



# THE LEAST DEVELOPED COUNTRIES REPORT 2018

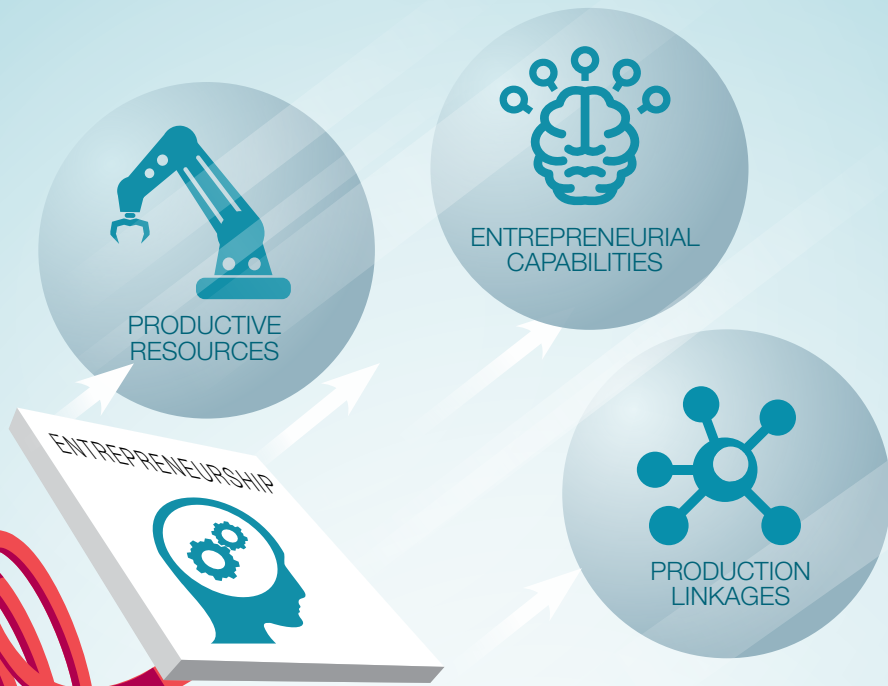


## CHAPTER

# 1



Sustainable development,  
structural transformation and  
entrepreneurship



**ENTREPRENEURSHIP SPURS**  
DEVELOPMENT OF  
PRODUCTIVE CAPACITIES



**DYNAMIC FIRMS HAVE HIGHER IMPACT**  
ON STRUCTURAL TRANSFORMATION

# CHAPTER 1

## Sustainable development, structural transformation and entrepreneurship

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## A. Introduction

The focus on entrepreneurship of the present edition of *The Least Developed Countries Report* is grounded in the series' vision of sustainable development through development of productive capacities and structural transformation of the economy. Innovation as an entrepreneurial activity is an essential element of structural transformation that implies shifting production factors from traditional economic activities towards those with higher value added and higher productivity. Entrepreneurship is thus indispensable for sustainable development. This is true of developed countries and other developing countries, but even more so of LDCs, where much more radical economic transformation is required.

The global objective of sustainable development, as enshrined in the 2030 Agenda for Sustainable Development adopted by the international community in 2015, provides direction for the development strategies and policies of developed and developing countries, including LDCs. Sustainable development implies a radical reconfiguration of production and consumption patterns and changes in the relationship between societies and the natural environment. It therefore requires the structural transformation of economies, especially in LDCs, where the objective of sustainable development requires a new way of tackling the traditional challenge of structural economic transformation for economic and social development, while mainstreaming environmental considerations and sustainability.

Chapter 1 presents the rationale for this report and the conceptual framework underpinning subsequent chapters. Sustainable development is defined and its relationship with structural transformation, outlined, in section B, while alternative concepts of entrepreneurship and the sense in which the term is used in the report are discussed in section C. The contribution of entrepreneurship to sustainable development in section D brings together these two concepts, and the individual and contextual determinants of entrepreneurship are introduced in section E. The chapter concludes with section F, which introduces the remaining chapters of the report.

## B. Sustainable development and structural transformation

The international community has committed itself to the pursuit of sustainable development, enshrining this commitment in the 2030 Agenda for Sustainable Development. A multitude of actors are currently establishing strategies and policies to follow this path,

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## Entrepreneurship is indispensable for sustainable development

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including states, sub-national authorities, international organizations, non-governmental organizations and the private sector. The LDCs are striving to embark on a path towards sustainable development by pursuing both the Sustainable Development Goals established by the 2030 Agenda and the development goals included in the Programme of Action for the Least Developed Countries for the Decade 2011–2020 (Istanbul Programme of Action) adopted in 2011 at the Fourth United Nations Conference on the Least Developed Countries. In order to understand what this strategic orientation means and why it necessitates structural transformation and entrepreneurship, this section recalls the concept of sustainable development and its relationship with structural transformation.

### 1. Sustainable development

The classic formulation of sustainable development as a concept comes from the 1987 United Nations report of the World Commission on Environment and Development, also known as the Brundtland report, entitled “Our common future”:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- the concept of “needs”, in particular the essential needs of the world’s poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs.

This definition reflects that, to improve conditions in the developing world, a growing and sustainable economy should be integrated with environmental protection and satisfying basic needs. Implicit is a process of change that ensures harmony between the exploitation of resources, direction of investments, orientation of technological development and institutional changes, so that all enhance current and future potential to meet human needs and aspirations. Ultimately, there is an understanding that focusing exclusively on economic growth ignores and impedes social development and environmental protection.

## United Nations Member States have emphasized the obligation of States to pursue sustainable development

Over time, the definition of sustainable development became more holistic, linking the three aspects of sustainable development: economic development, social inclusion and environmental sustainability. This three-fold view of sustainable development was emphasized in “The future we want”, the outcome document of the 2012 United Nations Conference on Sustainable Development (Rio+20 Conference). Of note, this broadened concept applies not only to developing countries, but also to developed countries.

The outline below is a useful way of understanding the need for the environmental, economic and social aspects of sustainable development to be embedded simultaneously in systems (Purvis and Granger, 2004):

- Environmental sustainability requires the maintenance of a constant and lasting resource base, prevention of the depletion of non-renewable resources (e.g. fossil fuels) and preservation of biodiversity.
- Economic sustainability requires management of the production of goods and services at a constant rate without causing inequalities among organizational entities.
- Social sustainability requires the attainment of social justice in the allocation of goods (e.g. food) and services (e.g. education and health), gender empathy and governmental cooperation.

The Rio+20 Conference mandated the formulation of a set of Sustainable Development Goals to guide the development agenda beyond the 2015 time frame of the Millennium Development Goals. This process resulted in the 17 Sustainable Development Goals and 169 targets adopted under the 2030 Agenda for Sustainable Development.

In the outcome document of the United Nations summit for the adoption of the post-2015 development agenda, Transforming our world: the 2030 Agenda for Sustainable Development (paragraph 13), the unity of, and mutual support among the economic, social and environmental dimensions of sustainable development is emphasized: “Sustainable development recognizes that eradicating poverty in all its forms and dimensions, combating inequality within and among countries, preserving the planet, creating sustained, inclusive and sustainable economic growth and fostering social inclusion are linked to each other and are interdependent.”

The 2030 Agenda furthermore evenly distributes the Goals and targets across these dimensions. More importantly, it stresses their complementarity and mutual support and, in turn, that of the Goals and targets, which are considered integrated and indivisible in light of the “deep interconnections and many cross-cutting elements across the new Goals and targets” (paragraph 17). Goal 7, for example — to ensure access to affordable, reliable, sustainable and modern energy for all — is a pre-condition for the achievement of several health, education and economic development goals, as UNCTAD has highlighted (2017a).

Notwithstanding the interdependence of the three dimensions of sustainable development, there can also be trade-offs between different components of the Agenda. For example, there may be tensions between employment generation and rising productivity, industrialization in land-scarce countries may reduce the availability of arable land or lead to deforestation or loss of biodiversity and the construction of physical infrastructure can lead to the population displacement from project areas. Such trade-offs need to be addressed through mechanisms such as appropriate technology, environmentally efficient infrastructure, regulation for the adoption of clean technologies and strengthened labour market institutions (Basnett and Bhattacharya, 2015).

Successive policy statements issued by United Nations Member States have emphasized the right and obligation of States to pursue sustainable development strategies. In the 2030 Agenda, Member States not only explicitly recognize “that each country has primary responsibility for its own economic and social development” (paragraph 41), but also acknowledge the policy space required: “We will respect national policy space for sustained, inclusive and sustainable economic growth, in particular for developing States, while remaining consistent with relevant international rules and commitments” (paragraph 21).

## 2. Structural transformation as a concept

UNCTAD (2006a; 2014a) has long emphasized the importance of economic structural transformation for poverty eradication and long-term development in the LDCs. In recent years, attention to structural transformation among domestic and international development policymakers has risen to a level not seen since the 1960s (te Velde, 2013a), largely because “the failure of quantitative growth to trigger economic and social development [has] shifted attention to the quality of the growth process, to structural change and to catching up” (Nübler, 2011).



Efforts to implement the 2030 Agenda have intensified that attention.

Traditionally, structural change in economics has referred mainly to “changing weights of the elements which compose an aggregate” (Landesmann, 1988), particularly output, employment, trade and demand (Landesmann et al., 2003). While “[t]he most common use of structure in development and in economic history refers to the relative importance of sectors in the economy in terms of production and factor use” (Syquin, 1988), structural change has been defined as “change in the long-term composition and distribution of economic activities” (United Nations Industrial Development Organization (UNIDO), 2013a). Such structural change arises from the transfer of production factors (especially labour, capital and land) between economic activities and sectors, leading to corresponding changes in the composition of output, employment and, typically, trade. These themes have been clearly present in development research and policy at least since the 1960s.

The characterization above highlights changes in the composition of economic aggregates, such as output, employment or demand, but is relatively neutral. It does not indicate in which direction the transfer of resources leads the economy, nor especially whether the economy is evolving towards socially preferable forms of organization and structuring. Therefore, some authors have put forward a normative concept, indicating that “a normative perspective of structural change often emphasizes desirability in the direction of change. For example, Ocampo (2005), Ocampo and Vos (2008) and [the United Nations, Department of Economic and Social Affairs] (2006) define structural change as the ability of an economy to continually generate new dynamic activities characterized by higher productivity and increasing returns to scale” (UNIDO, 2013a).

Such favourable structural transformation (sometimes also referred to as structural change) results from the transfer of production factors — especially labour, capital and land — away from activities and sectors with low productivity and value added, to those with higher productivity and value added and greater efficiency, which are typically different in location and organization, as well as technologically (Rodrik, 2013). It results from two distinct processes: intra-sectoral transfer of resources, mainly through the adoption of superior technologies (e.g. from subsistence farming to higher value crops) and intersectoral transfer of resources (e.g. from agriculture to manufacturing) (UNCTAD, 2014a). It may thus also be characterized

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### **Favourable structural transformation results from transferring resources to activities with higher productivity**

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as “improvements in economic structure, through diversification, increased capability to produce higher technology products and services, higher productivity, greater international competitiveness and the expansion of formal sector employment” (African Centre for Economic Transformation, 2014).

A distinction between any type of change in the composition of economic activities and sectors, on one side, and the type of transformation which is desirable from a development perspective, on the other, is important as it cannot be taken for granted that structural change will lead the economy to a new configuration favourable to sustainable development. LDCs have typically experienced a transfer of labour from low-productivity agricultural activities to low-productivity urban services, sustained over the medium term. While labour productivity in such services is marginally higher than in agriculture, this does not amount to structural transformation and has been characterized, in the context of African LDCs, as “static gains, dynamic losses” (de Vries et al., 2015). Successful structural transformation processes, for example, in developed countries and other developing countries, such as China and Viet Nam, have instead entailed the transfer of rural labour to manufacturing activities with much higher productivity (UNCTAD, 2014a). Other examples of structural transformation not evolving in the socially desirable direction in LDCs are the premature deindustrialization observed since the 1980s and the “re-primarization”, which has taken place at different points of time, including most recently during the period of high international commodity prices (2003–2011).

In broader terms, structural transformation is not restricted to the economic sphere, but also has broader social aspects. Structural transformation thus typically involves four main features (Timmer, 2007):

- A declining share of agriculture in economic output and employment.
- A rising share of industry and modern services.
- Migration from rural to urban areas.
- A demographic transition, entailing a temporary acceleration of population growth to reach a new equilibrium level.

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## Transformation requires attacking the root causes of problems and inequities

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### 3. Sustainable development and structural transformation

In the preamble of Transforming our world: the 2030 Agenda for Sustainable Development, Member States highlight the outcome document's transformational nature, stating that they “are determined to take the bold and transformative steps which are urgently needed to shift the world on to a sustainable and resilient path”.

This has far-reaching consequences. The United Nations Research Institute for Social Development (2016) consequently notes that “transformation requires attacking the root causes that generate and reproduce economic, social, political and environmental problems and inequities, not merely their symptoms”.

Realization of sustainable development in its three dimensions thus requires a radical change in economic processes and production methods and in consumption, transportation and lifestyles. It encompasses transforming the relationship between societies and the natural environment, to focus on the attainment of societal goals within environmental boundaries. Achieving the Sustainable Development Goals also necessitates changing social relations and the distribution of resources within and among countries in line with the objectives of inclusiveness, leaving no one behind and reducing economic, social and gender inequality. This requires profound institutional and policy changes. The consequent economic, social and institutional changes apply to all countries, irrespective of their level of development.

In LDCs, these changes go beyond the historical imperative of structural transformation for economic and social development, as discussed in this section. They require economic and social transformations consistent with environmental boundaries. LDCs also need to undergo a process of structural transformation to more modern, more efficient forms of production and consumption, with higher value added, analogous to the historical transformations of developed countries and emerging market economies. Yet they need to achieve this in a way that avoids repeating the negative environmental consequences of these processes in other countries.

UNCTAD has long called for LDCs to adopt economic development strategies based on the development and upgrading of productive capacities and diversification of their economic activities, leading to structural transformation of their economies that is rich in employment growth (UNCTAD, 2006a; UNCTAD, 2013a; UNCTAD, 2014a). The 2030 Agenda reinforces the need for such strategies, as structural transformation is essential for LDCs to achieve the Sustainable Development Goals across sustainable development's economic, social and environmental dimensions. Several Sustainable Development Goals (e.g. Goals 2, 8, 9 and 11) refer directly to specific features of structural transformation, and others (e.g. Goals 3, 4, 5, 7 and 17) are relevant to the means of achieving it. Goals 10 and 16 are likely to result from a successful structural transformation process that moves in a desirable direction, while Goals 6, 12, 13, 14 and 15 contribute to environmental sustainability. Finally, the only economically sustainable way to eradicate poverty (Goal 1) is to generate sufficient jobs for the workforce with earnings above the poverty line, matched by productivity — that is, poverty-oriented structural transformation (UNCTAD, 2015a). Without this approach to structural transformation, the economic, social and environmental aspects of sustainable development cannot be ensured.

As noted above, structural transformation has typically been associated with a demographic transition. Most LDCs remain in the initial phases of both these processes, and both are, at best, proceeding slowly. The result has been a combination of rapid population growth and predominantly young populations that have added, and will continue to add, almost 11 million to the labour force annually between 2010 and 2050, requiring employment creation on an equivalent scale (UNCTAD, 2013a).

LDCs thus face the double challenge of accelerating both structural transformation in a desirable direction and job creation. This means redirecting productive resources to higher value added activities and increasing productivity within sectors much more rapidly than in the past, while ensuring that this structural transformation is employment-intensive. This requires addressing the tension between increasing labour productivity (reducing labour use relative to output) with employment creation (increasing overall labour use), both of which will need to accelerate considerably from historical rates to eradicate poverty (Goal 1) and generate enough jobs that are higher in productivity and better paying to employ rapidly growing labour forces (UNCTAD, 2013a).

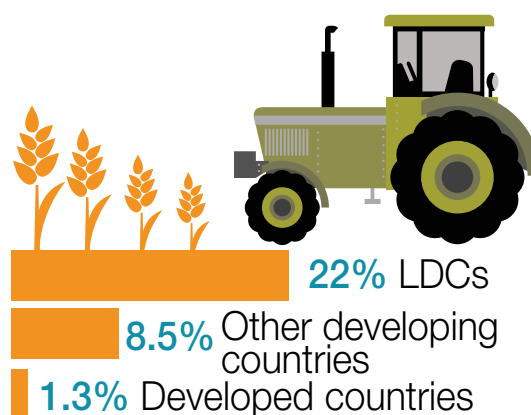
#### 4. Transforming least developed country rural economies

As noted above, another major feature of structural transformation is a decline in agriculture's share of output and employment. For most LDCs, this process also remains at an initial stage. Agriculture continues to play a disproportionate role in LDC economies, generating on average some 22 per cent of economic output, compared with 8.5 per cent in other developing countries and 1.3 per cent in developed countries. Its role in employment is greater still. Agriculture absorbs two thirds of the LDC labour force, similar to the rural share of the population, whereas this is less than 7 per cent in most developed countries. Even by 2030, more than half of the population in LDCs (56.5 per cent) is projected to continue living in rural areas, making the transformation of rural economies central to the overall structural transformation of LDCs and highlighting "the rural development imperative" (UNCTAD, 2015a).

Rural transformation occurs in part by stimulating changes in demand associated with economic growth and urbanization, which promotes the production of more diverse and higher-value agricultural produce and other goods. Agriculture must become more productive to contribute effectively to structural transformation, rather than grow only through increased labour and land use or higher commodity prices, as appears to have been the case in the recent past (UNCTAD, 2015a; International Fund for Agricultural Development, 2016; Wiggins, 2016). This implies seeing agriculture primarily as a business, not only as a livelihood, and improving its links with market opportunities, and supply and global value chains, and strengthening agricultural enterprises' ability to exploit such opportunities. Agricultural development and the entrepreneurship on which it depends, built on a foundation of increasing agricultural productivity, are crucial to structural transformation, especially in LDCs.

Within rural areas, there is also an important distinction between areas close to urban areas and markets, and with good transport and logistical connections to them, and more remote and marginal areas, which are often dominated by small-scale ("minifundia") operations (Wiggins, 2016). Farming and non-farming activities in the former areas can more readily commercialize their operations through direct purchase of their produce by wholesalers and are also often better equipped to scale up their activities and diversify into non-farm entrepreneurship, whether in industry or services.

#### Agriculture continues to play a disproportionate role in LDCs' economic output



Increasing rural wages can play a crucial role, as both cause and consequence of the transformation of rural economies. Accelerating rural-urban migration can give rise to labour shortages in rural areas, increasing wages (though this has been a more prevalent pattern in Asia than in Africa or Latin America in recent years). When such labour shortages arise, they can contribute to reducing rural poverty by setting a floor for rural incomes, shifting rural consumption towards higher-value agricultural and non-farm products (Wiggins, 2016). This also increases labour costs in agriculture, encouraging greater use of mechanization and technology, which can also increase value addition. Combined, these two forces can thus transfer comparative advantages from the farming sector to the non-farming sector, contributing to structural transformation.

Diversification from agriculture into non-farm entrepreneurship contributed to a yearly overall improvement in rural labour productivity of 4.1 per cent, between 2001 and 2012, across a number of LDCs (Diao et al., 2017). In addition to expansion of the non-agricultural sector, such diversification can also improve agricultural labour productivity, as labour moves from agriculture to non-agricultural enterprises.

#### 5. Productive capacities

Productive capacities play a pivotal role in sustainable development. This is increasingly recognized in the policy discourse and in international frameworks, such as the 2030 Agenda and the Istanbul Programme of Action for LDCs, where productive capacities feature as a priority.



## Interaction between entrepreneurs and the State influences productive capacities

The concept of productive capacities reflects the intellectual contributions of different strands of development research, from early development economists to evolutionary and structuralist thinking.

UNCTAD (2006a) defines productive capacities as “the productive resources, entrepreneurial capabilities and production linkages which together determine the capacity of a country to produce goods and services and enable it to grow and develop”. The three main components are outlined below:

- **Productive resources.** Includes natural resources, human resources, and financial and physical capital.
- **Entrepreneurial capabilities.** The core competencies and technical capabilities that allow enterprises to mobilize resources effectively for production, innovate and upgrade products and their quality, including both technological capabilities and managerial capacities.
- **Production linkages.** Includes backward and forward linkages and the circulation of ideas and explicit and/or tacit knowledge among firms operating along the supply chain.

Strengthening domestic productive capacities is one key to structural transformation, which occurs through capital accumulation, technological progress and structural transformation (as defined in section B.2). The interplay of these three processes can allow expansion of the production possibility frontier, emergence of new goods and services and higher productivity activities, and development of a denser network of production linkages.

Strengthening productive capacities is of particular importance in LDCs, which are typically characterized by a weak domestic private sector, heavy reliance on primary commodity exports and undiversified economic structures (UNCTAD, 2014a; UNCTAD, 2016a). By underpinning economic growth, enhancing the scope for domestic value addition and setting in motion economic diversification, development of LDC productive capacities can provide a sustainable means of improving welfare, generating productive employment and reducing aid dependence (UNCTAD, 2006; UNCTAD, 2018a).

The link between sustainable development, structural transformation and productive capacities is recognized in paragraph 27 of the 2030 Agenda for Sustainable Development:

We will strengthen the productive capacities of least developed countries in all sectors, including through structural transformation. We will adopt policies which increase productive capacities, productivity and productive employment; financial inclusion; sustainable agriculture, pastoralist and fisheries development; sustainable industrial development; universal access to affordable, reliable, sustainable and modern energy services; sustainable transport systems; and quality and resilient infrastructure.

While the primary focus of productive capacities is on supply-side constraints, utilization of productive capacities is also important, to incentivize investment in their expansion. This is contingent on demand-side factors, both domestically and globally. A sustained increase in productive capacities thus hinges on a process of cumulative causation, driven by mutually reinforcing increases in demand and supply. Domestically, such a virtuous circle occurs primarily through the expansion of productive employment opportunities fuelling growth in domestic demand, which, in turn, drives a further supply-side response via Keynesian multipliers (UNCTAD, 2014a). At the global level, it relies essentially on the animation of a profit–investment–export nexus, whereby profitability in the tradable sector attracts additional investment, further boosting exports flows and dynamically easing balance of payments constraints (UNCTAD, 2006; UNCTAD, 2016b).

The nature of interaction between entrepreneurs and the State thus inevitably influences development of productive capacities. Investment decisions by entrepreneurs — in addition to directly affecting the acquisition of entrepreneurial capabilities and know-how, innovation and establishment of a viable network of production linkages — also affect the accumulation of productive resources and animate the profit–investment nexus. As discussed in the next section, this makes the nature of entrepreneurship in LDCs central to their prospects for structural transformation.

## C. Entrepreneurship as a concept

### 1. Definitions

Entrepreneurship is a diverse and multifaceted phenomenon. As Casson et al. (2008) have said, “there is hardly any aspect of economic and social behaviour which is not affected by entrepreneurship”. Consequently, conceptualizations of entrepreneurship differ, with definitions grouped into three categories: behavioural, occupational and synthesis (Naudé, 2013).

**Behavioural definitions** of entrepreneurship define the entrepreneur as the coordinator of production and agent of change, which is achieved through innovation (see section C.3). Definitions in this category typically derive from the seminal definition of Schumpeter (1934; 1942).

**Occupational definitions** conceptualize entrepreneurship as the result of an individual's choice between waged employment and self-employment (Lucas, 1978; Murphy et al., 1991). The choice of becoming an entrepreneur is thus viewed as the result of an evaluation of the returns generated by self-employment (profits plus non-pecuniary benefits), relative to the wages and other benefits available from waged employment. This distinction typically refers to opportunity-driven entrepreneurs, rather than necessity-driven entrepreneurs (a distinction explained in section C.2).

**Synthesis definitions** of entrepreneurship have been proposed by Gries and Naudé (2011), Naudé (2013) and Szirmai et al. (2011). According to Szirmai et al., entrepreneurial activity “consists of the creation, recognition, and utilization of positive opportunities within existing firms (or through creation of new firms) in such a way that involves ‘innovation’ — or the provision of ‘new combinations’”.

While most of the definitions of entrepreneurship presented above (and others) share common elements, the emphasis differs. The diversity of the concept is conveyed by listing the most frequently occurring elements:

- Innovation. This element is described in section C.3 below.
- Opportunity-seizing or -creating. With this emphasis, the entrepreneur is defined as a person who facilitates adjustment to change by recognizing and seizing opportunities for profitable arbitrage arising from imperfect information in markets and proposing and undertaking transactions on this basis (Kirzner, 1973; Casson, 2003). Such information asymmetries typically arise in disequilibrium situations in markets, which are pervasive in developing countries, especially LDCs.
- Risks. Entrepreneurs take risks because they face uninsurable uncertainties when managing production (Kanbur, 1979), especially when they introduce innovation.
- Judgement. Entrepreneurs exercise judgement in decision-making about the combination and allocation of resources and the use of knowledge elements (Casson et al., 2008), taking difficult and

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## Different types of actors and organizations can undertake entrepreneurial activities

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complex decisions for which other people are unwilling to take responsibility.

- Development of business organizations. This element emphasizes that most entrepreneurs either establish firms (start-ups) or carry out their activities (allocating resources, raising finance, taking decisions, etc.) within existing firms.

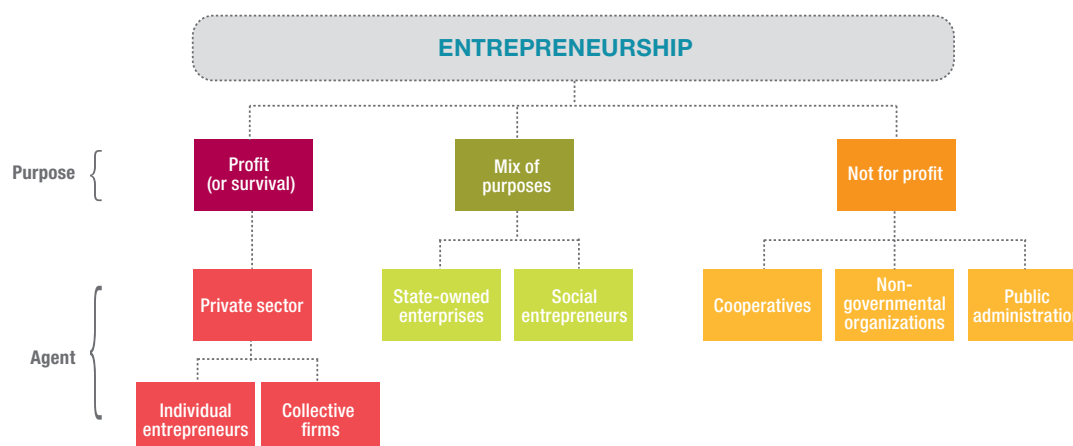
### 2. Agents of entrepreneurship

As the broad and multiple concepts of entrepreneurship mentioned above would suggest, different types of actors and organizations can undertake entrepreneurial activities. Figure 1.1 provides an indicative classification of entrepreneurial agents, according to the goal of the entrepreneurial undertaking, whether profits or survival. The goal of profits is the most commonly associated with entrepreneurial activity and is typically carried out by individual entrepreneurs, acting alone or, more commonly, within firms which they either establish themselves (start-ups) or already exist (often called intrapreneurship). These firms can vary by size (microenterprises, small, medium-sized and large), type of ownership (domestic, international or mixed; private, public or mixed) and degree of formalization (informal, formal), and their activities can take place in any sector of economic activity (agriculture, industry, services) and in different geographical areas (rural, urban).

At the other end of the spectrum are not-for-profit entrepreneurs. They typically pursue social and collective goals such as mutual support, collective action, protection of the environment and broader social good. They include cooperatives, non-governmental organizations and public administration (Mazzucato, 2013; Hughes, 1966). These agents do not always act entrepreneurially, but whether or not they do so depends on the modes of action and particular objectives their managers pursue.

Finally, some potentially entrepreneurial agents have a mix of purposes, which can range between profit-seeking and purely social goals, pursuing different levels of mixes from broad socially desirable goals to some form of profit. These agents include social entrepreneurs and State-owned enterprises (figure 1.1).

Figure 1.1

**Entrepreneurship: Purposes and agents**

Source: UNCTAD secretariat.

The entrepreneurial landscape in LDCs presented in chapters 2 and 3 focuses mainly on private sector entrepreneurship. The policy analysis and recommendations in chapter 5, while concentrating on this segment, also refer to other types of entrepreneurial agents.

Individual entrepreneurs also vary widely and are often categorized according to their abilities (typically represented by educational attainment), gender, age (particularly distinguishing youth entrepreneurship), location (rural and urban) and sector of operation. Making a distinction between whether an entrepreneur's motivation is opportunity-driven or necessity-driven is particularly important, especially in LDCs. Opportunity-driven entrepreneurs are those who choose to become entrepreneurs because they identify a business opportunity, while necessity-driven entrepreneurs are those who are obliged to become entrepreneurs due to a lack of alternatives, especially the option of wage employment as a source of income.

These different types of motivation for entrepreneurship have important consequences, not only for business performance, but also for the broader economic and social impact of enterprises. Typically, opportunity-driven entrepreneurs have better business performance (higher profits, stronger growth), a higher educational level, higher non-cognitive skills (e.g. conscientiousness, perseverance and team work) and better management practices than necessity-driven entrepreneurs (Calderon et al., 2016). By contrast, necessity-driven entrepreneurs tend to have lower cognitive and non-cognitive skills, concentrate on low-productivity activities and

have poor growth prospects. The goal of survival – rather than profits – is more prevalent among the self-employed and small enterprises in developing countries, especially LDCs (see chapter 2). Crucially, innovation (as defined in section C.3) is more likely to be introduced by opportunity-driven entrepreneurs than by necessity-driven entrepreneurs. Therefore, the former are more likely to be agents of structural transformation than the latter (section D).

A further distinction between different types of entrepreneurs can be made by looking at the economic impact of entrepreneurial activity. While the usual assumption is that entrepreneurial activity leads to socially desirable outcomes (section D.1), this is not always the case. The most important driver of private entrepreneurial activity is profits, and the types of activities most likely to generate profits depend on the structure of returns and on institutions (the “rules of the game”). These are the activities most likely to draw entrepreneurial talent. The socially desirable situation is that in which entrepreneurship is geared towards the adoption and diffusion of innovation and technology, employment generation, creation of new economic activity, expansion of jobs and economic growth, a situation which Baumol (1990) terms “productive entrepreneurship”. However, an economy's rewards structure may be such that it draws entrepreneurial talents to unproductive uses (e.g. rent-seeking) or even destructive ones (e.g. criminal activities, depredation). Therefore, a fundamental role for policy is to set an incentive structure that results in higher returns for productive activities and therefore draws entrepreneurial talent to them (chapter 5).

Another distinction made is between high-impact entrepreneurs and routine entrepreneurs. High-impact entrepreneurs are a Schumpeterian type that identify inventions and implement them in the productive process (i.e. that innovate) and whose firms generate technological progress and jobs and expand strongly (Acs, 2008). A routine entrepreneur, by contrast, refers to “activities involved in coordinating and carrying on a well-established, [on]going concern in which the parts of the production function in use (and likely alternatives to current use) are well known and which operates in well-established and clearly defined markets” (Leibenstein, 1968).

Entrepreneurs and their creations — firms — can also be distinguished in terms of their level of success, a distinction related in part to the various categories detailed above. The issue of survival and success is especially relevant among start-ups. These firms typically have higher failure rates than more mature firms, but also faster growth rates among survivors (Cressy, 2006).

### 3. Entrepreneurship and innovation

Innovation is central to the definition of transformational entrepreneurship adopted in this report. The classic definition of innovation is that of Schumpeter (1934): newness in products, production processes, sources of inputs or raw materials, markets and business or organizational models. These types of innovation are production-centred, allowing for no role for consumers (Metcalfe, 2006). They entail producers’ use of knowledge that is not currently used by firms in their production of goods or services (Audretsch and Keilbach, 2006). The incorporation of these types of innovation into production processes can be concomitant to the creation or expansion of new firms, which may eventually push incumbent firms out of markets in a process Schumpeter termed “creative destruction”. Innovative entrepreneurs are thus the agents of a continuous process of self-transformation, in which each entrepreneur changes in response to volatility generated by other entrepreneurs (Metcalfe, 2006).

There is a widespread tendency to assume that innovation is always positive and, therefore, socially desirable. This is in fact most often the case. However, there are times when innovation has socially deleterious effects. It can benefit the few at the expense of the many. In the financial sector, for instance, this includes situations that allow actors to realize large gains in the short term, while at a later stage creating even greater costs for society as a whole. In manufacturing, examples include innovations involving planned obsolescence and

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## In LDCs innovation introduced by entrepreneurs is crucial for structural transformation

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innovations leading to unsustainable consumption growth and environmental degradation. Rather than leading to Schumpeterian “creative destruction”, such situations have been qualified as the opposite, “destructive creation” (Soete, 2013). Such possible adverse outcomes point to the importance of policy to put in place incentives for stimulating socially constructive innovations, while hindering adverse types of innovation (chapter 5).

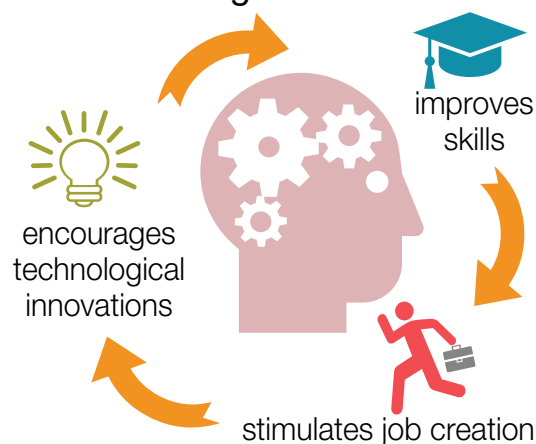
Innovation of the socially desirable type is important at all levels of development, although its nature and consequences differ between the earlier and later stages of the development process. In LDCs, while low levels of physical and human capital make factor accumulation essential to development, the central role of innovation in structural transformation means that innovation is also critical. However, unlike developed countries (where the changes introduced by innovation are generally “new to the world”, pushing the technological frontier outwards), innovation in LDCs typically entails the introduction of items and processes that already exist elsewhere but are new to the local market and thus far from a worldwide technological frontier (UNCTAD, 2007). Innovation is thus as important to economies where growth is driven by factor accumulation as those where it is driven by knowledge accumulation.

## D. Entrepreneurship and structural transformation

### 1. Entrepreneurship’s impact on structural transformation and growth

Entrepreneurial activity, and particularly innovation (as defined in section C.3), can make a crucial contribution to structural transformation, in several ways. First, it is an important mechanism for shifting productive resources from economic activities with low value addition and productivity, to those with higher value addition and productivity, whether in agriculture, industry or services. Innovative entrepreneurial activity can thus provide a direct contribution to economic structural transformation. It can be the means of adopting new and better performing technology and/or its diffusion. In both cases, the likely result will be improvements in productivity.

## Entrepreneurship's contribution to economic growth:



Second, entrepreneurship can stimulate investment and contribute to building a knowledge-driven economy, which plays a central role in economic growth (Aghion and Howitt, 2005). Third, even unviable innovations in production (introducing goods, services, production technologies or business models new to a particular setting) provide valuable information for future entrepreneurial decisions, including those of other entrepreneurs, in the form of “cost discovery” (Hausmann and Rodrik, 2003). These effects are especially critical in LDCs that are in the initial stage of structural transformation.

Entrepreneurial activity also contributes to economic growth by stimulating job creation, improving skills and encouraging technological innovation, and can increase efficiency and productivity by encouraging competition (Audretsch and Fritsch, 2002; Audretsch and Keilbach, 2004; Wong et al., 2005; Naudé, 2011). Differences in entrepreneurship have a significant effect on economic performance, controlling for traditional production factors (land, labour and capital) (Casson et al., 2006). In addition to its benefits for increasing incomes, economic growth is, in turn, an important element of structural transformation.

The different types of entrepreneurs and firms, however, vary in their contributions to structural transformation and economic growth. In particular, while dynamic, opportunity-driven entrepreneurship may have significant positive effects in these respects, survivalist “entrepreneurs by necessity” are typically not innovative, operating mostly in low-productivity and low value added activities, and producing traditional goods and services with established technologies. Their growth potential is very limited, and most remain microenterprises. While important to the survival of the entrepreneurs themselves and their families, they mostly do not generate significant

wider benefits. While survivalist entrepreneurs may become opportunity-driven entrepreneurs and have a more positive impact, such cases are very rare, especially in LDCs.

Firms that introduce radical socially desirable innovation (considering the national or local context) and which also have a high growth potential make the most direct and significant contribution to structural transformation (Wong et al., 2005). This does not imply that only these firms are important for structural transformation. Other, less performant and possibly smaller firms are also important, to the extent that they establish business linkages (both backward and forward) with the former. Business linkages are part of the very definition of productive capacities and hence development of these linkages is part of development of productive capacities. This view of the enterprise sector highlights the importance of variety in LDC enterprises, especially in terms of size. A healthy enterprise sector that leads to structural transformation comprises firms of all sizes.

The relative contributions to structural transformation (and other development goals) of entrepreneurs and firms of different types are an important consideration in policymaking (chapter 5). Resource allocation and vertical industrial policies (those directed towards particular sectors or economic activities) should target primarily firms with the greatest potential to contribute to structural transformation.

The relationship between the wider economic and social environment and entrepreneurship is two-pronged. This means that the economic and social context influences the intensity of entrepreneurial activity, but also the types, growth prospects and innovativeness of enterprises that can develop under a given context. The influence of the types, growth prospects and innovativeness of enterprises is examined in section E.1.

In sum, given the fundamental role of entrepreneurship activity in bringing about structural transformation, transformational entrepreneurship (defined hereafter) is fundamental to achieving sustainable development and the Sustainable Development Goals in the LDCs. The 2030 Agenda for Sustainable Development acknowledges the role to be played by different types of entities and organizations, which have a potential for entrepreneurial functions in the pursuit of the Sustainable Development Goals: “We acknowledge the role of the diverse private sector, ranging from microenterprises to cooperatives to multinationals, and that of civil society organizations and philanthropic organizations in the implementation of the new Agenda” (paragraph 41).



## 2. Transformational entrepreneurship

This chapter has so far focused on the concepts of sustainable development, structural transformation, productive capacities, innovation and entrepreneurship and how they are linked to each other. The discussion has also shown that structural transformation, innovation and entrepreneurship, while generally considered positively and contributors to sustainable development, can occasionally have adverse results, depending on how these processes evolve in a specific country and over a specific period of time.

Some forms of entrepreneurship (or innovation), while not necessarily negative in themselves, may simply not be conducive to growth and structural transformation (Brixiova, 2010). This is the case, generally, for most survivalist entrepreneurship, which is pervasive in LDCs (chapter 2).

At the same time, the discussion has shown that innovation, entrepreneurship and structural transformation that move in a socially desirable direction are necessary elements of sustainable development, especially in the case of LDCs. Thus, this report puts forward the concept of “transformational entrepreneurship”. This consists of the creation, recognition and utilization of positive opportunities within existing organizations (or through the creation of new organizations) in such a way that “innovation” is involved – or the provision of “new combinations”, which ultimately contribute to the structural economic transformation of a country. It is this conception of transformational entrepreneurship that is therefore a fundamental condition of sustainable development in the LDCs.

The forms of entrepreneurship most likely to be transformational are opportunity-driven, high-impact (as defined above) and innovative and have high growth potential. Policymakers of LDCs striving to achieve structural transformation of the economy are advised to concentrate scarce resources (financial, institutional, administrative, political, etc.) on transformational entrepreneurship, as it has the strongest transformational impact, rather than spreading resources among a large number of firms with limited growth and innovation potential (chapter 5).

The concept of transformational entrepreneurship also foresees the possibility of transformational contribution by non-firms, that is, organizations such as cooperatives, non-governmental organizations and public institutions which can also undertake entrepreneurial activities (figure 1.1). This report, however, focuses mainly on commercial innovation

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## Transformational entrepreneurship is a condition for sustainable development in LDCs

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and entrepreneurship as it is the most pervasive form of entrepreneurship and as this is the type of entrepreneurship which is primarily emphasized in the existing international policy discourse and debate.

By contrast, the concept of transformational entrepreneurship excludes the cases of socially undesirable innovation, entrepreneurship and structural change mentioned earlier (e.g. destructive creation, unproductive entrepreneurship and “re-primarization”).

## E. Determinants of entrepreneurship

As seen in the previous section, different types of entrepreneurship and firms have contrasting impacts on the economy through their contributions to growth and structural transformation. The relevant issue is then what determines both the intensity of entrepreneurial activity in a given economy and the types of enterprises and entrepreneurs that arise within it. The question matters as the determinants of a type of entrepreneurship and firm will, in turn, ultimately determine the patterns of structural change the economy will undergo.

Research on this issue has typically focused on two lines of explanation. The first line of research focuses on the ecosystem in which the entrepreneur is active, i.e. the attributes of the economy, society or country in which the entrepreneur operates (e.g. economic structure, institutions and cultural values). The second line of research emphasizes factors that influence a person's propensity to engage in an entrepreneurial activity and typically highlights the importance of personal traits of entrepreneurs, especially individual attributes such as personality, demographic factors, cognitive skills and genetic factors. All of these features can influence an entrepreneur's chances of success. Therefore, the level and quality of entrepreneurship in a given country is influenced by both socioeconomic and individual factors.

### 1. The influence of economic and social structures

Even though entrepreneurship typically involves one or more individuals, it always takes place in a given economic and social context. Therefore, the environment in which entrepreneurs evolve has a

## Structural features of LDC economies tend to slow entrepreneurship

strong bearing on the type of entrepreneurs which can arise and on their chances of success. “Successful entrepreneurship is as much a cooperative endeavour, mediated by social networks, as a purely individualistic and competitive ones” (Casson et al., 2006). Entrepreneurship is strongly affected by the overall environment in which it takes place, including the economic structure, institutional framework and sociocultural environment in which it is realized.

**Economic structure.** While the activities of dynamic, innovative (and typically opportunity-driven) entrepreneurs can contribute to both structural transformation and economic growth (as discussed in section D), the structure of the national and local economy also has a major impact on the types of enterprises that can be established and operated. This refers particularly to the geographical zone where entrepreneurial activity takes place and the national economy’s level of development. A particularly important aspect of the local dimension is the distinction between rural and urban areas, as discussed in chapter 2.

The level of development and structural characteristics of the economy where entrepreneurial activities evolve condition the types of entrepreneurship that can emerge, the patterns of enterprise growth and, thus, their economic and social impacts. Several structural features of LDC economies, including limited financial development, insufficient infrastructure, limited institutional development, elevated risks and disempowerment of women, tend to slow entrepreneurship and enterprise development. Limited urbanization and the disproportionate role of agriculture also have an important bearing on the nature of enterprises in LDCs.

The relationship of entrepreneurship to a country’s level of economic development (measured by gross domestic product (GDP) per capita) tends to be U-shaped, according to some research findings (Wennekers et al., 2010; Acs et al., 2008; Gollin, 2008), with a higher prevalence of entrepreneurial activity at both the lower and higher levels of income. However, this reflects the entirely different structural characteristics of economies at opposite ends of the income scale (chapter 2). The majority of empirical evidence confirms that entrepreneurship in low-income countries (including LDCs) tends to be largely necessity-based, while entrepreneurship in higher-

income countries is primarily opportunity-based. This is reflected in a desire among many self-employed people in low-income countries to move to waged employment with a higher level of security, while the opposite tends to be the case in high-income countries (La Porta and Shleifer, 2014; Acs et al., 2008).

**Institutional framework.** The institutional framework also has a strong impact on the type of entrepreneurship that arises, and thus on its broader societal impact, including its contribution to structural transformation. A well-functioning national system of innovation (Lundvall, 1992; Nelson, 1993) that fosters domestic absorptive capacity (UNCTAD, 2014b) is of particular importance to transformative entrepreneurship.

According to Casson et al. (2006), the institutions most likely to foster entrepreneurship are those of a liberal market economy: private property, freedom of movement and of association with partners, confidentiality of specific business information, protection of intellectual property rights, enforcement of property rights by court systems, currency stability, democratic government and openness to immigration. These conditions typically prevail in developed countries, but they are, however, quite different from the institutional and economic conditions prevailing in LDCs. Moreover, it is highly unlikely that simply transposing these institutions from a developed country context to LDCs would have the desired result of fostering transformational entrepreneurship. Simple institutional transfer to radically different national contexts does not achieve the expected results (UNCTAD, 2009). It is therefore important that LDC policymakers focus on some critical institutions that can foster transformational entrepreneurship (chapter 5). This includes especially the national regulatory framework on firm entry and exit, the financial system, infrastructure and the energy system (UNCTAD, 2017).

**Attitudes towards entrepreneurship.** Societies differ in multiple ways, which has consequences for attitudes towards entrepreneurship. Social features with a bearing on the intensity of entrepreneurship, and its variations across countries, include (Cacciotti and Hayton, 2017):

- Power distance: acceptance of differences in power and wealth (Hofstede and Bond, 1988).
- Uncertainty avoidance: tolerance or intolerance of uncertainty and insecurity.
- Institutional collectivism: encouragement and reward of collective distribution of resources and collective action.

- In-group collectivism: expression of pride, loyalty and cohesiveness in organizations and families.
- Gender egalitarianism: balance in society's valuation of achievement, cooperation, ambition, nurturing and assertiveness.
- Future orientation: includes valuation of persistence and perseverance or of tradition and fulfilment of social obligations.
- Performance orientation: encouragement and reward of performance improvement and excellence.
- Human orientation: encouragement and reward of fairness and kindness to others.

## 2. Individual-level determinants

Factors that influence an individual's propensity to engage in entrepreneurial activity include demographics such as age, gender and cognitive skills, as well as psychological, social, ethnic and personality traits. The economic role played by women has major developmental impacts (Duflo, 2012). It is well known that the women's contribution to development is often hampered by social norms and rules which prevent their economic and social empowerment and therefore diminish their contribution to the development process. This is especially true in LDCs and even more so in rural areas, where women are often prevented from realizing their full potential contribution to economic growth and development by social norms and customs, in spite of their strong participation in the rural workforce (UNCTAD, 2015a).

The prevailing institutions, rules and norms of a society also tend to impact on women's entrepreneurial activities and on the prospects for expansion and growth of women-led enterprises. Gender-based research sheds light on how a given factor affects women and men differently, and that they exhibit different patterns of entrepreneurial behaviour. Typically, women take account of considerations related to marriage, child-bearing or social norms in entrepreneurial decisions more than men do, while entrepreneurial activity by women is affected by gender-based differences in preferences, traits or personality (e.g. perceptions of opportunity, preferences for self-employment, risk aversion and self-confidence) (Garcia-Cabrera and Garcia-Soto, 2008; Minniti and Naudé, 2010). Women's propensity to start a business may differ from that of men's for cultural reasons or due to discrimination (Neumark and McLennan, 1995).

The personality approach interprets entrepreneurial behaviours as reflecting traits such as desire for success, limited fear of failure, openness to

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## The economic role played by women has major developmental impacts

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experience, conscientiousness, extraversion, agreeableness, persistence in the face of failure and alertness to perceive and act on opportunities. Behaviour is central to entrepreneurship and new venture creation, though a cohesive theory of entrepreneurial behaviour has yet to emerge (Teague and Gartner, 2017).

Another relevant body of literature analyses entrepreneurial behaviours from a psychological perspective. There are two schools of thought (Shaver and Davis, 2017). The personality approach describes entrepreneurial behaviours as characterized by specific traits. Some researchers depict the successful entrepreneur as someone with either an extreme desire for success or a very low fear of failure (Atkinson, 1958). Others see "driven" entrepreneurial behaviours as being favoured by a high propensity for risk (Palich and Bagby, 1995). It has also been suggested (Costa and McCrae, 1992) that entrepreneurial attitudes can be described by the following factors: openness to experience, conscientiousness, extraversion, agreeableness and neuroticism. The first factor refers to curiosity and innovation, the second stresses the importance of efficiency and the third highlights entrepreneurs' social skills. Agreeableness and neuroticism pertain to the idea of friendliness and an analytical nature, coupled with a confident attitude.

In a separate line of research, the social cognition approach considers instead how entrepreneurs might "think differently". A prominent example is the attribution process theory. It is usual for people to continue doing something in which they are successful and avoid failure. However, entrepreneurs are more persistent than implied by such behavioural norms in starting or continuing an entrepreneurial project in the face of difficulties. One interpretation is that this reflects that business failure is considered less shameful than failures of other kinds (Shaver and Davis, 2017).

## F. Conclusion

This chapter has shown the critical contribution that entrepreneurship can and should make to LDCs' progress towards sustainable development, which provides the rationale for devoting this report to the topic of entrepreneurship. Building on the conceptual framework presented in this chapter, chapter 2

presents a summary of the empirical evidence on the state of and context for entrepreneurship in LDCs and analyses the main determinants of enterprise and productivity growth in these countries. Chapter 3 discusses the relationship between entrepreneurship and the nature of LDCs' integration into the international economy, especially through global value chains. Chapter 4 provides a picture of the constraints on entrepreneurship and enterprise

growth in LDCs and takes stock of the existing policy and institutional environment of enterprise development in LDCs. Chapter 5 concludes by providing a detailed discussion of policy alternatives which LDC Governments can use to strengthen entrepreneurship and entrepreneurship's contribution to structural transformation and sustainable development.

## Notes

- 1 In this report, “other developing countries” refers to all developing countries, as defined by the United Nations, that are not LDCs.
- 2 This report’s definition of transformational entrepreneurship is based on the synthesis definition by Szirmai et al. (2011) quoted in section C.1.
- 3 This includes, inter alia, so-called gazelle companies, which are high-growth companies that have raised their revenues by at least 20 per cent annually for four years or more, starting from a revenue base of at least \$100,000.