
FSD Africa: Jobs Framework

Methodology Paper

DECEMBER 2020



Acknowledgments

This document has been prepared by The Good Economy, a social advisory firm specialising in impact measurement and management. It was developed in partnership with Tandem, a development consultancy providing research and Monitoring, Evaluation, and Learning services. The lead authors are Matt Ripley and Gareth Davies.

The FSD Africa Jobs Framework was first drafted in 2019, working in close collaboration with Kevin Munjal and Ryan Mwanzui from the Measurement and Results Management team. The Framework was tested on the programme portfolio in early 2020, and the methodology was subsequently refined after consultation within the FSD Network and with external stakeholders.

A photograph of two women smiling and interacting in what appears to be a workshop or training environment. The woman on the left is wearing a white hard hat and a yellow sweater. The woman on the right is wearing a white jacket and has long braided hair. The background shows some structural elements of a building.

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Introduction

This document sets out a framework to help FSD Africa understand its contribution to creating employment opportunities. It is designed to both:

'Prove' impact

So FSD Africa can report on the number and quality of jobs that projects and investments have created.

'Improve' impact

So FSD Africa can anticipate likely job impacts and make comparisons between different projects/investments.

In line with the FSD Network's shift to a 2.0 strategy - where facilitation remains financial sector-focused but recognizes that finance follows other inclusive goals for the societies in which it works – the framework is largely based on unpacking the transmission channels between the financial and real sectors¹.

Rather than creating an entirely new methodology, the framework blends and builds on a number of existing approaches to jobs measurement and tailors them to the FSD Africa context. This includes best practice guidance set out by the DCED and the methods used by other investors and development projects operating in Sub-Saharan Africa. The framework is also grounded in literature centred on evidence of the financial sector's propensity to create jobs.

This is FSD Africa's first jobs measurement methodology. However, an initial modelling of potential ex-ante employment effects was undertaken during the business case economic appraisal. For consistency, this framework significantly refines that model, adding aspects of job quality, inclusion, and the relative need for jobs, reflecting the importance for FSD Africa of the need to support not just 'any jobs,' but 'decent jobs.' Finally, the framework aligns with FSD Africa's overall approach to monitoring and results measurement (MRM).

The framework is designed to be flexible to reflect the diversity of FSD Africa activities and channels through which the financial sector can influence the real economy's employment effects. It is immediately relevant to FSD Africa – both investment and non-DevCap interventions - and may also be applicable to the work of the wider FSD Network. There may also be potential broader interest in the framework from FSD Africa's donors and other financial sector programmes trying to develop realistic, right-sized, and cost-effective ways to measure portfolio-wide job effects.

Ultimately, for FSD Africa, there will likely be a learning curve as to what measurement approaches will work in practice, and to continue to adjust the methodology to best define what can and cannot be measured and with what accuracy. Therefore, the approach taken in this document is an experimental one, seeking to balance both rigour and practicality in seeking to estimate the impact on jobs from FSD Africa interventions. The framework should be thought of as a 'starting point' in FSD Africa's journey to unpack how it affects various employment dimensions. Options for how the framework can be further upgraded over time have been noted throughout the document.

¹ See the Basel Committee on Banking Supervision Working Paper No. 18 "The transmission channels between the financial and real sectors: a critical survey of the literature"

Summary: The FSD Africa 'jobs number'

According to the programme theory of change, FSD Africa aims to catalyse “inclusive economic growth, characterised by increased access to jobs, improved livelihoods and/or increased resilience”. The Jobs Measurement Framework can be used for ex-ante projections and ex-post measurement of this ‘job access’ effect.

The framework estimates the number of jobs created and supported by FSD Africa projects, including through capital mobilisation, and whether these are likely to be decent jobs².

Different levels of job effect are considered:



New jobs created in real economy actors benefitting from a financial sector innovation; such as through improved access to credit or a better regulatory environment ('micro' effects).



Jobs supported in the wider value chain and inter-connected real economy sectors, such as upstream suppliers and downstream service providers ('meso' effects)

'Induced' employment effects at the macro economy level, including through increases in consumer spending, are not currently captured.

The first step in the Framework involves a theory-based assessment of whether – based on the current evidence-base on how the financial sector supports job creation - a given project is likely to have a 'material' or 'significant' effect on employment. The jobs numbers are then estimated using available primary data from project partners or financial service providers, and any supply chain effects are modelled. A 'decent jobs assessment' is then conducted to examine the likely nature of jobs being supported, in terms of gender equality, inclusion of vulnerable groups, earnings, job security and career development prospects – using sector proxies. This also factors in the relative need for job creation based on a suite of national-level SDG indicators.

It should be noted that job effects are notoriously difficult to measure, so this framework – and the resulting 'jobs numbers' generated by it - should be seen as the best possible estimation rather than exact figures. Indeed, the framework generates a range from conservative to more optimistic estimates of jobs created and supported – rather than arriving at an exact figure. The average of these ranges can be used when FSD Africa needs to provide a single 'jobs number' to donors.

When data is reported as achieved impacts, FSD Africa should include sufficient narrative to allow readers to properly interpret and situate the jobs data. This could be in the form of a standard data disclaimer, such as³:

“While we have used our reasonable efforts to ensure the accuracy of the data, figures regarding employment have not been audited or independently verified. These figures are based on data from FSD Africa’s partners which is used to estimate wider employment effects based on a series of assumptions and economic models, in line with benchmarked good practices among development finance organisations. We take into consideration jobs quantity and inclusion effects using a ‘Decent Jobs Assessment’, but this is based on the balance of probabilities using sector-level data and does not mean that all jobs supported are high-quality jobs. Jobs numbers should therefore be read as being indicative of magnitude rather than exact figures.”

² Aligned with the current One FSD Africa indicator “# new jobs that can be linked to FSD Africa’s investments”

³ Adapted from the CDC Group

Conceptual basis

The jobs challenge

The jobs challenge facing Sub-Saharan Africa is daunting: an additional 35,000 jobs need to be created each day until 2030 simply to keep up with demographic changes⁴. At the same time, a substantial number of people are working, but their economic activities yield insufficient income for a decent living. For most countries on the continent, the problem is not one of unemployment, but underemployment⁵.

The idea of a formal wage job as a pathway out of poverty is beyond the reach of many people, especially youth. This has led some to talk of a bifurcated African labour market. In the short term, informal employment will be the norm, so the first challenge is how to make existing jobs better. Formal wage employment is expected to be the engine of employment and growth only in the medium to long term, so the second challenge is how to start stimulating these new jobs now⁶.

Key Definitions: Part One

Unemployment refers to the share of the labour force that is without work but available for and seeking employment⁷.

Underemployment occurs when a person does not work full time or takes a job that does not reflect their actual training and financial needs⁸.

Informal employment is a person who is employed in an informal sector enterprise, irrespective of their status in employment and whether it was their main or a secondary job⁹.

Working poverty occurs when employed persons are living in households in which per-capita income/expenditure is below the poverty line¹⁰.

What's in a job?

Conceptually, a job can be defined as “a set of tasks and duties executed, or meant to be executed, by one person, including for an employer or in self-employment”¹¹.

According to the World Bank and the International Labour Organization (ILO), there are three dimensions to understanding jobs:¹²

⁴ European Development Financial Institutions.

⁵ “The registered level of unemployment in most Sub-Sahara African countries is not strikingly high (at around 7.6% for the past 5 years)” according to Include (2018); ‘Boosting Productive Employment in Africa’.

⁶ Louise Fox, USAID Chief Economist

⁷ ILO official definition

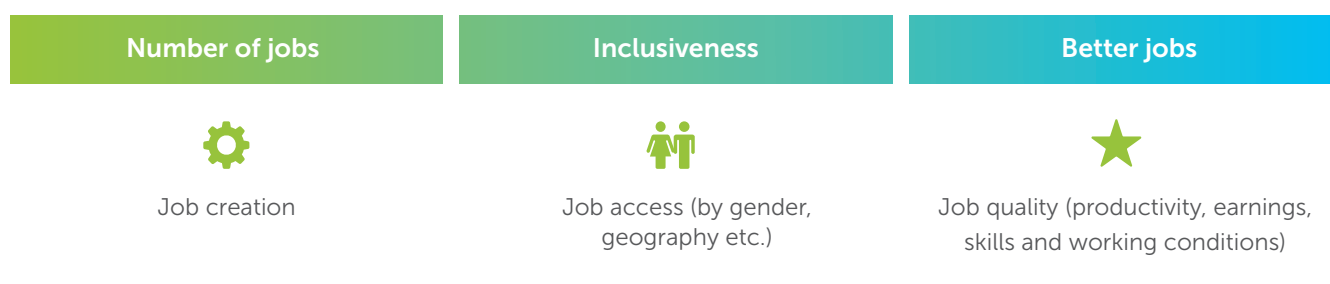
⁸ The ILO defines this more tightly as “time-related underemployment” as a measure of labour underutilization that provides information regarding the share of employed persons who are willing and available to increase their working time (for production within the SNA production boundary) and worked fewer hours than a specified time threshold during the reference period.

⁹ Informal enterprises are owned by individuals or households that are not constituted as separate legal entities independently of their owners, and for which no complete accounts are available (ILO)

¹⁰ ILO official definition

¹¹ DCED, based on ILO

¹² See the work of Thomas Farole, World Bank



While perhaps the most important metric for many external stakeholders (including donors and politicians), 'jobs created' does not offer real insight into the nuances of employment and relative impacts on the labour market – including the type of job, quality of job, or the distributional impacts of these jobs. As a metric to help understand real impact, just measuring jobs created and supported has been called a "blunt instrument"¹³.

There is increasing recognition that not only the number but also the quality of jobs matters to poverty alleviation and economic development¹⁴. This means it is equally important to improve the quality of existing jobs to sustain livelihoods: It is not necessarily that the poorest people are excluded from labour markets but rather that they are often adversely included¹⁵. And any new jobs being created need to be secure, well-paying, decent jobs.

Recently, the ILO issued a warning that progress on reducing unemployment around the world is not being matched by improvements in the quality of work, and progress towards the Sustainable Development Goal 8 on decent work and economic growth has been slower than expected. At the current pace, this makes SDG achievement unrealistic for many countries¹⁶.

Figure 1: The jobs triangle¹⁷



¹³ EDFI: Impacts of private investment on sustainable development in developing countries: Session note on Jobs - direct and indirect impacts on job creation and decent work (2019)

¹⁴ German Development Institute, MSEs as drivers for job creation, Oct. 2015

¹⁵ Chronic Poverty Advisory Network blog post, May 2014

¹⁶ For country-level data, see https://www.ilo.org/global/publications/books/WCMS_712685/lang--en/index.htm

¹⁷ Value Chains for Jobs Estimation, World Bank

Key Definitions: Part Two¹⁸

Paid employment: with an explicit employment contract, providing remuneration.

Self-employment: where remuneration depends on profits from the goods or services produced.

Part-time employment: a job where working hours are less than those of a comparable full-time job.

Fixed Term: A contractual arrangement between an employee and an employer for a specific set or time.

Casual Work: Hiring workers on a very short term or occasional & intermittent basis in return for a set wage for an agreed period (day, week etc.) or task.

Job Quality: Considered to be the operationalisation of ILO's Decent Work agenda.

Labour Productivity: A measure of output per unit or production i.e. US\$ output value per worker

Employment Intensity: elasticity of employment with respect to output (measure of the percentage change in employment associated with a 1% change in economic growth). It indicates the ability of an economy to generate employment opportunities for its population for a given increase in economic growth.

Different types of jobs impact

Jobs can be impacted in three different ways, through direct, indirect and induced channels¹⁹.

- 1 **Direct job effects** are jobs in businesses that an organisation works with, or aims to benefit. For example, a project facilitates a funding stream to a financial institution or supports a dedicated investment fund. The fund then lends money to SMEs which grow and generate what are counted as direct jobs²⁰.
- 2 **Indirect job effects** are employment changes in the upstream and downstream value chain (i.e. suppliers and distributors) of the beneficiaries of the investment/project. For example, investments into a firm helps increase their productivity and profitability leading to larger purchase volumes from local firms within their supply chain, therefore generating additional 'indirect' jobs within these suppliers²¹.
- 3 **Induced employment** are jobs resulting from direct and indirect employees spending more and increasing consumption²². For example, the SME fund could subsequently generate second order effects due to economic activity by the people newly employed by the SMEs buying more consumer goods. The businesses that receive this spending in turn recycle this money in the economy, with the new spending generating additional jobs throughout the economy²³.

¹⁸ Alberto Lema (2018) Measuring the Potential Contribution of DFIs to economic transformation

¹⁹ These definitions are for intermediated vehicles (such as wholesale finance fund or funds or through FIs), rather than direct investments into individual companies.

²⁰ Lema (2018)

²¹ Ibid.

²² According to the IFC Jobs Study, this also includes secondary effects, which refer to job creation throughout the economy as growth constraints are removed; for example, financing to increase power supply allows higher power consumption, generating more industrial production, economic growth, and hence employment.

²³ DCED



Implications for FSD Africa framework design

Link financial sector innovations to sector-specific jobs impact

Capturing changes in jobs requires tracing financial sector innovations to changes in the real economy; an approach which fits well with FSD2.0 – as well as renewed interest in economic transformation among policymakers.

According to the ILO, a sectoral approach is particularly relevant as employment intensity varies significantly across sectors. Changes in the sectoral composition of the economy can significantly affect aggregate employment. The ILO also argues that there are important sectoral patterns in terms of job quality. In other words, not all sectors are 'equal' from a decent jobs perspective, meaning that it will be important to not only examine the stock (total volume) of capital mobilised but also the flow into different sectors.

Implications:

- Deploy a sector-based approach to modelling job effects.
- Track share of finance mobilised into each sector as the core 'input' to estimate indirect employment. This means a project or investment appraisals will need to estimate likely shares of financing flowing into real economy sectors; alternatively, use proxy multipliers such as 'SME finance'.
- Both financial sector development and market building are critically important but long-term and uncertain routes to tackling job creation. 'Investing' in financial systems is very different from investing directly in real economy enterprises – which is often the focus of other DFIs and investors – so it is important to ensure any comparisons, impact expectations and timeframes are set accordingly.

Economic transformation and FSD2.0

Economic transformation is the process of moving factors of production from low to high productivity activities. It includes both the structural reallocation of resources towards higher-productivity sectors to raise aggregate productivity in the economy and within-sector (or intra-sectoral) shifts towards higher-productivity activities, within and between firms.

No modern economy has been able to develop and prosper without undergoing a process of structural transformation. The theory of successful transformation, according to a study by the Centre for Global Development, is that:



"A dynamic agriculture raises labour productivity in the rural economy, pulls up wages, and gradually eliminates the worst dimensions of absolute poverty. Somewhat paradoxically, the process also leads to a decline in the relative importance of agriculture to the overall economy, as the industrial and service sectors grow even more rapidly, partly through stimulus from a modernizing agriculture and migration of rural workers to urban jobs"

This has been borne out by empirical experience, where data shows that a declining share of employment in agriculture is positively associated with increases in GDP – which translates into higher standards of living and sustained reductions in poverty.

Economic transformation and FSD2.0 (continued)

Evidence from academic literature and policy papers is clear: “the long-run success of poverty reduction hinges directly on a successful structural transformation”²⁴. Donors are now re-focusing long-term programming on how to support the re-allocation of economic activities towards sectors with the potential for significant productivity gains.

Successful economic transformation requires numerous enablers to ‘come together’ like energy, roads, water, labour, research, inputs, markets, investment, tax, regulation and finance. The FSD2.0 strategy recognises the underlying reasons for a lack of access to finance may vary greatly by the sector, scale and formality of the business. The approach of FSD2.0 is not to address generic problems like the lack of SME finance, but to select economic sectors in which to focus, and then identifying the financial constraints affecting those sectors.



Deploy different ways to measure jobs at different levels

Measuring jobs is more than sticking numbers through a multiplier. The intermediated – market systems – nature of FSD Africa interventions means that almost all impact is generated via indirect pathways, given the programme’s catalytic mandate.

To avoid confusion with FSD Africa’s use of a market systems approach (and avoid terminology such as ‘direct impact on indirect job effects’), the framework instead conceptualises different levels at which jobs can be measured:

1. Micro (firm) level. These are job effects – primarily new jobs – within direct real economy beneficiaries of financial market innovations (products, services). For example, FSD Africa’s investment in ALCBF ultimately supports a variety of SMEs to raise financing through local bond issuance. These SMEs may then add jobs due to expansion activities. This is measured using data on employment from intended beneficiaries of a given project/investment and will often require a baseline and follow-up measures to isolate any changes in the ‘flow’ of jobs being created or lost.

Note: The Jobs Framework also does not, in general, consider jobs created supported in financial intermediaries or service providers, which is another type of direct job effect. In the example above, jobs in Lions Head Global Partners – the ALCBF manager – are not counted since these jobs are not usually accessed by the FSD Africa target group (poor, low-income, and marginalised populations). However, in certain cases – such as the Forcibly Displaced Persons Programme case, there is an explicit rationale for FSPs to recruit refugees as agents and field staff. Therefore jobs supported in financial services can be counted.

2. Meso (sector) level: These are job effects in the wider value chain benefitting from financial sector innovations, or capital inflows. For example, housing finance supports jobs in companies and contractors hired for housing construction and expansion; alongside significant wider effects on the supply chain for building materials and associated service providers. In practice, this would rely on multipliers, with the employment effect based on investment inputs (or capital mobilised). Baselines are generally not required, as the figure being captured is the current ‘stock’ of jobs being supported by a given volume of financing.

²⁴ DCED (2019); Promoting Economic Transformation through Market Systems Development

3. At macro (economy) level: These are economy-wide effects from direct and indirect employees increasing their spend on goods and services, creating employment for others. In practice, this means constructing social accounting matrixes and input-output modelling to arrive at estimates of employment impacts from aggregate investment in the whole economy.

It should be noted that donors such as FCDO have previously argued against the use of measurement at the macro level, as induced effects are commonly short-run in duration (it does not lead to a permanent change in the level of employment), and relies on the assumption of sticky prices i.e. that any increase in consumption expenditure does not simply lead to inflationary effects.

Implications

- Initially measure job effects at the micro and meso level
- Capture new jobs created at the firm-level
- Estimate jobs supported in the wider value chain
- Be clear this is gross job creation – not new net jobs in the economy

Why measure gross and not net job creation in a country?

Even if an investment is additional, the jobs created through it may not be. Estimating net job effects - jobs created minus jobs lost in the economy – means considering:

- **Displacement:** Where the positive effects of an intervention have negative side effects e.g. support for SMEs improves competitiveness at the expense of non-assisted SMEs leading to job losses
- **Substitution:** Where a person who has received support obtains a job at the expense of either an existing employee or somebody who was also unemployed but did not receive assistance
- **Deadweight:** Whether the outcome would have occurred anyway. I.e. if the natural rate of employment was growing

In reality, these are extremely difficult to estimate. The CDC Group argues that total employment (net job creation) is not a sensible measure for development interventions²⁵. Gross job creation is a more useful indicator as it is a driver of both increasing the number of decent jobs (net job creation in the formal sector) and replacing bad jobs with better ones (job creation and destruction). In 2017 the Swiss Government commissioned a year-long study to examine the job creation effects of the entire portfolio of SDC and SECO-financed activities. The team of academics concluded that no claims of net additional job creation could be made due to the lack of evidence and methodological challenges, given the many other factors at play.



Use a multi-dimensional approach to capturing job quality

While the ultimate aim is to deploy finance as a mechanism to unlock the transition from subsistence to high productivity work, the reality of labour markets in many African countries is that financial sector development programming will also have a positive impact on informal employment and unregistered enterprises.

Employment in much of Africa remains mainly informal, and the informal sector generates a substantial proportion of economic value add.

²⁵ <https://assets.cdcgroup.com/wp-content/uploads/2019/09/25143804/How-job-creation-fits-into-the-broader-development-challenge.pdf>

In Mozambique, for example, informal jobs in the services or manufacturing sectors appear at least as productive as wage jobs when local conditions are controlled for²⁶. In Tanzania, sustained economic growth can to some extent be attributed to productivity gains in agriculture, but mostly to a shift in employment share in favour of non-agricultural activities, i.e. structural transformation. Nine out of ten new jobs have been created outside of agriculture, primarily by small firms in manufacturing and trade services. These firms, especially in trade services (retail, wholesale, sale of food and beverages) have absorbed large numbers of unskilled youth and those leaving agriculture. However, the vast majority of these small private firms operate in the informal economy.

This framework does not adopt the assumption made in the FSD Africa Business Case Economic Appraisal, that “all jobs are created in the formal sector, and remuneration is equal to the average minimum wage across SSA”. This assumption does not reflect the on-the-ground reality, given the high prevalence of informality in sectors (85% of people in sub-Saharan Africa work in informal jobs). To allow the framework to capture the range of FSD Africa impact on jobs, informality is just one dimension of the quality of employment.

Measuring such a multi-dimensional concept as job quality is notoriously tricky. Even the ILO has never been able to agree on a set of indicators to measure the decency of an individual job. However, an assessment can take into account the likelihood that, on the balance of probability, a job created or supported is a ‘decent’ job. This builds on emerging approaches such as the DEG Development Effectiveness Ratings as one of the first international rating systems of its kind which seeks to assess the degree to which the job might adhere to core labour standards, and thus can be used to ‘weight’ a job by likely level of decency.

As noted by the ILO, this kind of ‘decent work employment multiplier’ would be extremely useful to measure the number of decent jobs directly and indirectly associated with an expansion in demand in a sector: “Sector A may have a higher overall employment multiplier than sector B, but a lower decent work employment multiplier and this would need to be factored into decision-making”²⁷.

Therefore, instead of defining quality only with reference to formal sector jobs, issues around informality and job quality should be factored into the jobs equation by considering the following three key characteristics²⁸:

- 1 **Fair pay:** To be fair, remuneration associated with the job (which should be determined by worker productivity) should be sufficient to permit an average family (worker plus immediate dependants) a level of consumption above the poverty line (or a national minimum wage, should this be meaningful).
- 2 **Job security:** The job and associated earnings need to be reasonably stable and predictable. Instability is associated with vulnerable employment, which is work with highly fluctuating and uncertain returns.
- 3 **Employability:** A key measure of how easily new entrants to the labour force can gain employment and achieve success in the world of work, alongside the opportunity for work progression of those already employed. High level of unproductive, informal labour are associated with the lack of opportunities for career progression leaving people trapped in vicious cycles of low-paying, low-skilled roles with limited ability to grow.

²⁶ Finn Tarp (UNU), Aid and Development: Creating Good Jobs in Africa

²⁷ Employment Policy Department Working Paper No. 166: Sectoral dimensions of employment targeting

²⁸ Adapted from Include (2018)

Implications

Rather than apply a specific hurdle rate (e.g. income increase) or screen (e.g. only count formal jobs), use an assessment to capture the multi-dimensional aspects of job quality and relative difference between sectors and countries.



Separate income from employment effects

While wages are an intrinsic part of what constitutes a job, there are a number of reasons why income effects need to be measured and reported separately from job creation effects. These are:

- 1 **Conceptual** – Ultimately, the goal in developing countries should be to replace informal, unstable jobs that pay poorly with formal, stable jobs that pay well²⁹. Measuring absolute changes in income, or the number of people benefitting from improved incomes, without a sense of the order of magnitude of these changes (e.g., whether the poverty gap is being closed), says very little about impacts on more and better job creation.
- 2 **Methodological** – Income effects are measured based on a headcount, i.e., the number of people accessing income-earning opportunity or the number recording improved incomes. Employment, however, is generally calculated using full-time equivalents (FTE, see below). Headcount and FTE cannot be combined into a single figure.
- 3 **Practical**: Many accepted measurement frameworks, such as the DCED Standard, advocate for measuring separate indicators on ‘jobs’ and ‘incomes’.

Implications

- Job and income effects need to be unbundled and measured and reported separately³⁰.
- Quantifying income change is not a ‘jobs’ issue per se and is outside the remit of the Jobs Framework³¹.



Consider both job inclusion and the need for jobs

For FSD Africa, addressing the specific needs and constraints of women, youth, and people in fragile areas remains a cross-cutting theme. The mission statement of FSD2.0 is to mould financial systems that work better for the poor in our societies.

Primary data on inclusive job creation is challenging and expensive to obtain, and most jobs effects will, therefore, have to be modelled. The central inclusion question to be answered is: Are these quality jobs, and are they accessible to the most vulnerable people? Sector-based proxy indicators can be used to reflect a company’s ability to offer opportunities for promotion and inclusion of groups most affected by unemployment – namely, youth, women, and those living below the poverty line.

However, there is another job access effect to consider: the relative need for decent jobs, according to geography. SDG8 promotes “sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all.” Of course, the reality is that the prospect of

²⁹ CDC Group

³⁰ Incomes could be measured through livelihoods-related household survey, (enhanced FinSope or equivalent) coupled with sectoral studies.

³¹ FSD2.0 # of poor people with higher or more stable income flow in selected economic sectors.

meeting this SDG objective varies greatly between countries, and to a lesser but significant degree between regions within individual countries. In other words, geography matters in looking at how companies contribute to sustainable and inclusive development.

The social need for decent work and employment is a meaningful and legitimate basis for evaluating the type of jobs created by companies. And this social need for more and better jobs varies geographically. Here, the central question is: Are jobs being created or supported in areas where they are most needed? The more a company creates jobs in areas where wages are low and where underemployment is high, the higher its jobs impact. This geographical dimension helps to assess projects, companies, and investments by taking into account the socio-economic context of the regions or areas they operate in.

It is also in line with EDFI calls for an understanding of the relative impact of the jobs created in respective economies to provide further comparability among investments and fits well with FSD Africa's regional mandate.

Implications

- Job access effects will also need to be modelled, in particular to understand the relative need for decent jobs
- Micro (direct) jobs can be disaggregated by gender and age
- Meso (indirect) effects can be disaggregated by gender or age, but this relies on the use of proxy data (sector averages).



Contribution or attribution?

Almost all jobs measurement methodologies and estimation techniques show the intervention's contribution to job effects rather than strict attribution. Attribution issues are challenging for jobs measurement, given the multitude of possible sources of bias and influence. Establishing causality between interventions and the impact on jobs depends on many factors that are typically not easy to control for and where there are difficulties in establishing counterfactuals. In addition, measuring elements such as job displacement and job substitution are even more difficult³².

Generally speaking, attribution challenges can be considered at two levels:

Enterprise impact



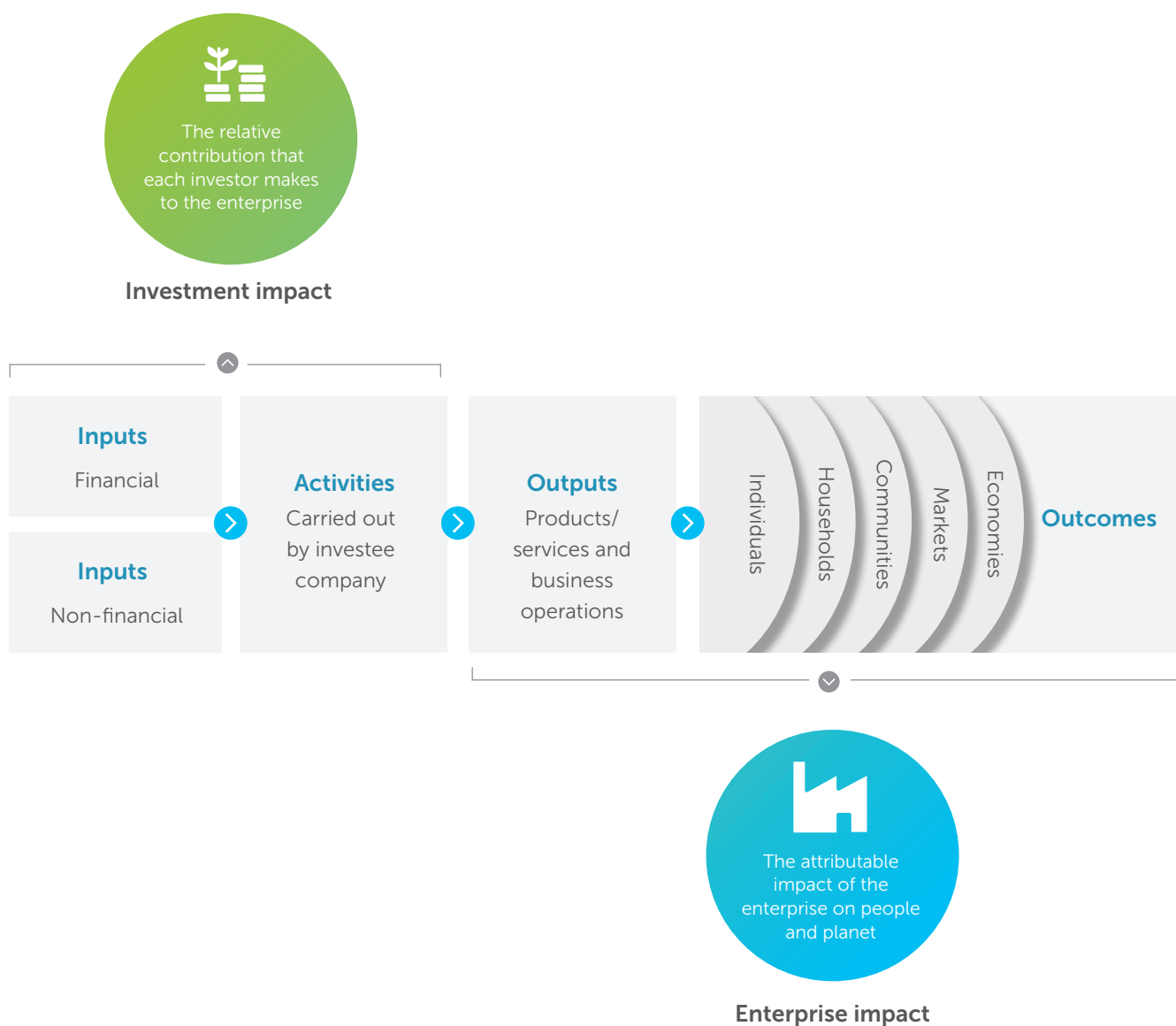
Jobs created and supported that wouldn't have been created/supported without the enterprise (growth). This requires a sound counter-factual.

Investment impact



The relative inputs of each investors to an enterprise's operations and expansion. This is usually based on pro-rating by investment share (and is often weighted by relative risk of financing provides, e.g., debt vs equity).

³² IFC

Figure 2: A conceptual framework for 'claiming' jobs impact³³

Implications

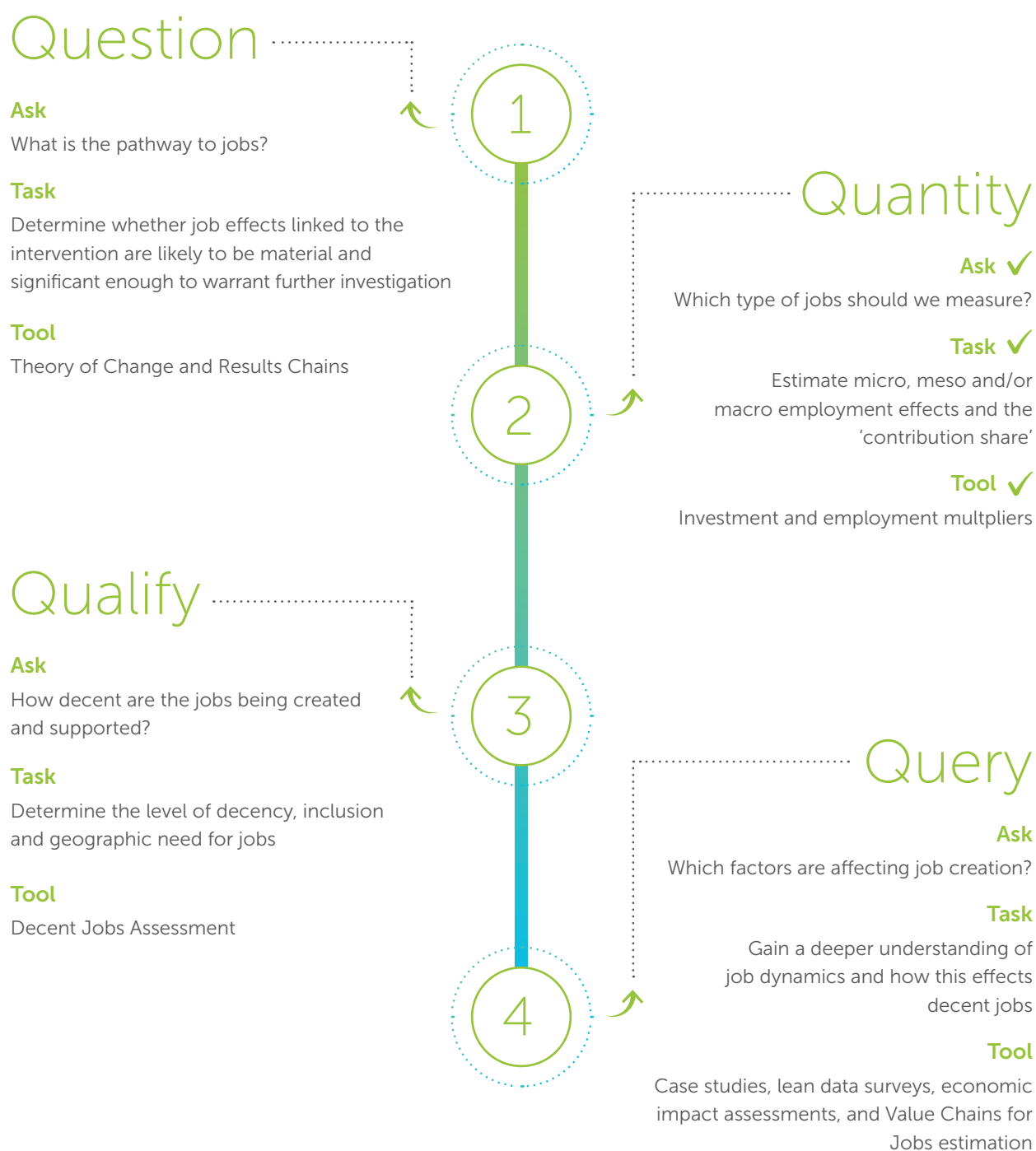
- Consider the share of contribution at the 'investment impact' level, but do not attribute at the 'enterprise-level'
- This 'contribution share' should be based on rules-based pro-rating

³³ https://ssir.org/articles/entry/unpacking_the_impact_in_impact_investing

Overview of the Framework

The Jobs Measurement Framework involves a repeatable four step process. This can be applied both ex-ante (before project appraisal in order to estimate likely impacts) and ex-post (after investment, or project has begun, in order to measure effects).

Annex 4 provides an example of the framework in use for ex-ante impact projections.



Jobs Measurement Framework: Key principles



Transparent

Full disclosure of how jobs are calculated and limitations in the approach, allowing the figures to be explained and understood by internal and external stakeholders. As EDFI notes, flagging any caveats to users of impact metrics is crucial to maintain credibility.



Consistent

A systematic approach to measuring jobs that can be repeated across multiple projects/ investments.



Conservative

Seeks to avoid overclaiming contribution to jobs by making cautious estimates which are likely to be less than the actual amount but more defensible.



Meaningful

Provides data about real impact and directional change over time, rather than simply describing jobs that can be linked in the broadest possible sense.

The Jobs Measurement Framework will need to be updated annually to reflect the fact that:

- Multipliers can be fluid
- Indicators underpinning the Decent Jobs Assessment should be as up-to-date as possible to reflect changes in employment conditions both geographically and sectorally.



Step 2

QUESTION:

Link the intervention to job effects

The first step in the Jobs Measurement Framework is to map out, for a given project or investment, the likely jobs impact. Almost any intervention can be linked to a job effect. The purpose of this step is to decide whether the causal connections are strong enough to justify further effort in trying to understand and quantify the precise impacts.

This should be based on an assessment of whether the pathway to jobs impact is both:

Material	Significant
	
The intervention has a plausible link to creating more and better jobs, and these impacts were intended (i.e., is there a jobs impact?).	Likely to have a strong positive impact – supported by existing evidence-base, and where the intervention has made a sizeable contribution (i.e., how large is the jobs impact?).

Each FSD Africa intervention needs to think through their own ‘pathway to jobs’ – against the Theory of Change set out below. But not every intervention will need to proceed to Step 2. A Theory of Change (ToC) is a comprehensive description and illustration of how and why the desired change is expected to happen³⁴. Therefore, a ToC can provide a roadmap, explaining how an intervention is expected to lead to a specific social impact, drawing on a causal analysis based on available evidence³⁵.

How the financial sector deepening leads to more and better jobs

The overall goal of FSD Africa is poverty elimination in line with Sustainable Development Goal (SDG) 1. Jobs are a cornerstone for development and a key pathway to eradicating poverty and boosting shared prosperity. According to the World Bank, growth in the presence of limited job creation (as typically happens in resource-rich countries) or where job growth is highly skewed toward high-skilled activities (as increasingly happens in higher-income countries) often has little effect on poverty and contributes toward increasing inequality³⁶.

³⁴ FSD Africa MRM Manual

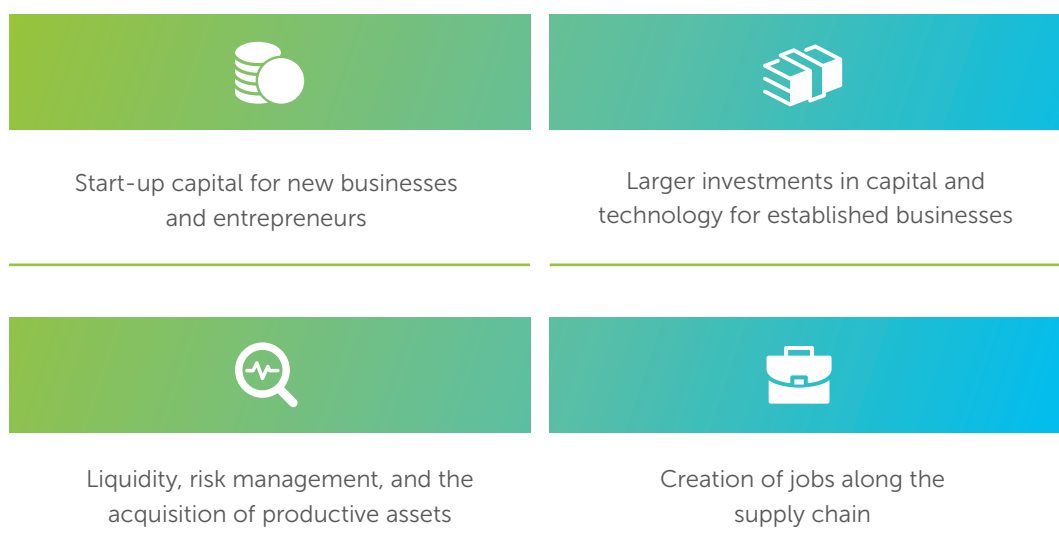
³⁵ NORFUND Theory of Change methodology

³⁶ World Bank Jobs for Value Chains

Available evidence shows that developing financial systems can drive rapid growth and development, especially through the ability to pool and allocate capital that allows the investment necessary to significantly boost productivity and living standards³⁷. New financial capital is thought to be necessary but not sufficient to create jobs and add value to the economy.

Evidence from empirical studies shows that interventions are most likely to have an impact when they are designed to strengthen the financial system in a way that is purposefully systemic and aims for spillover effects. For instance, according to CDC, “increasing the amount of capital available for lending to high-growth firms, combined with efforts to improve a lender’s ability to identify these firms, if successful would strengthen a particular bank both by improving its capital structure and building up its human capital”³⁸.

According to the IFC, there are four specific channels through which access to finance positively affects employment



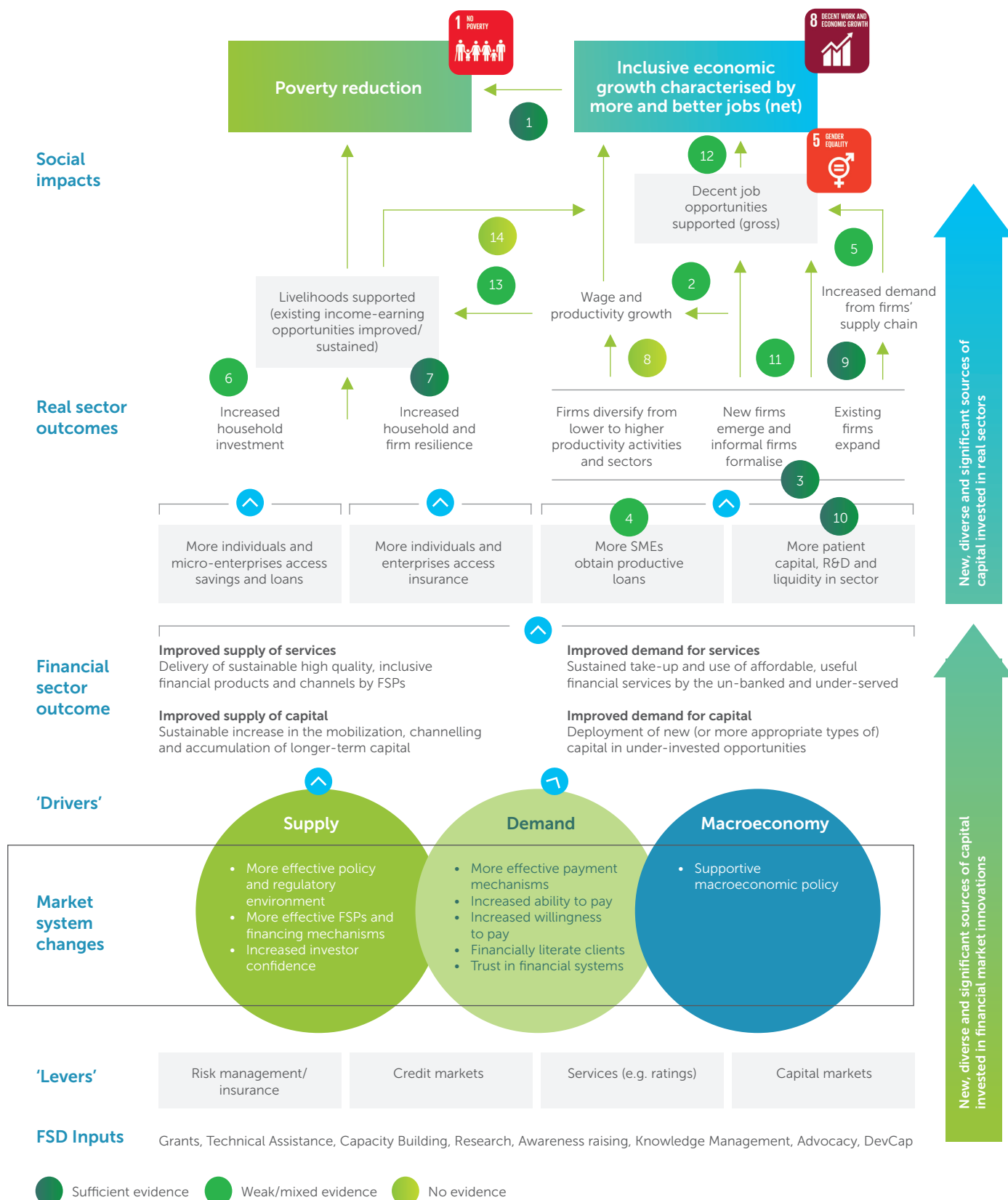
Ultimately, demand for labour is derived from demand for goods and services. An improved financial sector is an ‘enabler’ of economic growth, and as such financial sector interventions are not always made with the explicit purpose to create jobs.

FSD Africa ‘jobs impact’ theory of change

FSD Africa seeks to address market constraints and contribute to sustained economic prosperity in Sub-Saharan Africa. It does this by spurring systemic and transformational financial sector development outcomes. The Theory of Change, below, has been designed to unpack FSD2.0’s emerging theory of change from a jobs perspective, showing the programme pathway from financial sector outcomes to real sector outcomes and impact on jobs.

³⁷ CDC Research Paper: How job creation fits into the broader development challenge

³⁸ <https://assets.cdcgroup.com/wp-content/uploads/2019/07/31155727/What-is-the-impact-of-investing-in-financial-systems-IS003-31072019.pdf>



Assumptions underpinning the ToC:

- No macro economic shocks
- Supportive monetary policies
- Stable political and security situation
- Environment is conducive to business growth
- Demand growth facilitated
- Sufficient stock of human capital

FSD Africa pathways to jobs impact

Each FSD Africa intervention already develops more granular results chains that set out a detailed intervention logic/hypothesis. These define the outputs (short-term results) expected from the resources invested in a given project, and how these (outputs) in turn lead to long-term market system change and financial sector development outcomes. A project results chain provides the overall framework for measuring results at project level and is designed to easily nest onto the programme Theory of Change.³⁹

The table below shows generalised pathways towards jobs for different FSD Africa 'sectors'. FSD Africa interventions that either boost demand-side drivers – or simultaneously stimulate demand for jobs while improving the quality of supply, are likely to have a clearer pathway towards creating and supporting jobs. For example, this could include new capital market products such as green bonds that increase long-term capital into efficient energy or sustainable agriculture; or Financial Service Provider (FSP) innovations that increase uptake of capex loans by SMEs.

FSD Africa interventions purely aimed at supply-side, or intermediation (such as smoothing employment services or information systems) may have significant and material effects on supporting jobs, but the pathway is likely to be less clear – and less easily quantified. Alongside macro-economic / policy interventions – which may be linked to job effects for example, by de-risking and unlocking investment flows – if a plausible theoretical argument can be made for a jobs impact, this should be further examined on a case-by-case basis, for example by commissioning separate economic impact assessments (see Step 4).

Type of innovation ⁴⁰	Aim/theme	Simplified jobs impact pathways
Enterprise finance (banking)	Better serve unserved and under-served consumer segments.	Small-business owners gain better access to financial services > increased uptake of inclusive savings accounts and credit > 1. Stabilized balance sheet via working capital and OpEx > inclusive jobs supported 2. Business expansion (capex) > Jobs created
Capital markets	Improve markets for putting capital to long-term productive use	Increased liquidity > Capital mobilized into more and deeper investments > Jobs created
Credit	Enhanced credit market efficacy (information, policy, practice)	Fairer and more efficient lending > entry rate of firms > growth rate of smaller firms > Increased incomes and new jobs
Fintech	Technology and innovation increases availability and accessibility of financial services	New potential customers are not excluded from using financial products > Increase availability and affordability of financial services for individuals and micro, small and medium enterprises > inclusive jobs supported
Informal economy	Strengthen individual and household resilience and enable economic activity at community level	Increased uptake of Savings Group credit/savings services > existing livelihood/income-earning opportunities supported
Insurance	Insurance providers more responsive to MSMEs and low-income household needs	Increased access to insurance products by MSMEs > 1. Businesses more willing to invest (upside) > existing firms grow > jobs created 2. Businesses able to cope with shocks (managing downside risk) > existing jobs sustained/saved
Market infrastructure	Underlying foundations of marketplace to enable efficient exchange	Pathway should be linked to banking, credit and capital markets

³⁹ FSD Africa MRM Manual

⁴⁰ Based on FSD Africa website sector labels

Annex 4 sets out four example jobs pathways for different typologies of FSD Africa action. These are simplified results frameworks that show the causal logic from FSD Africa activities through to micro and meso-level job creation. The pathways also indicate questions FSD Africa would need to ask to interrogate critical links.

- **The first and simplest pathway** is where FSD Africa is providing direct support to a financial service provider (FSP). This distinguishes between 'non-targeted' support and 'targeted' support, the former being support to an FSP that is not linked to a particular financial service (e.g. equity / debt investment, TA for core process improvements etc.). For non-targeted support FSD Africa would need to trace through general organizational improvements in the quantity / quality of financial service provision. For targeted-support (e.g. credit-lines, TA to support the development of a particular financial service etc.) the task would be to trace through the impacts specific to the financial service in question (e.g. extra lending to MSMEs resulting from the credit line, or the number of MSMEs accessing the new financial service).
- **The second and third pathways** are more complex because where FSD Africa is not working directly with FSPs there is an additional step in the causal logic. The infrastructure pathway could also be adapted for areas such as wholesale finance.
- **The fourth pathway** is the most complex and 'stretched out' given the challenges in isolating the effect of new or improved regulation / legislation on the quality / quantity of financial service provision and its linkages to the real economy.

Any given intervention / investment might involve multiple pathways.

These pathways are not organized against the FSD Africa sectors, as these sectors do not create differences in the basic logic of the pathways. For example, whether working directly with an FSP on 'banking services' or 'credit' or 'insurance', the basic causal logic for jobs (and the questions needing to be asked to interrogate the logic) are the same. Based on the pathways, FSD Africa can build more detailed results chains to show the specifics of the intervention.

Step 1 ends with a clear understanding of:




- (How) Does the intervention help create or support jobs?
- Can we make a plausible argument in theory for a jobs effect, which is aligned to the FSD Africa ToC?
- Are the effects material and significant enough to proceed to Step 2?

Step 2

QUANTIFY:

Estimate total jobs created and supported

This step has two parts. The first estimates how many jobs are likely to be created and supported by the innovation; and second estimates how much 'credit' FSD Africa can take in the form of a contribution share. Both figures are approximations, therefore a range from is presented from lower to higher confidence levels. In all likelihood, the reality is somewhere between the two. The second step is to decide at which level(s) to measure jobs. This can be at the:

Micro-level	Meso-level	Macro-level
		
The number of new jobs added in 'real economy' firms that are intended beneficiaries of the financial innovation being supported by the project/ investment. This involves comparing 'before' and 'after' situations.	The number of jobs supported in the wider supply chain (upstream and downstream). This involves using a multiplier which is based on the volume of capital deployed.	The number of jobs supported in the wider economy through increased expenditure. This is not used in the current iteration of the framework.

The choice of which level(s) to measure will depend on the sector, and context-specific factors. However, the table below provides some guidance, based on available evidence⁴¹.

Sector	Micro effects	Meso effects	Macro effects
Manufacturing	High	Medium	Low
Tourism	Medium	High	Low
Infrastructure	Low	Low (temporary)	High
Agriculture	High	Medium	Low
SME banking	High	Medium	Low

⁴¹ Adapted from ODI and IFC

a) Jobs at the firm-level (micro)

Jobs created are counted as new positions added minus positioned lost. In other words, net job change within the business⁴².

Depending on the project, target beneficiary businesses may vary. However, given the intermediated nature of FSD Africa's work, it is unlikely that these businesses are the ones that FSD Africa is directly working with. For example, a project may be supporting a financial institution to extend new credit product to SMEs in the agricultural sector. It is the jobs in the agri-business that we are interested in – not those in the financial institution⁴³.

This means that unless the financial institution already collects employment data on its loan portfolio, FSD Africa will need to support some basic data collection. The following pieces of information are required:

Isolate the 'innovation'	This ascertains what precisely was FSD Africa's impact on the financial service provider (FSP) / financial intermediary (FI) in terms of the type, quantity or quality of financial service. This then involves working out which additional financial services are going to which additional end-users. For example, before FSD Africa support the FSP provided credit products to 2,000 SMEs, after support this increased to 3,000). The 'job creation' calculation would then only apply to the 1,000 additional SMEs. How this is done will depend on the nature of FSD Africa support. If an equity FSD Africa investment, a simple share of the 'innovation' outreach could be made. If the support was non-financial, a before-after comparison / contribution analysis may be required within the FSP/FI.
A baseline figure	The number of jobs in the target companies before the 'innovation' (e.g. before the loan was made, or as close as possible to the time the loan was disbursed). This allows FSD Africa to measure the additional jobs created. In the event that new 'greenfield' businesses are starting up with the funding, then baseline will be zero.
Annual updates	Annual updates on the number of jobs in the target company, which distinguishes between permanent new job positions created by the company and temporary jobs or contracts created. The number of full-time and part-time staff should be captured separately.

Ideally, the jobs figures should be disaggregated between: male/female, and youth (less than 35 years old). However, this may not always be possible as intermediaries may want to limit the data burden on their own clients.

Measuring full time equivalent jobs

In calculating a job, FSD Africa uses FTEs (full time equivalents). DCED describes jobs as FTEs taken over one year (240 days/year) which may be seasonal, and paid in kind, but does not include unpaid family labour. As FSD Africa covers different countries the calculation can also be done in accordance with local labour legislation.

The formula used is $\text{days} \times \text{weeks} / \text{days in a year (240 working days/8 hours a day)}$. For example, if an employee is scheduled to work 3 full days a week for 25 weeks, then $3 \text{ days} \times 25 \text{ weeks} / 240 = \text{FTE } 0.3125$.

Seasonal or part-time jobs are prorated on the basis of the period worked (e.g. full-time position for 3 months equal to 0.25 FTE job). FSD Africa works on the basic assumption that 2 part time jobs are equal to one FTE.

⁴² Adapted from DCED and AECF

⁴³ Typically, the job impact within financial service providers or financial intermediaries themselves will be minimal, and any job creation is likely to favour skilled, relatively wealthy people, so this job channel can be ignored. However, in some instances this will not be the case (for example, support provided to an MNO to expand their mobile money distribution network, creating employment and self-employment opportunities for mobile agents).

Why not measure jobs 'saved'?

Interventions, particularly those related to insurance products/services aimed at businesses, may help with capital protection, which can support business continuity in the event of significant shocks, or longer-term stressors. This helps firms manage downside risk (and increase their resilience and ability to 'bounce back'). It may also lead to firms being more willing to invest in business growth activities, which may lead to adding to their labour force, as they have a risk cushion – although evidence of this impact is scarce.

The 'jobs saved' argument is essentially a counter-factual argument and cannot be directly observed or measured, unlike job creation. No estimates of jobs saved are made in the framework. However, a proxy measure at the output level may be to count the number of businesses covered by / accessing new insurance products/services. This, however, cannot be added to the FSD Africa jobs figures. In order to be translated into a 'jobs supported' figure, this would require a deep dive to take place (see Section 3). This would be a case study or an impact assessment that would seek to – on a case-by-case basis – collect data to compare the outcomes in a sample of covered firms with a 'counter factual' scenario such as business failure rates or a sector trend analysis.

b) Jobs at the sector-level (meso)

Employment changes at the meso-level can be measured in one of three ways:

- 1 **Investment multipliers** (FTE jobs per \$ invested). This estimates the number of jobs supported per unit of investment in the sector, e.g. per USD 1 million (or local currency).
- 2 **Employment multipliers** (FTE jobs per direct jobs)⁴⁴. This estimates the number of jobs supported per direct job created. It can only be done if direct (micro) job creation has already been measured.
- 3 **Output multipliers**. (FTE jobs per unit produced). This estimates the number of jobs supported per additional output, e.g. number of houses built, or clients served.

All three approaches rest on the efficacy of multipliers which measure the proportional effect of an exogenous variable on an endogenous variable⁴⁵.

Economics distinguishes between Type 1 multipliers (those that measure jobs supported at meso level) and Type 2 (those at meso and macro). It is rare to find a Type 1 employment multiplier, meaning most of the time we will have to combine both the meso- and macro-level if using an employment multiplier.

In practice, given FSD Africa's catalytic mandate, the investment multiplier will almost always be more appropriate. Multipliers are calculated based on input-output tables; where the key 'input' into the model is the volume of additional finance mobilised into the sector.

To calculate meso-level employment effects using the investment multiplier, the formula is as follows: *Share of capital mobilised x investment multiplier*

⁴⁴ The employment multiplier, expressed as full time equivalent or FTE, is the ratio of direct plus indirect (plus induced if Type II multipliers are used) employment changes to the direct employment change. In other words, if you have the change in FTE employment for the industry the employment multiplier can be used to calculate the change in FTE employment for the economy as a whole (Source: Scottish Government)

⁴⁵ DCED

Financial flows should be disaggregated as close to real sectors as possible. Pooled capital is sometimes not allocated to sector-specific activities. However, financial intermediaries often report on the sectoral distribution of their loan portfolio in their annual reports as part of their risk reporting; even if this is at the 'economic sector' level (agriculture, services, industry) rather than the more granular sub-sector (construction, energy etc.) breakdown. If it is not possible to get data by sector, multipliers do exist for generic SME banking and financial services.

It should be noted that, especially in Africa, there are significant limitations in getting accurate, up-to-date, country- and sector-specific multipliers. While good practice is that multipliers cannot be generally extrapolated to other countries, some broad commonalities in sectoral patterns might be expected⁴⁶. FSD Africa may be required to use the same multipliers for the same sector across different countries within a sub-region, but this needs to be clearly caveated and disclosed when reporting. The box below sets out some guiding principles when deciding whether to extrapolate.

Being careful not to 'over-claim' on supported jobs

A great deal of FSD Africa's jobs impact is likely to come at the meso-level. These are jobs that FSD Africa helps support through deepening financial sector activities; they are not jobs that have necessarily been created because of FSD Africa.

The Standard Chartered economic impact studies – where FSD Africa's business case multipliers were drawn – are clear that they do not refer to job creation effects for a number of reasons. Firstly, jobs supported in the supply chain are not measured against a counterfactual (i.e. what would have happened without FSD Africa support). Second, although capital is a necessary input for a company, it is not the only one. Firms need labour, materials, energy etc. as well in order to operate and none of these "factors" is the sole determinant of its success and associated economic impact.

Ideally, according to the DCED, programmes should develop their own bespoke multipliers. However, FSD Africa has a regional mandate – covering scores of countries across many sectors. This would mean potentially hundreds of multipliers needing to be calculated based on primary data collection, creating excessive time and cost, given jobs are just one of FSD Africa's intended social impacts. Multipliers also need to be updated (termed 'adjusted') continuously to remain relevant. This framework therefore makes use of already existing multipliers, which are set out in Annex 2. Individual FSDs may be able to develop their own sector- and country-specific multipliers, where resources allow. These can then be slotted into the framework.

Given data challenges, the Jobs Framework does not rely on one single multiplier, or one single data source. Rather, it triangulates different estimates to arrive at a range of like job effects, from a conservative (lower) to an optimistic (higher) scenario. Which data is used to build these scenarios will depend on the project in question, the specific pathways to a job effect, and available data. Examples from applying the Jobs Framework to FSD Africa's portfolio to-date have included:

- Using both the investment and employment multiplier
- Using the supply chain jobs reported by partners and an average of the modelled meso-level (multiplier) data
- Different scenarios where part time jobs are reported by partners on a headcount basis: Using the simple assumption that one part time is 0.5 FTE, to a more seasonal assumption where one part time jobs is 0.25 FTE.

⁴⁶ ILO

Quality checking multipliers

The DCED has set out useful criteria for sense-checking multipliers:

Is the multiplier valid for the sector? Multipliers are often sector specific and there are differences in structure and dynamics among sectors. Practitioners need to compare the sector for which the multiplier was developed with the sector in which they intend to apply the multiplier. To what extent are the dynamics, supply chains, and market forces similar?

Is the multiplier valid for the region? Multipliers are often developed for a certain region. Practitioners need to compare the context where the multiplier was developed with the context where they intend to apply the multiplier. For instance, is the infrastructure the same, are labour markets functioning in a similar fashion?

Is the multiplier valid at this point in time? Sector dynamics, structure and market forces change over time. Practitioners need to determine the extent to which the sector characteristics have changed from when the multiplier was developed to the proposed time of application to determine if the multiplier is still appropriate.

c) Jobs at the economy-level (macro)

Estimating job effects at the economy-level is currently beyond the scope of the Jobs Framework. There is both a philosophical argument as to whether the 'facilitative' approach deployed by FSD Africa can be plausibly linked to induced employment effects; and a practical consideration that work on such macro modelling is already being carried out by a coalition of DFIs⁴⁷. In future, FSD Africa may wish to align with this forthcoming harmonized 'total employment effects' model. By using this model across multiple financial institutions, there are more opportunities for ground-truthing and fine-tuning. Another advantage is that multipliers can be dynamic, rather than static. Current models assume that an increase in capital of 10% provided to a company increases that company's revenues, profit, and employee headcount by 10%; and that because of 10% higher spending on intermediary demand, indirect and induced employment also increases by 10%. However, when companies add to their capital stock, they tend to become more capital intensive, meaning that the output to capital ratio (and the labour to capital ratio too) decreases⁴⁸.

d) The 'claimable' share of jobs created and supported by FSD Africa

The DCED Standard recommends that one of the 'common impact indicators' all programmes should track is "Net additional jobs created". This is defined as a sustainable net change in the number of full-time equivalent jobs created for the target group as a result of the programme, per year and cumulatively⁴⁹.

The DCED Standard definition implies only counting those jobs that can be confidently attributed to a programme's intervention. However, as described above, global evidence shows we still do not know how much we can confidently attribute employment effects solely to an investment, rather than other factors (i.e. changes in market conditions etc.)⁵⁰. A robust impact assessment would be required to compare employment creation effects in supported firms with effects in a

⁴⁷ Bio, CDC, FMO, and Proparco inter alia, and IFIs (inc. African Development Bank).

⁴⁸ The so-called Joint Impact Model (JIM) is the new open access model to be launched in 2020, for calculating and reporting on indirect impacts (Jobs, Value Added, GHG). It has so far been developed so far by AfDB, BIO, CDC, EDFI, FinDev, FMO and Proparco with Steward Redqueen.

⁴⁹ "Additional" means jobs created minus jobs lost. "Per year" comprises 240 working days. Jobs saved or sustained are reported separately

⁵⁰ Lema (2018)

comparator group of firms (which are otherwise similar), but this is rarely possible due to budgetary and methodology limitations.

A calculation, therefore, needs to be made on the proportion of jobs that FSD Africa can plausibly claim to have supported. As noted by the FSD2.0 strategy, there is a difference between attribution of outcomes, which should be possible at the level of the financial system, and contribution to achieving the desired social impacts (including on jobs). The issue is, therefore, best framed as FSD Africa's contribution to creating and supporting jobs.

This needs to be based on:

1 A theoretical argument about the counter-factual. What would have happened without the FSD Africa project/investment? This consists of a simple qualitative statement explaining why FSD Africa support was additional.

2 Adjusting the total jobs supported/created by a 'contribution share'.

FSD Africa cannot claim all of the jobs associated with financial systems change. Often, FSD Africa is just one of many inputs required, whether providing 'hard' financial support or 'soft' support like technical assistance, or a mix of the two. The framework uses pro-rating according to the amount of capital invested (or share of support). For example, a wholesale financier introduces a new innovation that leads to client SMEs increasing the numbers of employees by 500 (increasing from 5,000 to 5,500 FTE jobs), which in turn can be associated with a further 1,000 value chain jobs. If FSD Africa provided a mix of technical advice and research, alongside another development project who provided grant funding, a 50% 'contribution share' would lead to FSD Africa claiming 750 jobs (half of the total jobs created and supported). Where a strong case can be made that FSD Africa was cornerstone investor, or provided critical support – or that co-investment was made because of FSD Africa (see below) – then up to a 100% share can be claimed.

FSD Africa has a catalytic mandate, so the jobs framework also captures employment effects through investment being catalysed into the real economy, as a result of FSD Africa. This can happen in two ways:

First-order crowding-in	Second-order effects
captures co-investment alongside FSD Africa support to intermediaries (funds or financial service providers etc).	capture finance mobilised through the activities of the firm that the intermediary invested in – for example, investments into ZHL (under Sofala)

These can be measured using the same figures and 'contribution share'. For instance, if we know that 337 jobs are supported by each additional \$1 million of deployed finance in Kenya's agriculture sector, then \$5 million of crowded-in capital would allow FSD Africa to report support a further 843 jobs (on a 50% contribution share).

How long can impact be claimed?

The jobs impact from innovations supported by FSD Africa may continue – and even scale up – long after programme support has ended.

However, FSD Africa's 'contribution share' will drop off over time. For investments, impact can be claimed in equity structures for long as the holding period (i.e., until exit) and for debt instruments until a bond self-liquidates. Non-DevCap projects should follow guidance issued by the DCED, that is, to track impact for up to 2 years after the close of the intervention. However, in some cases, it may be necessary to track impact for longer: Where the innovation is to seed and 'kick start' a new type of financial service, for example, the impact may only be realised in the medium term. In the exceptional cases where FSD Africa tracks jobs impact for longer than 2 years post-close, the guidance on how to adjust impacts for 'drop off' issues by the [Social Return on Investment Methodology](#) should be followed.

Worked example of a 'contribution share'

In 2018, FSD Africa Investments acquired a shareholding in Sofala Capital Pty Limited (Sofala), a housing finance catalyst based in Cape Town, South Africa. The £1.6 million investment was designed to help Sofala scale-up its provision of construction mortgages in both Zambia and South Africa through its two operating businesses, ZHL, and i-Build.

FSD Africa can therefore claim impact according to its share of the mortgage book of ZHL and i-Build, and any additional finance mobilised as a result of the FSD Africa investment. For example, Sofala has a 30% stake in ZHL; and FSD Africa, in turn, has a 25% holding in Sofala. Given FSD Africa's multi-faceted support to Sofala and blend of returnable and grant financing, it is reasonable for FSD Africa to claim all (100%) of Sofala's share of impact in ZHL. However, the whole of ZHL's impact on the real economy cannot be 'claimed' by FSD Africa. The 'contribution' share of total jobs supported by FSD Africa in ZHL is 40%⁵¹. No baseline value has been taken to isolate the exact increase in financing deployed since FSD Africa investment, on the premise that, by making an equity investment, FSD Africa (through Sofala) are exposed to the entire outstanding loan book – and a result, to the jobs already being supported through ongoing construction activities⁵².

The Jobs Framework measures gross job creation (not net job creation), so there is no need to attribute the construction sector jobs being supported to ZHL or i-Build, which, for example, would have required estimating the natural growth rate of construction sector employment (deadweight) or whether jobs were being created/supported in firms at the expense of others (displacement).

⁵¹ This is made up of the 30% equity stake and a \$500,000 credit line (which represents an additional 10%) of the overall loan book.

⁵² This is consistent with the OECD methodology for estimating shares of private capital mobilised

FSD Africa's catalytic mandate

According to its business case, FSD Africa aims to catalyse £150 million of additional investment finance in the real economy.

This happens in two ways:

1

Investments that aim to 'crowd in' additional capital, increasing the volume of economic activity in a country.

2

Projects that support or demonstrate the potential (or de-risk) for a financial activity, leading to further investments, which in turn lead to more economic activities.

The way in which FSD Africa measures and reports on the 'capital mobilised' figure is covered separately, based on the OECD methodology for measuring the amounts mobilised from the private sector. For the sake of obtaining an accurate estimation of employment, a separate 'capital catalysed' figure is used. This is based on actual disbursements (rather than commitments), and considers both first- and second-order effects. It also strips out any elements of consumption financing, non-performing loans, or re-financing (i.e. non-growth capital), where evidence shows a weak link to employment. It also considers capital mobilised by other donor and development agency-funded actors (such as DFIs), unlike the OECD methodology.

Step 2 ends with a clear understanding of:

- The effect on target beneficiary firms (micro-level) and on jobs created
- Whether jobs are supported in the wider value chain (meso-level) and are best captured through investment, employment or output multipliers
- The share of jobs impact that can be plausibly claimed as being contributed to by FSD Africa.

Step 3

QUALIFY:

Understand whether the jobs are likely to be decent

The third step helps FSD Africa understand how 'decent' the jobs created and supported are likely to be. A 'decent jobs assessment' is conducted to examine the nature of jobs being supported in terms of gender equality, inclusion of vulnerable groups, earnings, job security and career development prospects. It also factors in relative need for job creation based on a suite of national-level SDG indicators.

Decent Jobs Assessment

This assessment aims to solve a particular pain point in jobs estimations: that to-date job quality has not been captured when modelling indirect or 'meso' level effects. As part of the Jobs Framework, the decent jobs assessment goes further than job quality to consider job distribution and geographic footprint⁵³.

Each project/investment is scored out of 100 to gauge how decent the jobs are that they support. This score is then used to compare between different projects/investment and see which are having the greatest effect across all three dimensions of employment: job creation, job inclusion and job quality.

The Rating takes into account sectoral patterns, and the country-specific need for decent job creation. Data on the number of jobs in a sector that can be classified as decent jobs is often unavailable, especially in countries in which FSD Africa operates. Proxy measures are thus required. The framework uses international standard definitions and metrics for measuring aspects of decent work and inclusion in the labour market. Each real economic sector is ranked by quintile along a number of dimensions. The box below gives an example of the Rating in use for Sofala. The table overleaf shows the suite of metrics and indicators used to calculate the sector rankings. A separate Excel sheet contains all the look-up tables for the Decent Jobs Assessment.

Use case: Women's World Banking Project

A 'decent jobs assessment' was applied to the two new products issued by Diamond Bank (BETA Savings and MSME Credit). The job quality and inclusion effects are based on data for various sectors (using Standard Industry Classification (SIC) codes) in priority FSD Africa countries.

The BETA Savings product is deliberately targeted at market traders. The most relevant SIC for BETA Savings is "wholesale and retail trade; repair of motor vehicles and motorcycles". The ranking for this sector in Nigeria is two out of five (second-lowest quintile).

⁵³ The decent jobs assessment was developed as a FSD Africa-specific adaption of The Good Economy's Good Jobs Rating, a proprietary tool for responsible and sustainable investors to track their contribution to SDG 8

Use case: Women's World Banking Project (continued)

The sector scores well for gender equality given the high levels of participation of women. However, the sector scores less well for levels of earnings, job security, employability, and inclusion (see table below).

Also note that the jobs estimate for the BETA Savings product is based on a survey question which asks respondents about changes in paid and unpaid employment. It is therefore possible that some of the jobs created are unpaid (e.g. for family members) and are therefore of low quality.

The MSME credit product is not targeted at any particular economic sector. However, using data from the Small and Medium Enterprise Development Agency of Nigeria (SMEDAN) it is possible to estimate the distribution of MSME credit clients across sectors (assuming the distribution of clients by sector matches the distribution of enterprises in the general population). The table below shows the five sectors with the highest distribution of micro-enterprises by sector using the SMEDAN 2013 data, and the corresponding ranking.

Ranking for five sectors with largest numbers of micro-enterprises in Nigeria

Sector	Number of micro-enterprises (% of total)	Level of earnings	Job security	Employability	Gender Equality	Inclusion	Total Score (including Country weighting)
Wholesale & retail	54.5%	1	2	2	5	2	52
Manufacturing	13.2%	2	1	5	5	4	68
Agriculture	8.9%	1	1	2	2	5	48
Other services	7.9%	2	4	3	4	3	64
Accommodation and food services	5.5%	1	4	5	5	5	77

The list of sectors in the above table includes sectors with both high decent job scores (manufacturing, accommodation and food services, and other services) and low scores (agriculture, and wholesale and retail). The largest sector by far is wholesale and retail, discussed above in relation to BETA Savings. Using the number of micro-enterprises as a weighting, the average score for the five sectors is 60 out of 100). This suggests that across the two products, the quality of jobs is likely to be moderate.

The importance of modelling decent jobs at the sector-level

"Existing methods used by DFIs to estimate indirect job creation effects could be augmented with information about average job quality in different sectors of the economy, which would provide some guidance about the quality of jobs created through demand multipliers"

CDC Group

Step 3 ends with a clear understanding of:

Nature of jobs supported and created, based on sector profiling using the decent jobs assessment

Decent Jobs Assessment: Indicator Set

Dimension	Indicator	Rationale	Metric	Weight (%) (within Quality, Inclusion and Geography scores)	Overall Weight
Job Quality	Earnings	The prevalence of 'fair pay' practices in low-wage occupations	Earnings quality – mean earnings in the sector	33.3%	Quality Score: 33%
	Job Security	The growth potential and security of employment within a sector	Forward look – predicted sector job growth	16.7%	
			Formal employment – proportion of formal employment in the sector	16.7%	
	Employability	Opportunities to progress and grow within the sector – utilising human capital development	Under-employment – proportion of under-employment in the sector	16.7%	
			Occupational mobility – proportion of employees in the sector in intermediate occupations that enable progression	16.7%	
Inclusion	Gender Equality	Gender equality is an integral dimension of diversity and inclusion in company reporting, with women's economic empowerment addressed by SDG 5.	Female employment – proportion of female employees in the sector	33%	Inclusion Score: 33%
	Vulnerable Groups	Young people, both school leavers and graduates, are faced by high rates of unemployment and underemployment, as recognised in the SDGs	Youth employment – proportion of young employees (aged 15-24 years) in the sector	33%	
			Low-skilled employment – proportion of employees in the sector in low-skilled occupations	33%	
Geography	Inclusive Growth	The earnings dimension of job quality, capturing basic income needs and the prevalence of working poverty (SDG 8.5)	Gross National Income (GNI) per Capita (2011)	25%	Geographic Footprint Score: 33%
		A measure of income and wage inequality in the labour market and wider society (SDG 10.1)	Earnings distribution - indicated by the Palma Ratio of Income Inequality (Top 10 percent of population's share of GNI/bottom 40 percent share)	12.5%	
		Breaking the cycle of poverty involves full employment and decent work. Evidence shows that decent and productive jobs which deliver a fair income, along with sustainable enterprises and economic transformation play a key role in reducing poverty (SDG 1).	Working Poverty Rate (Percentage of the Employed Living Below US\$1.90 Purchasing Power Parity (PPP))	12.5%	

Dimension	Indicator	Rationale	Metric	Weight (%) (within Quality, Inclusion and Geography scores)	Overall Weight
Geography (continued)	Productive Employment	Employment and skills opportunities in modern knowledge-based international sectors, particularly developing and transition countries (SDG8.3)	Proportion of Total Employment in Industry and Services Sectors	10%	
		A needs measure of participation in the formal labour market, regardless of current work status (employed + unemployed)	Economic Activity Rate (Labour Force Participation)	10%	
		The prevalence of worklessness based on official measures for people actively seeking and needing to work (SDG 8.5)	Unemployment Rate	10%	
	Sustainable Growth	Labour productivity is an important indicator that is closely linked to economic growth, competitiveness, and living standards within an economy (SDG 8.2)	Growth in labour productivity: 3 Year Growth in Output (GDP) per Worker	10%	
		GDP per capita is an economic performance indicator for average living standards and economic wellbeing. (SDG 8.1)	Growth in output per capita: 3 Year Growth in Output (GDP) per Person	10%	
Decent jobs assessment					100%

Step 4

QUERY:

Deep dive to verify and unpack the jobs impact

To supplement aggregate results reporting methodologies, which are designed to be applied across a portfolio, in certain instances, FSD Africa may wish to get a more granular understanding of the job effects for a particular project/investment.

FSD Africa should proceed to this step if the numbers of jobs created/supported is particularly large or if there is scepticism as to whether the numbers reflect reality. This step can be thought of as a means to validate Steps 1 through 3. FSD Africa may also wish to jump to step 1 in cases where the job effect is potentially large, but the pathway is long and difficult to quantify without deeper analysis. This is likely to be the case for FSD Africa's policy and regulatory reform work, for example.

Four 'deep dive' options are available:



Value Chains for Jobs Estimation (VCJ)



Economic impact assessment (EIA)



Case studies



Lean Data Surveys

a) Value Chains for Jobs

What? This uses a lean application of the World Bank's Value Chains for Jobs Estimation tool (VCJ). It is based on the premise that value chains help us understand better the scale, location, and nature of jobs. The methodology is not to be confused with the Value Chain Development approach (which is a broad analysis of constraints and interventions to address growth and inclusivity), but is instead a narrow exercise to underlying assumptions on how the value chain is / will be structured and dynamics of its operation, and how this effects decent jobs.

When is it best used? Where projects/investment are focused on a particular real economy sector (within or across countries) – see the example of the FSD Africa investment into Sofala, where a housing construction and rental value chain study was conducted for the two underlying investments in Zambia and South Africa

How does it work? Taking a whole value chain approach can help FSD Africa to estimate better how investments and interventions are likely to impact jobs. By tracing the linkages, both vertical (between firms at different levels of the value chain) and horizontal (between firms at the same level of the value chain), among firms in a value chain it is possible to gain a richer understanding of the dynamics that shape job creation and destruction, as well as how changes in a value chain are likely to impact the quality of jobs, the nature of skills demand, and the inclusiveness of job creation.

The relationship between financial sector development, real economy value chains and job creation is complex. For some projects/investments, it may not be possible to cover all companies or sub-sectors (e.g. regional funds). If not, the analysis can be done on a sample of investees which are selected according to likely magnitude of impact (materiality and significance).

Specifically, the VCJ tool seeks to understand the following:

- 1 **Business model:** The 'theory of change' for how finance flows into the real economy; connecting capital to communities.
- 2 **Markets and competitive environment:** This involves identifying how the market is structured in order to understand how changes among certain actors of the value chain are likely to impact others. Many of the issues will be integrated into the discussion of supply chains and production structures, but it will also seek to understand the nature of domestic competition and the positioning of the domestic value chain relative to foreign participants (suppliers, markets, lead firms).
- 3 **Workforce:** This involves identifying the structure of the current workforce of relevant or typical firms at each stage of the value chain and the barriers to expanding the workforce. It requires an understanding of:
 - How the structure of the workforce is shaped by market dynamics and regulatory issues
 - How technology interacts with the workforce and impacts size, skills demand, wages, etc.
 - How growth and the nature of market opportunities impacts firm decisions on the size and nature of the workforce
 - How skills availability and gaps impact jobs outcomes
 - Salient job quality issues
- 4 **Supply chain relationships:** This involves identifying the current supply chain links and the opportunities and barriers to deepening local links. This is critical for understanding the multiplier effect in the value chain. Key issues to understand include:
 - Sourcing and distribution strategies for key goods and services inputs
 - Expenditure on key inputs
 - How growth, changes in markets, and changing technologies impact sourcing
 - Barriers to local sourcing
- 5 **Production structure:** This involves identifying the production structure of the firm, including the relative use of labour, capital, and other inputs and the relationship between outputs and labour use. Issues covered include:
 - Cost structure of production – this is perhaps the most fundamental issue to understand across the value chain, as it ultimately determines the demand for the labour share of production.
 - How output growth would impact the use of labour (skilled and unskilled) and capital

6

Jobs coefficient

- This involves establishing the relationship between a project/investment (in a firm or more broadly in the value chain) and jobs – i.e. the jobs coefficient.
- Determining the jobs coefficient will involve establishing the relationship between investment and output growth, and then between output growth and jobs.

7

Additionality and leverage

- Leverage is the proportion of FSD Africa investment/support over total financing. It does not necessarily indicate additionality because it does not show how much, if any, of the total financing or its impacts would be impossible without concessional development assistance. Defining additionality requires considering a counterfactual situation where FSD Africa financing/support was not involved. This involves estimating how much financing FSD Africa was responsible for helping 'unlock'.

The analysis is carried out using basic secondary research (conducted upfront) and targeted, semi-structured interviews and focus groups (as required) to gaining a more in-depth qualitative understanding. The analysis ends by making a conclusion as to the likely veracity of the jobs numbers and recommending any adjustments. It also summarises a qualitative understanding of job creation, access, and inclusion effects.

A value chain lens is already embedded within the FSD vision

The FSD2.0 strategy states the need to “Draw on end-to-end value chain analysis within the selected sectors. In adopting this approach initially on a limited basis, we accept that we will likely not succeed in all cases in positively influencing the real economy towards inclusive growth, but in the course of trying, we will understand better the linkages between the real and financial economy in ways which can be applied over time. As a network, as we share learning from our engagement in different sectors over time, we will build up a portfolio of knowledge across the real economy.”

b) Economic Impact Assessment (EIA)

What? Conducting an EIA involves developing a specific methodology, using a variety of quantitative tools, to estimate the impact of a particular 'event' or organisation or business. For example, governments often use ex-ante and ex-post EIAs to estimate the economic impact of a proposed regulatory change.

When is it best used? For the purpose of estimating job impacts, a full EIA is not required (unless FSD Africa is interested in also capturing wider economic impacts beyond jobs), although the tools and techniques commonly used may be useful for job estimation in the case of more complex FSD Africa interventions. Given the complexity involved, it is likely that consultants with specialist impact assessment skills would be required.

How does it work? A full EIA aims to capture the full social and economic impact, including positive and negative externalities, and to 'price' non-monetary costs and benefits (through techniques such as contingent valuation) in order to arrive at an overall cost-benefit assessment. In the field of financial sector deepening, an interesting example of an EIA is Safaricom's 'True Value Report,' which aims to calculate the full impact of Safaricom's activities, including attempts to monetise the social impact of products such as M-Pesa on different stakeholders (consumers, agents, and merchants).⁵⁴

⁵⁴ See: www.safaricom.co.ke/images/Downloads/Resources_Downloads/True_Value_Booklet_Final.pdf

c) Case study

What? Like an EIA, a case study approach would also involve developing a specific methodology in order to build up a more detailed picture of the jobs impact of a particular 'event' or business.

When is it best used? A case study would be useful when FSD Africa wishes to unpack and understand the more qualitative dynamics and dimensions of how financial sector innovations are impacting real economy jobs. In contrast to an EIA case studies rely more on qualitative data and insights, and do not seek to quantify or monetise all costs and benefits. Therefore, they are not so useful in quantifying or validating the numbers, but understanding the 'what' and the 'why' of.

How does it work? A case study would be built around a theory of change, with qualitative techniques such as Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) used to test links in the causal logic, understand the depth and significance of change and the change processes involved, and explore unintended positive and negative impacts. The data collection and analytical tools are less complex than those used by EIAs, making them less dependent on outsourced expertise.

d) Lean Data Surveys

What? Lean Data Surveys use mobile technology to gather rapid insights into social impact. The most prominent provider of lean data services is 60 Decibels, who developed the approach while being incubated by the Acumen Fund.

When is it best used? Lean Data would allow FSD Africa to engage with - and listen to the voice of - those people ultimately benefiting from more and better jobs as a result of financial sector innovation. Lean Data Surveys would gather primary data directly from the people experiencing change; and can be used to complement the decent jobs assessment, which is based on sector averages.

How does it work? **60 Decibels** has a set of survey modules that are based on tried and tested question sets. The Core Insights module is usually supplemented by 3-4 additional modules such as:

- Income Change
- Worker well-being
- Fair & Equal Rights
- Pay & Benefits
- Skills & Development
- Motivation & Purpose
- Gender Impact
- Profile: Disability / Previous Employment / Education Level

A team of trained enumerators conduct the survey. To maintain data quality and respondent engagement, surveys are capped at 35-40 questions (approximately 15 minutes per survey),

Step 4 ends with a clear understanding of:

More granular job quantity, quality and inclusion effects based on unpacking the value chain, more detailed economic modelling, lean data surveys and/or targeted case studies.

Annex 1:

FSD Africa Jobs Pathways

The Framework can be used both for ex-ante decision-making and to arrive at projected impact figures for a particular project/investment.

The example below is illustrative, inspired by the FSD Africa Business Case and based on hypothetical support to Capital Markets Authority Ghana. The tabular format can slot into FSD Africa Investment Committee papers.

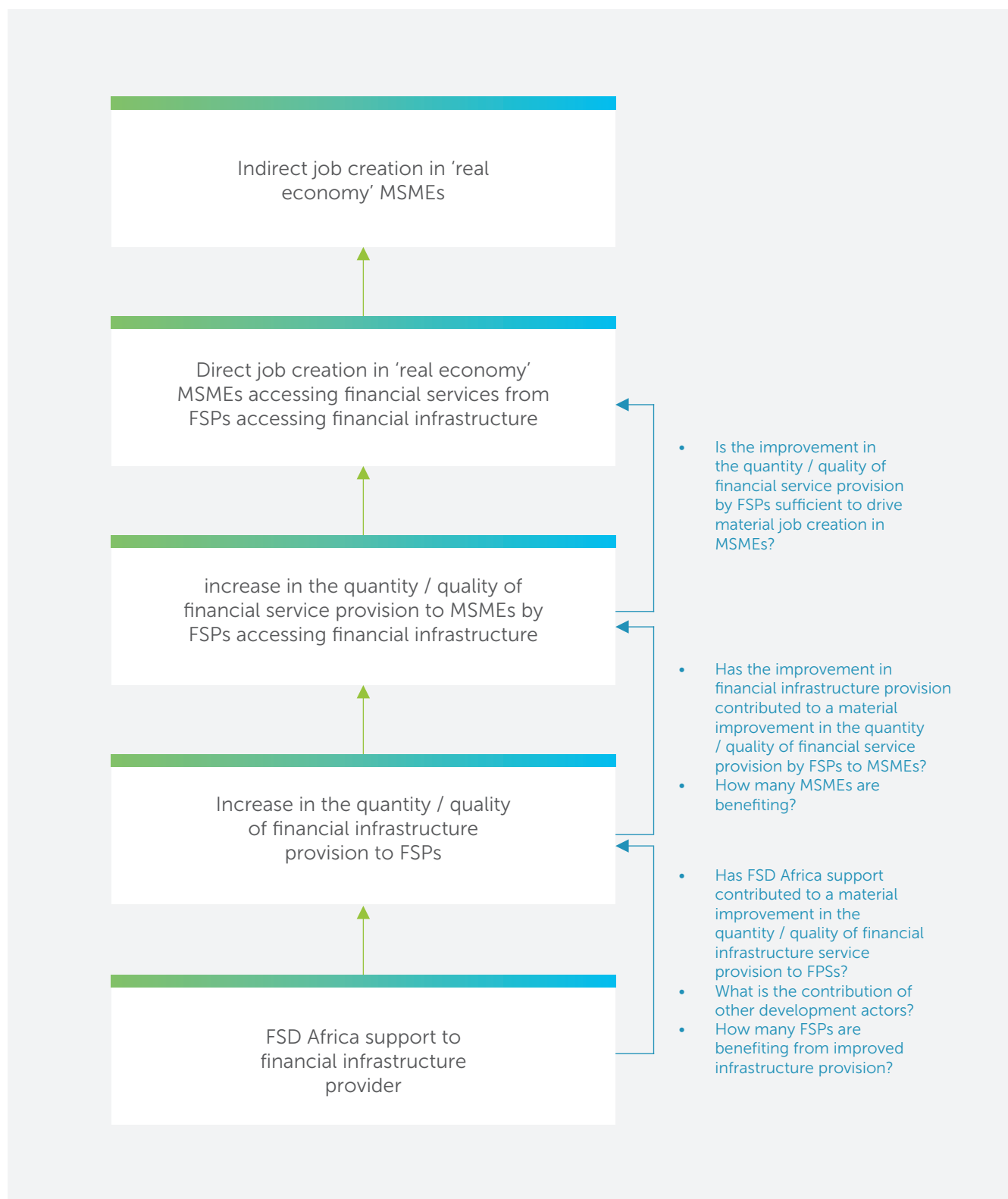
1. Non-targeted direct support to FSPs (e.g. equity/debt investment; TA to core processes)



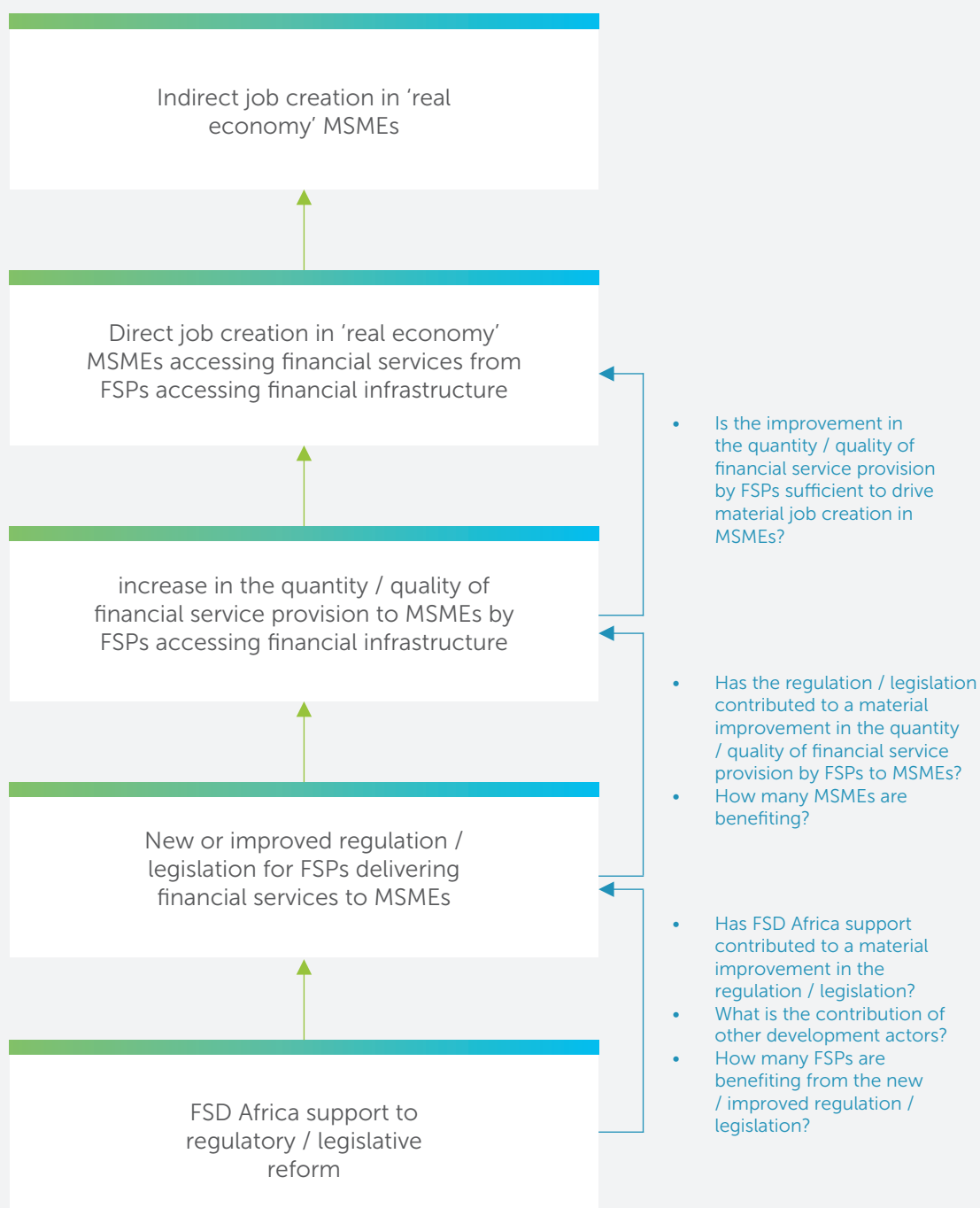
2. Targeted direct support to FSPs (e.g. credit-lines; TA to new product development)



3. Support to financial infrastructure providers



4. Support to regulatory / legislative reform





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