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# "Resisting the formulaic; measuring the impact of aid on entrepreneurship and development" Dr Simon White

#### **Abstract**

How do donor and development agencies allow their programs to be flexible and adapt to changing circumstance while ensuring taxpayer funds are well spent and create a positive and significant impact? This paper reports on the results of current research on how private sector development and entrepreneurship contributes to sustainable development. It presents the challenges facing public policy-makers and program managers as donor interventions become more market-oriented and systemic. The growing, sometimes competing, demands for results and evidence require program designers and managers to constantly monitor and respond to systemic changes. Formulaic blueprints for measuring results are no longer appropriate. This paper describes indicators and approaches used to better assess how private sector development supports broader development ambitions. While developed and developingcountry governments want to measure the impact of their programs against expenditure, it is also important to generate evidence to guide program revisions and to better understand how programs affect the market and government systems entrepreneurs operate within. While "top-down" planning frameworks, such as the Sustainable Development Goals, reconfigure donor programing, there is an even greater need to understand the experiences and behaviour of entrepreneurs in a "bottom-up" process of diagnosis and program design. This paper focuses on the hourglass of top-down and bottom-up program design and management in which the ambitions of programs are clearly delineated while responding to changes in market and government systems.

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#### Introduction

Around the world, the private sector is the primary creator of sustainable employment opportunities. This is no less so in developing economies, where 90 per cent of all jobs are found in the private sector (World Bank 2013). Most people who have overcome poverty identify "finding a paid job" or "starting a business" as the two most important reasons for the transition out of poverty (International Labour Organization 2014). Thus, there is a strong interest among both donor and recipient countries to support the growth of the private sector and entrepreneurship. Private sector development (PSD) refers not only to the development of private enterprises, but also to the range of factors, including markets, crucial for the development of a well-functioning private business sector (see Sinha, *et.al.* 2001). PSD encompasses a number of broad themes, including the promotion of domestic enterprises (i.e., entrepreneurship), the development of markets, the strengthening of value chains, and the mobilisation of increasing levels for private foreign and domestic investment for development.

The expectations and ambitions of working with the private sector are changing. PSD has sought to contribute to national development goals such as poverty reduction and economic growth through measures focused on increasing firm profits, generating jobs and improving livelihoods for poor women and men. However, the private sector also provides the products and services consumers require and there is greater awareness of the role of large enterprises and corporations in better serving poor consumers with the products and services they require (see Prahalad, 2005). Growing demands are placed on private firms in both developed and developing economies to become more ecologically and socially sustainable and to meet targets representing a "triple bottom line" (i.e., financial, social and ecological). More recently, the private sector is seen as a partner in development<sup>1</sup> and Australia has joined an international trend in the promotion of "shared value" achieved through public-private partnerships (see Bishop 2015 and Porter & Kramer 2011). Increasingly, large firms and multinational enterprises have been encouraged to find ways to bring previously excluded smaller enterprises into global value chains and to play a more productive role in these. This includes small-scale farmers and agri-businesses. The recent adoption by the United Nations in 2015 of the Sustainable Development Goals (SDGs) presents a call to action and provides yet another set of high-level goals and targets policy makers have subscribed to and to which PSD must account (United Nations 2015a).

Policies and programs aimed at engaging with the private sector and promoting entrepreneurship are changing fast. There is a growing demand to deliver programs with impact and to lever additional resources for development. This leads to experimentation and innovation, which supporting agencies need to manage, not only to account to their sponsors (i.e., treasury, taxpayers, investors), but also to better understand what is working and what is not.

An enduring aspect to all these programs is their focus on changing individual behaviour. Entrepreneurship promotion encourages individuals to become more enterprising—to take a measured risk, mobilise the resources available to them and pursue the development of a new or improved product or service. There are many factors affecting this decision and whether or not it succeeds. Indeed, even failure—or how one responds to failure—can be a

The Addis Ababa Action Agenda of the Third International Conference on Financing for Development (United Nations 2015b, para. 35) calls "on all businesses to apply their creativity and innovation to solving sustainable development challenges" and invites them to "engage as partners in the development process, to invest in areas critical to sustainable development, and to shift to more sustainable consumption and production patterns".

sign of success. Thus, there is a range of country specific institutional, social and cultural systems shaping this behaviour.

This paper provides a brief overview of the issues faced when measuring the impact of PSD and entrepreneurship promotion programs supported by international donor and development agencies. It considers the ways programs can demonstrate their results in a practical and credible way and how program performance data can be used to improve program effectiveness and design. In part, this paper contains some work in progress the author is engaged in with the United National Conference for Trade and Development (UNCTAD) in the preparation of a White Paper on Measuring Entrepreneurship and the Impact of Entrepreneurship Policies, which is due for completion in the first half of 2016. The challenge in this work is to combine the top-down drive of a global development agenda, as presented by the SDGs, with a bottom-up response to the unique challenges facing businesspeople on the ground.

#### The causal links for PSD and national development

Measuring the impact of PSD and entrepreneurship on national development requires an understanding of the means through which program interventions ignite micro-level changes with desired macro-level effects. This was quite easy to measure in the early days of entrepreneurship promotion. Aspiring entrepreneurs were provided with services (e.g., cheap finance, management training, mentor support) in order to achieve a desired outcome (e.g., new businesses established, people employed). The impact of these services could be directly measured (although this was rarely done): beneficiary performance could be compared with that of non-beneficiaries and the value of the performance measured and calculated against the cost of the service. However, as the evidence of poor performance and limited impact grew, the nature of these programs changed.

Today, PSD and entrepreneurship promotion programs adopt more systemic interventions, working with markets and other institutions to influence the behaviour of aspiring entrepreneurs and business owners and managers. Where once, governments ran business services, today these services are commercialised, demand-oriented and embedded into broader market-driven value chain interventions (see Elliot, et. al., 2008). More attention is given to the influence of business environments and the social, political and cultural systems affecting the performance of firms. There is also more attention given to bringing interventions "to scale" and to focusing on firms that exhibit "high growth" prospects (see Audretsch 2012). New models, such as "inclusive businesses" and the use of "impact bonds" have emerged.

Program interventions broadly exhibit two levels of impact. The first is at the firm level. Here, PSD and entrepreneurship promotion seeks to change the behaviour of women and men who own and manage a business or who aspire to do this. Programs provide education and training to school students and university graduates to help them better understand what business is about and to consider a career in business. Social programs are used to promote business role models and to challenge negative stereotypes. Other types of programs focus on reforming the business environment, making it easier, cheaper and more transparent for businesses to start-up and operate. Finance and training programs improve the access businesspeople have to the resources they require and value chain interventions open up new market opportunities.

All these interventions are initially measured in terms of the impact they have on the individual or firm. Measures include the number of new businesses established or registered and changes in the way the businessperson manages their business, such as by investing more

into the business (e.g., buying new plant and equipment, more staff, more staff training, formalised employment contracts, better working conditions). Firm level impacts include the decisions made by informal firm owners and managers to formalise, i.e., taking steps to move from the "hidden" informal economy and to increase compliance with the legal and regulatory framework.

These micro-level changes are not important in themselves. While it is good to see new firms start and expand, public money is not being spent for this purpose alone. Governments and social impact investors desire a level of impact at the economy level. Here, micro-level changes combine to influence change in aggregate net employment and economic growth, which in turn increases the number of poor women and men who obtain employment and earn more.

These levels of impact are illustrated in Figure 1.

**ECONOMY-LEVEL IMPACTS** POOR WOMEN AND MEN GET JOBS AND EARN MORE 1 **EMPLOYMENT INCREASES ECONOMY GROWS** 1 **ENTERPRISE-LEVEL IMPACTS** FIRMS INCREASE TURNOVER FIRMS INCREASE PRODCTIVITY AND/OR PROFITS 1 1 FIRMS CHANGE BEHAVIOUR - THEY **NEW FIRMS START-UP/REGISTER INVEST MORE** 个 个 **TYPES OF PROGRAM INTERVENTION (INPUTS & ACTIVITIES)** PUBLIC-PRIVATE **BUSINESS ENVIRONMENT** M4P/VALUE CHAIN PARTNERSHIPS & SHARED **REFORMS DEVELOPMENT** VALUE

Figure 1:Enterprise and Economy-Level Impacts of PSD programs

SOURCE: Adapted from Donor Committee for Enterprise Development (2015b)

As the figure above shows, program interventions can be articulated to connect program activities with micro (firm) level changes and macro (economy) level impacts. While three types of program intervention are displayed (i.e., business environment reform, making markets work for the poor and value chain development and public-private partnerships and shard value), innovations in program design and delivery will create new categories, which will still require the causal relationships to be explained.

Before focusing on program measurement, it is instructive to understand how governments typically assess entrepreneurship and how they may come to the conclusion that some kind of policy or program intervention is necessary. To do this, research typically connects microlevel experiences and influences to macro-level measures, many of which are (questionably) used for international comparisons.

# **Measuring Entrepreneurship**

Measures of entrepreneurship help governments to determine the health of the business sector and to infer from this the extent to which private enterprises contribute to national development. There are a number of large-scale, international comparative measures used to examine economic growth and development, some of which include entrepreneurship and the state of the business sector. This includes the World Economic Forum's Global Competitiveness Index and the World Bank's Enterprise Surveys, as well as other assessments with a specific interest, such as the Index of Economic Freedom, produced by the Heritage Foundation and the *Wall Street Journal*. This paper focuses on two measures specifically concerned with entrepreneurship.

# OECD-Eurostat Entrepreneurship Indicators Programme

Among the Organisation for Economic Cooperation and Development (OECD) member states, the OECD-Eurostat Entrepreneurship Indicators Programme (EIP) is a valuable source of cross-country data. The EIP develops policy-relevant and internationally comparable indicators based on an analytical model and measurement infrastructure. Launched in 2006, EIP has produced methodological tools to structure the development and collection of indicators of entrepreneurship. EIP suggests there is no single indicator to adequately cover the complexity of entrepreneurship. It has developed a set of measures to capture different aspects and types of entrepreneurship. These measures are referred to as indicators of entrepreneurial performance and are conceived to assist the analysis of key questions such as:

- What is the rate of creation of new businesses in a country?
- How many jobs do they create?
- How many start-ups survive in the first years following creation?
- Will the young firms innovate or export?
- Are there more firms created by men or women?
- Do they set up businesses in the same sectors?

EIP takes a comprehensive approach to the measurement of entrepreneurship by looking not only at the manifestation of the entrepreneurial phenomenon, but also at the factors influencing it. These factors—or "determinants"—range from market conditions and regulatory frameworks, to culture and conditions of access to finance. Each year, EIP produces a harmonized set of indicators in its *Entrepreneurship at a Glance* publication (see OECD 2015). The figure below shows how the EIP distinguishes between measures of key entrepreneurship determinants and firm-level changes (i.e., "entrepreneurial performance") and "impact". See Figure 2 on the following page.

Simon White, February 2016

5

For more information on EIP go to: <a href="http://www.oecd.org/std/business-stats/theentrepreneurshipindicatorsprogrammeeipbackgroundinformation.htm">http://www.oecd.org/std/business-stats/theentrepreneurshipindicatorsprogrammeeipbackgroundinformation.htm</a>

Entrepreneurial performance Determinants Impact Knowledge creation and diffusion Regulatory Access to finance Entrepreneurial capabilities Market Culture Firm based Job creation conditions Training and Access to debt financing Risk attitude in Employment based Administrative Economic growth Anti-trust laws R&D investment entrepreneurs Administrative Business and University/ Attitudes towards Poverty reduction Wealth Competition entrepreneurship education (skills) Business angels industry interface Technological Desire for Formalising the Bankruptcy regulation Access to the Entrepreneurship infrastructure Venture Capital Safety, health Entrepreneurship Access to foreign Technology Access to other Immigration environmental types of equity (mindset) regulations Broadband Degree of public involvement Stock markets Labour market regulation Firms **Employment** Wealth Court and legal Share of high growth firms Share of high growth firms Employer enterprise birth Social and health Employer enterprise death Share of gazelles (by Share of gazelles (by employment) Value added, young or Income taxes Business churn Ownership rate start-ups small firms Net business population Ownership rates business Productivity contribution, young or small firms Business and Patent system standards Survival rates at 3 and 5 Employment in 3 and 5 Innovation performance, young or small firm Proportion of 3 and 5 year old firms Average firm size after 3 Export performance, young or small firms

Figure 2: OECD-Eurostat Entrepreneurship Indicators Programme Indicators Framework

SOURCE: Organisation for Economic Cooperation and Development (2015, 13)

The firm level effects of the identified "determinants", referred to as "entrepreneurial performance" in the figure above, measure the number of firms, employment and wealth. These are connected to broader development impacts (i.e., job creation, economic growth, poverty reduction, and formalisation).

The EIP requires a well-established national statistical database from which these indicators can be drawn. While not all counties in the OECD have immediately comparable data, there is a strong capacity within most member states to work toward this. The same cannot be said for many developing economies, where national statistical data is often weak and inconsistent. For this reason, purpose-specific measurement methods, such as surveys, are often required.

#### Global Entrepreneurship Monitor

The Global Entrepreneurship Monitor (GEM) measures entrepreneurship activities and attitudes around the world to better understand why some countries are more entrepreneurial than others.<sup>3</sup> It has become a rich source of information on the subject, publishing a range of global, national and special topic reports on an annual basis.

Through annual household surveys of the adult population in participating countries—developed and developing—GEM provides responses from interviewed adults on their reported attitudes towards entrepreneurship, their pre-start-up activities, their work on the initial phase of their firm, their involvement in the established phase of the firm and their business closures. Unlike enterprise surveys, GEM surveys people in households so it can

GEM began in 1999 as a joint project between Babson College in the USA and London Business School. For more information on GEM go to: <a href="http://www.gemconsortium.org">http://www.gemconsortium.org</a>

identify those involved in different phases of entrepreneurship. This allows for the collection of information on entrepreneurial motivations, aspirations and other individual characteristics. The most recent report, the GEM *2014 Global Report* surveyed more than 206,000 individuals and 3,936 national experts across 73 economies (GEM 2015).

The current GEM conceptual framework is made up of four elements (see Figure 3):

- Social, cultural, political and economic context: this is defined the World Economic Forum's twelve pillars for profiling economic development phases when surveying competitiveness and nine components of the GEM National Entrepreneurial Conditions.<sup>4</sup>
- Social values towards entrepreneurship: including how society values entrepreneurship as a good career choice, if entrepreneurs have a high social status, and how media attention to entrepreneurship is contributing (or not) to the development of a national entrepreneurial culture.
- Individual Attributes: including several demographic factors (i.e., gender, age, geographic location), psychological factors (i.e., perceived capabilities, perceived opportunities, fear of failure) and motivational aspects (i.e., necessity-based versus opportunity-based venturing, improvement-driven venturing).
- Entrepreneurial Activity: defined according to the ventures' life cycle phases (i.e., nascent, new venture, established venture, discontinuation), the types of activity (high growth, innovation, internationalization) and the sector of the activity (see GEM 2015, 24).

GEM has developed indicators to measure various aspects of entrepreneurial behaviour:

- Nascent Entrepreneurship Rate: the proportion of the population actively involved in setting up a business they will own or co-own, this business has not paid salaries, wages or any other payments to the owners for more than three months.
- New Business Ownership Rate: the proportion of the population that is currently an owner-manager of a new business paying salaries, wages or any other payments to the owners for more than three months, but not more than 42 months.
- Total Early-stage Entrepreneurial Activity Index: the sum of the proportion of the population involved in nascent entrepreneurship activities and those who have started new business within the last 42 months. This is a measure of the stage in advance of the start of a new firm (i.e., nascent entrepreneurship) and the stage directly after the start of a new firm (i.e., owning-managing a new firm).
- Established Business Ownership Rate: measures the proportion of the population that is currently an owner-manager of an established business paying salaries, wages or any other payments to the owners for more than 42 months. This measure provides information on the stock of businesses in an economy.

Figure 3, below, is the GEM Conceptual Framework displaying how these elements and indicators interact.

For more information go to: <a href="http://reports.weforum.org/global-competitiveness-report-2014-2015/methodology/?doing">http://reports.weforum.org/global-competitiveness-report-2014-2015/methodology/?doing</a> wp cron=1452574076.4241731166839599609375

The GEM framework Social, Cultural, Political, Outcome Economic (socio-economic Context development) Entrepreneurial Output (new jobs, new value added) Entrepreneurial Framework Conditions Social Values **Entrepreneurial Activity Towards** Entrepreneurship By phases of organisational life cycle Nascent, new, established. Individual discontinuation Attributes **Basic Requirements** Types of activity (psychological, High growth, innovative, Efficiency Enhancers demographic, internationalization motivation) Sectors of activity Innovation and Total Early-Stage Entrepreneurial Activity **Business Sophistication** (TEA), Social Entrepreneurial Activity (SEA), Employee Entrepreneurial Activity (EEA)

Figure 3:GEM Conceptual Framework

SOURCE: Global Entrepreneurship Monitor (2015, 20)

While many countries consistently participate in the GEM annual reviews, participation is dependent on funding and there is some variation each year in the countries included. The GEM is valuable for the information it provides at a micro level and its insights into how macro framework conditions and societal values combine to influence individual behaviour.

Both GEM and EIP show how systems influence entrepreneurship. As our understanding of systems increase, so too do the demands on programs. In its review of United Kingdom Department for International Development's (DFID) PSD work, the Independent Commission for Aid (2014) recommended that DFID "needs to work harder to understand the barriers and business imperatives faced by the private sector in participating in development. Wherever it operates, DFID needs to be clear how and where its interventions can address these barriers".

Changing systems can lead to sustained and significant improvements in the levels of entrepreneurship and the impact entrepreneurial behaviour has on economic, social and ecological outcomes. However, like trying to hold a wet and slippery fish, working with and changing systems can be complex and difficult to manage.

#### Measuring program effects and impacts

While the OECD-Eurostat EIP and the global GEM reports provide valuable insights into the dynamics of entrepreneurship across selected countries, they do not provide data for determining the performance and impact of PSD and entrepreneurship promotion programs. These programs may aspire to improve the conditions for entrepreneurship and the capability of entrepreneurs and their firms, but they cannot use EIP or GEM data to demonstrate how a program has contributed to changes at this level. Thus, programs are required to articulate the relationships between their interventions and broader development goals.

Storey (2005) argues the first step in beginning to determine the success of programs is to ensure their objectives are clearly specified and formulated in a measurable manner. Unfortunately, says Storey, "this is rarely the case" (p. 490). However, programs are now paying more attention to the formulation of results chains outlining the logical relationships among resources invested, activities and the sequence of changes producing desired results. Results chains articulate the logic of a program and its assumptions and are used to demonstrate how program interventions create firm level and ultimately macro-level changes (see Kessler 2015).

As the methods for PSD change, becoming more market-oriented and systemic, results chains are growing longer and more complex, containing many elements (e.g., policy, legal and regulatory frameworks, administration and governance systems). Coordinating and measuring these elements can be difficult. Furthermore, there are many external factors affecting PSD programs. These include external shocks and global trends, as well as the impact of other government and donor programs. Indeed, many donor and development agencies believe it is not realistic to evaluate donor interventions by measuring changes in firm behaviour (Lindahl, *et. al.*, 2011). While donor agencies typically make assumptions to accommodate the affect of these external factors when attempting to attribute the results of their own programs, there is a growing demand to find ways to more accurately trace specific program results.

Innovations in PSD and private sector engagement make it more important to design programs by explaining the causal links, some of which may be untested. Careful program monitoring and robust impact measurement can track progress, test assumptions and determine effectiveness. This data can then be used to refine programs, both current and future, and provide objective evidence on which new program interventions can be developed. As Easterly (2006, 376) points out, "a negative evaluation of a particular aid effort is a learning opportunity, not an excuse to cut foreign aid". Indeed, Story (2005, 507) argues for setting aside funds to regularly review policy impacts and program performance; far from being the end of the line, "evaluation provides the basis for setting future objectives and targets for policy". However, many programs are facing increasing pressure to provide results justifying their existence. The demand for results can draw significant resources and can distract managers and sponsoring agencies from learning form current experiences and adjusting programs where necessary.

There are two very different kinds of data required by program managers and donor agencies. The first measures the effect the program currently has on its partners, beneficiaries and other actors within market and government systems. The second measures the overall impact of the program and its success in achieving desired results.

#### Measuring program effects

Program innovation and working with market and government systems is a complex process requiring a regular flow of information on how programs are influencing these systems. This creates unique challenges for programs from the diagnostic phase right through to program closure.

The process of measuring program effects and impact is closely connected to diagnostics and design. While a great deal of effort and time typically goes into understanding market and government systems and the behaviour of entrepreneurs, program design can be an unwieldy process made more complicated by detailed design templates, sophisticated log frames and lengthy approval processes, which are often disconnected from the realities of program beneficiaries. The top-down goals of development programs, such as those enunciated by the SDGs, are combined with the bottom-up experiences of entrepreneurs and other system agents—or should be. A well-designed program will focus on the neck of the hourglass of

these top-down, bottom-up demands and will strategically focus program interventions on systemic changes that influence outcomes in both directions. The challenge for program managers is to monitor the effect the program has on these systems and to adjust accordingly, while responding to demands from funders for evidence of longer term impact.

Working with systems requires careful monitoring of effects and adjustments that respond to unexpected changes, whether they are created by the program or by external forces. Laric (2012) describes how monitoring information can be used to "reorient programs, strengthen advocacy and generate evidence and further reform momentum". Manuel (2015) suggests that program design should begin with locally identified problems informed by local conditions and politics. This should lead to "programming that is designed and implemented in a highly flexible and adaptive way".

Andrews, et.al., (2012) describe the relevance of "problem-driven iterative adaptation" (PDIA), which focuses on solving locally defined problems (as opposed to transplanting preconceived and packaged "best practice" solutions); creating an authorizing environment for decision-making that encourages experimentation (as opposed to designing projects and programs and then requiring agents to implement them exactly as designed); embeds this experimentation in tight feedback loops that facilitate rapid experiential learning (as opposed to enduring long lag times in learning from ex post "evaluation"); and actively engages broad sets of agents to ensure that reforms are viable, legitimate, relevant, and supportable (as opposed to a narrow set of external experts promoting the top-down diffusion of innovation). Thus, monitoring information is used to assess the effect programs have on systems and to use this to test assumptions formulated in the design phase, refine program strategies as they are implemented and keep a finger on the pulse of beneficiaries. Within this context the use and adjustment of results chains that delineate causal linkages is important.

A recently developed tool for PSD program monitoring provides a good example of this. The Donor Committee for Enterprise Development (DCED) Standard for Results Measurement has been developed to measure and improve program performance (Donor Committee for Enterprise Development 2010). The Standard helps program managers to clearly articulate the hypothesis connecting program activities with desired change at the enterprise and economy level. It provides guidance in systematically setting and monitoring indicators to show whether events are occurring as expected. This empowers programs to learn and adapt based on the monitoring data they collect. The Standard stresses the use of results measurement to make management decisions and helps program managers working in complex environments such as market systems, by encouraging flexibility and continual validation and revision of the program logic.

The first step in the Standard calls for managers to articulate the results chain. This helps managers to be explicit about the assumptions on which their work is based – including, for example, sequencing and parallel logics. The rest of the Standard framework flows from the program logic, supporting managers to test it in real time to see whether it is valid.

# Box 1: Elements of the DCED Standard

- 1. Articulating the results chain or program logic
- 2. Defining indicators of change based on the logic
- 3. Measuring changes in indicators, applying good practice

The Donor Committee for Enterprise Development (DCED) is a membership organization, established in 1979, made up of international donor and development agencies engaged in PSD. For more information go to: http://www.enterprise-development.org

- 4. Estimating attributable changes
- 5. Capturing wider changes in the system or market
- 6. Tracking associated program costs
- 7. Reporting results in a responsible way
- 8. Managing the system for results measurement

SOURCE: DCED http://www.enterprise-development.org/page/download?id=1448

To date, over 100 projects in more than 50 countries are currently implementing the DCED Standard, in a range of sectors including value chain development, challenge funds and business environment reform. It supports programs in thinking through what they plan to do, what they hope to achieve and what assumptions they are relying on.

Tools such as this are a valuable resource for managing innovation and ensuring sound evidence is used to guide management decisions and program refinements.

# Measuring program impacts

The measurement of program effects, described above, differs from the measurement of program impact. While monitoring data is obtained during the program's operation, impact data is typically gathered after the program has concluded—sometimes years later. While many PSD programs have been subjected to reviews and evaluations as they conclude (e.g., Project Completion Reviews), these have typically sought to evaluate program performance against a set of common criteria in which broader program impacts are only briefly considered. However, in recent years, more attention is being given to measuring the impact of a program, two, three or more years after its closure.

Posthumus and Wanitphon (2015) report on their work with various programs to measure change and attribute program impacts. They have produced a framework for considering which measures are best used to attribute program performance to enterprise and economy level impacts. (See Appendix 1.) Greater attention is being given to robust methods of measuring program attribution, including quasi-experimental methods and random control trials.

There is a strong argument that business success is the best indicator of progress. Private enterprises must operate in competitive markets and those surviving in these markets are successful. Thus, a country's success in promoting entrepreneurship is best measured by the number of businesses starting and surviving the notoriously difficult first five years. However, the problem with using the market as an indicator arises when markets do not operate perfectly. Market failures can affect the performance of firms and are often exhibited through problems in the profile and dynamics of the business sector (e.g., access to markets, anticompetitive behaviour). Similarly, failures in government systems can affect markets and the business sector; witness for example, the dominant size of the informal economy in many developing countries.

Business success and growth are good indicators of success at one level. Indeed, programs demonstrating a capacity to improve firm survival, profitability and growth deserve support. However, there may be other equally relevant micro and macro-level measures to consider when measuring the impact of entrepreneurship promotion programs. These measures include qualitative indicators focusing on the qualitative aspects of entrepreneurship (see Davidsson 2005). This may include firm level indicators of employment quality (e.g., use of formal contracts, working conditions, employment of women and other disadvantaged groups) and the sustainability of business practices in ecological and social terms. At the

macro level, indicators may encompass measures beyond economic growth and include inequality measures and carbon use.

With the adoption of the SDGs, containing 17 goals and 169 targets, multilateral and bilateral agencies are eager to reconfigure their programs. For better or for worse, the SDGs established a framework for measuring development impact. While the SDGs refer to entrepreneurship only twice (i.e., Indicators 4.4 and 8.3), they connect PSD and entrepreneurship to a high number of goals and indicators. Furthermore, the private sector is mentioned many times in the supporting text of the document as a key stakeholder and a critical actor in the implementation and success of the SDGs. The links between PSD, entrepreneurship and the SDGs can be clustered into the following themes:

- Economic growth and diversity;
- Productive employment and decent work;
- Inclusion and redressing inequality;
- Women's empowerment;
- Environmental sustainability (e.g., energy production and use, climate change mitigation); and
- Sector development (e.g., agriculture, energy).

The challenge for donor and development agencies is to consider the extent to which they can demonstrate how their PSD and entrepreneurship programs contribute to these themes. However, there is danger in forcing a global blueprint of development outcomes on all actors without recognising the practical and unique problems experienced on the ground. Thus, agencies should refine their indicators to represent specific changes at micro and macro levels.

The figure below present an initial consideration of what these indicators may be. They are drawn from examples of indicators agencies currently use or are considering for future use.

Figure 4:PSD and the SDGs: Possible indicators

SDG Theme	Firm Level	Economy Level
Economic growth and diversity	Changes in the number of disadvantages social groups in business Changes in firm investments	Changes in private sector contribution to GDP and employment Changes in poverty levels (rates) Changes in export value of goods and services (% of GDP)
Productive employment and decent work	<ul> <li>Changes in employment quality:</li> <li>Formal contracts</li> <li>Worker representation (social dialogue)</li> <li>Compliance with International Labour Standards</li> </ul>	Total private sector employment, disaggregated by sex, location, sector, etc.
Inclusion and inequality	Changes in the number of poor or indigenous women and men employed in firms	Changes in the GINI Coefficient
Women's empowerment	<ul> <li>Female representation in:</li> <li>Ownership</li> <li>Board membership</li> <li>Employment Numbers</li> </ul>	Changes in the number to FTE female jobs in the private sector

	Employment Levels	
Environmental sustainability	Energy use — including use of renewable energy	Value chain performance in green industries
	Firm investments in clean technologies	Renewable energy produced (MWH/year)
	Firms providing an environmentally focused service or product	GDP/CO2 emitted
		Income/CO2 in consumption
		Greenhouse Gas emissions avoided or reduced (metric tons per year)
		Water use avoided or reduced (cubic metres per year)
Sector development	No of firms in sectors with high representation of poor people (e.g., agriculture)	Changes in value-addition in selected sectors

SOURCE: Author — work in progress, variety of sources, including Green Growth Knowledge Platform (2013) and Donor Committee for Enterprise Development (2015a)

Indicators are important because they focus attention on what programs endeavour to change—often expressed by the maxim, "What gets measured gets changed". An interesting case in point is the World Bank's annual Doing Business assessment (World Bank 2015). While not not strictly designed to measure the performance of the private sector or levels of entrepreneurship, Doing Business measures an important dimension of entrepreneurship: the ease at which an entrepreneur can navigate the legal and regulatory regime for starting and operating a business. <sup>6</sup> By focusing on a specific set of regulatory indicators, the Doing Business assessment has inspired reforms in countries around the world wishing to improve their conditions for business growth. Rwanda is a celebrated case. In the Doing Business in 2015 report, Rwanda was ranked 46th in the Ease of Doing Business Index, third in Sub-Saharan Africa after Mauritius and South Africa (World Bank 2014). Despite the significant success Rwanda has achieved in making these reforms, private investment levels remain low, even when compared with other small, landlocked countries. It would appear that the constraints to private enterprise growth and entrepreneurship go beyond the reforms required to perform well in the Doing Business assessments. Important as these reforms may have been, they have proved insufficient and possibly should not have been considered a priority reform area for private sector growth.

Thus, while universal, global indicators have their place—they can, for example, promote a desire for reform through their comparative ranking of country performance—they have severe limitations when considering the problems local entrepreneurs face. Programs designed according to these telescopic, long-range and top-down indicators alone are doomed to failure. While donor and development agencies and their development partners are eager to support development outcomes that reflect global development aspirations, such as those outlined in the SDGs, success requires a good understanding of the problems entrepreneurs face and of the specific systems influencing the decisions entrepreneurs make. Programs require indicators that connect micro-level change (e.g., individuals, firms, organisations) to macro-level outcomes. Selecting appropriate, robust and accessible indicators during program formulation and establishment focuses attention on the changes

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programs desire and connects these changes with development goals. Choosing the right indicators and assessment methods is crucial to success when compiling evidence on which program impact can be measured. However, this is not an activity to be undertaken at the completion of a program. It should be initially formulated in the design phase of the program and regularly assessed. Through out all this, it is important for programs to formulate a clear narrative describing how their interventions are affecting systems and how these effects ignite change at the macro level.

#### **Summary and conclusion**

New approaches to PSD and entrepreneurship promotion require careful measurement and assessment. At the heart of these measures is how programs provoke a change of behaviour among would-be entrepreneurs and businesspeople. Donor and development agencies can support developing country governments and the private sector to catalyse change and maximise the contribution such changes make to national and global development objectives.

Good practice in program design and management reflects a stronger focus on understanding systems and responding to change. The "Doing Development Differently Manifesto" calls for governments, civil society, international agencies and the private sector to "work together to deliver real progress in complex situations and despite strong resistance". Among the principles outlined in the Manifesto is the need to "blend design and implementation through rapid cycles of planning, action, reflection and revision (drawing on local knowledge, feedback and energy) to foster learning from both success and failure" (Andrews 2014).

Taylor (2013) describes as incompatible the use of systemic change methods with the demand for results where targets are set and performance measured, as witnessed by the proliferation of performance indicators. Changing the systems in which entrepreneurs operate is a complex process requiring constant monitoring and revision, steeped within a country and market specific context. A high degree of trial and error is required. Furthermore, as systemic changes increase the distance between program interventions and beneficiaries, it can be difficult to assign changes in beneficiary behaviour to program activities. For Taylor, the drive for results is mistaken: "results are serving as a disciplinary tool which compromises the capacity for innovation amongst program designers and implementers, while evidence is striving for a solution to development challenges" (p. 20).

The solution is to combine the use of program evidence to assess the effect of different approaches within a specific context and focused on an agreed problem. This presents a major challenge for donors and development agency programing. Programs need to be able to respond to change; whether this change is based on desired shifts in the market and government systems they target or on incorrect assumptions or diagnoses discovered as the program unfolds.

Broad global and national development plans, such as those enunciated by the SDGs, present a further challenge to aid programing in this field. While they correctly align development programs to the aspirations of governments and their development partners, they increase the demand for a predetermined set of results. They are, by nature, top-down global goals designed to influence program interventions and the quality of development outcomes. Program managers need to develop a set of indicators and assessment mechanisms to allow them to measure and test the relationships been program interventions, changes in market and government systems, and national development goals. Thus, while global development indicators are formulated at the macro-level, further effort is needed to understand how micro-level effects can be captured to refine programs in a way that leads to more sustained and impactful outcomes.

A the conclusion of their book, Poor Economics, Abhijit Banerjee and Esther Duflo write:

"If we resist the kind of lazy, formulaic thinking that reduces every problem to the same set of general principles; if we listen to poor people themselves and force ourselves to understand the logic of their choices; if we accept the possibility of error and subject every idea, including the most apparently commonsensical ones, to rigorous empirical testing, then we will be able not only to construct a toolbox of effective policies but also to better understand why the poor live the way they do" (Banerjee and Duflo 2011, 272).

Understanding the logic of choices and how programs can influence these choices is critical for success. The market and government systems businesswomen and men operate within shape these choices and impact upon the broader development outcomes. Donor effectiveness in this field will improve as these links are more rigorously tested, documented and learnt from.

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# **Appendix 1: Attribution methods**

Posthumus and Wanitphon (2015) report on their work with various programs to measure change and attribute program impacts. They have produced a framework for considering which measures are best used to attribute program performance to enterprise and economy level impacts comprising of seven typical methods:

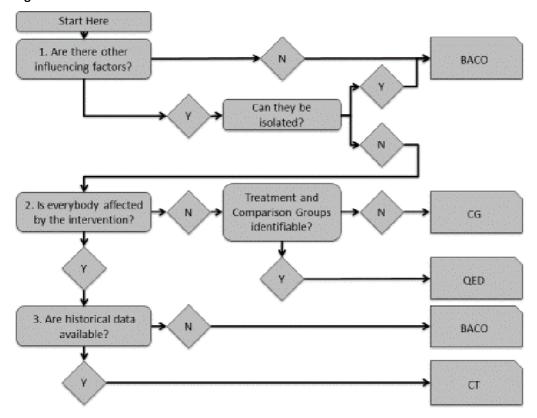
- 1. Before and After Comparison (BAC): used when there are no other influencing factors (i.e., where the counterfactual is the base-line situation). The impact is simply the difference between the end-line and the baseline. While this is the easiest method, it is often the most criticised for failing to capture the influence of other variables.
- 2. Before and After Comparison with Opinion (BACO): similar to BAC, this method assumes there are no, or very few, influential factors and that these can be negated or isolated. Qualitative perception data is used to assess whether the interventions influenced changes ex ante and ex post.
- 3. Quasi-Experimental Design (QED): applied when the target beneficiaries have potentially benefited, but when a similar group of potential beneficiaries did not have access to the intervention.
- 4. Comparison Groups (CG): similar to the QED method, estimates the difference-in-difference between those that benefited (i.e., the user-group) and those that did not benefit (i.e., the non-user group); used when it is not known who will and will not benefit; the allocation of respondents done at the end when users are allocated into the users and non-users groups.
- 5. Comparing Trends (CT): analyses trends and changes in trends to assess the impact of an intervention. With sufficient historical data, for example, it is possible to compare the trend after and before the intervention—the difference between them is due to the intervention.
- 6. Regression Analyses (RA): quantifies the relationship between two variables and estimates the extent a certain dependent variable would change (e.g., the yields of a crop) when the independent variables change (e.g., the use of fertiliser and the application of certain cultivation practices), in order to estimate changes of the dependent variable (e.g., the change in yields) by measuring the independent variable (such as the use of fertilizer and cultivation practices). Once it has been demonstrated that a change in one variable causes a change in the other, then future measurement becomes easier. If the program has demonstrated that a certain increase in fertilizer application leads to a certain increase in yield, in future it could just measure the change in fertilizer application, which is cheaper and easier to assess.
- 7. Randomised Control Trial (RCT): randomly allocates potential beneficiaries into either the treatment or control group. The program decides who will benefit and who will not benefit (i.e., comparable to flipping coins) in order to be able to compare the two groups and assess impact. Very few PSD programs have applied this method, although there is growing interest in how this may be done.<sup>7</sup>

An interesting example of the use of RCT for an entrepreneurship promotion program is the Impaq International evaluation of the U.S. Department of Labor and Small Business Administration demonstration project, known as Project GATE – Growing America Through Entrepreneurship (Benus, et. al., 2009). This evaluation sought to answer the question: What is the effect of adding Project GATE to the array of self-employment services already offered in the community?

Posthumus and Wanitphon (2015) use three questions to guide the selection of appropriate methods for measuring attribution (see Figure 5):

- Are there other influencing factors?
- Is everybody affected by the intervention?
- Are historical data available?

**Figure 5:Chart for Method Selection** 



SOURCE: Posthumus and Wanitphon (2015)