RQ1: Which are the current fragile countries?

RQ2: What does the data tell us about the relationship between fragility and

entrepreneurship?

RQ3: Can Entrepreneurship boost sustainable development in fragile countries?

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# **Literature Review**

# 1. Fragility

"When the Paris Declaration was agreed six years ago, fragile states were little more than an afterthought, occupying three paragraphs under the section on harmonization" (Chanty, 2011).

Overtime a shift in the distribution patterns of poverty across the globe has taken place. In 2005 low-income stable countries accounted for half of the global share of poverty, while now these account for just a tenth with poverty increasing in proportion in middle-income stable countries, and fragile countries (middle and low-income) (Gertz et al,2011).

According to different estimates there are currently between 30 and 60 fragile countries. Fragile middle-income countries which host one fifth of the world's poor pose a new and very relevant challenge, with the emergence of large countries such as Nigeria, Pakistan and Yemen into this group emphasizing the need for attention and new molds of engagement (Gertz et al, 2011). New approaches for fighting poverty have then to be set, and these have to prioritize assistance for fragile states as they have also been unable to meet a single Millennium Development Goal and represent already two thirds of low-income countries (Chanty, 2011; Gertz et al, 2011).

Recognizing the relevance of the problematic brought by these fragile states we need to make a closer look at fragility and to understand what does it mean to be fragile.

## 1.1. Conceptual overview

Only recently has fragility as a concept became subject of attention by development economists (CSP,2008)<sup>4</sup>. The first classification of fragility was the *Low Income Country Under Stress(LICUS)* category developed by the World Bank, which relied on the assumption that the state was stuck in the pre-development phase (Gertz et al, 2011). However, such categorization rules out current fragile middle-income countries which have embarked in a somewhat sustained economic development but are still struggling with deficient attempts to attain stability and improved capacity and governance (Gertz et al, 2011).

Other international institutions have then developed their own instruments, theories and measures to analyze and address these states, nevertheless despite the differences regarding

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<sup>&</sup>lt;sup>4</sup> Center for Systemic Peace (CSP)

methodology, they all tend to be similar and country lists from different organizations often overlap (IMF, 2011).

# **Definitions and Methodologies**

The World Bank defines a fragile state "as having either: a) a composite World Bank, African Development Bank and Asian Development Bank Country Policy and Institutional Assessment rating of 3.2 or less; or b) the presence of a United Nations and/or regional peace-keeping or peace-building mission (e.g. Africa Union, European Union, NATO), with the exclusion of border monitoring operations, during the past three years." Country's Policy and Institutional Assessment (CPIA) data is a key factor of International Development Association (IDA) Performance Allocation System. Countries are considered core fragile if their CPIA score is between 3.0 and 3.2 (over a range of 1 to 6). There is, however, some margin and uncertainty around these scores, and hence these definitions constitute mainly guidance for policy making and should not therefore be interpreted as absolute. Nevertheless, it is the only rating to offer available info since 1977 and it was specifically designed to compare countries.

This definition from the World Bank has been used and suffered some modifications from other authors. Bertochi et al (2010) introduced a more extensive definition of extreme fragility in their study regarding the Sub-Saharan Africa (SSA) region. They classified as extremely fragile countries the ones which belonged to the bottom quintile of CPIA ratings, and the ones that didn't even have any rating.

The OECD Development Assistance Committee (DAC) defined fragile states as "unable to meet [their] population's expectations or manage changes in expectations and capacity through the political process". They have demarked fragile countries as those whose CPIA ratings are placed in the bottom two quintiles or the ones that are not rated.

UK's Department for International Development (DFID) has a similar definition to OECD which focuses on service entitlements: fragile countries are "those where the government cannot or will not deliver core functions to the majority of its people, including the poor", referring to service entitlements, justice and security (DFID, 2005). This definition does not restrict it to conflict or immediate post-conflict countries.

# **Indices of State Fragility**

There are three major indices of state fragility, and each is compounded by different indicators and uses a distinct weighing system (Goldstone, 2008):

- 1) The Foreign Policy/Fund for Peace "Failed States Index";
- The Brookings/Center for Global Development "Index of State Weakness in the Developing World";
- 3) The George Mason University Center for Global Policy "State Fragility Index"

All of them provide only yearly reports, and the first two have limited time coverage: the "Failed States Index" has published only six editions (since 2005) and the "Index of State Weakness in the Developing World" only released one yearly report regarding 2005 and 2006 data. The "State Fragility Index", on its' turn, has continuously released reports since 1995 and is developed upon the research of the Political Instability Task Force and the CSIS study of fragile states. This latter constitutes hence the most encompassing index offering a retrospective analysis of the countries' evolution. This index aggregates political, economic, social-demographic, and security factors each measured separately according to qualities of effectiveness and legitimacy. They are in total 15 indicators: Effectiveness Score, Legitimacy Score, Security Effectiveness, Security Legitimacy, Armed Conflict Indicator, Political Effectiveness, Political Legitimacy, Regime Type Economic, Effectiveness Economic Legitimacy, Net Oil Production or Consumption, Social Effectiveness, Social Legitimacy and Regional Effects. They show all the scores each country has on every indicator, which eases the evaluation on fragility. In terms of data availability they have collected SFI for all countries with more than 500,000 habitants since 1995. The SFI ranges from 25 to 0. On one edge we have Extreme Fragile countries (SFI equal to 25) which GDP<sup>5</sup> per capita is 400\$ or less (constant 2000 \$US). Zero fragility on the other edge relates to a level of governance that conducts to responsive governance, it doesn't signify though that it is a maximum level of well-being.

# Concepts of State Failure and State Building

The concept of "fragility" encompasses a wide spectrum of different country settings, but across the majority it is closely related to a state which fails to execute its basic functions and has deficient legitimacy and authority (Stewart et al, 2010). A failing state hampers the possibility of progress and leads fragile countries into a capability trap where even in an optimistic scenario it would take them a very long time to grow functional competency (Pritchett et al, 2010).

The UNU-WIDER<sup>6</sup> 2010 Report regards Political Participation- which refers to constitutional design, electoral politics, human rights protection, the legal and justice system,

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<sup>&</sup>lt;sup>5</sup> Gross Domestic Product

<sup>&</sup>lt;sup>6</sup> United Nations University- World Institute for Development Economics Research (UNU-WIDER)

decentralization and political culture- as the cornerstone for attaining a successful transition for fragile states, especially for countries which are phasing out from conflict.

The Center for Research on Inequality, Human Security and Ethnicity (CRISE) proposes a definition of fragility which is applied to a country which is failing or at high risk of failing. They use the premise that there are three different types of failure: authority failures, service entitlements failures and legitimacy failures. They also make a distinction between risk of failure and failure. "Fragile states are thus to be defined as states that are failing, or at risk of failing, with respect to authority, comprehensive service entitlements or legitimacy" (CRISE, 2009). This definition encompasses the notion of failure in a comprehensive way and not only referring to the exclusion of services to the poor fringe of the population.

The Development process starts with an effort by the state to build its ability to function (Pritchett et al, 2010). (OECD-DAC, 2008) <sup>7</sup>defined State building as a "purposeful action to develop the capacity, institutions and legitimacy of the state in relation to an effective political process for negotiating the mutual demands between state and societal groups".

This process of state building can result in a responsive path towards development or in an ineffective one. When there is an emphasis given to three core areas of progress: Political settlement, Survival Functions and Expected Functions; the process of state building is said to be responsive (DFID, 2008). "Political settlements are in essence political settlements that are in place wherever those with the power to threaten state-structures forego that option either for reward (which may simply be personal security), for the sake of belief, or to wait an opportunity to become the government overseeing the existing structures" (DFID, 2008). In general, political settlements are enshrined in a document, which normally is a Constitution; are not static; and transfers of governments can be either violent or peaceful without changing the structures and rules of power; in short, political settlements are often the crucial basis for guaranteeing the success of state building and peace building (DFID,2008).

Survival Functions are the ones that regard security, revenue and law. "Security" is the ability to control the use of violence; "revenue" refers to the capacity of collecting funds in a sustainable way (namely through taxes); and "law" considers the power of ruling through an existing framework of laws (DFID, 2008). When a state is successful in the path of ensuring the ability to convey this three core functions, it is then able to develop competence in other areas (DFID, 2008).

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<sup>&</sup>lt;sup>7</sup> Organization for Economic Co-operation and Development - Development Assistance Committee (OECD-DAC)

Expected functionality makes reference to the expected level of functionality that a state achieves when is in its progress of state-building. What can be seen as expectations? Well they are "the result of the aggregation and expression of shared preferences and opinions, a process often dominated by organized avenues for expression, such as political and civil society" (DFID, 2008).

Sometimes, on the contrary of what happens in the responsive model seen above, settlements do not make a positive contribute to strength the state and its functionality. An unresponsive state is described as ineffective, repressive and corrupt (DFID, 2008). How can political settlements drive a state towards a non-responsive model?

One possible cause, introduced by Khan (2009) is the even sharing among political and economic elites as it leads to an unstable settlement which tries to keep key constituencies pleased. In developing countries there is an informal power network which may compromise state building in western kind of model and as Khan (2009) explains: "Institutions and the distribution of power have to be compatible, because if powerful groups are not getting an acceptable distribution of benefits from an institutional structure they will strive to change it".

# 1.2. How to fix Fragility?

Among the community of foreign policy and donors there is a growing concern with fragility, and such interest is primarily related to the alarming sequence of negative externalities that conflict and state failure may cause (Chanty, 2011). To fight fragility traps, international organizations must be wary of what the causes of fragility are, of when is a country considered to be in a development path and on what the flaws of international engagement with these countries are.

# a) Causes of Fragility

Most fragile states' history is broadly characterized by conflict, and many are just breaking into a post-conflict phase (UNU-WIDER, 2010). Their fragility is interrelated to continuing violence and insecurity, weak governance, legacy of conflict and lack of means to deliver public goods or services in an equitable and efficient way (Mcloughlin, 2010).

But what are the roots of such violence and insecurity that oppress these states with a fragile development? Kaplan (2010) sets that these might be a fragmented population, a noncohesive society and elite. Such inferring follows the thought that fragmented societies are

more likely to have worse economic performance than more homogeneous ones, since they present less trustable environments which then raises transaction costs (Collier, 1998).

Another explanation is given by Goldstone (2008), who tracked five different trajectories that may have arrayed countries' fragility: Escalation of communal group (ethnic or religious) conflict<sup>8</sup>, State predation (corrupt or crony corralling of resources at the expense of other groups)<sup>9</sup>, Regional or guerrilla rebellion, Democratic Collapse (into Civil war or by Coup d'état)<sup>10</sup> and finally Succession or Reform Crisis in Authoritarian States<sup>11</sup>.

An additional interesting fact mentioned by Bertochi et al (2010), is that for the case of African Sub-Saharan (SSA) region -which hosts the majority of fragile countries- the reasons behind the poor development are not majorly related to any historical factor (nationality of colonizers or incomer mortality) neither to geographic characteristics.

# b) Pathway from Fragility: Development process

The development process comprises economic, political, administrative and organizational, as well as social evolvements: the economy becomes more productive, administrations more effective and polities more just (Pritchett, 2010). Orthodox theory predicts a development pathway from fragility to stability to income growth (Gertz et al, 2011), but such transition results in very long-terms attempts (Chanty, 2011).

The question then is how can a fragile country enter in a development stage? Collier (2007) in his study regarding the necessary pre-conditions for turnaround of failing states, defines these as those who were consider as low-income countries for at least one year by the World Bank and which have presented a CPIA<2,5 for at least four years. He then sets that a turnaround is consider to be when a country passes from having a CPIA of maximum 2,5 to have at least 3, and that would stay at least for two years with such classification. He discovered that there were found three relevant explanatory variables for this model: the percentage of the population with secondary schooling, the resource rents relative to the GDP and population. He has also found that financial assistance has a negative coefficient but that technical assistance has on the other hand a significantly positive one.

The progress towards improved governance by a fragile state can result in a very slow one. Chanty (2011) illustrates such sluggish recovery and refers that even if it were going to evolve at the rate

<sup>10</sup> Nigeria, Madagascar

<sup>&</sup>lt;sup>8</sup> Rwanda, Liberia, Yugoslavia, Lebanon

<sup>&</sup>lt;sup>9</sup> Nicaragua, Philippines

<sup>&</sup>lt;sup>11</sup> Examples: Indonesia under Suharto, Iran under Shah, Soviet Union under Gorbachev

registered by stable countries it would take around 100 years for a fragile country to reach the standards of a country like Malawi. Collier (2007) also quantifies the delicateness of this development process and concluded that the probability of a sustained turnaround at any given year was as low as 1,85 % for fragile countries and further said that one might stay as failing state for as long as 54 years. In its report "Making Peace Work: The Challenges of Social and Economic Reconstruction (2009)" UNU-WIDER states that a sustained turnaround can only take place if there is a transversal attention to different development areas (e.g. health, gender issues, ethics and horizontal inequalities) feeding the mutually reinforcing binding between peace, prosperity and participation.

# c) International Engagement

Fragile states represent not only the most challenging development need s (Chandy, 2011), but also the most problematic landscape for external players to implement strategies to eradicate poverty (Gertz et al, 2011). For this duality of concerns these states constitute one of the most puzzling matters for development community (Chanty, 2011).

The Western approach tends to overlook the complex political thread that sets a huge constraint on development for these countries, when it should instead concentrate efforts in easing local processes, boosting local capacity and work with local actions (Kaplan, 2010). For the past decades aid agencies have plugged their energies towards settings that had critical development needs and offered good governance, and such scrutiny led to growing attention to low-income stable countries and a neglected allocation of resources to fragile states (Chanty, 2011). Donors continued on accumulating expertise and knowledge of low-income stable countries (Chanty, 2011), but as Levin et al (2005) referred fragile countries have received less aid and poor analysis have been done regarding the performance of patterns of aid in fragile settings. Poverty distribution of poverty has changed and international actors have to commit themselves with new efforts and leave this paradigm applied until now (Gertz et al, 2011). Aid must change from its traditional approach and shift from "being primarily a source of hand-outs, to helping developing countries build strong institutions that will assist them in overcoming barriers and creating an entrepreneur-friendly environment" (Abraham, 2011).

There is also a growing role of non-Western actors across the developing world, namely China, India, Russia, Brazil, South Korea, the Gulf States, Turkey and South Africa. Trade and investment (along with cultural ties) from these rising powers have significantly more impact in their regions than Western aid has. China in particular is the member of the UN Security

Council that contributes with more UN peacekeepers, has intensified its economic relations with developing nations: increased trade, has invested in agriculture, infrastructure and industry, is planning to set up 10 industrial zones and has reduced tariffs to products from these regions (Kaplan, 2010).

In order to be successful the first thing to set is then that it must be a multi-polar engagement, with a reunion of knowledge from Western and rising powers, and the latter should have bigger weight in setting development policies (Kaplan, 2010).

# g7+: "Goodbye Conflict Welcome Development"

The g7+ is a group of the world's most fragile states and it was established in April 2010 in Dili, Timor Leste. Originally there were only seven members but now there are 19 covering Asia, Africa and the Pacific. These are Afghanistan, Burundi, Central African Republic, Chad, Côte d'Ivoire, The Democratic Republic of Congo, Guinea Bissau, Guinea, Haiti, Liberia, Nepal, Papua New Guinea, Sierra Leone, The Solomon Islands, Somalia, South Sudan, Timor-Leste (Chair) and Togo. Last November they had their premiere collective and formal contribution in defining global policies, in the IV High Level Forum on Aid Effectiveness. The Forum, held along with the International Network on Conflict and Fragility (INCAF), had a valuable output, "The New Deal": a document which enshrines the needs of fragile states and will be in course of action until 2015. Its objectives are put in a very straightforward way: "Stop Conflict, Build Nations and End Poverty"; ultimately it enhances the importance of citizen-citizen and citizen-state trust so that the right conditions to push the process of state-building, peace-building and foment state's legitimacy.

# 2. Private sector

"All economic growth takes place at the level of the productive enterprise."

Arnold C.Harberger

Across the literature it has been widely discussed the importance of the private sector to ensure the stability of a country and support its development. In fact, the truth is that even when fragile states are experiencing the most hostile environment the private sector continues to function.

Fragile countries require more political assistance than technical (Gertz et al, 2011) and aid should primarily address government failures which in turn result in market failures (Chanty, 2011). Policy formation has to be done through domestic efforts, and aid cannot aspire to undertake such process (Devarajan et al., 2001), specially under such unpredictable scenarios where local partners often prove little reliability (OECD DAC, 2001). Donors have been reluctant in getting themselves involved, political wise, as reforms can distorts the power balances that exist between elites<sup>12</sup> (ChanTy,2011). According to the 2011 World Development Report (WDR) efforts have to be reunited to monitor institutions so that they pay premium attention to security, justice and jobs.

Despite the worrying settings, aid can excel in results (Chanty,2011), but the means through which external actors can conduct good results in policy reforms in fragile countries are yet not well designed and constitute an important subject for future research (Gertz et al,2011).

Ironically and as Chanty (2011) highlights these sectors which were prioritized are the very ones for which international development community has little expertise. Under the light of such incongruence, Chanty (2011) points some observations for donors to take into account when implementing policies: to track success cases in key sectors for later replication on other countries, to partner with domestic and external stakeholders, to develop new metrics to evaluate changes and its impacts<sup>13</sup>, and finally to conduct perceptions surveys<sup>14</sup>. ~

# 2.1. The role of the private sector in developing countries

"The private sector accounts for 90% of jobs in developing nations, and poor people rate selfemployment and jobs as the two most promosing ways to improve their situation." (Smith, 2006).

Although international assistance plays a key role, business is the main driver of a sustainable development: it brings down unemployment, boosts productivity, lowers the prices of goods and services, generates funds for public programmes and most important helps in freeing the government from foreign aid (Kaplan, 2009). According to the Centre for Global Development, in its report regarding Africa's Business Environment, increased productivity is a necessary

<sup>&</sup>lt;sup>12</sup> The author points the main stakeholders of this so called elite as: soldiers or police, judges or tax collectors, NGOs or indigenous leaders.

<sup>&</sup>lt;sup>13</sup> To better measure administrative and political progress. Here the authors points the limited coverage of the World Bank's World Development Indicators database and the Human Development Report's statistical annex.

<sup>&</sup>lt;sup>14</sup> In order to assess changes in the perceived legitimacy and confidence in institutions.

condition for economic growth: it leads to the generation of jobs and augments in incomes, which feeds a sustained middle-class that leads in turn for an upgrade of political accountability and the solidification of democratic institutions and processes.

Channell (2011) in his study departs from the basic paradigm that economic growth is essential to stability and that it happens at the firm level; in conflict- affected states there are high-risks and hence high-costs, hence interventions for helping firms to suceed should seek to reduce risks and costs. And for the example of Somalia, according to the OECD (2011) in its report "International Engagement on Fragile States", the country can still present some hopes in the form of a flourishing private sector, despite the vulnerable combination of poverty and conflict.

There are examples of how private initiative can lead the country out of a poverty stage into a development era. Fields et al. (2003) have identified that there are two critical cornerstones for reducing poverty: investment climate and empowerment. In fact, according to the UNDP (2011) in the report "Unleashing entrepreneurship: making business work for the poor" there is a strong co-relation between the reduction of poverty and economic growth, and then there is also a clear linkage between economic growth and strong private investment. This can all have a positive impact in the quality of the lives of the poor. In their study ranging 50 developed countries and three decades, Bouton et al (2000) have shown that countries with higher growth were the ones that had had higher private investment. Moreover it is very difficult for a country to grow out of poverty with strong domestic investment based in domestic savings (UNDP, 2011).<sup>15</sup>

# 2.2. Environment Analysis

# Challenges: How to bypass them?

Doing business in a fragile country is assuming up front a big challenge, as any company is going to face a hostile context to develop or implement its activity. According to the Doing Business indicators while non-fragile countries rank on average 78th out of 183 countries, the fragile rank around 144th. The World Bank Group's Enterprise Surveys reveal that firms consider electricity to be the main constraint that they have to surpass, followed by access to finance, political instability, practices of the informal sector and corruption.

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<sup>&</sup>lt;sup>15</sup>World Bank, Unleashing Entrepreneurship Report, 2011

UNDP (2011) <sup>16</sup>found that there were three main challenges faced by companies operating in all developing countries: the informality that rules across small and medium enterprises, the existence of strong barriers to growth and the absence of competitive pressure to push companies to become more innovative and productive.

According to the UNPD (2011) what determines the strength and sustainability of the private sector is related to the existence of physical and social infrastructures, the rule of law, and foundations in the global and domestic macro environments. Economic growth is very much driven by open markets, good-quality foreign investment, effective development aid, peace and political stability, policy predictability, transparency and accountability. The existence of strong and reliable physical and social infrastructure -roads, ports, telecommunications<sup>17</sup>, basic education and health- improves both the lives of the poor in a direct way and enables the growth of businesses. These infrastructures are dependent on capital investment, efficient contracting, and credibility of public and private management. A high level of human capital seems to be one of the leading factors in enabling a market economy to grow, as companies can rely and benefit from a healthy and educated workforce. Rule of law specificities in the private sector are translated into commercial, customs and contract laws. Nevertheless, without transparent and effective administration there may be frustrated outcomes, such as fostering oligarchic settings along with firm's corruption. If the set of existing laws result in unclear schemes it will constitute an incentive in itself for businesses integrate the informal sector. Informality is an almost intrinsic feature in developing nations' market economy and legal system<sup>18</sup>, and it often shades away the formal; in fact the poorest countries are usually rated as corrupt. Informality and corruption alter prices and markets, hampering free and fair competition and ultimately economic growth rate: the World Bank (2011) estimates that corruption alone can decrease the latter by 0.5 to 1.0 percentage points a year.

#### Constitution of the private sector

According to IFAD (2007)<sup>19</sup> a large part of the private sector in low-income countries is constituted by small farmers, herders, woman-headed households, rural wage-earners, rural micro-entrepreneurs and small agricultural traders

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<sup>&</sup>lt;sup>16</sup> Report "Unleashing entrepreneurship 2011"

<sup>&</sup>lt;sup>17</sup> Inefficiencies due to poor physical infrastructures led to a yearly loss of 55 billion dollars in developing countries, during the early 1990's. (UNDP report, 2011)

<sup>&</sup>lt;sup>18</sup> In developing nations an estimated 80% share of legal issues of the poor are dealt within customary or informal systems (UNDP report, 2007)

<sup>&</sup>lt;sup>19</sup> Private Sector Development and Partnerships, Report 2007

In developing countries, small and medium sized firms are the ones that employ more people across countries and create more jobs, but present however not the best contribution neither to economic growth nor to boosting productivity as they are conditioned by poor policies (Demirgüç-Kunt et al, 2010).

Normally the poor form the private sector and the goods and services offered are normally to the poor as well. The bottom of the pyramid market is the ensemble of people that earn less than \$1,500 a year (Prahlad et al, 2002). The problem according to the UNDP report is that these goods are mainly delivered by an informal sector, which doesn't guarantee a reliable quantity, and moreover practices higher prices. In the case of the poor they have increasingly more access to basic services due to private investment<sup>20</sup>. This private initiative can encompass the rural fringe as well as the urban troubled zones.

# 2.3. Sectors of Activity

According to the World Bank Group Entrepreneurship Database (2007) there is a clear disproportional distribution of business concentration across sectors of activity between developed and developing countries. In developing regions the percentage of businesses in wholesale retail and trade, and finance sector doubles the one in the developed countries; whereas the percentage in industry and services sectors is halved. The reason behind this distortion may be the lower need of investment, human resources, knowledge and capital.

Fragile countries' economies are substantially driven by their rural sector, and this has been a truth for many years. 75% of the population which lives on less than a dollar a day, is part of the rural area and is relying to survive on what they produce (subsistence production); in Africa the agriculture sector represents 30 per cent of the GDP (UNDP, 2008). There is however a shift happening, as previously the State would be entitled of the development of this sector, whereas now it has been mainly promoted by private investment. This means the activities that were usually dominated by the State have been opened up to the market and this is happening across the developed world (UNDP, 2008). The rural sector itself is also changing with the increasing integration of the developed economies in the global environment, along with the development in the information and communication technology, the continuing

<sup>21</sup> In the 1990's the domestic private investment averaged 10-12 per cent of GDP, while public investment was 2-5 per cent (UN, 2004).

<sup>&</sup>lt;sup>20</sup> 63 per cent of health expenses in the poorest countries are affected to the private sector, whereas in high-income countries that belong to OECD this number is halved.

generation of income from microfinance and remittance and the evolving structure of agrofood chains and the rapid expansion of supermarkets (UNDP, 2008).<sup>22</sup>

# 3. Entrepreneurship

"Entrepreneurs are individuals who, in an uncertain environment, recognize opportunities that most fail to see and create ventures to profit by exploiting these opportunities" (Gunter, 2011).

The process through which an individual turns into an entrepreneur is very much complex, and it comprises five essential elements: entrepreneurial capabilities, knowledge/skills, motivation, social mobility and, of course, economic incentives (Guglielmetti, 2010).

In this section of the literature review, we will examine how these entrepreneurs' activity can impact in development, scoping the existent models and frameworks that are inclusive with the relevant variables for the dynamic process.

### 3.1. Entrepreneurship and Development

"The level and quality of entrepreneurship make a difference in the economic vitality of communities, regions, industries and the nation as a hole" (UNU-WIDER, 2010).

Entrepreneurship is increasingly been viewed as a vital component in the economies' organization (Thurik, 2008) and been integrated in the framework of economic growth (Maltsev, 2008). There are consistent findings that there is a strong relation between greater entrepreneurship level and higher GDP per capita, and with greater financial development as well (Klapper, 2006). Indeed, according to Abraham (2011), entrepreneurship has to be stimulated as a vehicle for economic development as growth private businesses – as already covered in the first section of this literature review- create new jobs, increase societies' comparative advantage (GEM, 2010), supply consumer goods, build reform momentum (Fields et al, 2003) are not dependent on handouts and aid, and often create more wealth fare effects than state run businesses (Abraham, 2011).

<sup>&</sup>lt;sup>22</sup> This is especially true in the Latin American context, where supermarket chains control around 60 percent of the retail food market.

Western Europe and North America's developed economies which have benefited until the late 1980's from the model of managed economy, where growth and business outputs was dictated by essential y the combination of capital and labor, have now new challenges: the new competition from low-cost but skill-intensive countries in Central and Eastern Europe as well as Asia, and the information technology advancements that have lowered the shifting costs of transferring capital and information for these new locations (Thurik, 2008). Therefore developed economies' competitive advantage has to rely on activities based on knowledge and in intellectual search, as these that cannot be easily transferred from one location to another (Thurik, 2008). Thurik (2008) defends that an economy whose competitive relies on knowledge is more consistent with the model of entrepreneurial economy rather than the model of managed economy. There is strong evidence that entrepreneurship introduces innovation, enhances rivalry and creates competition and that through such mechanisms it can leverage the performance of a country's economy (Acs et al, 2008). This model of entrepreneurial economy can only be supported for the case of developed countries, as emerging economies experience a mix of a managed and entrepreneurial one.

But this view of Entrepreneurial Economy can and should be enlarged to developing economies according to different authors. All this theoretical background has been emerging only for developed economies (Thurik, 2008), whereas for the specific case of fragile countries, the concept of entrepreneurship has been poorly researched, as well as its impact in fighting poverty in such states (Addison et al,2009). Nevertheless, empirically there are observations from the field that show how entrepreneurship can generate new employments and indeed flourish in such environments and function as source for new employment (CDBS, 2010). It can result as a building block in establishing peace in conflicted affected states, but it is the repercussion on the structure of incentives that the society offers that is going to determine whether it is going to lead development or not (Addison et al, 2009). It is this delicate balance of powers that reflect the role of entrepreneurs and whether it is a good or pervasive one (Addison et al, 2009).

The setting surrounding private firms, as covered previously, is definitive for the success and nurturing of the private sector. Policies that aim towards enabling a sustainable and profitable environment have to be in the most urgent pipeline of priorities and actions of the Governments. Among these one would highlight i.e. cutting the red tape of a burdensome regulation, granting the rule of law and reducing taxes. However, such policies, as recorded by Naudé (2007), are not in themselves a sufficient condition for entrepreneurship development

or development of the country itself. Especially, for post-conflict countries or fragile countries, which atmospheres are burdened by uncertainty (Wohlmuth, 2004).

Noteworthy is also the concept regarding informal entrepreneurship. The informal sector can offer a possible alternative for entrepreneurs, when comparing to the salaries and protections attained as an employee in the formal sector (Fields et al, 2003). The informal sector can constitute an entrepreneurial breeding ground, and should therefore be not suddenly alienated by government's policies as it can generate important spin-off for development (GEM, 2008).

In Fragile States as there is the prevalence of the informal sector and poor governance, Gary et al. (2003) documented the importance of repeated transactions between partners, nurturing trust, a vital element when there is poor enforcement of formal contracts. This is even more critical when we consider that when there is also no formal financial market, and firms are often very much dependent on suppliers' credit<sup>23</sup>. The reputation of a firm is hence critical when establishing new partnerships. Vietnam poses an interesting case, where the creation of trade organizations aimed spreading information regarding who breached contracts and coordinating sanctions of these. Nevertheless, as the same authors Gary et al (2003) note, although these trust mechanisms are crucial in allowing more complex transactions between partners, it is restrained by natural limits. Ultimately, there is the need for the state to support entrepreneurship. This support comes with proper laws of contract and courts capable of enforcing them. This allows relationships among anonymous partners (for example, those who live in distant cities), production of more complex good and services (as customers are able to for instance order in advance of production) and finally more ambitious investments ( if firms can invest more than their retained earning they can start to benefit from economies of scale).

# 3.2.1. Conceptual and Empirical Frameworks to link Entrepreneurship and Growth

# i) Global Entrepreneurship Monitor

Global Entrepreneurship Monitor (GEM) was formed in 1997 under the mentorship of two scholars: Michal Hay (London Business School) and Bill Bygrave (Babson College). The analyses of the Global Entrepreneurship Monitor (GEM) according to UNCTAD (2004)<sup>24</sup> constitute one of the most important sources for statistical analysis of the relationship between entrepreneurial activity and economic growth. Another body, the Global Entrepreneurship

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<sup>&</sup>lt;sup>23</sup> In their study, (Gary et al,2003) found that 53 percent of the surveyed manufacturers the bill was paid in credit.

<sup>&</sup>lt;sup>24</sup> United Nations Conference on Trade And Development, 2004.

Research Association (GERA), was created some years afterwards and it was intentioned to overseeing GEM's activity. GERA's mission is to foster entrepreneurship that leads to global economic development. GERA contributes mainly by adding research regarding the factors that impact levels of entrepreneurship among countries, policies that foment entrepreneurial activity and by allocating resources to increase education's role in fomenting entrepreneurship. GEM on its side conducts its activities essentially to pursue three objectives: to evaluate the disparities across countries in entrepreneurial attitudes, activity and aspirations, to determine the factors affecting entrepreneurship levels in national terms, and studying the implications of policies in the country's economy. GEM covers now both developed and developing countries, and started using the opportunity-necessity ratio as a composite indicator of entrepreneurial activity and economic development. The GEM model (Appendix C1) summarizes and conceptualizes the relevant national conditions to foment entrepreneurship and impacting economic development. It addresses the relationship between national-level business activity and institutional environments (Acs et al, 2008). The institution organizes these in nine Entrepreneurship Framework Conditions (hereafter EFCs) where entrepreneurship is likely to flourish: Entrepreneurial Finance, Government Policy, Government Entrepreneurship Programs, Entrepreneurship Education, R&D transfer and Commercial and Legal Infrastructure, Entry Regulation, Physical Infrastructure and finally Cultural and Social Norms. These EFCs are "the necessary oxygen of resources, incentives, markets, and supporting institutions to the growth of new firms" (Bosma et al,2008). The EFCs are only likely to impact if there are basic requirements and efficiency enhancers: reliable and functional institutions, infrastructures, primary education and health, macroeconomic stability, higher education and training, markets efficiency, labor market efficiency, financial market sophistication, technological readiness and finally market size. Entrepreneurs achieve more remarkable results when integrated in a stable socio-economic and political environment, and if supported by stable institutions (GEM, 2010). When economies are still latent in the Factor-Driven Development stage, the first concern of government should be to meet first the basic requirements (GEM, 2010).

In this yearly Global Report, guided by the EFCs, GEM assesses Institution's Quality, by National Experts<sup>25</sup>. The institution also deploys an Adult Population Survey (APS) to measure the entrepreneurial attitudes, activity and aspirations. While undergoing this report, it makes distinction between three types of entrepreneurship:

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<sup>&</sup>lt;sup>25</sup> In the report of 2010 GEM included 59 countries.

- ambitious entrepreneurship: medium/high job growth expectation early stage entrepreneurial activity (MHEA);
- ii. less ambitious entrepreneurship: low job expectation early stage entrepreneurial activity (SLEA);
- iii. entrepreneurial employee activity (EAA)

According to GEM Global Report of 2010, the Factor-driven economies own the highest rates of Total Early Stage Entrepreneurial Activity (hereafter TEA), and are followed by the Efficiency-driven. This difference is stirred by the development levels and necessity versus opportunity motives. Lower development levels are typically associated with a higher number of entrepreneurs, however these individuals do not grow innovative, dynamic or international oriented businesses.

# ii) Entrepreneurship Model (Carre and Thurik, 2002)

In their study, Carre and Thurik examine the determinants of entrepreneurship from three different levels: the individual, the firm and macro. This framework constitutes an important step in bridging management and macroeconomic into the light of studying entrepreneurship. The individual level relates to the motives and decision-making processes that lead an entrepreneur to start his own business; the firm level analysis entrepreneurship at the market dimensions (i.e. profit opportunities); finally the macro level focus on a forth fold analysis: it circumscribes technological, economic, cultural variables as well as government regulation. This model also envisages the inter-relationship between the three, and supports that in order to foster entrepreneurship there should be a forth fold approach, reviewing the role of the individual, the firm, the government and other stakeholders (such educational institutions).

# iii) Kauffman Foundation (New Growth Framework, 2012): A Framework for Applied Expeditionary Economics in Pakistan

A major goal of this framework is to serve as starting point for structuring development strategies for countries that resemble Pakistan. It departs from the Principles of Expeditionary and applies them to a new growth framework. Pakistan falls into the group of factor-driven stage development (according to WEF country groupings). Until now, traditional aid approaches have failed to reverse Pakistan's slow growth and cycle of violence. In his study (Looney, 2012) successful countries, that have relied their approaches in fostering entrepreneurial activity have been able to sustain growth, and this is very much due to the ongoing reforms motivated by the new vibrant entrepreneurial class. Entrepreneurs, emerging

as relevant and dynamic stakeholders, can then initiate a virtuous cycle of increased economic liberalization, extended entrepreneurship, expanded growth and improved governance. The more relevant finding to take away for all the countries that resemble Pakistan in fragility and instability is that it is possible to foster entrepreneurship in the short-term without a significance improvement in governance, as long as there is a focus in liberalizing trade and improving business climate(Looney, 2012).

# **Expeditionary Economics**

The thinking behind Expeditionary Economics sheds a focus "on the role of indigenous entrepreneurship in spurring economic growth post-conflict or post-disaster" (Kauffman Foundation, 2010). The concept was firstly introduced by Carl Schramm, Kauffman Foundation's president and CEO <sup>26</sup> and it was originally formulated to assist countries that were moving out from conflicts, for which cases the normal approach through aid and stabilization mechanisms often delivered poor results. Expeditionary Economics brought a new theoretical and empirical ground to enhance the particular role that Entrepreneurship plays in fostering development in post-conflict cases (Looney, 2012).

The principles taken from Expeditionary Economics can achieve more results in building a more fruitful flowchart of oriented actions towards development, especially in the fields where the state is failing to provide such thrive. From Pakistan's case the implementation of Expeditionary Economics can immediately translate itself into growth employment and stability. Then on a medium and long-term, the entrepreneurial class is able to actual lead the country to higher levels of development, as long as there are ongoing institutional reforms.

# iv) Entrepreneurship Indicators

There is not a unique indicator able of encompassing the diverse dimensions of entrepreneurship, and for policy making according different objectives rulers should guide themselves through different measures (OECD, 2010). We can divide these indicators into two: static and dynamic measures of entrepreneurship. An example of static indicator is for instance the business ownership rate, whereas as example of a dynamic would be the young business entrepreneurial activity rate.

GEM introduced three important dynamic measures of entrepreneurship. The young business entrepreneurial activity rate, defined as the percentage of the adult population that is the owner/manager of a business less than 42 months old. The nascent entrepreneurship rate is

<sup>&</sup>lt;sup>26</sup> Essay in the May/June 2010 issue of Foreign Affairs

defined as the percentage of the adult population 28 actively involved in starting a new business. And the third one, which is the sum of these two, the Total early-stage Entrepreneurial Activity (TEA), including the activities of both nascent entrepreneurs and owner-managers of young businesses (Bosma et al, 2008).

The World Bank Doing Business (WBDB hereafter) indicators offer a positive and normative relevance as indicators of entrepreneurship, and they cover a wide geographical range. About one third of the countries reviewed by the WBDB, are fragile or in an armed conflict, which makes them a precious tools as they provide a unique insight for these countries, for which normally there is simply no data available regarding business environment or performance. World Bank's Doing Business presents quantitative indicators on business regulation and the protection of property rights that can be compared across 183 economies overtime. WBDB work under the premise that an entrepreneurial private sector promotes economic growth and increased the opportunities for the poor. However, WBDB does not consider any context variable<sup>27</sup>, it restricts the analysis by measuring different inputs for entrepreneurship development and follows by ranking the countries accordingly to do the dimensions measured (Guglielmetti, 2010).

WBDB indicators cover eleven areas of business, but I have chosen to track the evolution of only those related to "Starting a Business". There are four indicators related to "Starting a Business" dimension: the number of procedures needed to start a business; the time required; the cost as percentage of income per capita and the paid minimum capital The first three-Starting Costs, Starting Days, and Number of Procedures- were found to be negatively related with the growth of new businesses (Klapper, 2010).

#### 3.2.2. Entrepreneurship and Stages of Development

# i) Necessity vs. Opportunity

Necessity entrepreneurs start their business when and where the basic requirements for business are not present, generating benefits within their society and contributing for development (GEM, 2008). Opportunity entrepreneur, on the other hand, are individuals that have turned entrepreneurs because they perceived and chased an opportunity by realizing that it would entail a positive trade-off with their current situation (Guglielmetti,2010).

Varga et al. (2008) have found in their research using a sample of eleven countries, that the effects on economic development generated by entrepreneurship greatly vary depending

<sup>&</sup>lt;sup>27</sup>The concept of "fragility" is referred only once in the report of 2009.

whether it was spurred out of necessity or chasing an opportunity. In their study they concluded that necessity entrepreneurship had no impact on economic development, while opportunity entrepreneurship impacted in a positive and significant way. This contrast can be explained by the shift of wageworkers into the creation of self-employment that had as a result several years of negative GDP growth (GEM, 2008). GEM (2008) suggest the opportunity-to-necessity ratio as an indicator of economic development, and identify it as important input for development policy. Zoltan et al (2008) found in the report a positive relationship between the opportunity-ratio and GDP per capita, which interpretation should lead policies to focus on the national framework conditions that thrive opportunity led entrepreneurship.

#### ii) U -shaped Relationship

The U-shaped framework was firstly developed to grasp the increase in entrepreneurship in high-income countries of OECD (GEM, 2008). It shows that the relationship between new firm creation and levels of economic development has been verified when using cross-country data (Klapper,2010). Moreover Galor et al (2006) have found in their research that the difference in economic growth between advanced and developing economies can narrow precisely to the growth of entrepreneurial activity. Wennekrs et al (2005) have studied this U-shaped relationship using both the dynamic and static indicators of entrepreneurship and concluded that is valid for both sets. There are thee observations regarding this U-shaped relationship: it explains the decline in self-employment for less developing countries (cross-countries and cross-time) but doesn't explain entrepreneurship in broad terms; second it doesn't explain the role of entrepreneurship in countries which are still in the efficiency-driven stage of development and third it is of limited value for these set of countries (GEM, 2008).

# 3.2. Conditions for Entrepreneurship

What are the pillars (apart from strong macroeconomic and institutional foundations) that establish a strong environment that allows entrepreneurship to flourish?

Klapper (2010) summarizes the key pillars for entrepreneurship, across all economic development stages, in two: country-level governance and corporate tax rate. According to the World Bank Unleashing Entrepreneurship (2011) report there are three main ones: a level playing field, access to finance, and knowledge and skills.

As for the first pillar listed in the World Bank Unleashing Entrepreneurship Report (2011), what are the variables comprised in a level playing field? Companies need a trustable environment

to operate on and to help the market economy; this level playing field is built with fair, fairly enforced and predictable rules. Rules have to guide the entrance of new firms, monitor operations, supervision the market and also define the terms for a company to exit and close activity. The registration of a new firm can be a very bureaucratic, time consuming and expensive process, and results in an impediment for the establishment of a company. These very complex registration processes are moreover directly associated with rising corruption<sup>28</sup> as well as with lower productivity. In developing regions company's operations are hindered by excessively complex labor and rigid employment regulations, tax and credit rules (which are more prejudice for small than larger firms). This complexity is associated with higher female unemployment, limited protection for creditors in case of default, and forms as well a huge incentive for small companies to integrate the informal sector instead. The constitution of a large informal sector hamper state building and capability as lowers government receipts and imposes higher taxes for companies operating in the formal economy<sup>29</sup>. Rules have to monitor the market in a way they do not discourage the acquisition of land<sup>30</sup>, (which can further on be used as collateral for receiving credit), do not impose high restrictions on pricing, and that alleviate trade barriers. Credit is the major source of capital for companies in developing countries. Inappropriate bankruptcy laws can raise the risks of insolvency and hence increase the costs of lending. Exit rules are then also very much definitive in the way the market economy functions and prospers.

The report continues by detailing the conditionings of the second pillar: access to finance. In developing regions the main threat is posed by the existence of weak, state-dominated financial sectors. But along with this factor there is also net of other hurdles: weak property rights, financing institutions lack the skills for small and medium enterprise lending, no reliable credit information available, investors do not have exit opportunities (capital markets are highly illiquid) and finally entrepreneurs are neither willing nor skilled to receive risk capital.

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<sup>&</sup>lt;sup>28</sup> World Bank's Cost of Doing Business survey estimates that starting a business requires \$5,531 in Angola (more than eight times the per capita income) and about \$28 in New Zealand (far less than 1% of the per capita income).

This is vicious and dangerous cycle. In Brazil for instance, the informal economy grew as tax revenues increased from 24% of GDP in 1991 to 29% in 1999.

<sup>&</sup>lt;sup>30</sup> It takes about 168 steps, involving 53 public and private agencies and 13–25 years to acquire "informal" land and receive legal title to it in the Philippines (World Bank, Unleashing Entrepreneurship Report 2011)

The report finalizes with the last pillar which concerns access to knowledge. Many developing countries' sustained growth is hampered by low levels of human capital which is worsened by the brain drain phenomenon <sup>31</sup>.

Abraham (2011) in his study regarding major stumble blocks to entrepreneurship also concluded that Government can constitute one of the biggest obstacles. Moreover, he found that early-stage entrepreneurs in developing countries have great difficulty in accessing credit (especially in non-tech industries and in the first rounds of financing)<sup>32</sup>, have a hard time in accessing distant markets (which are more likely to offer higher margins), have non access to the best technologies, best practices and knowledge networks, and finally have great obstacles in luring high quality human capital.

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<sup>&</sup>lt;sup>31</sup> The International Organization for Migration estimates that some 300,000 professionals from the African continent live and work in Europe and North America.

<sup>&</sup>lt;sup>32</sup> Even for the case of India where there is a reasonably good venture capital environment (Abraham, 2011).

# **Methodology and Data Collection**

Given the concepts and theories revised in the literature we then decided to take threefold approach in understanding how to link entrepreneurship to development in fragile states. First we checked which were the current fragile states and narrowed an analysis on their behavior in terms of fragility. Then for these featured countries we went and inquiry what was the data telling us about the relationship between fragility and entrepreneurship. Third we gather the finding from this analysis, from the literature and conducted interviews, and took the definite goal of constructing a development framework for fragile settings, where entrepreneurship would receive a prominent role.

# 1. Empirical Approach

We departed from the finding of Klappan (2010) that for the World Bank Doing Business Indicators -starting days, cost, and number of procedures- there is a negative relationship with growth of new businesses. For our analysis we relied in these three indicators, and completed a multiple linear regression between them and the State Fragility Index.

#### 1.1. Variables

# **Dependent Variable: State Fragility Index**

We relied in the State Fragility Index (SFI) from the George Mason University Center for Global Policy. It offers the widest range of data time and country wise. Our first concern was to understand what has been the behavior of these fragile countries in terms of SFI. Our study regards those countries that pose the most challenging environments for entrepreneurship. Hence, we restricted our analysis to the extremely fragile- for which the SFI ranges from 16 to 19- and the highly fragile countries — with SFI between 19 and 25. The states with moderate and low fragility were excluded from such analysis as the majority of these countries has been benefiting from the effects of globalization and a decreasing pattern of poverty. It is our target to focus our study to those countries which have been victim of capabilities traps that refrain sustainable development. However, we found it also interesting to discern which countries managed to become more resilient and - despite starting in 1995 as fragile- were in 2010

showing a SFI under 16. This third set of countries we have denominated it as "Recovered Countries". Finally, there was a fourth set included, named as "Low-income", which ensembles all the countries that although being categorized as low-income in 2010 they have never experienced fragility. This forth group was introduced so that we could infer the differences with the others that have experienced fragility, as in our study we want bring a new light for the phenomenon of entrepreneurship in fragile settings since developing (or low-income) countries have been already subject of more research and attention. For this last group of countries, we won't analyze the behavior of their SFI, but only include them in the regression (we display the countries featured in this category in table 1, appendix A).

# Predictor Variables: World Bank Doing Business Indicators and Dummy coded variables

At the time of this paper there were nine editions available (2004-2012) of the WBDB Indicators- however we were only able to use the data from 2006-2010, as it was the only period for which we had available indicators for our featured countries and for which we had the SFI available as well. We narrowed our selection to those included in the section of "Starting a Business". There are four indicators related to "Starting a Business" dimension: the number of procedures needed to start a business; the time required; the cost as percentage of income per capita and the paid minimum capital. For the pool of countries selected, according to the SFI, the last indicator "paid minimum capital" was scarcely available, so it was excluded from the study. It is noteworthy recalling, that Klapan (2010) coincidently identified these three measures as being negatively related with the growth of new businesses. In Appendix B1 we have exposed the assumptions around the construction of these Doing Business Indicators from the World Bank.

Our dataset contains information for a five years period and for four country types. Therefore, it is worth to introduce into our model group differences using a single group against all the other groups. For this purpose, dummy coded variables can be used. Dummy coding uses only ones and zeros to convey all of the necessary information on group membership. The group with all zeros is known as the reference group. In our analysis, we have chosen 2006 as the reference group for years and the Low Income as the reference group for the country type. Therefore, seven dummy coded variables were considered: DummyP1, DummyP2 and

DummyP3 for the country types, and DummyT1, DummyT2, Dummy T3 and DummyT4 for years.

# 1.2. Multiple Linear Regression Analysis

We started first by trying to run a linear and multiple linear regressions for each set of countries analyzed. However, as the number of observations was too low (for the set of Extremely Fragile countries, for example, there were only 15 observations available), we were not able to reach any conclusion. For that reason we opted to consider countries all together in one unique set in order to do one Multiple Linear Regression.

Our aim is to specify a multiple linear regression model, which uses the WBDB Indicators – Procedures (Proc), Cost, Time- to predict the SFI, as follows:

$$SFI_{i} = \beta + \alpha_{1} \operatorname{Pr}oc_{i} + \alpha_{2} Cost_{i} + \alpha_{3} Time_{i} + \alpha_{4} DummyP1_{i} + \alpha_{5} DummyP2_{i} + \alpha_{6} DummyP3_{i} + \alpha_{7} DummyT1_{i} + \alpha_{8} DummyT2_{i} + \alpha_{9} DummyT3_{J} + \alpha_{10} DummyT4_{i}$$

where  $\beta$  is the intercept and  $\alpha_1$  to  $\alpha_{10}$  are the partial regression weights.

# 2. Framework

The purpose of our research is to develop and empirically based framework for defining development strategies integrating entrepreneurship for fragile countries. This comes as a tentative for designing an alternative thinking for these nations where there is a lack of results attained by aid and the economy has not been able to turnaround into sustainable growth.

The struggles of fragile countries extend beyond their ruined economy, and for that reason we want to understand at what extent entrepreneurial phenomena can help the economy to flourish and then, at a broader scale, push national development further.

Fragile countries offer the most complicated setting for policy making. There are no across the board studies or data analyzed reviewing these countries from which one can draw imperative success factors for development. In current literature there is agreement in one note: it cannot be purely state-driven and policies should not leave a state dependent on aid. In

this thinking entrepreneurs can (and should?) become a sustainable moving force as long as they have a viable environment to conduct their activities.

We will apply the reasoning behind Expeditionary Economics' Principles to conduct the construction of a New Development Framework that emphasizes Entrepreneurship role in driving growth and stability in fragile settings. We backed this research with three already existent models that review development and entrepreneurship. The first is the one created by GEM<sup>33</sup>; the second is the one introduced by Carree and Thurik (2002), and finally the one developed by the Kauffman Foundation for the specific case of Pakistan (2012).

The process of designing this New Development Framework was then to consolidate the approaches used by these there frameworks into one unique and broad model which would encompass the wide spectrum of dynamics and dimensions related to entrepreneurship and development under fragile settings. Throughout the process we relied on empirical findings gathered in interviews, the insights taken from the existent literature, the conclusions from the World Business Environment Survey (Appendix C2) of the World Bank and cross-country examples of successful engagement of entrepreneurs in development.

We will revisit the above frameworks bearing in mind the intricate challenges posed by failed countries. The barriers that asphyxiate the entrepreneurial initiatives have to be described and framed properly. We will differentiate the Level of Analysis in: Individual, Firms (including big corporations), Government and Institutions. The conditions suggested by Carree and Thurik (2002) are not present in fragile contexts, neither are crucial elements. Finally we will incorporate policies and suggestions that should be taken so that these levels can be determinant in relating entrepreneurship and economic growth.

#### 2.1. Revisited Models

#### Entrepreneurship Model (Carre and Thurik, 2002)

In this research we will attempt to merge the three-level model from Carre and Thurik to foster entrepreneurship in the Development Framework with the findings and measurements from GEM Model (EFCs and Entrepreneurship Profile), and integrate it in the New Growth Framework for Pakistan from the Kauffman Foundation.

<sup>&</sup>lt;sup>33</sup> I used the one included in the latest Global Report of 2010

#### Entrepreneurial Conditions Framework (GEM)

In the GEM model the basic requirements and efficiency enhancers specified can sustain necessity-based entrepreneurship, while the EFCs' scope (if the former are verified) is to drive dynamic and innovative entrepreneurship. Fragile Countries constitute in their majority Factor-driven economies, and for these it is critical the sufficing of the basic requirements. However, policy makers and Development Frameworks should follow the end of both enabling necessity motivation and promoting opportunity motivation. This is crucial for thriving a more dynamic economy and vibrant society.

Bearing this in mind, we will focus our attention in two aspects of GEM Model addressing a macro dimension (relative to environment) and the personal dimension of the entrepreneur respectively: on a macro dimension the Entrepreneurship Framework Conditions; and on the Individual side the entrepreneurial attitudes, activity and aspirations.

### Kauffman Foundation (New Growth Framework, 2012)

A Framework for Applied Expeditionary Economics in Pakistan

In this research we will do the exercise of scaling up the framework that applied the Principles of Expeditionary Economics for Pakistan, which envisions the links through which a Focus on Expanded Entrepreneurship is able to generate a circle of virtuous growth and reform.

#### 2.2. Interviews

The indicators collected may offer a general view but in order to analyze Entrepreneurship as a cornerstone of Development for fragile countries we need the insights from the different levels involved. This subject lays grounds for controversial talks, and it seems too difficult to back up any opinion with reliable data. These interviews were not guided around a strict questionnaire as it was from our understanding each interviewee would add his/her own specific view and that the matters to which he/she could refer to would depend very much on his/her works. The relevant value added that could be brought from such queries was to bridge opinions that would range different areas of expertise in an effort to draw conclusions. Such conclusions will be built up the literature and enter relevant variables that the current data was failing at delivering.

The first thing we were worried with was the limited data available covering our subject. For such we needed reliable sources from which we could get some answers from. Secondly we

needed a comprehensive understanding around the conditions for entrepreneurship in fragile countries. Carrying these two concerns, we undertook an extensive effort to reach the right people that would offer us the most precise input. In the end we were very pleased to have interviewed Donna Kelley, author of the Global Entrepreneurship Monitor Report; Alejandro Caravia, from Endeavor Uruguay<sup>34</sup>; Aldi Saboer Surianingrat, from Swiss Contact Indonesia<sup>35</sup> and Philip Darling, from DFID in Sierra Leone.

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<sup>&</sup>lt;sup>34</sup> Endeavor helps High-Impact Entrepreneurs unleash their potential by providing an unrivaled network of seasoned business leaders, who provide the key ingredients to entrepreneurial success

<sup>35</sup> Swisscontact is an international development agency founded by the Swiss private sector, with over 30 years of experience in Indonesia.

# **Results Analysis and Discussion**

# Research Question nº1: Which are the current fragile countries?

In this research encompassing entrepreneurship and fragility we decided, as previously mentioned, to use as indicator of fragility the State Fragility Index (hereafter SFI) from Center for Systemic Peace. For this indicator, the data available ranges the time period of 1995-2010.

We want to start building a sort of understanding around the evolution of these countries and check which have just become fragile, moving out of fragility or have fallen back into fragility. First step is to compare which countries were fragile in 1995 and in 2010. We divided between the two groups: Extremely Fragile and Highly Fragile.

Table 1. Extremely and Highly Fragile Countries in 1995 and 2010

Extre	mely Fragile	Highly F	ragile	Countries Recovered	
1995	2010	1995	2010	1995-2010	
Afghanistan	Afghanistan	Algeria	Angola	Algeria	
Angola	Chad	Azerbaijan	Burkina Faso	Azerbaijan	
Bangladesh	Cote d'Ivoire	Benin	Burundi	Bangladesh	
Burundi	Dem. Rep. of Congo	Bhutan	Cameroon	Benin	
Chad	Ethiopia	Burkina Faso	C.A. Republic	Bhutan	
D.R. Congo	Myanmar (Burma)	Cambodia	CBrazzaville	Cambodia	
Ethiopia	Somalia	Cameroon	Guinea-Bissau	Djibouti	
Guatemala	Sudan	Cote d'Ivoire	Guinea	Equatorial Guinea	
Iraq		Djibouti	Haiti	Gambia, The	
Liberia		Equatorial Guinea	Iraq	Ghana	
Mali		Ghana	Liberia	Guatemala	
Myanmar		Guinea-Bissau	Malawi	India	
Niger		Guinea	Mauritania	Iran	
Nigeria		Haiti	Niger	Laos	
Rwanda		India	Nigeria	Madagascar	
Sierra Leone		Iran	Rwanda	Mali	
Somalia		Laos	Sierra Leone	Mozambique	
Sudan		Madagascar	Uganda	Papua New Guinea	
Togo		Mauritania	Yemen	Tajikistan	
Uganda		Mozambique	Zimbabwe	Zambia	
		Pakistan		Togo	
		Papua New Guinea			
		Tajikistan			
		Yemen			
		Zambia			
		Zimbabwe			

The second step is to trail the evolution of the countries that are currently denoted as highly and extremely fragile. How were they 15 years ago?

To build such path we begin by presenting the trend for the current Extreme Fragile States in terms of their SFI for the past 15 years. Then we introduce the difference they show in absolute terms of their SFI. As displayed above currently there are 8 Extremely Fragile Countries. Figure 1 in Appendix A shows the evolution of SFI for this group.

As it is perceptible these countries have been struggling with their fragile conditions, and only Afghanistan is warily showing signs of recovery and managed to decrease its SFI from 25 to 22. The fragility of these nations is predominately related to the existence of continued situations of conflict.

We continued then by making zoom in to the evolution of the Highly Fragile countries.

According to the Center for Systemic Peace, currently there are 20 states denominated as Highly Fragile. Figure 3 in Appendix A shows that among these there are a few which are showing a decedent trend in their SFI as they are becoming more resilient: Angola, Liberia and Rwanda.

As we have previously addressed in the Literature Review conflict is a cause and a consequence of fragility, and the majority of the countries are experiencing or were recently experiencing an armed tensions. It is very important to flag which countries are currently under conflict or in the eminence in entering in armed situations (this information is referent to 2010 as it was exposed by the Systemic Peace Center). Table 2 in Appendix A allocates for each country the respective Armed Conflict Indicator.

The table shows that all the extreme fragile countries are or were until the past five years under armed conflict. This is one of the main links that doesn't let this countries breakthrough their fragile conditions. The fact that they are constantly irrupting in armed conflict, hampers any possibility of them developing their economy, assure reliable social institutions, providing public services and have a ruling and resilient state. It also leaves the population under a stress that should define and set the major constraints for the society's normal behavior, and the potential opportunities for its citizens. Is there hope for this set of countries? Is it possible for them to increase in real and effective terms their resilience?

The third step of the analysis addresses the countries that during this span in time have actually seen their state's resilience better and found themselves benefiting from

development pathway out of fragility. As understood in the beginning of this section there were 21 states that were successful in building their way and which are now increasing their resilience and capability of delivering their functions. They might still be not considered stable or firmly set in development stage, but are definitely evolving towards such direction (Table 3, Appendix A).

Among these there are a few that demark with an amazing recovery, as it perceptible in Figure.5, Appendix A). Here, Guatemala represents the most successful case with a decrease in its SFI of 10 (Figure. 6, Appendix A). Azerbaijan, Bangladesh and Togo succeed as the best performers. Ghana records the most modest improvement, decreasing only 2 points in its score; Algeria and Madagascar follow with a weak performance.

# Research Question nº2: What does the data tell us about the relationship between fragility and entrepreneurship?

Looking into the fragility patterns that we have just analyzed, how can one relate these with entrepreneurship patterns for the countries included in the study?

The aim of this research is to try to fit a multiple linear regression between the WBDB Indicators – Procedures (Proc), Cost, Time- and the SFI. Therefore, we will start our study by analyzing the bivariate plots, which can help us to rule out problematic non-linear data, but that cannot guarantee that our data are linear in the multivariate plane.

Figure 1. Scatterplot: SFI vs. Cost

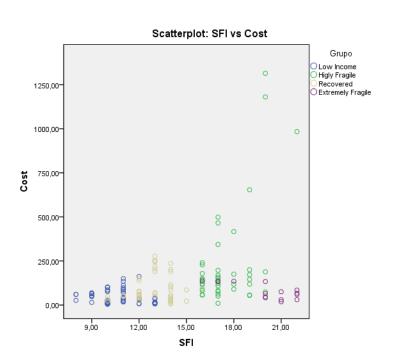
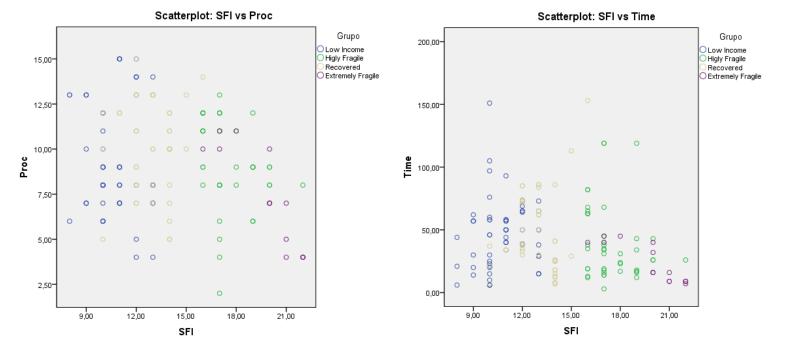


Figure 2. Scatterplot: SFI vs. Proc

Figure 3. Scatterplot: SFI vs. Time



These scatterplots show that it does not seem to have any curvilinear or linear relationship between the response variable SIF and the predictor variables Proc and Time. However, between SIF and Cost variables there is a slightly relation, even if it is not clear if it is curvilinear or not.

The first question that one can pose, since we are considering four country types, is that if there is any difference between the four groups in relation to SFI: Does the SFI vary by countries types? To answer to this question we will conduct an analysis of variance (ANOVA).

It can be observed (Table 1,Appendix B2) that SFI maximum and minimum values depends on the group of countries being considered, and exception made for Low Income type, the range in which SFI values lye in is the same for all country types. Moreover, the average SFI is higher for Extremely Fragile and Highly Fragile country types than for Low Income and Recovered country types. It is worth to note that Extremely Fragile type has the highest standard deviation, whereas all the other country types have very similar standard deviations. It also turns out that the equal variance assumption, which is required for the ANOVA, is met (p-value is 0.228>0.05- Table 2, Appendix B2).

The ANOVA was conducted to examine whether there were statistically significant differences among countries in different country types in relation to SFI. The results revealed (see Table 3,

Appendix B2) statistically significant differences among the country types (F(3,166)= 286,057, p=0,000)

ANOVA was found to be significant, and so to examine which two groups differ significantly from the total number of groups multiple comparison tests were conducted (table 4, Appendix B2). The Scheffe test revealed significantly differences between all the country types.

ANOVA depend on the assumption that data were sampled from a Gaussian distribution. Since the Kolmogorov-Smirnov (Table 5, Appendix B2) test as well as the Shapiro-Wilk test does not allow concluding about this assumption (Table 5, Appendix B2), we opted for doing the Kruskal-Wallis test, which also allows to compare if there is any significant differences between the four country types in relation to SFI. After performing this test (Tables 6, Appendix B2), it turns out that the mean rankings, 39,17, 135,47, 79,24 and 155,139, are quite different. Moreover, it suggest a statistically evidence that differences among the country types exist.

We followed our study with a multiple linear regression analysis. Our dataset contains information for a five years period and for four country types. Therefore, it is worth to introduce into our model group differences using a single group against all the other groups. For this purpose, dummy coded variables can be used. Dummy coding uses only ones and zeros to convey all of the necessary information on group membership. The group with all zeros is known as the reference group.

In our analysis, we have chosen 2006 as the reference group for years and the Low Income as the reference group for the country type. Therefore, seven dummy coded variables were considered: DummyP1, DummyP2 and DummyP3 for the country types, and DummyT1, DummyT2, Dummy T3 and DummyT4 for years.

To explain how these coded variables work, let us give an example. If, the second coded variable is selected as a predictor variable in the fitted model it means that 2008 has a different behavior when compared with 2006, and so the constant part of the fitted model is expected to be different in year 2008.

We requested SPSS to produce a multiple linear regression with the predictor variables Proc, Time, CostF, and all dummy variables accounting for the year period and the country type.

Analyzing the model summary and ANOVA tables (Appendix B3), one can conclude that at least one of the independent variables is significant (F=97,044; p <0.001). Thus, there exists a

statistically significant relationship between the SFI and the predictor variables. Overall, the independent variables explain linearly 85.9% of the variability of the SFI, meaning that almost 86% of the variance in SFI is accounted for by the linear combination of the predictor variables.

Additionally, there is no statistically evidence of differences between years (the significance level for the t-test values for DummyT1, DummyT2, DummyT3 and DummyT3 are very high). Therefore, it can be stated that there is no statistically significant difference of the data collected during 2006 when compared against the data collected over the period that goes from 2007 to 2010.

It is also worth to note that the three most significant variables are the DummyP3, DummyP1 and DummyP3 (they are the ones with the highest t-test values). Thus, one can conclude that there exists a statistically significant difference of the countries belonging to the Low Income country type when compared to all the other country types. Moreover, the predictor variable Time is not significant (the significance level for the t-test value is also very high).

One of the assumptions of multiple regression analysis is that there is no multicollinearity between the independent variables. Even if some correlations are expected it is not desirable that they are strength enough that can compromise the quality of the analysis. The Variation Inflation Factor (VIF) (should be smaller than 10), which measures how much the variance for a given regression coefficient is increased compared to if all the predictors were uncorrelated, as well as to the condition index (if above 30, the regression is said to have significant multicollinearity) allow us to check this assumption. The maximum condition index number and VIF value are 12.745 and 1.645, respectively (see tables with coefficients and colinearity diagnostics in Appendix B3). Thus, there is no multicollinearity between the independent variables.

Another important assumption is that there are no outliers, which are data points with extreme values that could have a negative effect on the estimators. This assumption can be checked trough the Cook's distance, which measures how much an observation influences the overall model or predicted values. The maximum Cook's distance value is 0.091 (see table residuals statistics in Appendix B3), which is far below 1, and so it turns out that there are no outlier observations.

Despite some departure from the expected residual under the normality (see scatter and histogram), the Shapiro-Wilk test for normality do not reject normality (p=0.081). It means that sampling errors can account for such a difference.

Another important assumption is the homoscedascity and linearity. Thus, it is necessary to check if the random errors have constant variance and zero mean. For this purpose, a residual plot, which is a scatterplot of the residuals versus the predicted values, can be used. If these two assumptions are satisfied, one would expect the residuals to vary randomly around zero and to be spread throughout the plot.

Observing the scatterplot (in Appendix B3), one can see that the variance keeps constant for different values of the predictor variables meaning that the residuals are homoscesdastic.

Moreover, the linearity assumption is also verified.

From our analysis we were able to draft up four main insights: First we understood that the variability of SFI is explained in 86% by our predictor variables. Second, the Dummy T variable is not significant, which means that the years from 2007 to 2010 appear to be not more explanatory of the variability of the SFI when compared to the year of 2006. Third, there is strong evidence that countries show differences in their behaviors of their SFI according to the category which they belong to. Forth and finally Procedures and Cost are shown to be the other factors to own more significance in explaining the variability of SFI. Given the sample, SFI will increase on average 0,003% if costs to start a business required increase by 1% (and all the other variables remain constant), which means that there should be a decrease in the total of costs. On the other side, the procedures have a positive Beta, meaning that the SFI will decrease on average 0,14% if the number of procedures increases by 1% (and all the other variables remain constant). This leads us to a counter intuitive thinking that the number of procedures should actually increase so that fragility decreases.

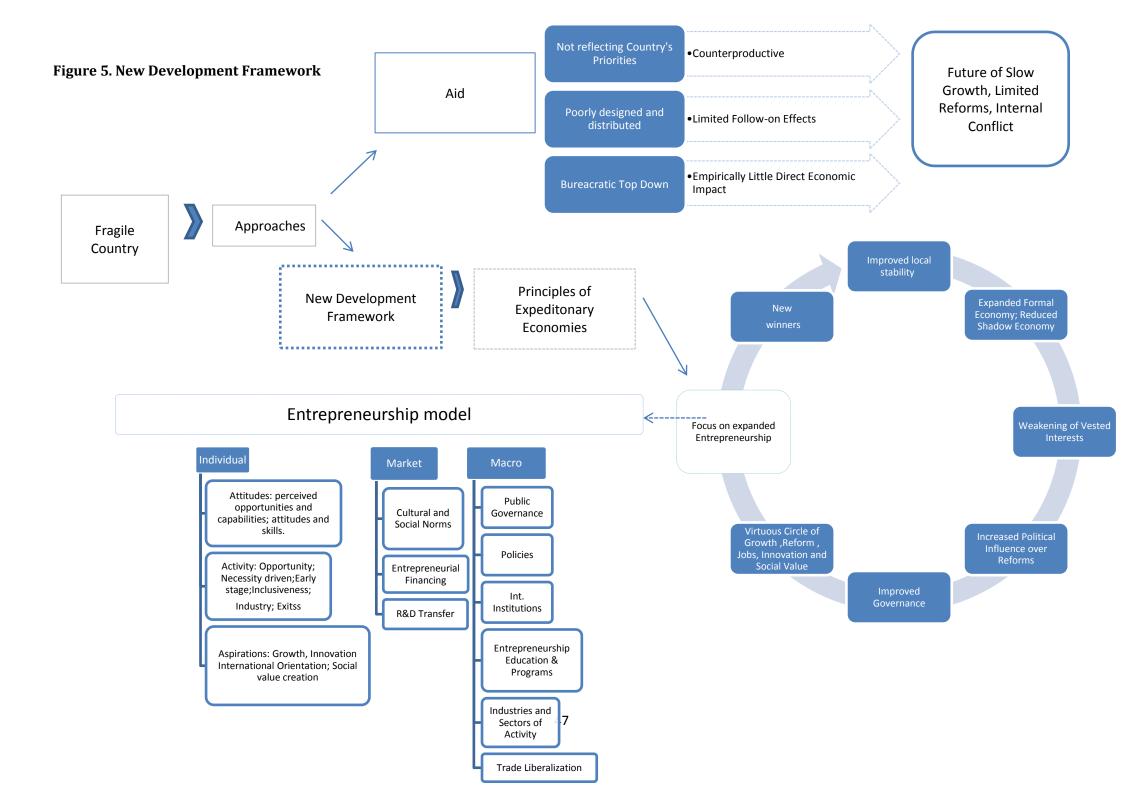
Given these findings which understandings can we take to our study? This analyzes shows that there is a strong suggestion that factors related to entrepreneurial activity can be explanatory of the fragility of the country. Governments and Aid Institutions should definitely prioritize their policies by focusing in these factors. When implementing policies, and in order to guarantee that these are successful in decreasing fragility, they should bear in mind two things: that they should be adapted to the category the country belongs to, and take into account the number of procedures and costs required to start a business.

# Research Question nº3: Can entrepreneurship boost sustainable development in fragile countries?

We have now tracked which are the current fragile countries and their behavior in terms of fragility for the past fifteen years, and then analyzed for these countries for the relationship between the SFI and the World Bank Indicators. From such we were already able to take some understandings regarding policies and decision-making for fragile countries. The purpose of this research is to align the three models revised previously in order to construct a broad development framework, while integrating the enlightenments delivered by the interviewees and the empirical findings from the RQ1 and RQ2. This exercise is made to help us understand if Entrepreneurship can be in fact a crucial factor for development in fragile settings.

This New Development Framework ties all the knowledge collected from the interviewees the Pakistan case study to offer a new conclusion that may lay some important ground to define policies more efficient in tackling fragility and attain sustained growth, since aid itself is loosely achieving any achievements. This new model is based in the Principles of Expeditionary Economics that emphasizes the role that Entrepreneurship has in motivating sustainable economic development, generating jobs, fomenting stability and creating social value, for fragile countries.

The exercise of constructing a new development framework integrating the dynamics spin-offs of entrepreneurship offers upfront some serious challenges and these in majority have one common source: restricted data. Only by going and experiencing in the field the real perceived opportunities by entrepreneurs, the entrepreneurial intentions within the communities and the response from the market to new ventures in fragile countries can one collect the necessary understanding. However, institutions don't have available the resources to gather and construct such findings: it is a task that is highly time consuming and expensive. We therefore carry no arrogant ambitious of filling up this gap with our exercise, but rather to add some insights featuring the possibilities of an entrepreneur in fragile countries and the relationship that exists between entrepreneurship and development.



#### Framework overview

In this overview we will fragment the analysis of the framework into three levels. At a first level we will be addressing the findings that come from Expeditionary Economics and in which terms these can be applied for development in fragile countries, under a general perspective and thus not reducing it to United States' approach. The question at this level is "Why should there be a focus in expanded entrepreneurship in Fragile Countries?". Following up to the second level we then question: Can a Focus in Expanded Entrepreneurship lead to a Sustainable Socio-Economic Development in Fragile Countries? We conjugate the knowledge collected (through the literature, regression, and case studies) to convey an answer to this. Finally we reach the third level, where we will breakdown the Entrepreneurship dynamics and dimensions, making reference to the specifications tied to fragile settings.

#### 1st Level

Principles of Expeditionary Economics: Focus on Expanded Entrepreneurship
In the analysis conducted in RQ1 we understood that most of the countries which are currently experiencing high or extreme fragility were until recently or are still involved in an armed conflict. This link between fragility and the existence of conflict, is responsible for a slowdown in growth, limited improvements in Governance Economic Freedom, Stalled Reforms Low Tax Base and Investment, and finally to a Weakening of Institutions. Expeditionary Economics is a development "bottom-up" approach that focuses on productive entrepreneurship as the main vehicle to generate jobs and achieve political stability, under these fragile or conflict-affected settings.

Kauffman Foundation in its report for Pakistan (2012) scrutinized the application of Expeditionary Economics for this country. In this document it unleashes some valuable insights that we used as key-take always for other states that resemble Pakistan's condition:

- -Traditional Aid approaches failed to break the cycles of violence and foment economic growth;
- -Areas of the country that registered successful rates of growth were fertile in entrepreneurship;
- -Countries whose development is primarily motivated by entrepreneurial activity have higher probability of reaching sustained development;

-Development led by entrepreneurship can potentially generate a virtuous cycle of growth and reform.

Entrepreneurship can thus fuel a strong alternative to the Aid approach in fragile settings and promote sustainable socio-economic growth. In fact in Guatemala the private sector represents now 85% of the GDP, while the public sector is restricted to transportation and development oriented institutions, and its role is being more and more limited<sup>36</sup>. Moreover for countries such as Rwanda and Togo governments are succeeding in breaching out of fragility and such is mainly related to real efforts in enforcing the private sector<sup>37</sup>.

Indeed, as our interview Phillip Harding stressed: "The problem with post conflict situations is that the emphasis is on recovery and on the humanitarian effort and people tend to be provided with everything – food, shelter etc. – and a dependency culture can build up. This is what has happened in Sierra Leone." This is consistent with the findings from Abraham (2011), who supports that Aid should be directional towards creating a business and entrepreneurship friendly environment, and not on handouts. However the traditional Aid approach has boldly failed. The poor accomplishment of results is due to the way it was poorly allocated to fragile countries and its implementation in the field. Levin and Dollar (2005) found that the flows of aid to fragile countries over the 1990's were remarkably low. Nonetheless, this doesn't mean that aid could never work in fragile settings. Aid could have accomplished great milestones "if it had been properly targeted, designed and delivered" (Chandy, 2011). The problem is that these three conditions are rarely satisfied. For instance, INCAF<sup>38</sup> in its meeting in June 2011 released a report with the key sectors to be prioritized by donors in fragile states, and these identified sectors were the ones for which international aid community owned the least capability of delivering efficient work.

#### 2nd Level

# How can a Focus on Expanded Entrepreneurship lead to Socio-Economic Growth in Fragile Countries?

As Abraham (2011) recorded, although entrepreneurship and business are loosely accounted as drivers of development "across the world, we find that countries that created an entrepreneurship and business friendly environment were successful in reducing poverty

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<sup>&</sup>lt;sup>36</sup> Source: UNDP

<sup>&</sup>lt;sup>37</sup> Source: OECD

<sup>&</sup>lt;sup>38</sup> International Network of Conflict and Fragility

drastically." Entrepreneurship may operate in bringing a period of sustained development through a sequential process: growth private businesses create new jobs, increase societies' comparative advantage (GEM, 2010), supply consumer goods, build reform momentum (Fields et al.,2003) are not dependent on handouts and aid, and often create more wealth fare effects than state run businesses (Abraham,2011).

We have explicated this process in our New Development Framework, by relying on the one offered by the Kauffman Foundation for the case of Pakistan. This process is conveyed in the cycle of virtuous growth where entrepreneurship contributes to local stability, which in turns helps to expand the formal economy, weakens vested interests, and with the increase in the influence by entrepreneurs there is a natural push for improved governance. By completing itself as a major lead for better governance, the most important building block for development in fragile countries, entrepreneurship starts and nurtures a positive cycle which deploys structural changes in the development paradigm for these countries.

#### Let's look closer at this cycle path:

- -Local Stability: where aid has failed to break the cycle of violence and conflict, the active participation of entrepreneurs who generate jobs, augment income levels in their community and integrate outliers of the society in their projects, bridging their aspirations and strengths under one common mission, benefits coherence and prevents fragmentation of the communities which nurtures stability. Moreover they have a high impact in the lives of the population by providing societies with services and goods that the government failed to.
- Expanded Formal Economy: with the boost of entrepreneurial activity and expansion of the private sector, people who had consistently lived ad survived with their small business in the shadow economy begin to realize and be able to collect the benefits of integrating the formal sector. Under formality businesses they have more opportunities to expand in scope, dimension and returns.
- Weakening of Vested Interests: an augment in the share of the population actively participated difficult the chance of the Government and Institutions prevailing certain group' interests.
- Increased Political and Influence: entrepreneurs collectively gather huge influence over governments and institutions whilst fighting for their rights and advocating their concerns, and

manage to stimulate the implementation of reforms. Moreover they become an active vigilant of governments' actions, pressuring them to become more responsive.

- Improved Governance: by gaining such influence over the ruling institutions and continuous pressure, it deploys a period of improved governance. As reviewed improved governance is the most necessary requirement for both the bloom of entrepreneurship and development.

-Virtuous cycle of development and growth: with this most basic requirement in place, it unravels a prosperous cycle of development and growth.

#### 3rd Level

### Entrepreneurship model: Breakdown Analysis

For each level (individual, market and macro) what have we found to be as crucial elements and findings for entrepreneurship in fragile settings?

#### Individual

This section aggregates the conditions that frame an entrepreneurs' behavior throughout the four phases of entrepreneurship process: perception of opportunities, conception, firm birth and persistence of a business.

- i) *Attitudes/Skills/Actions:* According to our interview, Philip Harding, post-conflict and fragile states usually have a lack of educated people. The educated either left the country, were killed or a generation has missed schooling. The challenge is to have people with the skills to do business in a capitalist world. Some cultures are more intrinsically capitalist than others, and in fragile settings much skills and business development training is needed.
- ii) *Activity:* There may be certain populations that are more or less excluded from entrepreneurship, like women (on the other hand, where there is a lot of political strife women may need to provide their families with a source of income if they have no other income sources in the family), Philipp Harding said. Donna Kelley added that another important issue is many businesses may be started, but few survive because of instability or because the types of businesses started in these countries are not sustainable.
- iii) *Aspirations:* Fragile states, as exposed by Donna Kelley, may have a lot of entrepreneurs, yet they are motivated by a need for a job, and less likely to have high growth businesses or selling internationally. According to Alejandro Caravia the selected entrepreneurs aspire to

modify the culture within the community, or even at a wider national scale, and to contribute for improvements in the economy.

#### Market

#### **Cultural and Social Norms**

Culture: Culture can be one of the main obstacles for entrepreneurship expansion. Aldi Surianingrat highlights this problem, explaining that the majority of the Indonesian prefers to work in a big company or government rather than starting a business. Phillip Harding shared the same opinion, and added that the challenge remains how to create a culture which values business and the entrepreneurial spirit, one which does not see them as exploiting ordinary people or as a profession second best to being a government worker.

Entrepreneurial role models: Here to be emphasized the importance of entrepreneurial role models within the community or as national icons (i.e. Steve Jobs for the U.S.A) as it was appointed by Alejandro Caravia. Alejandro added that when his organization is selecting which entrepreneurs to sponsor, they give much weight to his principles and ethics, and whether is he able to generate an entrepreneurial culture around himself and his project.

Partners' relationship: As Gary et al (2003) documented the importance of repeated transactions between partners, nurturing trust, a vital element when there is poor enforcement of formal contracts. This is even more critical when we consider that when there is also no formal financial market, and firms are often very much dependent on suppliers' credit<sup>39</sup>. One interesting way to contour this is the one posed by Vietnam case where the creation of trade organizations aimed spreading information regarding who breached contracts and coordinating sanctions of these. Nevertheless, as Gary et al (2003) although these trust mechanisms are crucial in allowing more complex transactions between partners, it is restrained by natural limits.

*Entrepreneurial Finance:* For 13 of the countries that are listed as highly and extremely fragile by the Center for Systemic Peace Center, and constitute subject of our analysis, the managers included in the World Bank Enterprise Surveys, highlight the main obstacle for private business to be access to finance <sup>40</sup>(Appendix C2). In the specific case of Sierra Leone, as referred by Phillip Harding, there is a lot of micro-enterprise and large scale foreign investment

<sup>39</sup> In their study, (Gary et al,2003) found that 53 percent of the surveyed manufacturers the bill was paid in credit.

<sup>&</sup>lt;sup>40</sup> World Bank Enterprise Surveys conducted in the year of 2009 for the sector of Manufacturing.

is starting in the country. Unfortunately micro-finance is not leading to the establishment of small to medium scale enterprises and the foreign investment is not benefitting the people because profit leaves the country.

Investors to reduce their risk invest opting for a short-term view in their returns, expecting to collect returns in few years, and such decisions may not necessarily foment growth, as it was recorded in the report from Center for Global Development regarding Africa's Business Environment (2010).

Shari Berenbach<sup>41</sup> in her talk "Building Small Business Amid Great Challenge: Entrepreneurship in Fragile States (2012)" talks about the case of Afghanistan where entrepreneurs managed to benefit from a payment system leveraged on mobile networks, that improved their liquidity and reduced their risk.

**R&D:** It is vital a focus on quality-promotion framework and a culture of intellectual property rights. Abraham (2011) discussed entrepreneurial ventures in fragile settings have a hard time attracting high quality talent and lack access to knowledge networks and best technologies. These were for instance the major flaws registered for the case of Togo successful path towards growth. R&D is essential for the accumulation of knowledge and pushing the competitiveness of the entrepreneurs and at a broader scale the economy. As Thurik and Carre (2002) put it: "A process of competition between these various new ideas and initiatives takes place continuously leading to the selection of the most viable firms and industries. Variety, competition, selection and also imitation expand and transform the productive potential of a regional or national economy (by replacement or displacement of obsolete firms, by higher productivity and by expansion of new niches and industries)."

#### Macro

Public Governance: As Nicholas Stern noted, "good public governance is a sine qua non for sustained development. Where the state provides a good institutional framework, supplies or promotes infrastructure, supports education and health, and acts as facilitator, private firms respond by generating useful goods and services, by creating jobs, and by transferring technology." Also as (Kaplan, 2010) has put it, the efforts to improve Public Governance should focus in easing local processes.

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<sup>&</sup>lt;sup>41</sup> World Bank Enterprise Surveys conducted in the year of 2009 for the sector of Manufacturing

In the World Bank Enterprise Surveys, managers in the fragile countries listed as second and third main obstacles following Access to Finance, to be Electricity and the Informal Sector respectively (Table 1, Appendix C2).

As Gary et al (2003) stressed there is the need for the state to support entrepreneurship. This support comes with proper laws of contract and courts capable of enforcing them. This allows relationships among anonymous partners (for example, those who live in distant cities), production of more complex good and services (as customers are able to for instance order in advance of production) and finally more ambitious investments (if firms can invest more than their retained earnings they can start to benefit from economies of scale).

## State Building

The International Network on Conflict and Fragility <sup>42</sup> when defining their set of core objectives narrowed the list mainly for concerns regarding peace building and state building. This is a cornerstone for development: to foment stability and state's legitimacy; and such is dependent in strengthening citizen-citizen and citizen-state trust. Guatemala's government for instance has prioritized and supported transparency in its actions, and this has successfully contributed to the country's augment of resilience.

Government's main concern should target capacity building and improving governance, as Aldi Surianingrat points out. His experience in working with Indonesian entrepreneurs leads him to one thought: governments should focus on governance and regulating instead of credit or fomenting subsidies. Philip Harding shares the same opinion, and added that economic and political governance have a major impact on investor confidence.

Factors in the environment like political and economic stability, infrastructure, education, and others, if unfavorable, will not always deter new business starts; in fact, there are high numbers of entrepreneurs in the least developed economy despite poor conditions (people start businesses because these economies cannot supply enough jobs). Yet, as Donna Kelley clarifies, other factors will be less favorable- whether all groups in society are able to participate (inclusiveness), whether the businesses have any growth potential, etc. So the quality of the businesses, rather than the quantity may be impacted.

*Physical Infrastructures:* As referred across the interviews and widely strengthened in the literature, energy is a major constraint to doing business and the poor state of power

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 $<sup>^{42}</sup>$  The g7+ group of fragile states  $\,$  and the network of donors with whom they partner

generation, transmission and distribution is a major obstacle to private sector development. The absence of infrastructures that properly convey conditions for work remain one of the most serious challenges. Aldi Surianingrat gave the example for the area outside Java, where the lack of good roads creates impediments for the growing of online businesses, as it is represents a huge constraint for deliveries. (Channel, 2011) highlighted in his study <sup>43</sup> the case of Afghanistan, where, in a survey among the business community, electricity was mentioned as posing more threats than actual violence or conflicts.

Education: The role of Universities in increasing awareness for entrepreneurship. Aldi Surianingrat remarks that some Universities are now doing campaigns for entrepreneurship and launching star-ups programs, and that such initiative is helping to change the mindset of the new generation in Indonesia. On top of this work to be develop by universities, there should be a across the board technical support to entrepreneurs. Shari Berenbach, however noted the fact that often institutions are focused in providing training to entrepreneurs, but that then often they fail as they have no customers and no market, strengthening the important of access to markets.

*Industries and Sectors of Activity:* According to Alejandro Caravia technology industry is the one that offers more possibilities of attaining High-Impact Entrepreneurship. According to World Bank for the African Continent, in 2005 the Services Sector was by far the biggest one in terms of GDP, representing almost 50%. Actually, between 1990 and 2005 the shares of Agriculture and Manufacturing decreased, while services registered an ascendant trend.

Shari Berenbach<sup>44</sup> gave the example of Somalia where the telecommunications industry managed to thrive whilst the government enforced little regulation in this sector.

Institutions: Institutional scope of action should de be in delivering support functions, acting as a facilitator and improving supply chains. As (Collier, 2007) supported in his study international institutions should focus on technical assistance rather than on handouts, and should privilege the strength of local actions. (Abraham, 2011) also stressed that the international bodies should help governments in growing local capability and easing as well the entrepreneurial environment. One example may be the one offered by Phillip Harding, where in order to ease the access to finance, UKAID in Sierra Leone, is trying to work with Government to create an enabling environment for small and medium scale enterprise. The

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<sup>&</sup>lt;sup>43</sup> "Understanding Business Ideas as the Basis for Economic Growth and Stabilization"

<sup>&</sup>lt;sup>44</sup> Director of the Microenterprise Development Office at USAID

commercial banks will not risk lending to smaller businesses which means they cannot grow into medium sized enterprises. UKAID is looking for ways of solving this problem for example by guaranteeing loans to small and medium enterprise or for creating incentives for banks to do so. Nevertheless, as P. Harding stressed, this is not enough in itself.

**Policies:** As Klapper (2006) stated there is a negative relationship between the WBDB indicators- starting days, number of procedures, and cost for starting a business- and the economic growth. Findings from our regression, led us to further conclude that the required costs and starting days indicator were the ones more significant in explaining the variability of the SFI, as well the type of country. Thus we found that policies should be adapted to fragile countries bearing these three findings in consideration.

There is also the case of Sierra's Leone big positive shift in the Doing Business climate which was related to a change in tax policies. For the impressive growth registered In Rwanda- its GDP has nearly tripled- it is largely accounted for Tutsi government's push for tax collection, privatization, investment (with foreign interest in the countries' mineral resources such as colt and gold) and building up infrastructures. Along with this there is a commitment from the ruling entities to tackle the most important root of fragility- society and communities' fragmentation- and launched a reconciliation program.

*Trade Liberalization*: According to Kauffman's report for Pakistan, improvements in the business climate and trade liberalization appear as the most determinants in stimulating entrepreneurial expansion. Fields et al (2003) observed that by stimulating lower trade barriers and for international markets there is a bigger push for entrepreneurship than aid interventions. However, as Naudé (2007) explained the implementation of a set of reforms is necessary but not sufficient for entrepreneurship to flourish. Guatemala, which we have seen that has been highlighted as best performer in recovering out of fragility, is a case where the Government has been pushing efforts for fomenting development, and made reforms affecting taxes, the financial services sector, and liberalization of trade and overhauling public finances.<sup>45</sup>

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<sup>45</sup> source: OECD

## **Limitations & Future Research**

Throughout our research we manage to convey some interesting findings in how entrepreneurship can succeed as a pushing force towards development under fragile settings. However these results face some limitations that we should be aware of when interpreting them.

Regarding the measurement of fragility used, the State Fragility Index, although it was used because it offered the widest coverage of data it is a complex index, which congregates in one unique figure the status of fragility resultant from summing up different points for each dimension. We could have further continued our research as disaggregate it in its components, in order to understand which dimensions were responsible for the variability of the index itself across countries and time. We were however restricted by time and we couldn't devote such big part of our research as it would divert us from the remaining sections through which we have undergone.

Regarding the World Bank Doing Business Indicators, these prevailed as the most reliable indicators in measuring business environment. However, we had to narrow our analysis to a restrict period of time, as these have only been computed since 2006. By overlapping with the time period for which we had available the SFI (1995-2010) we were resigned to a span of 5 years for running our regression. To contour such problem, we assembled all the countries in one multiple linear regression, although the ideal would have been to run a separate multiple linear regression for each category of countries and compare the differences. Another limitation risen by using the WBDB is related to the assumptions over the type of business that the Institution in order to make it possible to compare countries over time (Appendix B).

By relying on these indicators, we succeed with our regression in understanding within the business areas related to entrepreneurship, which ones are more relevant in impacting fragility. From these findings we could then take conclusions for policy making: how to design policies regarding entrepreneurship that are best likely to impact in decreasing fragility. However, it was in the best interest of our research to relate SFI itself with dynamics measures of entrepreneurship. This was not possible, as such have only recently been collected for a reduced sized sample of fragile countries.

Regarding our empirical approach in constructing the New Development Framework, we were able to conjugate all the outputs from literature, interviews and regression into one model

relating entrepreneurship and development for fragile states. This model faces some however some limitations: we assumed that it would be possible to integrate GEM entrepreneurial framework conditions into the Entrepreneurship Model by Carré and Thurik; and then made the assumption that this adapted entrepreneurship model could be incorporated in The New Growth Framework of Pakistan, in order to fragment the phenomenon of entrepreneurship to which this framework states that there should be a focus upon. However, entrepreneurship is a recent topic in development specially when considering fragile states. The New Growth Framework for the case of Pakistan, conceptualizes an alternative approach to the traditionally adopted by international actors. It is an extremely recent approach, and hence the mechanisms that are underpinning the circle of virtuous growth and development, have not been fully supported either by examples of implementation across other countries either by experimentation over time. We could however, and it is noteworthy for future work, have cross checked among the countries which both managed to improve their entrepreneurial business ground and decreased their fragility, what were the features framing entrepreneurship. Then we would include such in our new constructed framework, bringing more empirical evidence and hence improving its efficiency.

## Conclusions

We have seen that since 1995, 21 countries have managed to surpass their fragile condition and are now benefiting from a path towards development. For the remaining, both extremely and highly fragile countries are still struggling with their condition of low resilience and are still very much connoted with state failure. We also discovered from the time patterns analysis that the majority of the covered fragile countries, were or still are under armed conflict; from which we take that for almost the entire group fragility was very much rooted in conflict.

It was understood that the typical aid approach had not succeed so far in deploying a sustain development growth, and that the role of entrepreneurs in settling a more stable environment breeding socio-economic development was roundly neglected until recently.

A new approach however, introduced by Kauffman Foundation, based in the principles of expeditionary economics, works on a framework that focus on expanded entrepreneurship as a vibrant generator of a virtuous cycle of growth and development in countries struggling with fragility and conflict.

We then went to look for the Doing Business Indicators from the World Bank, regarding the section of "Starting a Business", and deployed a multiple linear regression with SFI. There is a strong suggestion that 86% of the variability of the SFI can be explained by our predictor variables. Within our set of predictor variables the ones showing a more significant impact were the starting costs and procedures. Moreover, we found that there is a difference between low-income countries which have never experienced fragility and those who are currently or were until recently under the stress of fragile settings.

Bearing the Kauffman's framework design in mind we collected inputs from other two empirical frameworks: GEM and (Carre and Thurik,2002) Models. It was our main objective to arrange a New Development Framework that would grasp the dynamic dimensions of entrepreneurship and would integrate it in a development circle designed for fragile countries. We then revised the elements of this New Development Framework under the new light of the findings from our regression, plus the experiences grasped with the interviews and the reviewed literature.

In the end we were able to ensemble concepts and findings in a framework, which entails crucial factors to take into account whilst studying entrepreneurship for fostering development for fragile states.

The first and most important is that Governance is the most critical factor when determining the entrepreneurial breeding ground of a fragile country. Entrepreneurs need a business friendly environment, and a state that regulates and is reliable. Government's first priority should thus be to privilege their concerns regarding state building and capability. Moreover, as we have spotted the relationship between conflict and fragility for the group, the other concern that should prioritize both Governments and International Institutions is peacebuilding and building up harmonization within the society. Although good public governance is critical, it is found across countries examples were private businesses managed to thrive despite conspicuous obstacles and uncertain circumstances. For attaining short-terms, business managers are able to succeed despite poor governance. However, when drawing prospects for the long –run managers need a ruling government, enforcement of law as well as a state capable of delivering public services. In fact, one of the main challenges for the private sector- as taken from the World Bank Enterprises Survey for our pool of countries- was electricity. As for policies specifically aimed at promoting entrepreneurship, according to our regression results they should target the lowering down of costs and increasing numbers of requested procedures – the latter is subject of controversy and it is in our opinion counterintuitive- as these are shown not only to foster economic growth as well as bringing down fragility itself. On top of these there should be an effort for reducing trade barriers and liberalizing markets as it's positively related to the emergence of entrepreneurial activity.

Regarding the individuals as entrepreneurs, we found that fragile settings generally restrict entrepreneurship driven out of necessity, which has reviewed in the literature review is not consistently showing significant impact in economic development. However, there are cases such as Sierra Leone, Rwanda, Somalia and Afghanistan where vibrant businesses- the majority in the sector of telecommunications - flourished and persisted vibrant despite conflicts and fragility. Moreover, we found that the most critical aspect in engaging individuals with entrepreneurship has to be developed along with a shift in the society's culture and norms. Individuals must perceive the positive differences and gap of benefits to be explored in being a state employee or big-company employee. Institutions can play the important role of changing such entrepreneurial mindset, such as deploying entrepreneurship based programs. These and other actions, to be enrolled by Universities, for example, are also a striking mechanism to

attribute individuals with training so that they develop the right skills and capabilities to perceive existent opportunities, start and run their own business. This training and education also broadens their aspiration and help them in thinking of new ways to expand or export their business. However, this goes hand with hand with good governance, as they will only be able to sustain expansion if the environment is reliable. Moreover, they need the state support in terms of entrepreneurial financing, but on a scope which is not limited to micro-credit but ranging small and medium sized enterprises as well.

Assembling all these factors, we can go back to our New Development Framework, and with the imperatives brought by the framework applied for the Pakistan case we can understand how a prosperous entrepreneurship can unlock virtuous cycle of growth for other fragile countries. With an increase in the number and quality of entrepreneurs and ventures, more jobs and returns are generated, promoting more stability in their local community; whilst increasing in number it solidifies and strengths the formal sector, driving people and businesses away from the informal sector and gather more strength and influence towards the state and governance. As entrepreneurs have a bigger role in influencing and improving public governance, this – as reviewed in the literature and exposed in section 2 of this study- sets one of the most vital pre-conditions for growth in fragile countries.

This research has led us then to conclude that entrepreneurship as phenomenon is able to take place in the most challenging environments, such as fragile states or countries threatened by conflict, and that deploys a motion of sequential events that end pushing the country into a sustained path towards development consisting in a bold but auspicious alternative approach from the traditional aid one.

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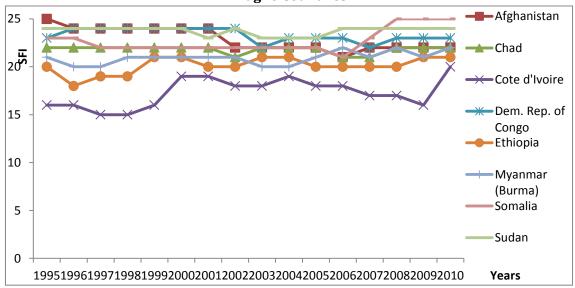
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# **Appendices**

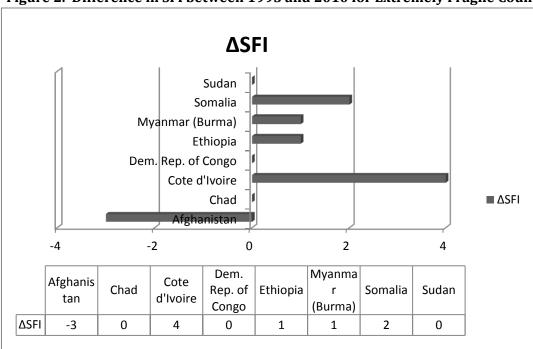
# **Appendix A: Graphing Fragility Patterns**

Figure 1. Evolution of SFI between 1995 and 2010 for the group of Extremely Fragile Countries



Source: Center for Systemic Peace, 2010

Figure 2. Difference in SFI between 1995 and 2010 for Extremely Fragile Countries



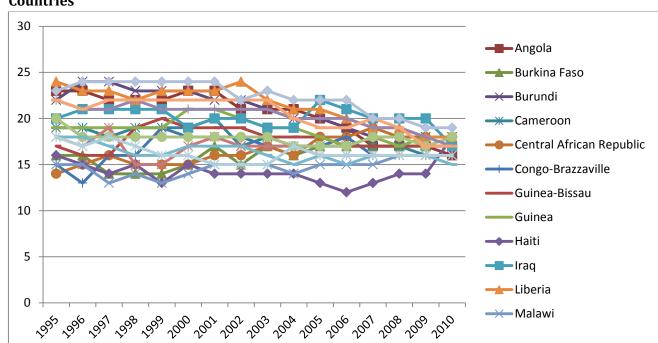
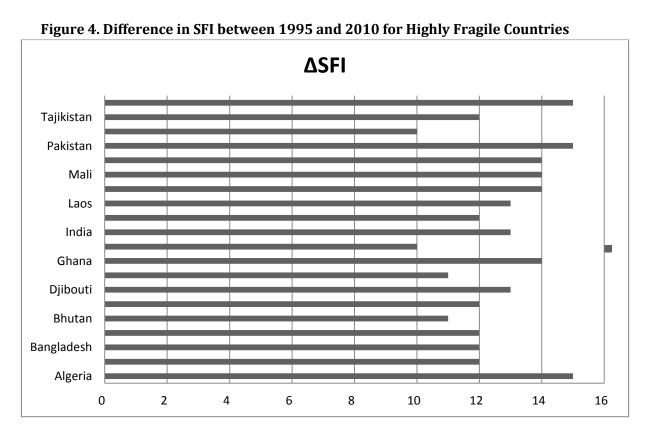


Figure 3. Evolution of SFI between 1995 and 2010 for the group of Highly Fragile Countries  ${\bf Countries}$ 



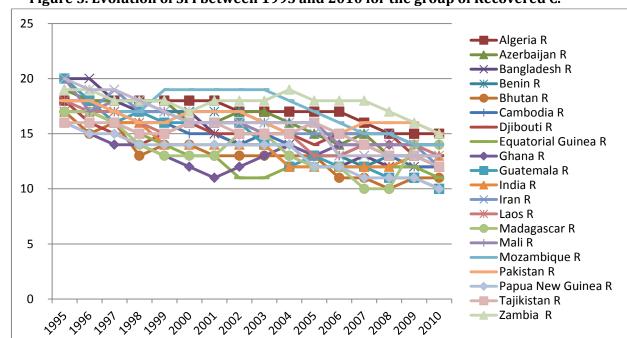


Figure 5. Evolution of SFI between 1995 and 2010 for the group of Recovered C.

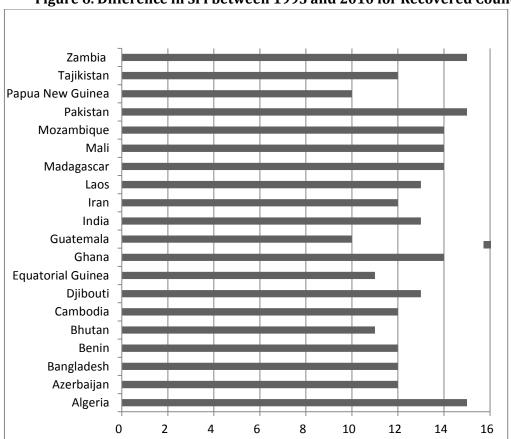


Figure 6. Difference in SFI between 1995 and 2010 for Recovered Countries

Table 1. List of featured low-income countries

<b>Economy</b>	SFI 2010
Bolivia	11
Gabon	11
Indonesia	10
Lesotho	11
Sri Lanka	13
Ecuador	12
Guyana	11
Honduras	9
Kazakhstan	10
Moldova	10
Solomon	9
Islands	9
Turkey	10
Uzbekistan	13

**Table 2. Armed Conflict Indicator** 

	Afghanistan	War
	Chad	War
	Cote d'Ivoire	Х
Extreme Fragile	Dem. Rep. of Congo	War
Countries	Ethiopia	War
	Myanmar (Burma)	War
	Somalia	War
	Sudan	War
	Angola	*
	Burkina Faso	
	Burundi	*
	Cameroon	
	Central African Republic	War
	Congo-Brazzaville	*
	Guinea-Bissau	
Highly Fragile	Guinea	
Countries	Haiti	Х
	Iraq	War
	Liberia	
	Malawi	
	Mauritania	*
	Niger	*
	Nigeria	War
	Pakistan	War

Rwanda	*
Sierra Leone	*
Uganda	X
Yemen	War
Zimbabwe	*

#### Legend:

War A country is actively involved in a armed conflict

The country has been actively involved in a armed conflict in the past twenty years, but has been experiencing peace since at least the last five.

 ${\bf \chi}$  The country has been actively involved in a conflict in the past five years

**Table 3. Fragility Status of Recovered Countries** 

SFI Recovered	1995	2010	Fragility Status
Countries			
Algeria	18	15	Moderate
Azerbaijan	19	12	Moderate
Bangladesh	20	12	Moderate
Benin	17	12	Moderate
Bhutan	17	11	Low
Cambodia	17	12	Moderate
Djibouti	18	13	Moderate
<b>Equatorial Guinea</b>	17	11	Low
Ghana	16	14	Moderate
Guatemala	20	10	Low
India	17	13	Moderate
Iran	17	12	Moderate
Laos	18	13	Moderate
Madagascar	17	14	Moderate
Mali	20	14	Moderate
Mozambique	18	14	Moderate
Papua New Guinea	16	10	Low
Tajikistan	16	12	Moderate
Zambia	19	15	Moderate
Togo	20	13	Moderate

# **Appendix B: Data Set Analysis**

## **B1) Variables**

The Doing Business in order to make it possible for comparison across countries overtime establishes assumptions over the type of business.

#### Such assumptions are:

- a) Is a limited liability company (or its legal equivalent).
- b) Operates in the economy's largest business city.
- c) Is 100% domestically owned and has 5 owners, none of whom is a legal entity.
- d) Has start-up capital of 10 times income per capita at the end of 2010, paid in cash.
- e) Performs general industrial or commercial activities, such as the production or sale to the public of products or services. The business does not perform foreign trade activities and does not handle products subject to a special tax regime, for example, liquor or tobacco. It is not using heavily polluting production processes.
- f) Leases the commercial plant and offices and is not a proprietor of real estate.
- g) Does not qualify for investment incentives or any special benefits.
- h) Has at least 10 and up to 50 employees 1 month after the commencement of operations, all of them nationals.
- i) Has a turnover of at least 100 times income per capita.
- j) Has a company deed 10 pages long.

Source: World Bank

### **B2) ANOVA**

**Table 1. Descriptives** 

SFI

					95% Confidence Interval for Mean			
			Std.	Std.	Lower	Upper		
	Ν	Mean	Deviation	Error	Bound	Bound	Minimum	Maximum
Low Income	65	10,7385	1,37246	,17023	10,3984	11,0785	8,00	13,00
Higly Fragile	45	17,4889	1,47127	,21932	17,0469	17,9309	16,00	22,00
Recovered	45	12,9333	1,33825	,19949	12,5313	13,3354	10,00	16,00
Extremely	15	19,9333	2,01660	,52068	18,8166	21,0501	16,00	22,00
Fragile								
Total	170	13,9176	3,58238	,27476	13,3753	14,4600	8,00	22,00

Table 2. Test of Homogeneity of Variances

SFI

SFI			
Levene			
Statistic	df1	df2	Sig.
1,458	3	166	,228

Table 3. ANOVA

SFI

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1817,315	3	605,772	286,057	,000
Within Groups	351,532	166	2,118		
Total	2168,847	169			

**Table 4. Multiple Comparisons** 

Dependent Variable: SFI

	(I) VAR00001	(J) VAR00001					
			Mean			95% Confide	ence Interval
			Difference	Std.		Lower	Upper
			(I-J)	Error	Sig.	Bound	Bound
Scheffe	Low	Higly	-6,75043 <sup>*</sup>	,28220	,000	-7,5475	-5,9534
	Income	Fragile					
		Recovered	-2,19487 <sup>*</sup>	,28220	,000	-2,9919	-1,3978
		Extremely	-9,19487 <sup>*</sup>	,41684	,000	-10,3722	-8,0176
		Fragile					
	Higly	Low Income	6,75043*	,28220	,000	5,9534	7,5475
	Fragile	Recovered	4,55556 <sup>*</sup>	,30679	,000	3,6891	5,4220
		Extremely	-2,44444*	,43386	,000	-3,6698	-1,2191
		Fragile					
	Recovered	Low Income	2,19487*	,28220	,000	1,3978	2,9919
		Higly	-4,55556 <sup>*</sup>	,30679	,000	-5,4220	-3,6891
		_ Fragile					
		Extremely	-7,00000°	,43386	,000	-8,2254	-5,7746
	<del></del> -	Fragile					
	Extremely	Low Income	9,19487	,41684	,000	8,0176	10,3722
	Fragile	Higly	2,44444*	,43386	,000	1,2191	3,6698
		Fragile					
		Recovered	7,00000*	,43386	,000	5,7746	8,2254

 $<sup>^{\</sup>ast}.$  The mean difference is significant at the 0.05 level.

Table 5: Kolmogorov-Smirnov and Shapiro-Wilk Test

	VAR00001	Kolm	ogorov-Smir	nov <sup>a</sup>		Shapiro-Wilk	
		Statistic	df	Sig.	Statistic	df	Sig.
SFI	Low	,197	65	,000	,919	65	,000
	Incom						
	е				II.	1	
	Higly	,275	45	,000	,850	45	,000
	Fragil						
	е						
	Recov	,187	45	,000	,922	45	,005
	ered					1	
	Extre	,247	15	,015	,863	15	,026
	mely						
	Fragil						
	е						

a. Lilliefors Significance Correction

Table 6. Kruskal-Wallis test Ranks

	VAR00001	N	Mean Rank
SFI	Low	65	39,17
	Income		
	Higly	45	135,47
	Fragile		
	Recove	45	79,24
	- red		
	Extrem	15	155,13
	ely		
	Fragile		ı.
	Total	170	

Table 7. Test Statistics a,b

	SFI
Chi-square	136,122
df	3
Asymp. Sig.	,000

a. Kruskal Wallis Test

b. Grouping Variable: VAR00001

# **B3) Multiple Linear Regression**

**Table 1. Model Summary** 

# Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,927ª	,859	,850	1,38575

a. Predictors: (Constant), DummyP3, DummyT4, Cost, DummyP2, DummyT2, Time, DummyT1, Proc, DummyP1, DummyT3

Table 2. ANOVA

# ANOVA<sup>b</sup>

Model		Sum of Squares df		Mean Square	F	Sig.
1	Regression	1863,521	10	186,352	97,044	,000 <sup>a</sup>
	Residual	305,326	159	1,920		
	Total	2168,847	169			

a. Predictors: (Constant), DummyP3, DummyT4, Cost, DummyP2, DummyT2, Time, DummyT1, Proc, DummyP1, DummyT3

**Table 3. Collinearity Coefficients** 

#### Coefficients<sup>a</sup>

Model				Standardized				
		Unstandardize	ed Coefficients	Coefficients			Collinearity	Statistics
		B Std. Error		Beta	t	Sig.	Tolerance	VIF
1	(Constant)	12,257	,511		23,999	,000		
	Proc	-,140	,044	-,111	-3,179	,002	,732	1,366
	Time	-,001	,004	-,010	-,279	,781	,745	1,342
	Cost	,003	,001	,123	3,544	,001	,733	1,364
	DummyT1	-,223	,337	-,025	-,660	,510	,621	1,611
	DummyT2	-,378	,341	-,042	-1,109	,269	,608	1,645
	DummyT3	-,374	,350	-,042	-1,069	,287	,578	1,731
	DummyT4	-,386	,357	-,043	-1,081	,281	,555	1,803
	DummyP1	6,274	,304	,775	20,640	,000	,628	1,592
	DummyP2	2,192	,274	,271	8,013	,000	,775	1,290
	DummyP3	8,751	,414	,695	21,116	,000	,817	1,223

a. Dependent Variable: SFI

b. Dependent Variable: SFI

b. Dependent Variable: SFI

**Table 4. Collinearity Diagnostics** 

Collinearity Diagnostics<sup>a</sup>

Collinearity Diagnostics														
Model	Dimension						,	١	/ariance	Proporti	ons	1	1	
		Eige	Cond			Ti	С							
		nvalu	ition	(Cons	Pr	m	os	Dum	Dum	Dum	Dum	Dum	Dum	Dum
		е	Index	tant)	ос	е	t	myT1	myT2	myT3	myT4	myP1	myP2	myP3
	1 1	4,585	1,000	,00	,0	,0	,0	,01	,00	,00	,00	,01	,01	,00
					0	1	1							
	2	1,154	1,994	,00	,0	,0	,0	,02	,00	,02	,03	,13	,11	,04
					0	0	9							
	3	1,027	2,112	,00	,0	,0	,0	,06	,00	,03	,05	,03	,12	,28
					0	0	0							
	4	1,000	2,141	,00	,0	,0	,0	,08	,00	,27	,05	,01	,00	,09
					0	0	0							
	5	1,000	2,141	,00	,0	,0	,0	,05	,02	,01	,20	,03	,00	,23
					0	0	0							
dimen	dimen 6	1,000	2,141	,00	,0	,0	,0	,12	,33	,03	,00	,00	,00	,00
sion0	sion1				0	0	0							
	7	,518	2,974	,00	,0	,0	,5	,07	,04	,01	,00	,01	,25	,07
					0	1	0							
	8	,352	3,608	,00	,0	,2	,0	,12	,06	,01	,01	,27	,27	,01
					0	8	8							
	9	,236	4,412	,00	,0	,1	,3	,17	,17	,18	,18	,46	,18	,15
					0	4	2							
	1	,100	6,777	,06	,2	,5	,0	,23	,25	,28	,23	,05	,05	,03
	0				4	6	0							
	1	,028	12,74	,94	,7	,0	,0	,09	,12	,16	,23	,01	,00	,09
	1		5		5	0	0							

a. Dependent Variable: SFI

**Table 5. Residuals Statistics** 

# Residuals Statistics<sup>a</sup>

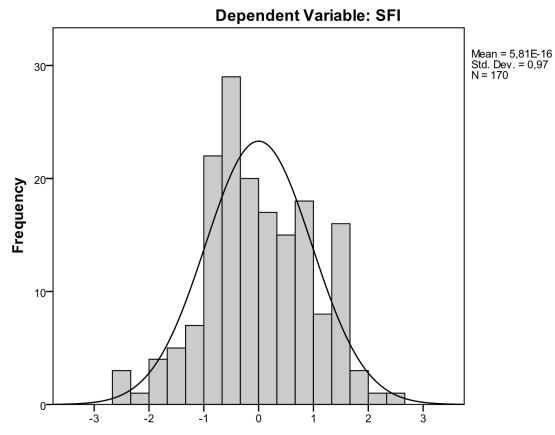
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	9,9134	20,6318	13,9176	3,32065	170
Std. Predicted Value	-1,206	2,022	,000	1,000	170
Standard Error of Predicted	,274	,839	,345	,071	170
Value					
Adjusted Predicted Value	9,7269	20,8875	13,9166	3,32359	170

Residual	-3,53462	3,45231	,00000	1,34412	170
Std. Residual	-2,551	2,491	,000	,970	170
Stud. Residual	-2,694	2,661	,000	1,005	170
Deleted Residual	-3,94165	3,93855	,00101	1,44391	170
Stud. Deleted Residual	-2,749	2,714	,000	1,011	170
Mahal. Distance	5,622	61,012	9,941	6,120	170
Cook's Distance	,000	,091	,007	,012	170
Centered Leverage Value	,033	,361	,059	,036	170

a. Dependent Variable: SFI

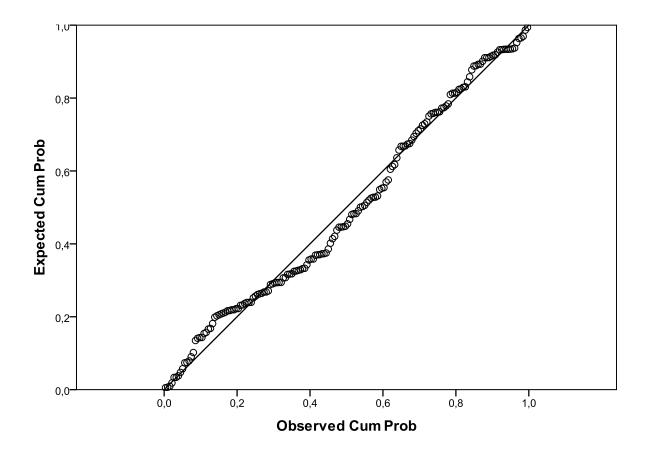
Figure 1. Histogram

# Histogram



Regression Standardized Residual

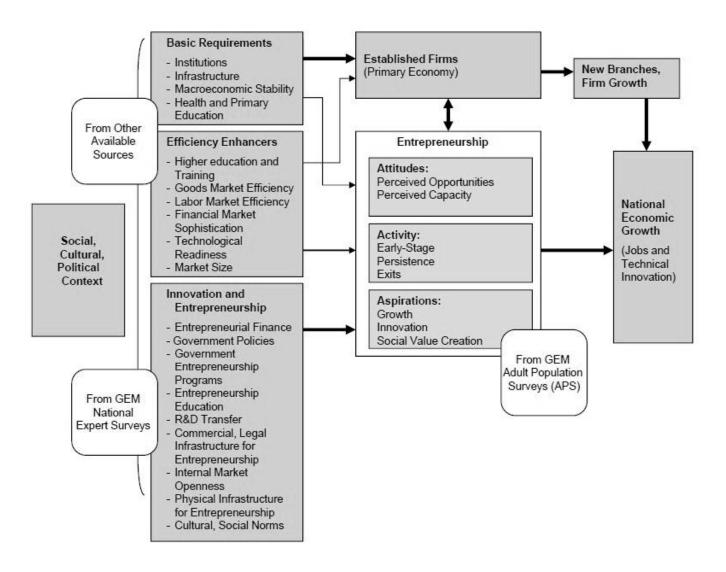
Figure 2. Normal P-P Plot of Regression Standardized Residual. (Dependent variable: SFI)



# **Appendix C: Inputs for the New Development Framework**

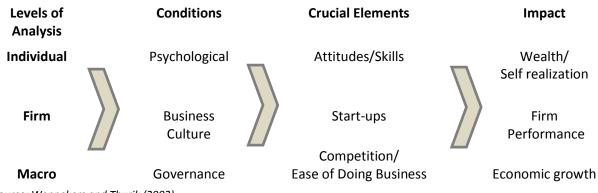
## C1: Revisited models

Figure 1. GEM MODEL



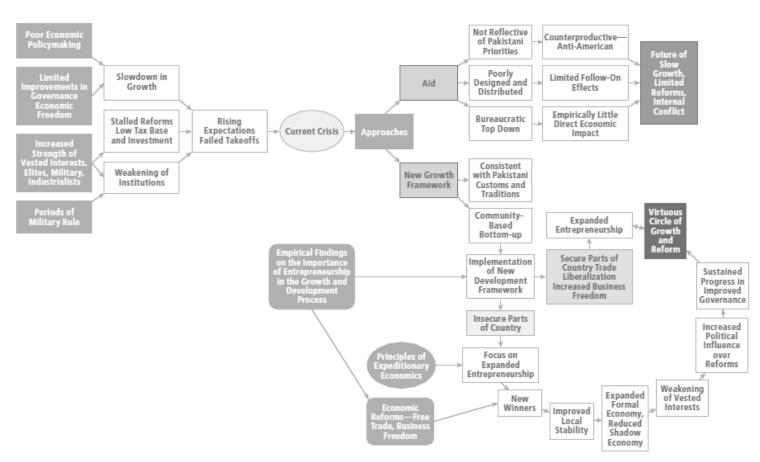
Source: GEM,2011

Figure 2. Entrepreneurship Model, Carree and Thurik (2002)



Source: Wennekers and Thurik (2002)

Figure 3. The New Growth Framework for Pakistan



Source: Kauffman Foundation, 2012

# **C2: World Bank Enterprise Surveys**

Table 1. World Bank Enterprise Surveys (2010)

Economy	Access to financ e	Acces s to land	Busin ess licensi ng and permi ts	Corru ption	Court	Crime , theft and disord er	Custo ms and trade regula tions	Electri city	Inade quate ly educa ted workf orce	Labor regula tions	Politic al instab ility	Practi ces of the infor mal sector	Tax admin istrati on
Azerbaijan	28,3	0,8	3,5	15,3	0,0	0,4	2,0	3,5	0,8	0,0	0,0	31,4	1,2
Benin	24,4	4,3	0,0	12,6	0,0	1,1	1,1	22,1	1,2	0,0	4,3	10,3	12,3
Bhutan	27,1	1,6	4,4	0,0	0,0	1,1	1,7	2,7	14,9	10,4	0,8	16,3	0,8
Burkina Faso	37,9	4,1	0,0	10,7	0,3	2,1	4,9	8,4	0,3	1,0	0,2	13,7	3,9
Cameroon	16,5	0,0	0,0	11,9	2,3	2,3	2,1	13,7	2,0	1,5	1,8	21,3	19,2
Chad	14,9	0,0	0,0	18,7	2,1	1,4	8,0	19,2	0,0	0,0	28,1	3,9	2,5
Liberia	46,7	0,5	0,3	4,6	0,9	16,7	0,0	29,3	0,4	0,0	0,0	0,0	0,0
Malawi	29,0	6,4	1,7	4,4	0,0	6,9	0,7	14,1	2,0	1,9	0,0	5,4	1,3
Niger	11,0	1,1	0,0	9,0	0,0	0,0	1,1	9,6	1,7	0,0	16,8	38,2	0,0
Sierra Leone	18,3	9,8	0,6	25,3	0,0	4,0	0,6	15,1	8,0	0,0	3,3	1,8	0,0
Togo	25,1	0,0	0,0	12,8	0,0	0,0	0,0	2,6	0,0	0,0	13,8	32,5	1,0

Source: World Bank