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Human Capital for More Jobs:

Connecting People to Work and Creating Entrepreneurs

PROTECT AND INVEST *in people*

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Foreword

"**Human capital is important in order to create more jobs.**"
— His Excellency Carlos Fernández Valdovinos,
Minister of Finance, Republic of Paraguay

We face an unprecedented challenge in the coming decade: 1.2 billion young people will reach working age in the Global South. What can we do to generate job opportunities, to ensure that those individuals and their families can thrive?

A key part of the answer lies in investments in human capital. By equipping people with human capital—knowledge, skills, and good health—we can help people connect with jobs today and keep pace with trends that shape opportunities tomorrow.

Human capital also creates employment by fostering entrepreneurs. When we give people the skills to launch their own businesses, they inspire innovation, fuel growth, and create jobs for themselves and others.

The Human Capital Ministerial Conclave at the 2023 World Bank-IMF Annual Meetings focused on the topic of *More Jobs Through Investing in Human Capital*, underscoring the transformative power of investments in people.

I would like to thank the Ministers for sharing their insights at the Conclave and for their recognition that investments in human capital are essential to job creation. This note draws from and extends that conversation.

As we move forward, it's crucial to build upon these discussions, translating ideas into actionable strategies that will shape a future where human capital drives economic prosperity and job creation in the Global South.

MAMTA MURTHI
Vice President
People Vice Presidency

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Introduction

Human capital — knowledge, skills, and good health — plays a critical role in job creation and economic prosperity. Two-thirds of the income gap between developed and developing countries can be attributed to disparities in human capital.[1] Healthy, skilled, and innovative people are better equipped to seize job opportunities, create businesses that generate jobs, and drive economic growth.[2]

It is widely recognized that human capital is fundamental to good jobs. Education and health investments, starting in the first years of life and stretching through the school years and beyond, give people the tools to be productive workers and adapt in an ever-changing world of work. Business executives, policymakers, and economists understand that human capital is the bedrock foundation for good jobs and prosperity. As Nobel laureate Theodore Schultz once remarked, "Truly, the most distinctive feature of our economic system is the growth in human capital. Without it there would be only hard, manual work and poverty except for those who have income from property."

There is less appreciation for the fact that human capital programs and policies also boost employment by connecting people to jobs and creating entrepreneurs. For example, policies like job information services match people to opportunities, and reliable access to childcare expands job horizons, especially for women. Additionally, investing in human capital sparks job growth by equipping entrepreneurs with the know-how to create businesses and innovate.

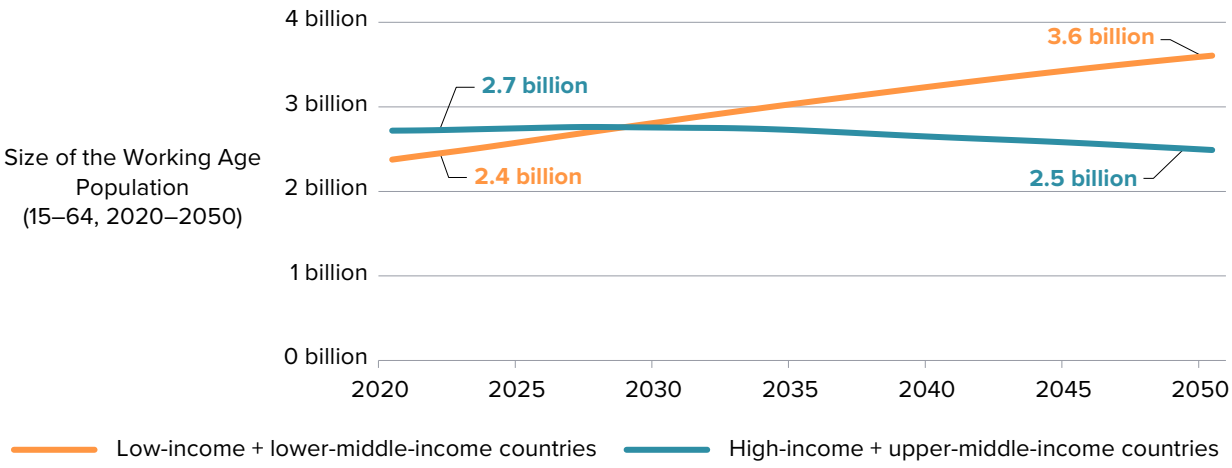
This note discusses how human capital is a job connector and driver of entrepreneurship. It first presents ideas on how to unlock the barriers to accessing productive employment, with particular attention to the challenges facing women and youth. It then discusses human capital as a job creator, by turning attention to building and unleashing the power of entrepreneurship and innovation.

The Jobs Challenge: One Billion Good Jobs

The world's workforce is increasingly concentrated in developing countries. Of the 5 billion people who make up today's working age population, 84 percent live in developing countries.[3] Between 2020 and 2050, the working age population (15-64) will grow by one billion people (Figure 1).[4] This expansion will take place entirely in low- and lower-middle-income countries. (The working age population will decline in high- and upper-middle income countries.) Getting this growing population into productive work can have substantial global benefits. Significant job growth will be required, however. For example, Sub-Saharan Africa needs 1.5 million new jobs per month to match working age population growth.[5]

The immense potential of the global workforce remains largely untapped. The World Bank's Human Capital Index[6] is 0.49 on average in developing countries, meaning that individuals born today can expect to be less than half as productive as they would be with full health and education. In addition, too much of the developing world's human capital is underused. Many people with skills are not working or are in low-paying jobs. The total output of the developing world is only 28 percent of

FIGURE 1: THE SIZE OF THE WORKING AGE POPULATION WILL INCREASE BY ONE BILLION PEOPLE BY 2050



Source: Derived from World Population Prospects 2024, estimates and medium fertility variant.

what it would be if everyone had full health and education *and* worked in a job that made the most of their human capital.[7]

Women across the developing world face limited access to quality job opportunities compared to men. When both women and men can fully utilize their talents in the workforce, economies become more robust and resilient.[8] Women are increasingly educated, but much of their human capital remains underutilized. While 69 percent of men are working, only 43 percent of women have jobs.[9] In many developing countries, unemployment rates for university-educated women are higher than for men, in some cases twice as high.[10] Although both men and women have high employment rates in poorer countries, often working long hours,[11] women are more likely than men to find themselves in low-income work.[12]

More investment in education and health has paid off in higher levels of human capital for today's youth. However, youth unemployment rates are often two to three times those of older workers.[13] COVID-19 also stunted job creation, especially for youth.[14] In 2020, 282 million young people were neither in education nor employment.[15] When young people have a hard time finding a job or can only find part-time work, especially during a recession, it can hurt their chances of getting good jobs for many years to come.[16]

Global forces including technological change, globalization, climate change, and population aging, are transforming the demand for skills. Workers may need a different set of skills than they have learned at school. New forms of work also require a broad range of socio-emotional, entrepreneurial, and digital skills.[17] At the same time, older workers will need to remain productively engaged longer as life spans extend. While returns to work experience often exceed returns to education, few countries promote learning across careers.[18]

In the face of these challenges, economies can follow a two-track approach to create better jobs. First, they can work towards structural transformation that drives job growth over the long run.[19] Second, in the short run they can advance human capital policies that connect people to jobs and drive entrepreneurship, while also laying the foundation for the long run. This note will focus on those shorter-term approaches.

Connecting People to Good Jobs: Unlocking Critical Barriers to Accessing Productive Employment

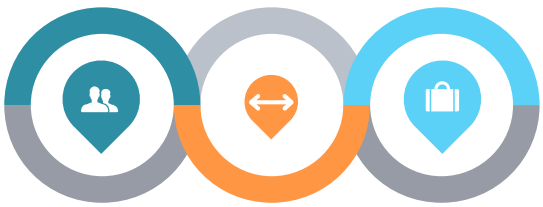
Reducing barriers to better job opportunities will enhance the productive potential of human capital. Public and private sectors can bridge the gap between people and labor markets, focusing on policies that remove obstacles to employment and career advancement. Continuous investment in skills is crucial for keeping pace with changing demands. Governments and companies should support lifelong learning and help individuals find jobs where they can fully use and grow their talents.

Reducing demands on women's time can help them participate more fully in the economy. When mothers, daughters, and grandmothers spend less time on unpaid work at home, they can spend more time on paid work and do a wider range of jobs. For example, providing quality childcare frees up caregivers' time while boosting children's early development. In countries as varied as Chile, India, Kenya, Mozambique, Nicaragua and Russia, childcare services have increased women's employment,[20] and in some cases significantly improved children's learning.[21]

Empowering women and changing social norms can boost women's job opportunities. Programs that make women feel more confident and capable can help them become workers or start businesses. In places with restrictive social norms, efforts with community leaders, partners, and families have successfully encouraged them to accept women doing paid work.[22] Enforcing women's legal rights—to fair hiring practices, ancestral and marital property, and a safe work environment—helps women get and keep jobs and earn more.[23] Training and other forms of support are more effective if they account for women's specific physical mobility or social constraints.[24] Digital technology can provide new opportunities to groups with time or mobility constraints, including women with family duties, older workers, and persons with disabilities.[25]

Training and job placement programs can close information gaps between employers and job seekers and shorten the time it takes for young people to start working. The "Jóvenes" programs in Latin America are a good example. These programs combined technical and behavioral skills training, job search skills, and life skills to prepare young people to get jobs. They have had positive effects on wages and employment, especially for young women.[26] In South Africa, low-cost job search assistance using digital platforms helped disadvantaged young people find relevant job opportunities and improve their employment and earnings.[27] When private sector job vacancies are scarce, innovative public

FIGURE 2: HUMAN-CAPITAL RELATED CONSTRAINTS TO EMPLOYMENT ARE ASSOCIATED WITH PEOPLE, ENTERPRISES, AND THE CONNECTION BETWEEN THE TWO



PEOPLE
- Skills shortages
- Limited training opportunities
- Lack of social protection
- Social norms & gender bias

CONNECTION
- Information gaps
- Mobility constraints

ENTERPRISES
- Economic instability
- Restricted access to finance
- Barriers to entrepreneurship or self-employment

works can prepare participants for future jobs in the private sector. These programs might focus on in-demand skills for green, digital, or care-related industries.[28]

To meet the rapidly changing demand for skills in the economy, it is essential to provide working age adults with opportunities to upgrade their existing skills and learn new ones. Today's dynamic labor markets are increasingly influenced by digital connectivity, industrial transformation, and the transition to a greener economy. Flexible and inclusive adult skills development systems are needed. These systems should cater to both the unemployed and employed.

While technical skills upgrading is important, developing socio-emotional, workplace, and digital skills is also needed.[29] COVID-19 accelerated a shift to online learning. With sufficient digital skills upgrading and outreach efforts, e-learning could become a cost-effective approach to expand training services.[30] Developed countries are putting in place adult skills development systems through incremental upgrading, including through "micro-credentials." [31] These short, applied, adaptable, and low-cost training services offer a flexible approach.[32] Such systems can benefit from public sector oversight to reduce fragmentation and ensure the training is relevant to the labor market.[33]

The private sector plays a crucial role in upgrading skills. Programs that draw on employers' knowledge of skills demand can enhance the employment chances for participants, compared to traditional public sector-provided programs.[34] Across the world, training funds that help cover the cost of company-based training are the most common way to pool resources.[35]

These policies should target smaller firms, which often underinvest in on-the-job training (OJT), despite positive effects on wages and productivity.[36] OJT could be encouraged through policies that reduce information barriers for companies and workers. This could include providing information on the benefits, costs, and effective ways to train, formally recognizing the skills learned, and offering targeted subsidies to companies and disadvantaged workers.[37] The public sector can also facilitate public-private partnerships in industry-based workforce programs. These programs have had positive impacts on low-skill workers and regional development.[38]

Helping job seekers by giving them information and assistance in finding jobs that match their skills and interests can make the job market work better and help people find better jobs.[39] Giving people better information about where the jobs are can help job seekers. These publicly or privately offered services can be cost-effective in low- and middle-income country contexts with growing labor markets.[40]

Reducing barriers to physical mobility opens job opportunities. For example, travel vouchers helped youth from Addis Ababa's disadvantaged areas find better employment within the city.[41] Improved urban transport within Lima helped women access better jobs, demonstrating the importance of ensuring safer and more convenient displacement.[42] In Northwestern Bangladesh, combining information about urban job opportunities with a travel grant during agricultural lean seasons increased labor income.[43]

International migration can be a win-win by bringing together jobseekers and job opportunities.[44] Labor shortages in low- and high skill sectors provide opportunities in both sending and destination countries. Managed migration — where migrants and jobs are matched ex ante — fills immediate labor shortages in receiving countries while alleviating the number of jobseekers in sending countries. Compared to natives of a host country, migrants with higher levels of human capital have a greater propensity to acquire new knowledge, be innovative, and own businesses in their home country,[45] raising job growth and labor productivity in destination countries.[46] Low-skilled migrants in advanced countries can spur investment and raise demand for both native and migrant workers.[47]

Both sending and receiving countries can reduce migration barriers. Governments and private companies can work together to create managed migration solutions that help people move in an orderly way and find jobs in their new country. These programs can help in several ways:

- Matching potential workers with available jobs,
- Lowering the costs of moving to a new country,
- Protecting people from being taken advantage of,
- Controlling how people enter and leave countries and making sure they can access services, and
- Making it easier for people to have their skills recognized in the new country.[48]

One example is a government-to-government intermediated migration program between Bangladesh and Malaysia, which helped lower migration costs and lower risks related to exploitation, resulting in significant benefits to sending households.[49]

Many countries run employment programs that encompass training programs, information services, assistance for business start-up, and public works. They are frequently tailored to assist more vulnerable groups. The most successful programs are typically those with well-designed beneficiary targeting and service delivery mechanisms. Programs that address the numerous constraints faced by disadvantaged groups tend to be more successful than those focused on a single obstacle.[50]

Equipping Entrepreneurs to Create Good Jobs and Innovate: Human Capital and Job Creation

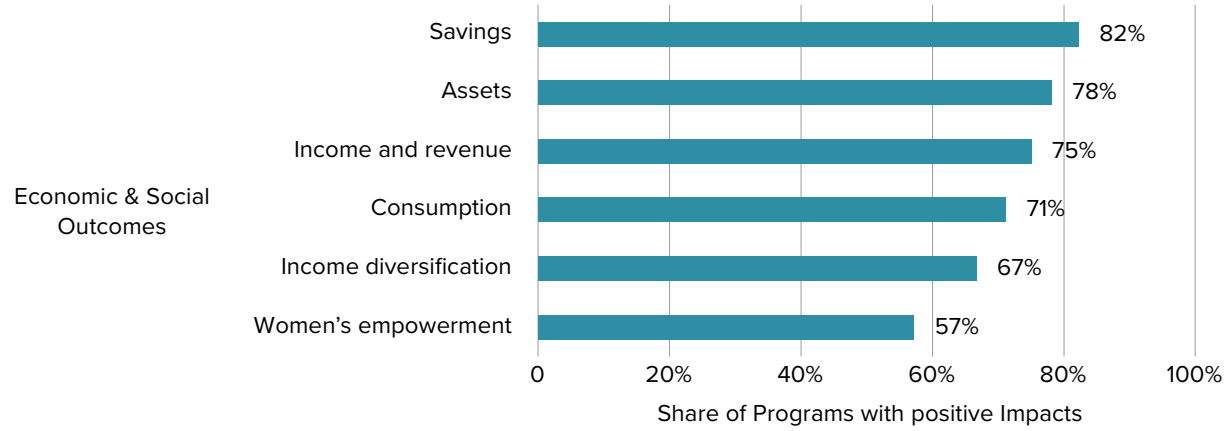
Human capital, in the form of entrepreneurship, innovation, and know-how, is an ingredient for creating good jobs. Macroeconomic stability, a supportive institutional and business environment, access to financial capital, and a skilled labor force provide the foundation for business growth.[51] However, it is ultimately entrepreneurial people who create enterprises and jobs.[52] Building entrepreneurial capacity involves nurturing innovation and creativity, lowering barriers to using human capital, and facilitating research and development.

Entrepreneurial human capital comes from both foundational learning early in life and applied learning as an adult. Entrepreneurs need basic literacy and numeracy, as well as social, emotional, technical, and business skills.[53] Instilling this wide range of skills in school curricula equips individuals to develop their potential to run businesses.[54] Continuing to learn throughout one's working life is equally important to help entrepreneurs keep up with changes in technology and the market, and to allow working age aspiring entrepreneurs to gain the necessary skills to start a business.[55] Successful interventions include the following:

- Teaching technical skills through short-courses,[56]
- Instructional videos or simple-to-use applications,[57]
- Financial management ranging from informal micro-credit courses to executive MBA programs,[58]
- Personal initiative skills through entrepreneurship programs, [59,60] and
- Management techniques through mentoring, network interaction programs and managerial extension services.[61]

Diverse needs and abilities require tailored approaches (see Box 1). Self-employed owners of household enterprises may need upskilling in numeracy and literacy skills as well as simple business practices that can be provided by adult learning programs. On the other hand, owners of larger and more complex businesses may benefit most from hands-on learning approaches, such as exchanges

FIGURE 3: MICRO-ENTREPRENEURSHIP PROGRAMS IMPROVE POOR PEOPLE'S ECONOMIC AND SOCIAL OUTCOMES



Notes: 97 quantitative impact evaluations for 71 micro-entrepreneurship programs were reviewed. The percent indicates the share of program evaluations that found a positive impact on the indicated economic or social outcome. None of the reviewed studies found a negative impact of micro-entrepreneurship on the indicated outcomes.

Source: State of Economic Inclusion Report 2021

with other countries and immersion in investor communities, to build skills to connect to markets and capital.[62]

Insurance offsets risks to the human capital associated with starting and running a business. Entrepreneurship is inherently risky, especially for the poor who may not have the resources to absorb a negative shock to the business.[63] Social insurance to cover health[64] and unemployment risks ensures that the business owner remains healthy and productive and offsets the cost of business failures, leading to more enterprise start-ups.[65] Even maternity benefits can increase women's entrepreneurial activity.[66] Private savings also provide resources for entrepreneurial risk management[67] especially among those who are not linked to public insurance systems. Innovations in the design of savings schemes in formal or informal institutions, such as offering immediately valued perks for long-term savings,[68] setting up committed business accounts,[69] behavioral nudges to save,[70] or building financial protection around informal savings networks[71] can increase savings, even among the poorest.

Other investments can also help entrepreneurs flourish and create jobs. Limited assets and credit-worthiness,[72] as well as weak professional networks,[73] can prevent the most skilled entrepreneur from using her talents to start a business. Financial inclusion programs help entrepreneurs build savings, engage with financial institutions, and establish credit histories to obtain loans.[74] Such programs increased the success of aspiring Chinese entrepreneurs between 2005-2014, especially those with low initial wealth.[75]

Financing and asset program are among the many other options for assisting poor entrepreneurs.[76] Cash grant programs work especially well when combined with technical skills training[77] or when allocated through business competitions.[78] Another approach is relaxing lending terms, such as an extended grace-period for loan repayment, to spur entrepreneurial activity rather than microfinance loans that require immediate repayments.[79] Formalizing asset ownership encourages the use of and investment in assets. Land titling in Vietnam led to significant increases in self-employment, notably among women.[80] Lao PDR[81] and Madagascar[82] are hoping for similar effects through their programs. Social networks in the form of cooperatives and membership groups allow for cost sharing, knowledge transfer, problem solving, and cheaper access to inputs which lead to enterprise growth.[83]

BOX 1: Building Entrepreneurship Skills: One Size Does Not Fit All

Entrepreneurs need tailored policy responses. Most entrepreneurs in developing countries run very small subsistence activities,[84] with limited potential for generating employment. Strengthening their human capital can bolster their own productivity and earnings. On the other hand, wage employment is largely driven by a smaller set of high growth entrepreneurs equipped with distinct visions and skills.[85] These firms may face a different set of skills constraints than those in subsistence activities.

High-skilled entrepreneurs in low-income countries require managerial know-how to scale up their business. High-skilled entrepreneurs need support to unlock their ideas and bring them to the market. This includes financial support to commercialize research, as well as access to mentors, venture financiers, and accelerator programs. A systematic literature review shows that R&D grants for young innovative entrepreneurs boost employment, revenue, and innovation. They also attract follow-up funding.[86] Venture financing can be particularly effective in removing market frictions for underserved populations. IFC's Startup Catalyst Program invests in innovation hubs, accelerators, and seed funds to develop innovative companies in the world's poorest countries. High-skilled women entrepreneurs in Egypt have used the program to scale up healthcare services using artificial intelligence.[87]

Holistic support to disadvantaged individuals opens job opportunities where there is little demand for wage labor. Poor and vulnerable working age adults face a range of constraints to integrating into the economy.[88] Big-push Productive Economic Inclusion (PEI) programs that provide a coordinated package of financial support, skills training, network building, and market integration activities targeted to the poorest households were being successfully implemented in 219 programs in 75 countries by 2020, benefitting nearly 92 million people.[89] Program results consistently show PEI's success in creating employment,[90] higher earnings,[91] and empowerment[92] among vulnerable populations across the world.[93]

Many different forms of support can help women unlock their entrepreneurial potential. Over half of women in developing countries already are or aspire to become entrepreneurs. But most women entrepreneurs lead low-productivity enterprises.[94] Socio-emotional training has been shown to have large benefits for many women entrepreneurs[95] and can work in tandem with business skills development courses. Programs that encourage savings and access to loans also increase women-run businesses' profitability.[96] Mentors and role models effectively help women to cross-over to more lucrative male-dominated professions.[97]

Finally, a critical human capital investment for job creation is local research and development.[98] Collaborative partnerships across universities facilitate knowledge sharing and technology transfer that foster the development of new or improved goods and services.[99] Africa's Partnership for Skills in Applied Sciences, Engineering and Technology (PASET) is an example of a regional platform to build and share knowledge across 15 research institutes and academia. Its programs include financing a stock of highly skilled scientists, professionals and innovators in transformative technologies and grants for commercialization with the private sector. The government-supported University-Industry Collaboration commercializes research and development through the private sector that would otherwise be unexploited.[100] Competitive funding programs that incentivize linkages between the private sector and R&D institutions have created global leaders in green energy in the European automobile industry,[101] and improved innovative products and services across Eastern Europe.[102] Innovation hubs or Do-It-Yourself laboratories can be low-cost effective strategies to facilitate knowledge sharing

and technology transfer.[103] Accelerator programs through their Open Innovation practices have also been shown to increase innovative performance of start-ups by using different external sources of knowledge.[104]

In summary, human capital can be an engine for more jobs, but that requires investment and the right policies. A wide variety of initiatives outlined in this note have proven results in connecting people to work. And entrepreneurs can be nurtured through both public and private investments in their skills, creativity, and innovation potential. These policies can help realize the full productive potential of human capital for more and better wage jobs and self-employment.

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2 World Bank 2019a.

3 Data from World Development Indicators.

4 Lam and Leibbrandt 2023.

5 Lam et al. 2023.

6 The Human Capital Index (HCI) is an international metric that benchmarks the key components of human capital across economies.

7 Estimates of the utilization-adjusted human capital index from Pennings (2020).

8 World Bank 2023.

9 Data from World Development Indicators. Refers to employed population aged 15 and above as share of total population.

10 Data from World Development Indicators.

11 Lata et al. 2021.

12 World Bank 2012; World Bank 2019b.

13 Data from World Development Indicators. Refers to Unemployed population aged 15–24 and aged 15 and above as share of active population(s).

14 Kugler et al. 2023; ILO 2022.

15 ILO 2022.

16 Andrews et al. 2020.

17 World Bank 2019a.

18 Jedwab et al. 2023.

19 Structural transformation policies include long-term macroeconomic stability, policies for a conducive business environment, access to finance and open markets, research and innovation, children's health and education, and social norms that promote the productive and innovative capacity of all groups that set the context for sustainable job creation in future generations.

20 J-PAL 2023; World Bank 2017.

21 Hojman and Lopez Boo 2022.

22 Halim et al. 2023.

23 Hallward-Driemeier and Gajigo 2015; World Bank 2023.

24 Halim et al. 2023.

25 World Bank 2016 and 2019a.

26 Attanasio et al. 2015; Almeida et al. 2012.

27 Wheeler et al. 2022.

28 Fox and Kaul 2018.

29 Allemand et al. 2023.

30 OECD 2020.

31 Micro-credentials certify the learning outcomes of short-term learning experiences, for example a short course or training. They can offer affordable approaches adaptable to time constraints imposed by family or work, and can be bundled together into more comprehensive upskilling.

32 OECD 2020.

33 OECD 2020.

34 O'Connell and Mation 2021.

35 UNESCO 2022.

36 Saraf 2017.

37 Saraf 2017, ibid.

38 Glover and King 2010.

39 Chiplunkar and Banerjee 2023.

40 Caria and Lessing 2019.

41 Franklin 2015.

42 Martinez et al. 2020.

43 Bryan et al. 2014.

44 Mergo 2016; Gibson et al. 2018.

45 Marks et al. 2020.

46 Tipayalai 2020.

47 Dadush 2014.

48 Clemens 2015.

49 Mobarak et al. 2023.

50 Kluve et al. 2019; Cho and Honorati 2014; Grimm and Paffhausen 2015; McKenzie 2017.

51 Nichter and Goldmark, 2009; Berge et al. 2015; Syverson 2011.

52 Schoar 2010.

53 Harrison et al. 2017; Brixiová et al. 2020.

54 Levin et al. 2023; Lackeus 2015; Costin et al. 2019.

55 Self-employment peaks in the older working age population in developing countries across the world, highlighting the value of entrepreneurial training courses for older workers. (Peeters et al. 2009; Cunningham et al. 2008; Dhillon and Yousef 2009).

56 Pereyra et al. 2021.

57 Nguimkeu and Okou 2021.

58 Buvinic et al. 2020.

59 Heuristic training simplifies training through heuristics and rules-of-thumb; for example, "rather than trying to teach a full range of general business practices, offers some simple guidelines to help less sophisticated firms, such as techniques to separate household and business accounts, or to avoid stockouts (McKenzie et al, 2021)."

60 World Bank 2019.

61 McKenzie 2021; Emerick and Sandrini 2021.

62 Cirera and Maloney 2017.

63 Vereshchagina and Hopenhayn 2009.

64 Liu and Zhang 2018.

65 Hombert et al. 2020.

66 Hombert et al. 2020.

67 Bianchi and Bobba 2013.

68 Jain et al. 2023.

69 Brune 2016; Fafchamps et al. 2014.

70 Karlan et al. 2016.

71 Guven et al. 2021.

72 Naudé 2010.

73 Paradis 2023.

74 Ajide 2020.

75 Fan and Zhang 2017.

76 Banerjee et al. 2019; Bari et al. 2021; Bianchi and Bobba 2013; Grimm et al. 2024; Bryan et al. 2024; Crépon et al. 2024.

77 Blattman and Dercon 2018.

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79 Field et al. 2013.

80 Menon et al. 2017.

81 Enhancing Systematic Land Registration Project (P169669), Project Appraisal Document.

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83 India's — Assam Agribusiness Rural Transformation Project (P155617), Project Appraisal Document. Kangogo et al. 2020; Emerick and Sandrini 2021.

84 McKenzie 2017; McKenzie and Paffhausen 2017.

85 Schoar 2010.

86 Testa et al. 2019.

87 IFC 2022.

88 Daidone et al. 2019; Barrientos 2019.

89 Andrews et al. 2021.

90 Bedoya et al. 2019.

91 Bossuroy et al. 2022; Bandiera et al. 2017.

92 Bossuroy et al. 2022 ; Bedoya et al. 2019.

93 Banerjee et al. 2016; Bandiera et al. 2017; Bedoya et al. 2019; Andrews et al. 2021.

94 Halim et al. 2023.

95 Campos et al. 2018; LACGIL 2021.

96 Buvinic et al. 2019; Buvinic et al. 2020; Campos et al. 2023; Riley 2019.

97 LACGIL 2021.

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103 Galvin et al. 2020.

104 Del Sarto et al. 2022.

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