TALENT FINANCE

U.S. CHAMBER OF COMMERCE FOUNDATION

TALENT FINANCE: A NEW CONSENSUS AND RETURN-TO-INVESTMENT

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U.S. CHAMBER OF COMMERCE FOUNDATION

The U.S. Chamber of Commerce Foundation (USCCF) is a 501(c)(3) nonprofit affiliate of the U.S. Chamber of Commerce dedicated to strengthening America's long-term competitiveness by addressing developments that affect our nation, our economy, and the global business environment.

U.S. CHAMBER OF COMMERCE

The U.S. Chamber of Commerce is the world's largest business organization representing companies of all sizes across every sector of the economy. Our members range from the small businesses and local chambers of commerce that line the Main Streets of America to leading industry associations and large corporations.

They all share one thing: They count on the U.S. Chamber to be their voice in Washington, across the country, and around the world. For more than 100 years, we have advocated for pro-business policies that help businesses create jobs and grow our economy.

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EXECUTIVE SUMMARY

We are in a new economy that competes on talent, yet the talent financing and development systems we rely on were built for a different era and economy. The global pandemic has introduced new urgency and risks that require bold thinking and transformational change. In this dynamic economy, skills and job opportunities are constantly changing and new skills and opportunities are emerging. Amid this change, employers, workers, and government face growing risks in achieving a return on investment in skill development and managing short- and long-term risks associated with employment and income.

The U.S. Chamber of Commerce Foundation and its partners are exploring a new public-private approach to talent finance that is built to address the challenges and requirements of the new economy. Our mission is to promote innovations in public-private talent finance that improves global competitiveness and expands economic opportunity and inclusion in the new economy. The finance innovations we promote will adhere to a set of guiding principles that will focus our efforts in ways that are different from previous public and private investment approaches. Public and private sector financing innovations, combined with access to better data and more robust employer leadership, set the stage for restructuring how we finance and manage the risks in talent development for all relevant stakeholders. Therefore, we need a talent finance approach fit for our time, not one built for past economies and labor markets.

TALENT FINANCE DEFINITION

Talent finance refers to the development and use of public and private instruments for aligning investments in talent development and in managing related downside employment and income risks.

TALENT FINANCE GUIDING PRINCIPLES

1. Public and Private
2. Shared Value and Risk
3. Expands Choice
4. Affordable and Fair
5. Data-Driven and Outcomes-based
6. Transparent and Accountable
7. Empowers Workers
8. Accessible
9. Equity-Based

This initiative will introduce and explore a new framework for organizing and understanding the talent finance ecosystem. This public-private approach will be grounded in a set of guiding principles that will encourage public-private collaboration, promote shared value and risk, and advance innovations that are accessible, expand choice, and promote equity. They also will promote data-driven and outcomes-based innovations while also contributing toward a more transparent and accountable talent marketplace. This initiative will also explore where to start in terms of:

- Promoting talent finance innovations in close partnership with employers.
- Building new tools for reporting on and accounting for investments and outcomes as well as for assessing and scoring risk.

All of this will be supported by an emerging data and technology infrastructure that can facilitate scaling innovations.

Why the Chamber Foundation? The Chamber's federation consists of the largest employer-led network in the world, which makes us an ideal partner to facilitate change management and uniquely positioned to activate authentically business-led initiatives while advancing scalable solutions. The Chamber Foundation's strength lies in its ability to mobilize — at scale — employer networks and broad-based public-private coalitions to tackle the most systemic opportunity gaps in the talent marketplace.

More than a paper, the Talent Finance initiative is a call to action. The white paper concludes with considerations of next steps, including how best to support emerging pilots and demonstrations in regions where there are strong or emerging public-private partnerships. If the United States is to meet the moment and maintain its global competitiveness while at the same time closing the opportunity and equity gap, building and growing a Talent Finance movement is nothing less than an imperative.

RECOMMENDATIONS ON WHERE TO START

Employer and Private-Sector Investment and Leadership: A Return to Investment

- Develop Employer Benchmark and Trend Data on Talent Finance
- Promote Innovations in Employer Financing
- Promote Employer Collaboration
- Promote Private Sector Innovation in Financial Instruments for Employers and Employer Collaboratives
- Promote Service Provider Business Model Innovation with Employers and Public and Private Investors

Government Policies for Expanding Choice in Public-Private Talent Development

- Provide More Balanced and Aligned Government Financing for Employer Investment and Collaboration
- Provide Stronger Quality Assurance for More Talent Development Choice
- Provide More Comprehensive Financing Disclosures, Protections, and Transparency Requirements.
- Leverage Government Investments to Promote Diversity, Equity, and Inclusion

Government Policies for Building Stronger Public-Private Risk Management Systems

- Improve Employment and Income Risk Management
- Improve Public-Private Safety Net Management

Talent Finance Metrics, Risk Scoring, and HR Accounting

- Improve Human Capital Accounting and Reporting Standards
- Improve Risk Identification, Measurement, Assessment, and Scoring
- Establish Public-Private Data Standards for Talent Finance

Talent Finance Data and Technology Infrastructure

- Build the Data and Technology Infrastructure Necessary to Produce and Share Learning and Employment Records (LERs) at Scale
- Build Public-Private Open Competency Framework and Data Collaboratives to Support and Grow a More Transparent, Equitable, and Accountable Talent Finance Ecosystem

INTRODUCTION

In the new economy, talent is king. Companies will compete on how well they are able to find, source, develop, advance, and retain talent. Learners and workers will compete on skills and credentials and the ability to be agile in a dynamic labor market and economy. Communities too will compete on their ability to attract, develop, and retain a competitive workforce that will drive economic growth, opportunity, and prosperity. However, the talent financing and development systems on which we all rely were built for a different era and economy.

The dynamic nature of the new economy — coupled with the disruption caused by the global COVID-19 pandemic — has exposed new risks and introduced new challenges to our talent development systems and labor market. These new realities have also laid bare major gaps and limitations in how we develop and support our workforce. This includes how we finance and invest in talent and how we manage risks associated with short- and long-term unemployment and loss of income or reduced earnings. We are also facing the undeniable truth that our current approach for financing and developing talent has perpetuated systemic and widespread gaps in equity and opportunity.

We all know the ramifications of using a playbook written for a different era and economy. These ramifications are frequently covered by the news media; debated by pundits and politicians; studied by researchers, academics, and economists; and discussed — or experienced — by families, friends, and colleagues, whether around the dinner table, on a college campus, at church, or at the unemployment office. Here are the kinds of news bulletins that are, unfortunately, becoming all too common:[1]

> "**4 out of 10 college students never complete a degree** with higher attrition rates for low-income and minority students."
>
> "College graduates take **three to six months to find employment**."
>
> "**Over half of college graduates are unemployed** or working in jobs that do not require a bachelor's degree."
>
> "Over 45 million borrowers now collectively carry nearly **$1.6 trillion in debt with 1 in 10 borrowers unable to pay** or in default."
>
> "**The unemployment rate has jumped to 14.7 percent** with over 23 million Americans out of work, with higher rates experienced by youth and minority populations."
>
> "**American workers and families are feeling financial stress** with over 30 percent concerned about income fluctuations and over 40 percent concerned about not having enough savings."

> "Displaced workers who are reemployed have **reduced earnings ranging from 17 percent to 48 percent**."
>
> "**As many as 40 percent of today's jobs may permanently go away** or be significantly transformed."

The time for change is now and bulletins like those must represent the past, not the status quo or our future. What is more, we have the tools, partnerships, know-how, and sheer will to make change a reality. This is nothing less than a national if not global imperative.

The U.S. Chamber of Commerce Foundation and its partners are launching a new initiative, Talent Finance. Together we are exploring a public-private approach to talent finance and investment that is built to address the challenges, risks, opportunities, and requirements of the new economy. Our goal is to promote innovations in public-private talent finance that result in improved global competitiveness and expanded economic opportunity and inclusion in the new economy. Should we be successful, the new news bulletins will read:

> "**Education and training programs boast a completion rate of 90 percent or higher**, with low-income and minority students closing the completion gap."
>
> "**Program participants guaranteed employment** upon entering a training program with opportunities to earn while they learn."
>
> "A majority of program completers are **earning wages commensurate with the skills they attained**, closing the earnings gap for women and minorities."
>
> "**Students leave college debt free** and are benefiting instead from equity investments in future earnings and are protected should they not be gainfully employed."
>
> "**Unemployment at less than half of what it would have been just five years ago** because of new employer-led continuing education programs and work share arrangements."
>
> "**Nearly 9 in 10 workers feel confident they have adequate savings** and income support to manage a career change or unexpected emergency."
>
> "**Income insurance innovations help workers transition to new careers**, preventing short-term and permanent loss of earnings during recession."
>
> "Jobs are changing faster than ever, but **employer investment in reskilling and upskilling is at an all-time high** resulting in an unprecedented low rate of worker dislocation."

This white paper begins by exploring the need for a new public-private approach to talent finance. Next, it introduces a set of guiding principles that encourages public-private collaboration, promotes shared value and risk, and advances innovations that are inclusive, expand choice, and promote equity. These principles also promote data-driven and outcomes-based innovations while also contributing toward a more transparent and accountable talent marketplace. From outlining the principles, we introduce a framework for analyzing the talent finance ecosystem, including who finances what for whom and using what instruments. We then propose where to start in transforming the talent finance ecosystem. This includes (1) promoting talent finance innovations in close partnership with employers; and (2) building new tools for reporting on and accounting for investments and outcomes as well as for assessing and scoring risk; all supported by an emerging data and technology infrastructure that can facilitate scaling innovations. Lastly, the paper concludes with next steps, including how best to catalyze and support emerging pilots and demonstrations in states and regions.

WHY NOW? THE NEED TO TRANSFORM HOW WE FINANCE AND INVEST IN TALENT

Today's economy is undergoing a fundamental transformation. Unfortunately, the current public and private systems for developing skills and talent and for managing their risks in the United States were built for a different economy and era.

And while our public and private systems have been undergoing significant changes, the way we finance and invest in talent has not kept pace. Even in the best of times the talent finance approach we depend on has yielded mixed and uneven results, especially when it comes to advancing economic opportunity for low-income and historically underrepresented populations. And while we should recognize and celebrate the success and achievements of the previous era (e.g., expanding access to higher education), we must also recognize the world is changing, and this change will necessitate a fundamental transformation in how we finance and invest in talent.

For the United States to grow its economy and strengthen its global competitiveness while also expanding economic opportunity in a rapidly changing economy, it requires a fundamental reimagining of our approach and the role of the private and public sectors within it. This new transformative approach must meet the moment with respect to the unique challenges the new economy brings while also addressing the limitations of traditional employer-led and government-led approaches. It also must build on growing employer leadership and private and public sector innovations as well as an emerging public private data and technology infrastructure. Finally, this new approach must address growing concerns over diversity, equity, and inclusion in the new economy.

KEY TAKEAWAYS

- Shifts in employer talent strategies and traditional government-funded supply-side approaches have further separated work and learning and contributed to a growing skills gap.
- This skills gap is likely to grow because of the rapidly changing skill needs of employers, shifting employment relationships, and growing lead times and costs in developing talent through traditional government-funded pathways.
- Improving signaling and communication between employers and government-funded providers and promoting and strengthening partnerships can only go so far in closing the skills gap.
- We now need to change the incentives for employers and government to work together as part of a new public-private approach to talent development that can scale promising employer, private sector, government, and service provider innovations.
- We also need to change how we identify, assess, measure, and manage new and changing risks as well as how we provide incentives for employers and government to work together to manage the related employment and income risks of the new economy.
- Public and private innovations in talent finance including new approaches for measuring and managing risk will require the expansion and modernization of data and technology systems.
- This new public-private approach to talent finance — including risk assessment, measurement, and management — must promote global competitiveness and expand opportunity and improve diversity, equity, and inclusion in the talent marketplace.

ECONOMIC SHIFTS AND CHALLENGES WITH TALENT INVESTMENT AND RISK MANAGEMENT

The United States and employers will compete on talent like never before in today's dynamic, global economy. As businesses integrate technology and adopt new operating models, they will constantly change their talent and skill requirements. This will result in major changes and challenges for learners preparing for and entering the labor market and for workers and their families needing to reskill and upskill. There is, therefore, a growing need for employers and workers to become more agile in a dynamic economy requiring continuous investment

in skill development, while simultaneously managing the growing and pronounced risks associated with these investments. To understand the new economy, we must first understand our past.

Employers have always been major investors in talent development and have constantly adjusted their talent development strategies to changing operating models and economic and labor market conditions. At least since the 1950s, employers — especially larger employers — invested heavily in in-house education and training of existing and newly hired workers. This was particularly true for management, professional, and technical jobs. This investment strategy was developed for a growing and relatively stable industrial economy, with a slower pace of change than today. It was developed for more closed and hierarchical organizational models with longer-term employment relationships and opportunities for internal career advancement. This investment strategy also was developed for addressing gradually shifting workforce needs and skill requirements in which employers could plan for the future and have some confidence they could manage the risks associated with their investments. Learners, who obtained a college education, could expect to get a good job with advancement opportunities.

Around the 1980s, many larger employers began to change their internal talent investment strategies and put more emphasis on external hiring to meet their talent needs. This has resulted in employers adopting a wide variety of strategies to better manage the risks of the new economy.[2] This strategic shift was driven by a number of factors, including firms seeking to cut costs and move to more open organizational models and employment relationships developed in response to a more dynamic and integrated global economy that itself was undergoing major structural changes. It was also in response to a growing number of available workers coming from an expanding higher education system composed largely of publicly funded and regulated schools, colleges, and universities. In many respects, this new strategy helped level the playing field between large employers and small employers, the latter never having had the scale and resources to make substantial in-house training investments for existing workers and new hires.

The change in the economy and resulting shift in talent strategy contributed to a decline in employer training investments, which in turn shifted talent development responsibility and risk to external education and training providers, government, and learners and workers themselves.[3] This new strategy created cost savings for companies, helped them better manage growing investment risks, and increased their talent sourcing flexibility. Education and training providers assumed increased responsibility and risk for developing high-quality programs to ensure that program completers were job- and career-ready. Government and learners assumed greater risk in financing talent development to address changing employer needs. This new strategy also created major challenges for employers in communicating and managing relationships with external education and training providers and in making sure that existing employees were updating their skills for existing jobs and career advancement.

These challenges are clearly seen in debates over the growing skills gap and how to address it. Some argue that employers need to communicate their skill requirements better and be more realistic about their skill requirements and the wages they pay and must be better partners with those developing talent for them. Others argue that education and training partners need to be more responsive to rapidly changing skill requirements. These challenges have launched promising public and private initiatives to improve employer communication and engagement and improve the responsiveness of education and training providers. These include employer and higher education partnerships, government-led sector initiatives in workforce development, and the employer-led Talent Pipeline Management initiative.[4] However, these efforts can go only so far in closing the gaps without addressing the changing incentives and risks associated with talent development in the new economy, which will become even more pronounced in the years ahead.

THE NEW ECONOMY: EMERGING TALENT MANAGEMENT RISKS AND OPPORTUNITIES

We are now heading into an innovation-based global economy that will be driven by talent and will change at an accelerating rate. This fundamental economic shift will bring major disruptions for employers, learners, and workers alike. We have been grappling with many of these trends already, but we have yet to fully grasp the new normal or reconcile ourselves with the challenges and pace of change the new economy brings and its implications for talent development and financing.

In the new economy, employers will be shifting strategies in talent development in response to new competitive challenges from an innovation-based global economy. Employers will face critical “build, buy, or borrow” decisions in how they source and develop talent.[5] This will require new compensation structures and incentives that maintain the commitment and engagement of regular and contractual employees without making commitments to long-term employment.[6] Ultimately, employers will increasingly compete on innovation, agility, and resilience that is driven principally by talent. Therefore, talent development and engagement will be key factors in their success.

Employers will compete on how well they develop and engage workers to drive and support innovation resulting in new and improved business models, products, and services; and how they adopt digital technologies to reengineer and automate business processes and redesign work.[7] In addition, they will compete in how they develop more agile and resilient workers to quickly respond to rapid and disruptive changes in their industries and downturns and shocks to the overall economy, such as the current pandemic.[8] As a result, employers will constantly change their skills requirements for their most critical jobs and will face greater uncertainty and risk in achieving returns from their talent investments. This dynamism around skills doesn’t allow for clear signaling to workers or education and training providers, which increases uncertainty and risk in achieving returns from their investments as well.

To reduce costs and maximize agility and resilience, employers also will explore new employment relationships and strategies for assigning work across regular employees, contractors, and

outsourcing partners.[9] As employers source and develop talent across different business functions at all levels of the workforce, they will develop new compensation structures and incentives that will include career advancement and learning and credentialing opportunities and economic security benefits such as financial wellness and severance and outplacement services. Employers also will make decisions on how to best manage the risks of achieving returns from these investments through employment contracts and other risk management tools.

Finally, employers will make critical decisions on whether and how to collaborate with other employer partners and competitors through industry and business alliances and associations. They also will make decisions on how to utilize both traditional and new intermediaries and service providers in sourcing and developing talent to address their most critical needs.

In all, employers will be creating new playbooks for developing talent and managing risks that make them more competitive within their own industries in a rapidly changing economy. As a result, these employer playbooks will vary widely by employer size, industry, and maturity with new business startup playbooks looking fundamentally different from those of large mature corporations in relatively stable industries with few competitors. These new playbooks will be adaptive and agile, changing in response to shifts in competitive strategies, innovations in talent management practices, changing labor markets and economic conditions, and changes in government policies.

In this new innovation-based economy, more and more workers will become career entrepreneurs who take on more responsibility in managing their talent investments and risks whether they are regular employees, independent contractors, or outsourcing partners. They will take more responsibility for planning and managing their own careers and their investments in skill development and managing the growing employment and income risks associated with a more open and constantly changing talent marketplace. They will be making strategic decisions on which employers provide the best career opportunities and overall compensation packages, how to best explore and finance their skill investments with and without employer and government assistance, and how to best utilize community colleges and universities as well as new intermediaries (e.g., professional services companies), worker organizations (e.g., unions, professional associations, freelancer organizations) and other service providers in exploring career options, investing in skills, and managing their employment and income risks.

TRADITIONAL GOVERNMENT-LED APPROACHES TO TALENT DEVELOPMENT AND FINANCING

The current debate around how to best finance talent development and expand economic opportunity in the new economy has focused largely on government policy that was in many respects designed for a different economy and era. However, traditional public approaches to talent finance and risk management cannot fully address the talent finance challenges

presented by this new dynamic and changing economy. Government needs to reconsider how its investments can prepare new and existing workers to be successful in this economy that is changing at an accelerating rate.

The current government approach to talent finance, for a stable and growing industrial economy, has disproportionately focused on the initial preparation of students to enter the workforce through traditional college pathways provided by publicly funded and regulated schools, community and technical colleges and universities. In financing traditional college pathways, the federal government spends upwards to $30 billion on Pell Grants and finances over $100 billion in loans annually.[10] This approach has resulted in over $1.5 trillion in student debt and continued problems with completion of college, interrupted employment, and insufficient earnings that make loan repayment more difficult and defaults more likely.[11] This system of traditional college pathways also relies on substantial state investments going directly to public community and technical colleges and universities as well as some additional student aid. These state government investments represent the third largest share of state budgets and have been reduced substantially during economic downturns and will be difficult to sustain and grow in the future for most states.[12]

This traditional college pathway approach also has largely separated work and learning, substantially increasing the time it takes to transition students and workers from education to employment and making it even more difficult to respond quickly to rapidly changing skill requirements in the new economy. This traditional pathway also provides obstacles to nontraditional students and those with limited financial resources who must attend part time and balance a wide variety of employment, financial, and family obligations. This approach has depended on higher education accreditation as the primary quality assurance system, which constrains innovation and reinforces traditional delivery models and approaches to talent development delivered by public and private colleges and universities. Furthermore, government investment to promote greater access to traditional college pathways has not produced the expected avenues or outcomes when it comes to economic advancement and closing the equity gap.

Finally, this traditional college pathway approach has not provided equal access and financing to alternative pathways, such as apprenticeship, that can better integrate work and learning and reduce the lead times and costs in talent development, especially costs for workers themselves.

The federal government also spends about $18 billion on dozens of workforce development-related programming focused on the reentry of unemployed workers and low-income and disadvantaged workers facing barriers to employment.[13] And this funding has been in steady decline since 2000. As it stands now, these federal programs do not have the funding to reach most of the workers they target and only a portion of it is spent on actual training and skill development. These federal programs also do not have the funding nor are they designed to fully address the needs of workers who are outside of or on the margins of the labor market and served by public safety net programs.

Federal and state tax policies and grant programs do provide some financing for the skill development of employed workers. However, these tax incentives — such as preferential tax treatment of employer-provided tuition aid benefits — and grant programs still represent a small share of total government spending. And, the tax incentives and grant programs do not address the needs of the vast majority of employed workers who require continuous skill development to remain employed and pursue career advancement opportunities. This is especially true for lower-wage, front-line workers who are seeking economic advancement opportunities and are at significant risk of displacement due to automation and other technologies.

TRADITIONAL GOVERNMENT-LED APPROACHES TO EMPLOYMENT AND INCOME RISK MANAGEMENT

A new innovation-based economy will require greater agility and a rethinking of how we manage the downside risk of talent investments. Traditional government risk management programs, including the federal-state unemployment insurance (UI) system and safety net programs, have major limitations in addressing the employment and income risks associated with an innovation-based economy. There are constantly changing skills requirements for existing, new, and critical jobs. In addition, employer strategies for assigning work across regular employees, contractors, and outsourcing partners are constantly changing. These new realities will require a more agile system that supports the reskilling needs of workers while meeting the new and emerging requirements of employers.

The federal-state UI system is designed to provide temporary income support for regular workers who become unemployed and are likely to return to work in similar jobs with only limited assistance for transition and reskilling. This system of UI has been augmented in many states with work share programs that provide options for employers and workers who face temporary layoff situations but where workers are likely to return to work with the same employer. UI systems have also been supplemented through expanded government programs to address the retraining needs of dislocated workers. The new innovation-based economy will dislocate more workers who will need to add new skills to their toolbox to be successful in the new economy.

In the recent pandemic, this system has been expanded temporarily to address the needs of independent contract workers. However, these traditional government approaches are not designed to address the needs of the growing ranks of independent contractors and those workers who face substantial drops and fluctuations in earnings as regular employees and contractors and who need other employment and income risk management options that provide income support for the reskilling necessary to make successful transitions into other careers. And, they are not designed to complement and supplement employer and private sector risk management benefits such as severance pay and outplacement assistance. The recent pandemic also has clearly shown the limitations of UI data and technology infrastructure to handle the expansion of benefits and growing volume and complexities of applications and benefit management.

Government safety net programs have major limitations in addressing the employment and income risks of the new economy. Federal, state, and local governments offer a wide variety of disconnected safety net programs, including federal and state tax credits (e.g., EITC), income support (e.g., SSI), as well as food (e.g., SNAP), childcare, and housing assistance. Each of these federal, state, and local programs has different eligibility criteria with different income thresholds, work incentives, and requirements. They also have different rules and processes for reestablishing eligibility for services if workers attain earnings that put them above one or more program thresholds, but then experience unemployment and other drops in income.

As a result, this complex web of disconnected safety net programs is difficult for most low-income workers to navigate and manage the risks of losing government benefits due to constant fluctuations in earnings where marginal wage increases can result in a net loss of income (i.e., the benefits cliff). In addition, these government safety net programs are not designed to complement and supplement employer and private sector risk management benefits that provide financial wellness and family support services.

EMERGING EMPLOYER AND PRIVATE SECTOR INNOVATIONS

As stated previously, the debate around how to best finance talent development and expand economic opportunity in the new innovation-based economy has focused largely on government policy that was designed for a different economy and era. What has not received sufficient attention is how to harness and guide the growing innovation in employer and private sector talent financing including innovations among colleges and universities and nontraditional intermediaries and service providers.

It was also previously noted that shifts in the economy have resulted in a decline of employer training investments as the risks and returns have changed. However, employers have always had significant skin in the game, regardless of these trends. What is more, their investment, while having declined relatively speaking, remains substantial — an amount currently estimated at $28 billion for tuition reimbursement, $177 billion for formal education and training, and over $400 billion for informal training — and rivals even what the federal government spends on talent development.[14] However, while the investment remains substantial, there is little known about how the money is spent, with whom, and with what results and impact. Some trends suggest that employers are seeking new solutions to address the pace of change and the emerging skills needed in a technology enabled workplace.

There is now growing interest among employers and the private sector in exploring new strategies in how they invest their own capital on training outcomes and how it is reported and treated. Employers are innovating how they manage tuition assistance programs and align them with corporate strategy. They are providing improved guidance, developing preferred

provider partnerships, and providing more incentives for participation especially for low- and moderate-income workers. Employers also are exploring new approaches to formal and informal education and training that better integrate work and learning, provide credentials, and utilize new partnerships with both public and private education and training providers. In addition, employers and financial experts also are exploring changes to human resource accounting and financial reporting that can better manage, measure, and report returns on human capital investments. Finally, employers are establishing employer collaboratives that have the potential to aggregate employer purchasing and procurement of talent development services and related financial products and services.

In addition, there are growing opportunities to use this employer leadership to better leverage the most promising private sector and public sector innovations, including in talent finance, risk management, quality assurance, and an emerging data and technology infrastructure for the talent marketplace.

The private financial services sector is developing promising financial products and services for employers and workers, including outcome-based financing approaches. On the public side, federal and state governments have experimented with outcome-based financing as well as alternative learn and earn pathways. States also have pioneered new approaches to upskilling workers through customized training programs involving different government financing approaches.

In addition, universities and colleges are pioneering new approaches to education, training, and credentialing that are more responsive to employer needs and shorten lead times including short-term certificate programs. They also are exploring new partnerships with employers and new financing approaches being developed in the private financial services sector. In addition, other public and private intermediaries and service provides are pioneering new business models that can leverage employers and private financing innovations. Finally, universities and colleges are pioneering new earn and learn approaches including internship and cooperative education models.

Underlying these innovations is how risk is spread and shared across the stakeholders who benefit from the investment, including employers, workers, and government. These private and public innovations can be strengthened by alternative quality assurance systems that put a stronger emphasis on outcomes — particularly for underserved or disadvantaged populations — and can be applied to a wider variety of public and private providers, including employers and employer collaboratives.

These private and public innovations can also be strengthened and supported by a new public-private data and technology infrastructure that can improve underwriting risk and management of outcome-based finance. In addition, it can promote transparency and accountability for both public and private investors and other stakeholders, including employers, learners, and workers.

NEW AND CHANGING RISKS AND INNOVATIONS IN RISK MEASUREMENT

Employers, workers, service providers such as universities and colleges as well as government and other private investors have always had to assess and manage significant risks in the talent marketplace. For example, employers have always faced uncertainty and risks when considering whether and how to invest in training for employees or when hiring new employees. There are also the inherent risks related to government compliance.

Workers have always faced how to assess and manage the uncertainty and risks as to whether the credential attained will provide the skills necessary to advance their employment prospects, or whether it is even necessary for employment. Finally, if a worker finances his/her training there are the credit risks with borrowing and the opportunity risks of whether he/she obtains a sufficient return to repay a loan. Service providers have always faced the uncertainty and risks related to program design and quality and enrollment levels as well as revenue and government compliance risks; and other private investors have faced investment, interest rate, and credit risks when financing employers, service providers, and workers. Some of these risks have been readily visible and well-understood while others have been hidden from view.

In the new economy, many of these long-standing risks are likely to increase as they become more volatile and extreme. In addition, they will combine with other risks in new ways, complicating the nature and magnitude of the risk. In addition, the new economy will create new risks that are even more volatile and complex as seen in the risks now being managed by employers, workers, service providers, and government and private investors in the current pandemic. Workers, in particular, will confront new uncertainties and risks as they consider how to invest in their ongoing talent development or reskilling in a technology-enabled workplace that is constantly changing. As the structure of work changes, workers will also confront employment and income risks that are not currently being effectively addressed by traditional public and private risk management approaches.

To effectively assess and manage these new and changing risks, it will be critical to clearly identify the risks, whom they affect, and how they can be assessed and measured in ways that are fair and equitable. In order to assess and manage these risks and increase prudent investment and expand economic opportunity, risk identification, assessment, and measurement is a major and necessary foundation for both government and employers and private sector innovations in talent financing. In turn, these efforts in risk measurement identification, assessment, and measurement depend on a more comprehensive public-private data and technology infrastructure.[15]

The financial services sector is pioneering new approaches for risk identification, assessment, and measurement with new applications in banking, insurance, and housing, including new approaches to credit risk. However, these innovations have yet to be explored and applied in a systematic way to talent finance. Any new public-private approach to talent finance should leverage these innovations and other novel thinking for a fresh approach to risk identification, assessment, and measurement in the talent marketplace supported by a new public-private data and technology infrastructure.

THE EQUITY IMPERATIVE

The new innovation-based economy will disrupt and dislocate workers at the lower end of the skills continuum. This will contribute to growing inequality of opportunity and lead to uneven risks and returns to talent investment. There will be a growing need to finance talent development and reskilling as well as manage risks in ways that expand economic opportunity and mobility. This is especially the case for those populations facing systemic discrimination and low-income, disadvantaged, and marginalized populations facing multiple barriers to economic advancement. Any new public-private approach to talent finance must leverage and better connect employer, education, workforce development, and government initiatives to increase diversity, equity, and inclusion at the workplace and at all stages of the talent pipeline.

Many leading employers are now launching diversity, equity, and inclusion initiatives to more equitably recruit, retain, and advance talent and provide more inclusive workplaces that value differences between people, including those differences based on race, ethnicity, and gender.

Many of these initiatives have a dual bottom line. They reflect growing employer social responsibility commitments to promote economic advancement and reduce opportunity gaps within their workplaces and communities. They also reflect competitive strategies to adapt to a rapidly changing and more diverse workforce by tapping new sources of talent and leveraging differences to create a more innovative and agile workforce that will improve bottom-line performance. Employers are working to eliminate hiring barriers and implicit bias such as degree requirements. These employer initiatives many times involve new partnerships with a wide variety of public and private providers. They also involve innovative strategies to promote the economic advancement of front-line workers and provide new types of benefits such as financial wellness programs that help workers manage financial risks and better take advantage of advancement opportunities.

Colleges and universities are also pursuing promising initiatives designed to close gaps in program and degree completion as well as increase career advancement. There also are promising approaches being pioneered by community-based nonprofit organizations that are dedicated to serving populations facing multiple barriers to career advancement, including recent immigrants. In addition, there are promising public and private initiatives to close the digital divide and provide more workers with the digital access and skills to capitalize on new education and employment opportunities. Finally, there are promising federal and state government initiatives to promote diversity, equity, and inclusion and expand economic opportunity for targeted populations.

Despite these promising initiatives and the potential power of public-private collaboration, we have a long way to go in making meaningful progress. As a result, improving diversity, equity, and inclusion must be a major imperative in developing a new public-private approach to talent finance.

THE TALENT FINANCE INITIATIVE: A PUBLIC-PRIVATE APPROACH

Given the challenges and opportunities the new innovation-based economy brings, we need a talent finance approach fit for our time, not one built for a different economy and era. This is nothing less than an imperative. If the United States is to grow its economy and strengthen its global competitiveness while closing the opportunity and equity gap, leadership, commitment, and a movement are required.

What is needed is an agile and responsive public-private approach that can forge a new consensus and strike the right balance between the roles of employers, workers, and government in talent finance and risk management. This new consensus — or social contract — should promote continuous investment in skills development and better manage the employment and income risks of the new innovation-based economy. For these reasons and more, the Chamber Foundation is launching the Talent Finance initiative to help forge a new consensus and to bring together critical stakeholders necessary to achieve it.

We begin by laying out the mission and guiding principles for the Talent Finance initiative. From there, we introduce a framework to better understand and analyze the ecosystem of talent finance issuers, recipients, and instruments. This framework will be utilized to identify and build on existing best practices but also to find important ways to promote innovation around new talent finance products and instruments using alternative financing arrangements and partnerships. We conclude with a discussion on where to start in transforming the overall public-private talent finance ecosystem by advancing and improving: (1) employer and private-sector investment and leadership; (2) government policies for expanding choice in public-private talent development; (3) government policies for building stronger public-private risk management systems; (4) talent finance metrics, risk scoring, and HR accounting; and (5) the talent finance data and technology infrastructure.

MISSION, METRICS, AND GUIDING PRINCIPLES

The Talent Finance initiative explores a new public-private approach to talent finance that responds to an innovation-based economy, improves global competitiveness, and expands economic opportunity. This initiative will engage stakeholders and develop public-private metrics that measure progress and provide benchmarks for all major stakeholders including employers, workers, and government.

- **Global Competitiveness:** Employer metrics addressing the level of talent investment and returns as well as success in managing risks and promoting diversity, equity, and inclusion.

- **Economic Opportunity:** Worker metrics addressing the level of investment in talent development and the returns to income as well as success in managing income and employment risks and improving diversity, equity, and inclusion.

- **Government Cost-Effectiveness:** Government metrics addressing the level and cost effectiveness of public investment in talent development and risk management and improving diversity, equity, and inclusion.

This initiative will pursue this mission by providing a forum for public-private collaboration and innovation to design, test, scale, and manage a wide variety of investment and risk management instruments involving different combinations of partners and stakeholders based on the following guiding principles:

1. **Public and Private.** Talent finance innovations provide a more balanced and aligned public-private approach to unleashing investment and driving shared outcomes. These innovations also promote new thinking about employer investment and returns (e.g., private sector accounting standards) and private sector innovation, and transform our understanding of the public-sector role and its tools of action (e.g., tax policy, grants, and loans).

2. **Shared Value and Risk.** Employers; education, training, and credentialing providers; learners and workers; government; and other stakeholders share in the investment (skin-in-the-game), benefits (share-in-returns), and the management of downside risks of talent development, reskilling, and employment.

3. **Expands Choice.** Finance innovations treat all types of human capital investment similarly and do not privilege any type of education, training, or credentialing, regardless of whether the provider is a public or private entity. What matters is the results the investments produce and value they create for employers, learners, workers, government, and the economy. Innovations should expand choice for learners and workers in terms of the pathways and financing approaches available to them, and employers should have choice in terms of who they can partner with to source and develop talent.

4. **Affordable and Fair.** Financing instruments for talent development and risk management should be affordable and fair based on leading financial services practices and government consumer protection regulations and policies. These instruments should be affordable by allowing employers and workers to finance their investments without economic hardship and should be fair in preventing discrimination, predatory practices, and ensuring transparency consistent with truth in lending principles and practices.

5. **Data-Driven and Outcomes-Based.** Talent financing products use evidence and outcomes to guide investment, inform underwriting and risk analysis, and manage and mitigate risk.

6. **Transparent and Accountable.** Talent financing products provide comparable information to the public on investments, returns, and risks. In addition, they make transparent the underwriting and credit risk analysis policies and practices used and create accountability to both investors and other public and private stakeholders.

7. **Empowers Workers.** Talent financing products provide workers with the accurate information, affordable and fair financing options, and tools to make their own investment decisions and manage their own risks in cooperation with or independent from their employers.

8. **Accessible.** Talent financing innovations are open and accessible to all learner/worker populations and all employers. For employers, innovations are designed for all types of employers, including small and medium-sized employers from different industry sectors, regardless of whether they are new or mature. Innovations should also be open to and accessible by employers that may be without taxable income, strong and consistent cash flows, and have more limited access to credit markets to finance talent investments for large segments of the workforce.

9. **Equity-Based.** Talent financing innovations support more choices and affordable pathways for low-income, disadvantaged, and historically underrepresented populations in ways that close the equity and opportunity gaps. Innovations should ensure there are no unintended consequences or disparate impacts for these populations. Ultimately, they support diversity, equity, and inclusion initiatives by employers, educational institutions, service providers and government.

A FRAMEWORK FOR UNDERSTANDING AND ORGANIZING THE TALENT FINANCE ECOSYSTEM

This talent initiative should start with a comprehensive understanding of the talent finance ecosystem and the high-level outcomes to be accomplished. To achieve this understanding we must have an organizing framework (see **Figure 1**) to map the relationships and finance instruments that currently exist. Using such a framework we can then identify where the gaps exist and how to develop a more comprehensive playbook for financing and investing in talent in the new economy.

We can best understand the current ecosystem and explore opportunities for innovation through a framework that addresses: (1) the purposes of financing; (2) issuers and financing partners; (3) recipients and beneficiaries; and (4) instruments and channels.

- **Purposes of Financing.** The talent financing landscape can best be understood as a set of public and private organizations that provide financing to: (1) support education, training and credentialing; and (2) manage and mitigate risks related to education, employment and income for different types of recipients through a variety of instruments.

- **Issuers and Financing Partners.** There are six major types of public and private "issuers" of financing: (1) government agencies, including federal, state, and local governments, military, and quasi-government organizations; (2) learners and workers themselves; (3) employers, employer collaboratives, and related business associations; (4) employment, education/training, and social service providers, (5) professional associations, unions, and other worker organizations; and (6) other private sector funders and investors. These instruments may involve other secondary issuers or financing partners who jointly issue (e.g., joint employer-union apprenticeship), provide capital, or make contributions (e.g., unemployment insurance funds).

- **Recipients and Beneficiaries.** There are three major types of recipients: (1) service providers to employers and workers; (2) employers and employer collaboratives; and (3) workers and learners. For all types of recipients, there are other direct and indirect beneficiaries beyond the recipients. One example is issuers providing grants to service providers to finance support services for workers that will result in benefits to governments, employers, and workers. Example service providers include:

  - » Public and private universities and community and technical colleges
  - » Community-based nonprofit organizations
  - » Staffing organizations
  - » Professional services companies
  - » Other education, training, and credentialing organizations
  - » Employer benefit providers (e.g., tuition assistance program managers)
  - » Industry and business organizations
  - » Unions and related worker organizations
  - » Government agencies

- **Instruments and Channels.** These public and private instruments include government "tools of action" and involve multiple channels and channel partners.[16] Example channels include:

  - » Federal discretionary grants to service providers channeled through state and local government agencies; and
  - » Federal and state grants to students and training vouchers channeled through service providers (e.g., universities and community and technical colleges) rather than directly given to learners.

Figure 1: Talent Finance Framework — The Framework contains examples of current and potential finance instruments and is not intended to be comprehensive. It is, however, intended to promote discussion around finance innovations and how best to organize them.

PRIMARY ISSUER	PRIMARY RECIPIENT UPSIDE OPPORTUNITY INVESTMENTS			PRIMARY RECIPIENT DOWNSIDE RISK MITIGATION AND MANAGEMENT		
	Employment, Education/Training, and Social Service Providers	Individual Learners and Workers	Employers, Employer Collaboratives, and Business Associations	Employers, Employer Collaboratives, and Business Associations	Individual Learners and Workers	Employment, Education/Training, and Social Service Providers
Government Agencies	Discretionary and formula grants Tax incentives/ expenditures	Student grants (e.g., Pell) and loans (e.g., IBR) Training vouchers Tax incentives/ expenditures (e.g., Section 127 and LLAs) Career guidance services	Discretionary grants Tax incentives/ expenditures (e.g., TIF)	Discretionary grants Tax incentives/ expenditures (e.g., financial wellness benefits)	Unemployment insurance Work share Safety net (e.g., EITC)	Discretionary grants Tax incentives/ expenditures
Individual Learners and Workers	Teaching and mentoring services contracts	Teaching and mentoring services contracts	Teaching and mentoring services contracts	Teaching and mentoring services warranties	Teaching and mentoring services warranties	Teaching and mentoring services warranties
Employers, Employer Collaboratives, and Business Associations	Grants Contracts (e.g., outcome-based contracts) Externships	Corporate training Tuition assistance Apprenticeship programs Income share agreements Career guidance services	Supply chain/ contractor/ franchisee training Contracts	Insurance Employee group benefits plans	Severance and outplacement benefits Financial wellness benefits	Hiring/internship risk contracts Social support services contracts (e.g., outcome-based contracts)
Employment, Education/Training, and Social Service Providers	Contracts	Scholarships Income share agreements Contracts (e.g., outcome-based contracts) Career guidance services	Contracts (e.g., outcome-based contracts)	Program warranties	Program warranties	Program warranties
Professional Associations, Unions, and other Worker Organizations	Contracts	Joint apprenticeship programs Education and training programs Career guidance services	Education and training programs	Employee group benefits plans	Unemployment benefits	Employee group benefits plans
Private Funders and Investors (e.g., banks, investment funds, philanthropy, insurance companies)	Grants and loans Social impact bonds (with government)	Grants and loans Income share agreements Education savings accounts	Grants and loans	Key person insurance	Employment/income insurance	Enrollment insurance

These public and private instruments and channels are supported by wide variety of systems for:

- **Performance and Risk Metrics and Data Systems:** An effective public-private talent finance ecosystem should collect, analyze, and report data on key performance indicators and risk metrics to investors and other stakeholders. The data also should support internal management of instruments and channels with service providers. Performance indicators address the outcome metrics that are relevant to developing and administering investment and risk management instruments. Risk metrics assess and inform the associated risks related to these instruments including how these instruments are underwritten and how the risks are managed and shared. These metrics and data systems may be based on proprietary or open data standards and may involve the sharing of individual-level and aggregated data between partners in providing financing and talent development and risk management services.

- **Quality Assurance Systems:** A public-private talent finance ecosystem should also provide assurances that partners have quality management systems in place to meet quality and financial capability requirements of investors and other stakeholders and promote overall trust with recipients and beneficiaries. These quality assurance systems may involve independent auditing and conformity assessment (e.g., accreditation, certification) to provide additional levels of trust among partners.

The performance and risk metrics, data systems, and quality assurance systems are addressed in later sections on building a public-private infrastructure for talent financing.

WHERE TO START IN TRANSFORMING THE TALENT FINANCE ECOSYSTEM

Now that we have addressed the need for a new social contract consensus, defined the Talent Finance initiative, established its guiding principles, and introduced an organizing framework to map how we finance and invest in talent and manage downside risks, it is time to turn our attention on where to start in transforming the talent finance ecosystem.

We begin by exploring and promoting how innovations in employer and private sector investment and leadership can transform the overall public-private talent finance ecosystem. From there we explore government policies for expanding choice in public-private talent development as well as government policies for building stronger public-private risk management systems. From there we examine the changes needed in talent finance metrics and HR accounting and we conclude with a review of the public-private data and technology infrastructure needed to power the next generation of talent finance and investment.

EMPLOYER AND PRIVATE-SECTOR INVESTMENT AND LEADERSHIP: A RETURN TO INVESTMENT

In exploring where to start in a new public-private approach, we begin with employers and the private sector. As previously discussed, changes in the economy necessitated shifts in talent strategy, including how employers manage their talent development and sourcing practices. These shifts, in turn, led to changes in how employers manage their investments in talent. And while these changes led to a gradual leveling off and decline in employer training investments, employers, as demonstrated, have continued to have substantial skin in the game. However, the return on this investment and the outcomes it has achieved remain unclear and there is consensus that there is room for improvement with respect to employer investments in talent based on the limitations of current talent strategies.

In the new economy, employers will be agile and compete on innovation and talent like never before. The economy will be more dynamic, not less, and the risks associated with how employers compete and the dynamism it brings will loom large for employers, workers, learners, and communities alike. Employer leadership and engagement will be more important than ever and will need to be significantly expanded and improved upon. This leadership and engagement must transcend traditional employer engagement strategies built for a different economy and era and must carry through to how employers invest in talent and manage risks associated with that investment in an innovation-based economy. In particular, given changing employment relationships, employers must play stronger roles in empowering workers, whether they be regular employees, contractors, or outsourcing partners. This includes empowering workers to plan and manage their investments in employer-led training and development as well as innovations in worker benefit programs that can be better combined with worker and private sector and government investments.

Therefore, if there is to be a new consensus for the new economy, or a new social contract among employers, workers, and government in talent finance and risk management, then it starts with transforming the role of employers and the private sector. To identify where to start with employers and the private sector we must first establish a baseline understanding of employer practices and potential interest in talent financing innovations. From there, we must revisit the Talent Finance Framework (see **Figure 1**) and focus our attention first on the employer-related lanes and identify and explore further the most promising innovations consistent with the Talent Finance Framework and guiding principles. We round out our recommendations with considerations of how employers can significantly scale the reach and potential of new talent finance and investment products and services through employer collective action.

What follows are recommendations on where to start with employers and the private sector.

Recommendation 1: Develop Employer Benchmark and Trend Data on Talent Finance

As previously shown, employers continue to have substantial skin in the game, but little is known about the exact size and use of those investments and how this has changed over time. In addition, there is limited information on related employer benefits addressing employment and income risks, such as severance payments and outplacement assistance and financial wellness benefits. In addition, there is limited information on employer adoption of and interest in leading talent finance practices and innovations in both training and development and employee benefits, including public-private innovations supported by government policies. Employer benchmark and trend data, combined with employer adoption and interest data, could provide an important foundation for the implementation of a new public-private approach to talent finance.

In years past, the Bureau of Labor Statistics (BLS) at the U.S. Department of Labor twice fielded the Survey of Employer Provided Training (SEPT). The data, though nearly two dozen years old, continue to be cited as one of the more comprehensive and statistically relevant surveys on employer investments. A recent report produced for the American Workforce Policy Advisory Board (AWPAB) makes the case for reestablishing and making more regular such a survey with increased standardization around definitions used when describing types of training and training investments.[17] The report also calls for interim strategies to improve data collection, such as expanding the Census Bureau's Annual Business Survey or Capital Expenditures Survey to better capture data on employer-provided training, and also expanding BLS's National Compensation Survey to capture incidents of employer-provided training.

The private sector too has also been collecting data on employer-provided training and investments. The Society for Human Resource Management (SHRM) conducts the National Study of Employers (NSE) every two years and the National Study on the Changing Workforce (NSCW), which is conducted every five years. Both surveys seek to collect benchmark data on employer investments in training. More recently SHRM — a member of the AWPAB — conducted a one-time survey to get more up-to-date data on employer investments in skill development, compliance training, and onboarding.

These surveys, and others like them, begin to tell the story of employer-provided training investments, but the picture remains incomplete. As we move into the new economy and employer-provided finance and investment becomes more critical to the success and growth of our economy and workforce, then a more comprehensive and sustainable solution is needed. Absent an immediate return of the SEPT, efforts should be made to collect and benchmark information on employer financing and investments in education and training. The benchmark information should address both corporate training and development as well as tuition assistance programs.

In addition, this benchmark information should address employee benefits related to employment and income risks as well as diversity, equity, and inclusion (DEI) initiatives. These efforts should

build on the work of SHRM and other employer benefit research organizations. This benchmark and trend information on both training and development and employee benefits should allow for comparisons between large, mid-sized, and small employers across major sectors and regions.

These efforts also should identify employer adoption of, and interest in, leading practices and innovations in talent finance, including public-private innovations supported by government policies and incentives. These efforts should be designed to capture the pulse of the employer community by gathering insights into employer priorities and challenges that must be addressed in promoting and scaling these innovations.

The Talent Finance initiative will support public and private efforts to gather more comprehensive benchmark and trend data by exploring how to identify employer adoption of and interest in talent finance innovation. This pilot effort will be done through an employer survey done in cooperation with SHRM.

Recommendation 2: Promote Innovations in Employer Financing

Next, employers and the private sector should explore finance and investment innovations that can both improve competitiveness and growth as well as expand economic opportunity and inclusion. As the Talent Finance Framework (see **Figure 1**) demonstrates — and currently available benchmark data support — employers are already major issuers of talent finance instruments. However, most of these resources are invested based on traditional employer-provided training or tuition reimbursement practices with a weak connection to corporate strategy.

There is also an emerging consensus that the level of investment can be expanded upon and the type of investments issued can be improved or reimagined. Already there are promising innovations underway that are changing the way we think about employer and private sector provided financing and investment strategies. These emerging innovations and best practices are beginning to define a new playbook for employer-provided financing and investment in education and training and can help usher in a changed landscape and ecosystem for how employers invest their resources and the types of outcomes they can achieve.

Below is a breakdown of investment practices by type as well as examples of promising employer-led innovations in new talent finance instruments:

- **Employee and New Hire Training and Development.** Employers are pioneering new approaches for financing talent development that expand career pathway options for workers and provide them with meaningful credentials. This includes new approaches for front-line workers who have historically not participated in training and development programs. This also includes training and development options for individuals who are not employed by the organization, but who could be potential employees or contractors. In addition, employers also are pioneering new models for

financing the training and on-boarding of new hires that involve partnerships with both traditional and nontraditional providers. A wide variety of earn and learn models, including apprenticeships, mutually benefit employers and workers while sharing the risks. There are also new partnerships with a wide variety of education, training, and credentialing providers.

EXAMPLE 1 — IBM AND NEW COLLAR JOBS

IBM is creating pathways to opportunity through its New Collar Jobs initiative and its focus on digital badging and skills development for some of the fastest growing technology jobs in the labor market, such as cloud application developer or cybersecurity specialist. This training and credentialing is used to support the advancement of entry-level workers into targeted positions. It is also used, however, to identify potential new talent in the labor market that can be recruited for a temporary project or to become new employees.[18]

- **Employee Benefit Systems.** Employers also are pioneering new approaches to tuition assistance programs by: (1) providing career guidance in selecting education and credentialing options; (2) establishing on-site and off-site education and training provider networks; (3) expanding eligibility to more employees; and (4) providing a larger employer match or contribution. Employers also are exploring how to convert more traditional tuition aid programs that reimburse employees after they have successfully completed education and training into tuition assistance programs that pay the employer contribution upfront directly to education and training providers. Employers also are pioneering student loan repayment programs that provide assistance to employees in paying back their student loans as a recruitment tool, employee benefit, and workforce retention strategy. These innovations can be paired with preferred provider networks that are defined by an employer or by an industry or professional association. They also provide the foundation for public-private portable learning accounts, sometimes referred to as Lifelong Learning Accounts that can be enabled through government policy similar to health savings accounts.

EXAMPLE 2 — AMAZON CAREER CHOICE

Amazon has made a significant investment in its frontline workforce and now covers up to 95 percent of an eligible employee's tuition and fees for a certificate or diploma in a qualified field of study that leads to an in-demand job at Amazon or in adjacent industries. Amazon also provides classrooms on-site at Amazon facilities to remove barriers to participation and to increase program completion. Over 10,000 Amazon employees around the world are taking advantage of this innovative program.[19]

EXAMPLE 3 — STUDENT LOAN REPAYMENT PLANS

Increasingly companies, such as PricewaterhouseCoopers, Peloton, and Staples, have expanded their benefit offerings to go beyond traditional tuition assistance and reduce the student loan debt burden of their employees. It is a benefit an employee can take immediate advantage of and does not require any upfront money or capital on the part of the employee. This benefit is in high demand by employees and is shown to improve retention while also helping facilitate recruitment of new employees.[20]

- **Downside Risk Management Instruments.** Employers are ideally positioned to explore new opportunities to scale employee benefit programs that mitigate employment and earnings risks for workers. This includes employer severance and outplacement and retraining assistance that mitigates risk associated with employment and income loss and enables smoother transitions to reemployment. These innovations provide the foundation for more comprehensive public-private approaches to employment and income insurance.

Employee benefit plans also include financial wellness programs that mitigate risks associated with earnings fluctuations while also promoting financial resilience. These programs provide risk mitigation instruments such as short-term loans and advance payments, savings accounts, as well as financial education, budgeting and tax planning services that allow workers to maintain financial stability and resilience in the face of earnings fluctuations and unforeseen household expenses. These innovations provide the foundation for a more comprehensive public-private safety net for workers with incomes fluctuating and falling below lower living standards established in government safety net programs.

EXAMPLE 4 — PEOPLE+WORK CONNECT

As unemployment surpasses record highs globally, a group of leading companies from multiple industries formed People + Work Connect, a collaborative online employer-to-employer initiative that brings together companies with workforces laid off or furloughed due to COVID-19 with those in urgent need of workers. At zero cost for employers to join and participate, the initiative is designed to shorten the complex, lengthy cycle of unemployment.[21]

EXAMPLE 5 — FINANCIAL WELLNESS SUPPORT

Financial wellness programs are on the rise with over half of companies reporting having at least one financial wellness program or support in place. More than tuition assistance, companies are increasingly taking on a role in supporting their workers with financial planning, emergency assistance, and money management tools. The emergency savings account is one innovation that, should it be scaled, is anticipated to enjoy widespread adoption by workers as an emergency savings account that allows direct payroll deductions into a dedicated account with an option for an employer match.[22]

Recommendation 3: Promote Employer Collaboration

If we are to fully unlock the potential and scale of employer-provided talent financing and investment, it will require levels of employer collaboration and partnership beyond what we have seen to date. Employers have already begun to engage in collective action around talent management challenges, but they have yet to unlock the true potential of collective action when it comes to financing their shared talent pipeline needs.

For example, through the Chamber Foundation's Talent Pipeline Management (TPM) initiative, employers are already engaging in collective action around shared workforce needs and are achieving impressive results. TPM is designed to be a scalable, employer-led solution designed to solve talent management challenges in ways that generate a return-on-investment (ROI) for learners, employers, and their communities. The TPM system was designed by employers, for employers, and is authentically employer-led. It is a systemic approach to unlocking employer leadership and engagement in a novel way by speaking the language of — and leveraging strategies and practices associated with — supply chain management. The TPM system is taught through the TPM Academy and supported by the TPM curriculum and web tools. It provides a structured process that facilitates employers engaging in collective action, producing primary source data about their workforce needs and challenges, and designing and implementing solutions that address their most pressing workforce pain points. Launched in 2014, the TPM movement is now in 33 states and Canada and growing, with hundreds of active employer collaboratives involving thousands of employers.

While employers have been engaging in collective action through TPM to organize their workforce needs and partnerships, they have yet to fully leverage their collaboration to promote shared talent finance and investment tools and practices. Through efforts like TPM, employers now have scalable and collaborative platforms to explore new opportunities in talent financing. The platforms also provide a means to pool investment and risk, which is especially important for engaging small and mid-sized employers that do not have the capacity, demand, or investment levels to go it alone. These employer collaboratives provide opportunities for employers of all sizes to achieve higher returns for talent investment while managing risks associated with internal and external talent

pipelines. The collaboratives also provide new mechanisms for employers to create shared value for education and training providers and other partners as well as workers and government. In addition, they provide a mechanism for joint purchasing of education and training services as well as employee benefits that can provide more value to employers and workers. Finally, they provide a mechanism to launch DEI initiatives that have the potential to expand economic opportunity in the communities where they are located.

In other words, employer collaboratives also provide ideal test beds for talent finance innovations as they are demand aggregators for new finance and investment products and services.

EXAMPLE 6 — TALENT PIPELINE MANAGEMENT AND SCALING FINANCIAL INNOVATIONS THROUGH COLLECTIVE ACTION

The Chamber Foundation has been leading a growing network of hundreds of employer collaboratives involving thousands of employers. What they have in common is the use of the Chamber Foundation's Talent Pipeline Management (TPM) framework to implement authentically employer-led talent supply chain solutions. For example, the Kentucky Chamber of Commerce has adopted the TPM system and coordinates 27 employer collaboratives involving hundreds of companies. To date, these collaboratives have focused on organizing their workforce needs and building career pathways with preferred education and training partners. However, there is now an opportunity to use them to engage groups of employers in adopting and implementing finance and investment innovations for talent development. This is similar to how companies are now using associations under the Affordable Care Act (ACA) to jointly procure healthcare plans that are shared across companies. This type of innovation is particularly important for engaging small and mid-size companies in finance solutions.[23]

Recommendation 4: Promote Private Sector Innovation in Financial Instruments for Employers and Employer Collaboratives

The Talent Finance initiative should promote private sector financial instrument innovations that could be used by employers and employer collaborations for talent development and risk management. These innovations should be supported by advances in how risk is assessed and managed in the talent marketplace and should take into account the new employer role and ensure consistency with the guiding principles of fairness and equity. Innovations in risk assessment should leverage advances in data analytics and better access and use of a public-private data and technology infrastructure.

Income Share Agreements (ISAs) are an example of one such innovation that combines an investment in upside training and credentialing but also helps manage downside risks associated with employment and earnings.[24] While ISAs are being explored at relatively small scale at universities, with workforce boards, and through private financing, there is an opportunity to expand them considerably through direct partnerships with or investments from employers. For example, employer collaboratives could work with financing partners to issue ISAs to learners who are being newly trained and credentialed as part of their talent pipeline. ISA financing could also be extended to current employees pursuing reskilling or upskilling opportunities. They can also be combined with new training models and partnerships, such as the staffing and professional services company example included in Example 9.

EXAMPLE 7 — INCOME SHARE AGREEMENTS

New finance innovations, which are ripe for employer uptake and use, are being explored by financial service companies. Income Share Agreements (ISAs) are a form of investment that is equity-based instead of debt-based and, if used by a company or collaborative of companies, could become a novel way for companies to underwrite their talent pipeline by betting on the future success and earnings of their workforce. They also protect employers from poaching or if employees move out of the region, because they allow the employers to share in the equity stake of those workers regardless of their employment status with them.

Recommendation 5: Promote Service Provider Business Model Innovation with Employers and Public and Private Investors

As shown in the Talent Finance Framework (see **Figure 1**), the talent finance ecosystem involves a wide variety of education, training, and credentialing service providers. They include publicly funded and regulated universities and community and technical colleges as well as other private providers including community-based organizations, business and industry associations, unions, and staffing and professional services companies. These service providers have widely different business models involving different approaches in how they add and capture value resulting in revenue flow from employers, workers, and third-party funders. These different business models involve different customers and customer relationships, services and service delivery models, business partnerships, organizational and cost structures, and revenue sources.

Many of these traditional and nontraditional service providers are pioneering new business models in response to rapidly changing employer and worker needs and revenue opportunities as well as reductions and uncertainties in government funding.

For example, universities and community colleges have a long history in establishing partnerships with employers for both employee training and development and for employee benefits through both credit and noncredit offerings. Community colleges have historically provided customized training programs for employers through employer and state government funding. In recent years, many universities have established partnerships with corporations to allow their employees to pursue college degrees through tuition assistance programs. Some universities are exploring alternative student financing options such as income sharing agreements. Nontraditional providers such as bootcamps are pioneering new models with employer and student financing. In addition, staffing and professional services providers also are pioneering new business models where employers pay for the training and development of temporary workers and contractors when they are hired as regular employees. Finally, community-based nonprofit organizations also are exploring new business models that provide services to employers to upskill current employees and improve retention.

Given these provider business model innovations, employer and private financing innovations as well as related public financing innovations should be co-engineered with service providers to explore how providers can share value and risks in new ways with employers, workers, and government.

EXAMPLE 8 — ARIZONA STATE UNIVERSITY AND INSTRIDE

ASU and Starbucks launched a partnership in 2014 to offer Starbucks partners (employees) the opportunity to pursue their first bachelor's degree through ASU Online, with 100% tuition coverage. The program has become a significant benefit for Starbucks partners, which has proven to attract new employees as well as improved retention rates with existing employees participating in the program. In 2019, inspired by the Starbucks College Achievement Plan, ASU and TPG/Rise Fund collaborated to launch InStride, a strategic enterprise educationTM company designed to achieve significant social impact through partnerships with employers who provide opportunities for their employees to obtain a high quality education.[25]

EXAMPLE 9 — REVATURE AND STAFFING MODEL INNOVATION

Revature is a staffing agency which turned into a hire and train company that provides last mile training and "try before you buy" job placement service for partner employers. Employers who wish to tap into their pool of talent pay Revature for its services. Revature screens, recruits, trains, and places talent while functioning as the employer of record. Participants are paid a salary while they complete their last mile training, are supported with job placement assistance, then can become full-time employees once an employer has been able to assess their fit for the job and their performance. This business model innovation coupled with finance innovations like ISAs can make for a powerful combination.[26]

EXAMPLE 10 — PUBLIC-PRIVATE BENEFIT MANAGEMENT

Employers are engaging new partners in managing their tuition assistance programs and providing additional services such as outplacement and upskilling assistance. For example, Guild Education provides a suite of services to employers and their employees. Those include a curated network of learning providers, personal coaching for students, and a direct payment infrastructure that enables employers to cover tuition expenses upfront for their employees, instead of relying on reimbursement, while taking advantage of the $5,250 tuition assistance tax exemption in Section 127 of the U.S. tax code.[27]

Employers are increasingly partnering with community-based nonprofit organizations to provide financial wellness and related support services to improve workplace productivity and retention and improve the lives of their employees. These partners assist employees in better understanding and using both employer and public benefits and other community resources such as transportation and childcare services. One example is Worklife Partnership in Denver, Colorado, that provides resource navigation services to employees as well as other related services.[28]

GOVERNMENT POLICIES FOR EXPANDING CHOICE IN PUBLIC-PRIVATE TALENT DEVELOPMENT

In exploring where to start in a new public-private approach, we began with employers and the private sector. Much like employers had to shift their talent strategy because of changes to the economy, so too did government. And while there is consensus that employers experienced a gradual leveling off and decline in training investments, the opposite was true for government, at least for a while. Government — and by extension taxpayers — began to take on a disproportionate share of the investment in talent development systems, but even that is now leveling off and there is an open question about just how effective the federal government has been, or can be, as the talent marketplace's financier of first resort.

Much like employers and the private sector need a new role in talent finance and risk management in the new economy, so too does government. The new consensus must be public and private. The talent finance and investment strategies pursued by government must be co-engineered with — and supportive of and complementary to — finance and investment strategies pursued under the leadership of employers and the private sector, including service providers.

Governments must continue to play a major role in the talent finance ecosystem and be a major financier of upside opportunity investments in education, training, and credentialing. The public sector similarly plays a role in filling gaps in the talent investment system, particularly for those

with limited attachment to employers and the labor market as well as the hard to serve and harder to employ. Governments can also be a powerful catalyst in promoting employer leadership and private sector innovations in talent development that can be instrumental in strengthening economic competitiveness, advancing economic opportunity, and closing the equity and opportunity gap.

As shown in the Talent Finance Framework (see **Figure 1**), federal, state, and local governments have a wide variety of instruments or tools of action that can provide incentives for employer leadership and private sector innovation. Much like we used the Framework to organize our thinking and approach for employers and the private sector, we now do the same for government and public policy.

What follows are recommendations for how to reimagine the public sector role in talent finance by building from and leveraging the recommendations made for employers and the private sector. This includes building off how employers can play a role in empowering workers through employee benefit programs that can be aligned and braided with government funding for student grants and loans and related instruments through new public-private instruments such as Lifelong Learning Accounts.

We begin with exploring how government and public policy can balance and incentivize private sector investment and collaboration and how to align and braid public finance and investment instruments. Next, we examine changes needed in our quality assurance systems to expand choice and improve outcomes for employers and learners and workers. We conclude by exploring how each of these recommendations can be leveraged to close the equity and opportunity gap.

Recommendation 6: Provide More Balanced and Aligned Government Financing for Employer Investment and Collaboration

Government should work with employers to explore ways to improve the public-private balance in government incentives for talent development in ways that expand choice for workers. Based on the guiding principle of "expand choice," government financing should treat all types of human capital investment similarly and not privilege any type of education, training, or credentialing whether that is provided through employers and employer collaboratives or more traditional college pathway options. Public finance instruments should encourage and promote greater employer and private sector investment and collaboration across all types of employers and industries and promote the alignment and braiding of public and private investments wherever possible.

In a more balanced public-private approach, government financing can be better combined with private sector finance and would flow through instruments and channels to those who are providing the talent development services. This funding should flow regardless of whether it is an employer or another public or private service provider, such as a college, university, business services intermediary, labor union, or community-based nonprofit organization.

Similar to other service providers, employers should receive incentives for those types of investments that result in critical and transferable skills and credentials that create shared value for employers, workers, and government. To ensure that employer investments result in critical and transferable skills, these transferable skills and credentials should be based on open and publicly available competency and skill frameworks developed in cooperation with employers and industry organizations and maintained through an open public-private data infrastructure as described in later sections. These open frameworks can then be used to promote seamless connections with education and training programs and credentials offered by a wide variety of service providers, including universities and community and technical colleges. Employers should be able to pool these incentives with other employers through a variety of employer collaboratives (e.g., business and industry associations, joint apprenticeship programs) that could directly provide or contract for talent development services.

This more balanced approach would be applicable to all employers who are constantly exploring and changing "build, buy, or borrow" decisions for their most critical jobs. For example, employers choosing "build" strategies that involve the direct provision or contracting for skill development of existing employees and new hires or even contractors and outsourcing partners would receive government incentives through government financing instruments (e.g., federal tax credit) similar to the government incentives provided through a government financing instrument (e.g., federal or state government grant) used for the direct funding of education, training, and credentialing providers.

Employers choosing to "buy or borrow" talent would not receive direct government incentives for talent development but could leverage the government incentives going to external partners. Employers could also choose to both "build and buy" and could receive incentives for providing paid work-based learning in cooperation with their external education and training partners who also receive government incentives for the related education and training.

Broadly, the talent development field could look to other public-private partnership models, especially those in real estate development, economic development, or housing development that use partnerships to support employer and private investment. Over the last several decades these fields have created complex project financing that include government direct investment and other tax credits to expand private investment. The New Markets Tax Credit Program and the Low Income Housing Tax Credit, along with many state and local economic development projects are good examples of how public investment can direct private investment to new areas.

In exploring more balanced approaches, employers and government should also explore the most inclusive and cost-effective financing instruments for increasing employer investments and collaboration. These instruments could include federal and state income and payroll tax instruments and grant programs. Based on the "accessible" guiding principle, inclusive instruments are those instruments that could be applied to all types of for-profit or nonprofit employers

including small and medium-sized employers from different industry sectors, regardless of whether they are new or mature and whether they have taxable income and whether they have the cash flows and access to credit markets to finance talent investments.

Employers and government also should explore the relative cost-effectiveness of different financing instruments to determine which instruments produce the most employer investment for the lowest total cost including administrative costs for employers and government. For example, government payroll tax instruments may be more accessible than government income tax instruments because some employers may not have income tax liabilities and may be more cost-effective than government grant programs because of the higher administrative and transactional costs of grant instruments.

In addition, employers and government should explore which financing instruments are best used by employer collaboratives. The national network of TPM employer collaboratives could provide one possible avenue for exploring these options and could also provide ideal test beds for pilot-testing and evaluation.

Finally, employers and government should explore how to design government financing instruments to be more easily aligned and braided with employer and private sector financing instruments for: (1) employee and new hire training and development, and (2) employee benefits such as tuition assistance benefits. This alignment and braiding should focus initially on three major employer financing instruments that are currently addressed in government policy: (1) grants; (2) loans; and (3) tax incentives. One major requirement for public-private braiding is the use of consistent human resource accounting practices and data standards that provide consistent guidance on what are the appropriate and standardized talent development costs and outcomes in managing both public and private investments.

What follows are examples of different types of public investments that could be better aligned with employers and other private sector innovations and that could be redesigned for better braiding with other public and private sector finance instruments in the future.

Grant Instruments: One instrument government has available to finance talent is grants and other direct forms of investment. Grants can be issued to individuals or directly to businesses and function much like vouchers.

The Pell Grant program is an example of grants to individuals. Pell Grants are used to support low-income individuals and families in accessing postsecondary education and are primarily used to offset the cost of tuition and fees. Individual Training Accounts (ITAs) are another type of direct investment from government for use in offsetting the cost of participating in a workforce development program.

In Talent Finance, government should find ways of aligning and braiding grant programs with employer and private sector investments. For example, federal and state grant instruments provide grants to employers, including WIOA incumbent worker training funding and on-the-job training. WIOA grants to employers for on-the-job training (OJT) offset a percent of a worker's wages while receiving on-the-job training based on a training plan. These investments can be more targeted in industry-recognized and financed apprenticeship programs where the government investment is a temporary wage offset. It can also be done in conjunction with other staffing agency models where employers can "try before they buy," with government buying down a portion of the risk.

Most states now have customized training grant programs that provide matching funding to employers for training current employees and/or new hires. In some of these states, the funding flows directly to the employer who can choose to provide the training in-house or through external training providers. These grant programs usually reimburse employers for a percentage of allowable training costs and are evaluated based on post-training employment and earnings. These state grant programs are funded by general tax revenues or employer taxes collected through state unemployment insurance (UI) systems.

EXAMPLE 11 — ON-THE-JOB TRAINING REIMAGINED

On-the-Job Training (OJT) is a popular program offered by federal and state governments. It functions as a wage subsidy for new hires or for workers who are being upskilled into new positions. For a limited period of time and amount of money, the employer will be reimbursed a portion of the worker's wages. Governments could reimagine how OJT programs and investments are made with greater alignment with employers and the private sector. For example, OJT can be an incentive for industry-led and recognized earn and learn programs (e.g., apprenticeship) or to offset training wages in a recognized talent supply chain using the TPM framework. It can also be used to offset the training wage for individuals in staffing agencies that are working closely with employer partners and customers. It can even be used as an offset to ISA holders resulting in reduced payments.

EXAMPLE 12 — KANSAS AND WORKFORCE AID

The Kansas Department of Commerce and Kansas Board of Regents are reinventing how state customized training programs work. As an early TPM partner, Kansas was able to flip how it manages employer engagement by having employers themselves manage the design and procurement of the training programs. This way the employers are choosing the training provider and not the other way around. This helps ensure employers are critical drivers of decision-making, that programs are aligned with employer needs, and

employers are working with their preferred training provider to deliver services. While currently limited to eligible colleges, the program could be expanded to maximize choice for employers as to who they work with to procure their future workforce, including unaccredited community-based providers that can reach target opportunity populations (e.g., Opportunity Youth or re-entry).[29]

Loan Instruments: Another talent finance instrument available to government is loans. The federal government is best known for its multiple, fixed-rate loan offerings used by individuals to access accredited postsecondary education programs. These loans are not risk-based and provide the same interest rate regardless of what education institution or program a learner attends, so long as it is accredited. More recently the federal government has experimented with income-based repayment plans where the amount owed is capped at percent of an individual's income and the balance of the financing is forgiven after a set amount of time. The federal government also offers loan forgiveness programs as a way to incent individuals to enter public service or to teach in a low-income community.[30]

Traditional loan products offered by government are ripe for innovation. In the new economy, government should align or braid its loan products with other private sector talent financing innovations. Rather than lending being the financing of first resort, it can instead be used in combination with ISA products. Funds traditionally flowing through loans could be direct investments in private sector led and financed ISA funds. These alternative public and private loan options could be managed and combined with government grants and employer and worker contributions through worker-managed and portable learning accounts.

Federal and state governments historically have also used a variety of loan instruments for assisting businesses. These offerings can be direct loans, participatory loans, or loan guarantees. However, government loan instruments have not been widely used for financing talent. Some states, such as Washington, are now demonstrating how, similar to business loans, government can provide interest-free or low-cost loan programs as an alternative to government grant programs for employee and new hire training.

Federal and state governments could partner with private investors, such as community development financial institutions, for financing employee training similar to how they now work together in providing other types of employer loans.

EXAMPLE 13 — REIMAGINING FEDERAL LOANS AND LENDING

The federal government is the largest provider of student loans, putting out over $100 million annually. More recently the federal government started experimenting with Income-Based Repayment (IBR), which functions similar to an ISA in terms of what is repaid is based on what one earns, but is different in that it is forgiven after a period of time and is not based on any underwriting or ROI analysis. The federal government could reimagine its role as a lender and improve how it aligns its lending with employer investments while also tapping into private sector innovation. For example, the federal government could move a portion of its loan portfolio into employer-backed ISA accounts that serve as underwriting partnerships for organized talent supply chains, industry-recognized apprenticeships, staffing agencies like Revature, or state training programs like Workforce AID.

Tax Incentive Instruments: A final and popular talent finance instrument used by government is tax incentives. Government is uniquely positioned to incentivize individual and business behavior through tax credits and offsets. Rather than engaging in direct investment or offering a debt-based loan product, government can provide incentives to individuals and businesses by reducing their tax liability or burden when engaging in certain preferred investment or savings activities, such as you see with healthcare, education, and retirement savings plans.

For example, federal and state governments provide tax incentives for employer-provided educational assistance benefits by providing a tax exclusion (Section 127 of the IRS code) to employees who receive education benefits. There have been many proposals on how to improve these tax incentives and better align with employer and private sector investments. The Aspen Institute has proposed increasing the maximum tax benefit and expanding the eligible expenses covered to make them more comparable to expenses covered by federal student grants and loans.

Another potential innovation is to use tax incentives to establish more portable, individual (i.e., worker-owned) education and training accounts similar to retirement, education, and health savings accounts where employers, workers, and other funders could contribute to pay for eligible training expenses. Federal and state tax incentives could also support even more expansive accounts such as Lifelong Learning Accounts as proposed by the Conference Board, where workers could manage and use accumulated savings as well as lines of credit from different public and private sources, including federal grants and loans, equity-based financing programs, and other investment funds.

Another example is state tax incentives for employer training or specific types of employer-based training, such as apprenticeship programs. States usually provide tax credits for a percentage of total investment in training up to a certain upper limit and are usually not refundable for employers without state tax liability.

States could explore other types of state tax incentives, such as payroll tax incentives, that would be more inclusive and provide more meaningful incentives to small and mid-sized employers who could use the incentives to retain the cash flow needed to finance employee training. These tax incentives could also be designed to promote economic advancement by providing employers stronger incentives for training for lower-tier workers that are associated with career advancement and earnings gains.

EXAMPLE 14 — FEDERAL AND STATE TAX INCENTIVES FOR WORKER BENEFIT PROGRAMS

The federal government already provides tax benefits for tuition assistance programs. However, they are limited by the amount and use of funds they cover. The federal government could expand the concept of Section 127 of the tax code to cover a much wider variety of education, training, and credentialing and related costs, such as childcare and admission test fees. Federal tax policies also could enable the creation of portable tax-free Lifelong Learning Accounts similar to health savings accounts where workers could contribute savings and manage a wide variety of employer, government and private investor contributions, and lines of credit. These accounts could also be supported by state policies similar to Washington where an employee owned account can receive matching contributions from an employer.[31]

EXAMPLE 15 — STATE TAX INCENTIVES FOR EMPLOYER COLLABORATIVES

State governments can reduce their role in grant making by certifying employer-backed partnerships with education, training, and credentialing partners. This would allow employers to recoup the cost of training by having a portion or all of an employee's state income tax deferred to the employer or training fund managed by an employer collaborative. This aligns the incentives effectively and promotes more employer direct investment while providing incentives for employers to hire and retain workers so they can recoup their investment with every paycheck and offset payroll expenses. This type of benefit can be done with any number of the innovations profiled above, including apprenticeship and staffing agency innovations.

Recommendation 7: Provide Stronger Quality Assurance for More Talent Development Choice

As the public sector improves upon its own talent finance instruments and explores ways of braiding those investments with employers and the private sector, employers and government leaders should explore alternative approaches to quality assurance that can expand choice for employers and workers in choosing talent development service providers that produce desired outcomes.

A more balanced, public-private approach requires more choice, which requires improved and expanded quality assurance mechanisms to support a more diverse playbook of investment strategies, whether pursued by the public sector, private sector, or both. Most quality assurance systems in the talent marketplace are designed for specific types of investments (e.g., apprenticeship programs) or specific types of providers (e.g., universities and colleges) and exclude many types of innovations in service provision that may provide benefits to both employers and workers. These systems are also disconnected from one another and reinforce the silos in learning and talent development, often creating bright lines between the type of learning or training and the type of funding for which they are eligible.

To promote the “expands choice” principle in talent finance requires innovations in quality assurance systems that do not favor a particular type of investment or provider, but instead puts a stronger focus on outcomes consistent with the “outcomes-based” guiding principle. This increased focus on outcomes should also promote equitable outcomes for all learners, including low-income and disadvantaged populations consistent with the “equity-based” guiding principle.

With a more coordinated, modularized, and diverse ecosystem of quality assurance, providers can address a wide variety of priorities and outcomes important to government, employers, and others and can ensure any provider can receive multiple endorsements or levels of recognition at low-cost and with less burden. This is particularly important for supporting a more equitable talent marketplace where providers of education, training, and credentialing services can always be benchmarked against whether they have the systems and processes in place to consistently and reliably produce equitable outcomes with little to no variance between the outcomes of different student populations. For example, providers would be benchmarked on closing equity gaps in completion and credentialing rates and short-term and long-term earnings of program graduates while taking into consideration the relative starting points for those being served.

As part of the Talent Finance initiative, we will explore new approaches to quality assurance that expand choice for employers, learners, and workers alike. These new quality assurance systems and solutions will support public sector, private sector, and braided public-private financing and investment decisions and their use in selecting education, training, and credentialing providers. For example, these assurance systems and solutions can be used for corporate training and tuition assistance instruments that can address goals of providing qualified workers and expanding diversity and equity.

EXAMPLE 16 — REINVENTING QUALITY ASSURANCE TO SUPPORT TALENT FINANCE

There is an opportunity to reinvent quality assurance systems to meet the needs of new employer partnership models and to support and inform talent finance innovations. The Education Quality Outcomes Standards (EQOS) is one such example. This is a new quality assurance solution focused on learner outcomes for short-term education and training programs, such as bootcamps. This approach is consistent with employer-led quality assurance methods that the Chamber Foundation and Manufacturing Institute have published. An outcomes-based approach to quality assurance can be aligned with employer needs. This will allow for the business community, employer collaboratives, or individual employers to establish their standards of quality that can then be used to inform the underwriting of financing instruments, such as ISAs or to guide government investments and tax benefits.[32]

Recommendation 8: Provide More Comprehensive Financing Disclosures, Protections, and Transparency Requirements

An effective public-private talent financing ecosystem should promote the disclosure of information that assists all stakeholders to make informed and optimal decisions in the financing options for the education and skills to obtain a good job. This information should help stakeholders assess whether the financing is affordable and fair. A robust and dynamic data infrastructure should also help identify, measure, and assess/score risk from the perspective of the stakeholder (i.e., worker/learner, employer, financing entity, etc.).

The decisions stakeholders make related to financing are grounded in several key areas. The first is around the capacity of the worker/learner to take on the financing. The worker/learner and financing entities are both assessing and trying to predict the income potential that is likely to result from the educational or skills program. This, in turn, leads to assessments of the effectiveness of the educational or skills program to create value as measured by increased earnings potential, along with a prediction that the worker/learner will complete the program and the likelihood the worker/learner will fulfill the obligations under the financing.

Government policies, therefore, should promote the gathering and disclosure of relevant information that supports innovations in public and private talent finance that identify shared value and shared risks for employers, workers, and government. This includes performance data and information on education and skills programs that should promote equal access and nondiscrimination. It should also provide information to help workers and learners navigate education and skills programs that can increase earnings and value.

Similar to efforts in securities investment and consumer protection, appropriate disclosures must be made by stakeholders so that workers/learners can make informed decisions as they take more responsibility in managing their own talent investments.

Regulations and protections should be equally applied to both public and private investment and risk management instruments and risk measurement, assessment and scoring systems. They also should follow leading practices, regulations, and protections in the financial services industry and consumer protection such as truth in lending as well as affordability and fairness. Regulations and protections should also establish guardrails for making sure that both public and private talent finance instruments provide value with manageable risks and without long-term economic hardship.

Ultimately, disclosures and information should promote transparency and accountability by ensuring that all public and private instruments use common or shared terminology and data standards. Talent finance instruments should be easily understood and compared in making investment decisions. In addition, they should address innovations in risk assessment to ensure they follow the guidelines on fairness and equity.

EXAMPLE 17 — TALENT FINANCE PROSPECTUS

When investing in a mutual fund, an individual receives a mutual fund prospectus that provides relevant facts and complete information about the fund to help investors understand the risks and opportunities of an investment and make an informed decision. It generally contains details on investment objectives and strategies, fund performance, distribution policy, fees, and background about the fund managers. In addition, the risks of the investment are summarized early in the prospectus and explained in greater detail later in the document.

Similar to a guide for investing in a mutual fund, a talent finance prospectus should be the common practice going forward. Such a prospectus would bring together the relevant information from the public and private financing entities on the potential shared value and risks associated with the talent financing of the education and skills opportunity. It should provide sufficient information and disclosure to the worker/learner to make an informed decision on the opportunities and risks of the talent finance instrument.

Recommendation 9: Leverage Government Investments to Promote Diversity, Equity, and Inclusion

Consistent with the guiding principles of this initiative, employers and government should work together to explore how more balanced and aligned public and private finance and investment strategies — backed by stronger quality assurance approaches — can be leveraged to promote diversity, equity, and inclusion throughout the talent pipeline.

A more diverse playbook of finance opportunities will not by itself necessarily produce more equitable outcomes for society, the labor market, or economy. If finance and investment instruments are to yield more equitable outcomes, intentionality and leadership will be required. Through this initiative there is a real opportunity to promote new conversations about equity in finance, such as through the U.S. Chamber of Commerce's Equality of Opportunity event series.

More than having a conversation, through the Talent Finance initiative there are opportunities to pursue public-private pilot tests and experiments all across the country. And there is already promising work that can be built on. For example, the U.S. Chamber of Commerce has developed a partnership with Howard University, one of the nation's leading historically black colleges and universities (HBCU). Known as the Next-Gen Business Partnership, this internship program is designed to bring diversity to the workplace, create a stronger talent pipeline, and promote entrepreneurship. Partnerships like the Next-Gen Business Partnership are ripe for experimentation with new talent finance instruments, such as ISAs or Career Impact Bonds.

Public sector financing instruments can also be experimented with. For example, the Aspen Institute has advanced a number of recommendations for how to rethink Section 127 tax benefits to increase the focus of employer investments in tuition on equity populations.[33]

EXAMPLE 18 — TARGETING FINANCE INNOVATIONS TO OPPORTUNITY POPULATIONS

Leaders in finance are already leveraging innovations consistent with the guiding principles of Talent Finance initiative to better serve opportunity populations. For example, the Student Freedom Initiative, a new nonprofit, is focused on reducing the loan burden on Black students. This is done through a new ISA fund that will be made available to STEM majors at 11 historically black colleges and universities (HBCUs).

Building on its decade-long work in Social Impact Bonds, Social Finance launched the Career Impact Bond (CIB) in 2019 to help the unemployed and underemployed access industry-recognized training programs, gain in-demand skills, and land good jobs. An impact-first ISA, the CIB is backed by impact investors who cover a portion of the tuition costs and fund important wraparound support services. The CIB can also be anchored with public and philanthropic funding in an evergreen "pay it forward" structure. Finally, the CIB can be deployed with employer investments. The approach aims to achieve better outcomes and mitigate downside risk for students and workers.

Maycomb Capital has launched the Community Outcomes Fund, a dedicated pool of capital for outcomes financing — previously known as social impact bonds. The Fund's capital is used to loan upfront dollars needed for programs serving a targeted opportunity population, where the repayment of the loan comes from the proceeds of an outcomes-based contract that the service provider holds with the government. This aligns government spending with outcomes in communities as government dollars are released when program participants achieve results. An innovation like this can be enhanced by further aligning with employer investments where employers also benefit from the outcomes. In such an instance, the employer could play a variety of roles. One role it could play is to be an outcome payor alongside the state or local government, aligning the employer's training dollars with outcomes in communities.

Lastly, many low-income and opportunity populations do not have the cash flow to front education and training expenses that are eligible for reimbursement by employers through tuition assistance benefits. Finance organizations like credit unions can solve this problem by providing short-term loans to workers and then be reimbursed by the employers through their tuition assistance benefit programs or through their financial wellness program.

All these innovations and more should be supported by public policy where the government is a participant in the talent finance solution.[34]

GOVERNMENT POLICIES FOR BUILDING STRONGER PUBLIC-PRIVATE RISK MANAGEMENT SYSTEMS

In the previous section, we made the case that much like employers and the private sector need a new role in talent finance and risk management in the new economy, so too does government. We covered what that means in a new public-private consensus and its implications for the talent finance and investment strategies pursued by government. And much like government must continue to play a major, albeit different, role in financing upside opportunity investments in education, training, and credentialing, governments also will continue to play a major role in downside risk management.

The United States has historically used a public-private approach to risk management with employer benefits playing a major role, especially in healthcare and retirement. Over the last few decades, the role of employers in risk management has declined relative to government, resulting in a shifting of risk onto government and workers themselves.[35] However, employers are now exploring major innovations in risk management through employee benefits that can be scaled through government policies.

Once again, government can be a powerful catalyst in promoting employer leadership and private sector innovation in risk management. What is more, this can be done in ways that are consistent with our tradition of braiding public and private sector risk management solutions.

As shown in the Talent Finance Framework (see **Figure 1**), federal, state, and local governments have a wide variety of instruments or tools that can encourage employer leadership and private sector innovation in building stronger public-private risk management systems. We will continue to use the Framework to organize our thinking and approach for employers and the private sector, but now with a focus on advancing new ideas and thinking for how government and public policy can better address downside risk management opportunities in partnership with employers and the private sector.

What follows are recommendations for how to reimagine the public sector role in risk management by building from and leveraging the recommendations made for employers and the private sector. We begin with exploring how to improve employment and income risk management. We conclude by exploring how to improve the safety net through public-private collaboration.

Recommendation 10: Improve Employment and Income Risk Management

In the new innovation-based economy that will disrupt traditional career pathways, individuals and families — much like employers — will face increased volatility, particularly when it comes to fluctuations in skills needs, employment, and income. However, anticipating and managing risk is not a foreign concept to well-functioning labor markets. Risk associated with the vagaries of employment and income is not something to be eliminated as much as managed, and managed effectively. As such, employers and government leaders should begin exploring a public-private approach to employment and income risk management that provides incentives for employers to expand their economic security benefits, reduces the time spent for workers in unemployment or underemployment, and mitigates against steep drops in household earnings.

The UI system is a critical part of the social insurance system in the United States, yet it does not currently serve employers or employees as well as it could. As a federal block grant program, state variation among systems is significant and challenging for employers with a multistate footprint. Beyond the administrative burdens of navigating multiple UI programs, the current system was built for a different age. One of the glaring holes in the current UI system is that it covers only traditional workers. The pandemic has shown that contract workers and workers traditionally not eligible for UI are filing at nearly a 1:1 rate. A modernized system needs to account for new work arrangements and evolving employer-employee relationships. With the growth of remote work, the same challenge exists in identifying which state's UI system should govern. For example, does a remote worker in California who works for a Georgia firm apply to California or Georgia?

A modernized and nationally standardized UI system can be facilitated through different joint investments in social insurance between the public and private sectors — and include protections for self-employed and contract workers. Rather than many different systems in each state that

miss covering a significant number of workers in the economy, a modernized system can provide employment supports and protections that travel with workers and are more easily understood across geographies, by workers and firms.

The system can also better serve and support workers in transition. The current system largely focuses on returns to suitable work, but experiences from the Great Recession and likely from the pandemic will show that many layoffs are permanent, and unfortunately the system does not facilitate skill building or job transitions at the scale needed. This can be ameliorated by developing standardized training funds and supports for dislocated and laid off workers that facilitate their preparation for employment in the future. Modernizing this system and pulling in training will require joint investment among individuals, firms, and the public sector.

This modernization of the federal-state UI system also could be accompanied by innovations in public-private income insurance and a modernized work share program that keeps people employed longer, even during periodic economic downturns. The modernization also could involve efforts to better align and braid public and private benefits and build on employer innovations in providing severance pay and outplacement assistance as well as retraining assistance.

EXAMPLE 19 — EMPLOYMENT AND INCOME INSURANCE

Much like government has incentivized markets for healthcare products and insurance, so too can it incentivize markets and spur innovation around new employment and income insurance products. For example, federal and state governments can create tax incentives and credits for employers and workers that offset the cost of purchasing employment and income insurance policies. An exchange of new employment and income insurance products that are priced based on risk can also benefit from direct public subsidies that buy-down the risk, particularly for opportunity populations.[36]

EXAMPLE 20 — MODERNIZING WORK SHARE

Work share, or short-time compensation, is a tool little used in the United States, but it has enjoyed large uptake in European countries like Germany. It is designed to prevent layoffs during an economic downturn and it does this by providing incentives for employers to reduce the number of hours their employees work rather than laying them off. The reduced hours and earnings are offset by prorated unemployment benefits. Work share can be improved by making it a coordinated benefit between the federal and state government to make it more attractive and affordable for states to offer. It can also be aligned with private sector innovation and be supplemented by employer-backed employment and income insurance products.[37]

EXAMPLE 21 — UNEMPLOYMENT INSURANCE (UI) MODERNIZATION

The UI system is outdated. A modernized UI system could create national standards for systems such that employers would have lower administrative costs in managing UI premiums, and workers could have more predictable compensation. A more modernized system would help encourage public-private partnerships in the management of layoffs and could utilize expanded programs like short-time compensation and work sharing and better capture potential "partial" unemployment claims.

The modernized system would largely find ways to encourage reconnections with work and reskilling to growing and in demand positions. The current system is not well-equipped to support the rapid job transitions often necessary after a layoff that happens today. Better integration with the workforce development system is essential.

In addition, administrative changes are necessary to keep the system solvent. Wanderer presents three major options — maintaining the current federal/state system with expanded federal standards, a single federal program administered through the U.S. Department of Labor, and a national program administered by the Social Security Administration.[38] These changes in UI systems may be able to be balanced or augmented through severance, outplacement, and retraining benefits offered by employers with incentives provided by government.

Recommendation 11: Improve Public-Private Safety Net Management

In addition to better managing risk associated with employment and income volatility, employers and government leaders also should explore a public-private approach that provides incentives for employers to expand their financial wellness programs and employee assistance and support services (e.g., financial management, emergencies savings, pay advances, tax preparation, and child and family care services). Increasingly, employers are providing support to front-line workers to improve employee retention and to prevent temporary work stop-outs due to a family or health emergency. This increased interest among employers should be leveraged and improved upon as part of the Talent Finance initiative so that it can be part of a more comprehensive public-private solution for managing financial wellness and mitigating the downside impact of income volatility.

An expansion and improvement of employer financial wellness and employee assistance programs should be done in coordination with the redesign, consolidation, and streamlining of public safety net programs. This effort should establish more consistent income thresholds, work incentives, and eligibility criteria for workers facing frequent fluctuations in earnings at, or near, the poverty line. This approach would improve the alignment and integration of public and private benefits and services in ways that would promote work and employment, while supporting workers in building their wealth and accessing talent development financing opportunities to pursue economic advancement.

EXAMPLE 22 — IMPROVING THE SAFETY NET AND THE EARNED INCOME TAX CREDIT (EITC)

Employer financial wellness programs provide risk mitigation instruments such as advance payments, savings accounts, and tax planning that allow workers to maintain financial stability and resilience in the face of earnings fluctuations and unforeseen household expenses. These programs encourage workers to accumulate emergency savings for improving financial resilience. The EITC is one of the largest and most cost-effective federal government tools for reducing poverty and improving financial stability while encouraging work for low- and moderate-income workers. There have been many proposals on how to encourage EITC recipients to use their tax benefits to establish and maintain savings. A more public-private approach would explore how to provide incentives for employers to provide financial wellness programs in coordination with government efforts to redesign the EITC and other safety net programs to improve the financial stability and resilience of American workers.[39]

TALENT FINANCE METRICS, RISK SCORING, AND HR ACCOUNTING

In determining where to start with a new consensus for the new economy, we began with transforming the role of employers and the private sector in talent finance and risk management. From there, we discussed implications for government finance and investment in both talent development and risk management instruments. We used the Talent Finance Framework (see **Figure 1**) and guiding principles to organize our thinking around the new consensus and new talent finance instruments for both upside opportunities in education, training, and credentialing, as well as downside risk management for employment and income volatility.

We now shift our attention from public-private talent finance instruments to the enabling reporting and data infrastructure that will make those innovations scalable and successful. As shown in the Talent Finance Framework (see **Figure 1**), the talent finance ecosystem is made of many different types of issuers and recipients, using any different types of instruments and channels. Regardless of whether talent finance instruments are driven by the public or private sectors — or if they are for upside or downside opportunities — these tools will rely on data and reporting if they are to be successful and gain widespread adoption and use. They also rely on a data and technology infrastructure that can consistently and reliably produce data that can be used to power talent analytics and insights that can promote transparency, power accountability, and inform underwriting.

Employers and the private sector — working in partnership with government and public policy leaders — can be a powerful catalyst in promoting new thinking around talent finance metrics and HR accounting and can be done in ways that are public-private. We begin with: (1) improving human capital accounting and reporting standards; (2) improving risk identification, measurements, assessment and scoring; followed by (3) establishing public-private data standards for talent finance.

We conclude in the next section with implications for the emerging public and private data and technology infrastructure that supports the talent marketplace.

Recommendation 12: Improve Human Capital Accounting and Reporting Standards

The public and private talent finance ecosystem of issuers, receivers, and related financing and channel partners use a variety of public and private metrics to manage and report performance. On the public side, governments use metrics for both federal and state reporting and accountability systems and consumer information systems. On the private side, employers use metrics for benchmarking and public shareholder reporting.

In addition, private investment entities use metrics for reporting to funders and stakeholders. These metrics are important to the guiding principle on “transparency and accountability.” They also are important in focusing talent financing instruments that are designed to support economic opportunity consistent with the “equity-based” guiding principle. Currently, public and private metrics are different and, in some cases, inconsistent, thereby creating barriers for public-private collaboration. One of the fundamental tensions is related to how spending on talent should be viewed. In some cases, the spending has qualities of capital investment. In other cases, the spending is more like an operating expense. These distinctions have a significant impact on how the spending should be treated, accounted for, and measured by public entities and private entities.

There have been many public and private initiatives to improve alignment within both the public and private sectors. Proposals have been made on how to align and standardize public metrics across all education and workforce grant programs (e.g., WIOA, Perkins) and for all public and private education and training providers, including public universities and colleges and WIOA eligible training providers (e.g., employment and earnings metrics). There also have been proposals for standardizing how employers report human capital investments and risks to investors and stakeholders (e.g., ISO 30414: Human Resource Management: Guidelines for Internal and External Human Capital Reporting).

These public and private metrics are many times based on widely accepted accounting and data standards in the public and private sectors. For example, employers follow generally accepted human resource accounting principles and practices when managing and reporting on their investments in corporate training and the value of their human capital. Federal and state governments also follow widely accepted public finance and accounting practices when estimating the level and return to government tax expenditures.

The Talent Finance initiative should explore changes in human resource accounting and promote leading professional practices for employers that: (1) treat human capital investment similarly to other types of capital investment; (2) provide guidance on how to measure human capital investment costs and returns and how to treat these investments as capital or operating expenditures; and (3) improve how employers report human capital investments and risks for internal and external reporting to stakeholders.

This effort should explore similar standards and leading practices in reporting for other investors in human capital, including investment funds and government. It also should explore the alignment of public and private accounting standards and metrics for reporting investment costs and returns to address the goals of competitiveness and advancing economic opportunity and inclusion. Finally, it should explore how government and private investors (e.g., social impact investors) can use these metrics and standards to improve economic opportunity and diversity, equity, and inclusion.

EXAMPLE 23 — MODERNIZING HUMAN CAPITAL REPORTING

The International Organization for Standardization (ISO) released ISO 30414: Human Resource Management: Guidelines for Internal and External Human Capital Reporting, which provides guidelines and associated metrics for internal and external human capital reporting (HCR). This represents an initial step to gain public and private consensus on leading HR metrics that can be used for a variety of purposes, including talent finance. The HR metrics addressing diversity also provide a starting point for addressing diversity, equity, and inclusion in employer HR policies, including talent development.[40]

Recommendation 13: Improve Risk Identification, Measurement, Assessment, and Scoring

An effective public-private talent financing ecosystem should provide the framework for employers, workers, service providers, government, and other private investors to manage new and rapidly changing risks. The framework should assist all stakeholders in creating shared value and managing shared risks. It is essential to identify, assess, measure, and score shared value and risks in ways that are fair and equitable and expand choice. As a result — and to increase prudent investment options and expand economic opportunity — risk identification, assessment, and measurement is a major and necessary foundation for government and employers and private sector innovations in talent finance.

The talent finance initiative should leverage innovations and practices in the financial and investment services sectors, as well as other new thinking, to pioneer innovations for risk identification, assessment, measurement, and scoring in the talent marketplace. Initial efforts should address both worker and investor risks in talent and skills development. Key factors may include traditional considerations — such as employment, income, debt, bill payment, and credit history — as well as new considerations such as the effectiveness of the education or skills program to increase earnings and the worker/learner's ability to persist and complete the program and to fulfill the financing obligations.

As an example, a worker with high investment risks on traditional measures could reduce his or her overall risk score by choosing an educational institution or skills program with high completion rates, demonstrated pathways to timely employment, and good earnings. The educational institution or skills program might also provide effective career guidance and coaching to ensure the worker/learner's success as well as a guarantee to reimburse the worker/learner if expected outcomes are not achieved. Favorable investment options could be provided by the investors who have partnerships with these preferred universities and colleges and who could agree to further share in additional value or risks associated with repayment of the financing (e.g., loan or income share agreement).

These efforts should also be adapted to address employment and income risks that are associated with employers, industries, and occupations. For example, some workers may face a combined set of employment and income risks with different employers in different industries because of shifting staffing patterns and higher risks of skills obsolescence. Talent finance instruments should be developed to effectively manage this risk of skills dislocation and the upskilling or reskilling necessary for the worker to make transition to a new job.

A new public-private partnership should begin the process of exploring the next generation of risk-based assessment and scoring to create a more transparent, accountable, and equitable talent finance ecosystem.

EXAMPLE 24 — A TALENT OPPORTUNITY SCORE

Innovations in public and private talent finance will require the use of advanced predictive analytics tools along with other sources of information and data to help all talent finance stakeholders make more informed and effective decisions. These tools should inform risk management and development of talent finance instruments. Predictive tools should advance equity and accessibility and should never be used to harm a worker or learner.

The time is past due to come up with a talent opportunity score to provide a more accurate representation and prediction of value and risks that public and private partners along with workers can use to understand and manage that value and risk. Such a score would help identify and rate the level of risk someone faces and the action needed to address the risk or increased value, which is critical if we are to develop better talent finance products, services, and strategies to support opportunity populations. In other words, we cannot adequately address someone's risk or increased value in the talent marketplace if we are blind to it.

Predictive analytics has been around and uses data, algorithms, and machine learning to identify and assess the likelihood of a future outcome based on historical data. It is used in many settings to detect fraud or equipment failure and to predict populations trends or risks of chronic disease. New tools will need to be developed for Talent Finance, but there are existing predictive tools that would inform a talent opportunity score:

- Fast Forward Works has developed an assessment tool based on a skills inventory is a scientifically validated, cost-efficient way to match people's skills and dispositions with educational opportunities and careers. The tool presents questions and problems to evaluate natural aptitudes and identify talents. Using an algorithm of fundamental job skill patterns possessed by highly valued employees, the Fast Forward Works assessment can measure candidates for specific skill patterns and look for the skills that matter.[41]

- FICO scores, created by the Fair Isaac Corporation, are used by lenders to assess credit risk and to support decisions on lending. FICO scores factor in a wide variety of considerations — such as payment history, amounts owed, length of credit history, new credit, and credit mix — to come to a numerical score between 300 and 850. The higher the score, the more creditworthy you are, which increases the likelihood of securing a loan and getting a better (i.e., lower) interest rate. There are also tools that can assist consumers in improving their FICO scores. A score similar to FICO can be developed to score talent opportunity and can inform a wide variety of talent finance instruments. Tools can also be developed to improve a talent opportunity score. In addition, predictive tools will also need to be developed to help assess and score the effectiveness of the educational or skills program to create value as measured by increased earnings potential, along with a prediction that the worker/learner will complete the program and the likelihood the worker/learner will fulfill the obligations under the financing.

Predictive tools will also need to be developed to help assess and score the effectiveness of the educational or skills program to create value as measured by increased earnings potential, along with a prediction that the worker/learner will complete the program and the likelihood the worker/learner will fulfill the obligations under the financing.

Recommendation 14: Establish Public-Private Data Standards for Talent Finance

Public and private metrics and accounting standards inform public and private data standards that define critical data elements, definitions, and formats for data systems. For example, employers use HRIS systems to manage human capital based on vendor-specific or open data standards. Governments use a wide variety of government-specific data standards for agency or program-level reporting as well as open data standards.

One major challenge in both the public and private sectors is establishing the underlying data standards needed to fully operationalize the metrics in ways that make them fully comparable, which is a prerequisite for full transparency. Another challenge is establishing data standards needed to fully braid public and private investments. An example is how to define the data included in measuring the fully loaded costs associated with public and private investments, such as the costs of participation in training and development and how the outcomes will be measured.

The United States is unique in encouraging federal agencies to use open public-private data standards when available and useful. The T3 Innovation Network — a Chamber Foundation-led open innovation network supporting the digital transformation of the talent marketplace — has been promoting the use of public-private data standards to support a wide variety of public-private applications including talent financing. The T3 Network is exploring how to establish a public-private data standards collaborative for the talent marketplace similar to data standards collaboratives for healthcare and other domains. This initiative would provide the forum for federal and state government agencies, data standards organizations, and other stakeholders including employers to work together to align and harmonize public-private data standards. This type of collaborative has the potential to address data standards required for talent finance applications.

This initiative also should explore public-private data standards necessary to support human resource accounting and finance and the underwriting and management of the full range of public and private investment and risk mitigation instruments. This effort can build on current T3 Innovation Network efforts to establish a public-private data standards collaborative that can promote the coordination and use of public-private data standards in the talent marketplace.[42]

EXAMPLE 25 — LESSONS LEARNED FROM ELECTRONIC HEALTH RECORDS (EHRs)

EHRs are based on public-private data standards and have been used to not only improve the delivery of healthcare services but also to improve coding and billing practices for both public and private healthcare insurance providers. Public-private data standards for Learning and Employment Records (LERs) can provide similar benefits for both public and private talent finance instruments. LERs are similar to EHRs and have the potential to improve education and hiring outcomes in the same way that EHRs have improved healthcare delivery. What makes LERs unique is their ability to be fully transferable and recognized across student information, learning management, employer HR, and military systems. LERs go by many names and are also referred to as an interoperable learning record (ILR).[43]

TALENT FINANCE DATA AND TECHNOLOGY INFRASTRUCTURE

We now turn our attention to the enabling data and technology infrastructure needed to power the next generation of public-private talent finance instruments. Much like emerging talent finance innovations require metrics, accounting, and reporting to scale and grow, they also require a data and technology infrastructure that can consistently and reliably produce data that can be used to power talent analytics and insights that can promote transparency, power accountability, and inform underwriting.

The data and technology infrastructure of the future for the talent marketplace will be public and private, distributed, and decentralized. As such, it will require that employers and the private sector work together to build the infrastructure while working in partnership with government and public policy leaders.

Federal and state governments have already developed extensive data and technology infrastructure designed to support evidence-based policy and labor market and consumer information, including the outcomes associated in government investment in education and training. Some major examples include the College Scorecard and state longitudinal data systems (SLDS).

Employers and private investors also have created extensive data and technology systems. For example, employers have created human resource information systems (HRIS) for capturing costs and outcomes associated with hiring, training and development, and promotion and retention. Private investors have their own investment reporting systems.

However, these public and private data infrastructures are siloed and provide limited access to those driving innovations in talent finance, including access to data needed to promote outcome-based financing that addresses the dual goals of improving competitiveness and closing the opportunity gap. These public and private data infrastructures also provide limited access to those driving innovations around how individuals can access and be empowered with data about their learning and employment history, which is a critical innovation needed to support financial innovations such as Lifelong Learning Accounts.

We begin with a recommendation on how to build the data and technology infrastructure necessary to produce and share Learning and Employment Records (LERs) at scale, which is critical for the guiding principle of empowering workers. We conclude with a recommendation on how to build public-private data collaboratives to support and grow a more transparent, equitable, and accountable talent finance ecosystem.

Recommendation 15: Build the Data and Technology Infrastructure Necessary to Produce and Share Learning and Employment Records (LERs) at Scale

The T3 Innovation Network — a Chamber Foundation-led open innovation network supporting the digital transformation of the talent marketplace — is exploring how to create a more open and integrated public-private data and technology infrastructure based on open public-private data standards.

This effort is focused on some key building blocks critical for public and private innovation in talent finance. This includes producing and sharing comprehensive LERs that can empower learners and workers to use their own data to pursue economic advancement opportunities.

An LER is a digital record of learning and work that can be linked to an individual and combined with other digital records for use in pursuing educational and employment opportunities. An LER can document learning wherever it occurs, including at the workplace or through an education experience, credentialing, or military training. It can also include information about employment history and earnings. LERs are similar to electronic health records (EHRs) and have the potential to improve education and hiring outcomes in the same way that EHRs have improved healthcare delivery. What makes LERs unique is their ability to be fully transferable and recognized across student information, learning management, employer HR, and military systems. LERs go by many names and are also referred to as an interoperable learning record (ILR).

This LER data infrastructure is critical to implementing certain talent finance innovations, such as Lifelong Learning Accounts. It must also be supported by an open competency data infrastructure that can be used by employers, talent development providers, and public and private investors for promoting investment in transferable competencies and skills that create shared value.

EXAMPLE 26 — LEARNING AND EMPLOYMENT RECORDS (LERS)

An LER is a digital record of learning and work that can be grouped together with other LERs for use in describing an individual's abilities when pursuing education and employment opportunities. An LER can document learning wherever it occurs, including at the workplace or through an education experience, credentialing, or military training. It can also include information about employment history and earnings.[44]

The American Workforce Policy Advisory Board is coordinating a number of LER pilots with large corporate partners, such as IBM and Walmart, to demonstrate how they can be used to support the career advancement of workers. The T3 Innovation Network is similarly facilitating a diverse ecosystem of LER pilots globally through the newly launched LER Resource Hub, which features open data standards and other resources needed to create truly interoperable records of learning and employment.[45]

Recommendation 16: Build Public-Private Open Competency Framework and Data Collaboratives to Support and Grow a More Transparent, Equitable, and Accountable Talent Finance Ecosystem

Public and private talent financing instruments are only scalable and effective when they have access to high-quality public and private data based on widely accepted metrics and accounting and data standards. One major building block as described earlier is a distributive network of open competency and skills frameworks that can be used to promote competency and skill transfer in the talent marketplace. This work is already being explored by the T3 Innovation Network. One part of this work is an open competency framework collaborative that can provide easy access and utilization of both public and private competency frameworks, including those created by employers, employer organizations, industry and professional credentialing organizations, and public and private service providers. Building on the efforts of the T3 Innovation Network, the Talent Finance initiative should work with employers, the private sector, and government to advance the open competency framework infrastructure.

Public-private data collaboratives are another building block that can use de-identified, individual-level records, and related data, for a variety of public and private applications, including talent finance applications. Work is already underway to produce and share LERs at scale and also to combine them with other aggregated data in new and innovative ways. For example, the National Student Clearinghouse, Manufacturing Institute, and Census Bureau have been working collaboratively to combine individual-level education data with industry credentialing data to drive new analytics and applications. In addition, state governments have been sharing data through new collaboratives to drive new analytics to inform education and workforce policy decisions.

Building on the efforts of the T3 Innovation Network, the Talent Finance initiative should work with employers, the private sector, and government to advance the LER data infrastructure and to share de-identified, aggregated data about where learning occurs and with what outcomes. The data that emerges will improve upon the work of existing data collaboratives but also power a new generation of talent analytics that will inform career pathway systems and tools; labor market tools; public accountability systems; and the underwriting of new public and private talent finance instruments.

The Talent Finance initiative should work with the T3 Innovation Network to explore how to expand access to, and improve the utilization of, a public-private data and technology infrastructure through data collaboratives. This includes supporting employers and employer collaboratives in managing and evaluating talent financing innovations. The Talent Finance initiative also includes supporting employers and government in developing and testing public-private financing innovations, such as the testing of different types of tax incentive instruments for current employees as well as new hire training and development. Finally, the Talent Finance initiative supports private investors in developing and managing financing innovations, including social impact investors who partner with nontraditional service providers (e.g., community-based nonprofit organizations) and who provide alternative pathways and advancement opportunities for low-income and disadvantaged populations.

EXAMPLE 27 — NEW PUBLIC-PRIVATE DATA COLLABORATIVES FOR TALENT FINANCE

As the data infrastructure becomes more robust, it will generate more data about where learning happens and with what outcomes than ever before. Data held by a massive network of public and private partners and can be linked to individuals through LERs. Aggregated and de-identified LER data can be combined with structured data about jobs (e.g., the Job Data Exchange) and more granular data from employers (e.g., TPM employer collaboratives as data collaboratives), to drive the next generation of talent analytics. These analytics can be leveraged to inform a diverse ecosystem of public-private talent finance instruments as well as support the implementation of outcomes-based financing strategies and policy. It can also be a powerful tool to inform and improve new risk assessment and scoring tools.

BUILDING A TALENT FINANCE MOVEMENT — A CALL TO ACTION

Given the challenges and opportunities the new economy brings, we need a talent finance approach fit for our time, not one built for a different economy and era. This paper has sought to make the case that this is nothing less than an imperative if the United States is to meet the moment and grow its economy, maintain its global competitiveness, and close the opportunity and equity gaps.

We have argued that what is needed is a public-private approach, one that can forge a new consensus and strike the right balance between the roles of employers, workers, and government in talent finance and risk management. For these reasons and more, the Chamber Foundation is launching the Talent Finance initiative and advancing a new framework for how we finance and invest in our workforce.

What we seek is nothing less than a paradigm shift. Should we be successful with implementing the recommendations in this paper, you can begin to imagine a transformed experience for learners and workers in how they navigate education, training, and employment. **Figure 2** provides just such a comparison between how many experience the world today and how they could experience the world differently.

Figure 2: Transforming the Experience of Learners and Workers

CURRENT STATE

Meet Robert, a 23-year-old male applying to a college to secure a BA in business administration.

Robert learned about the nearby program through television advertisements and brochures. He needed to take out a federal loan to pay for tuition and he covered the program fees out of pocket. Robert was able to secure only part-time work during his time as a student and even then it was inconsistent and not related to his program of study. Robert needed an additional year to complete the program, which meant more debt and forgone earnings. By the time Robert graduated he left with $33,000 in debt.

When Robert graduated it took him an additional 18 months to secure an entry-level job that did require his degree but did not have clear pathways for career advancement. Robert's employer provided tuition assistance benefits to support additional education and skills development. After taking on so much debt and having spent so much time in the classroom, Robert was reluctant to front the thousands of dollars needed and therefore passed on the opportunity to enroll in programs in emerging business fields such as data analytics or digital marketing.

The city where Robert lived experienced an economic downturn resulting in him becoming unemployed. He qualified for unemployment insurance, but it was not enough to cover his bills and he stopped making payments against his outstanding student loans. When he landed a job after six months, it paid less than when he started and was a role similar to his entry-level position. He was also dangerously close to defaulting on his student loans. Robert struggled with the decision to stay the course or to go back to school for additional skills and take on even more debt with no certainty of a better outcome.

FUTURE STATE

Meet Sarah, a 28-year-old minority female seeking a postsecondary education to start a career in cybersecurity. After high school, she worked full time in retail, starting at an entry-level position and moving up to assistant manager. While Sarah has enjoyed her job, the experience, and having a paycheck, she felt it was time to secure a job that provided better pay, more advancement opportunities, and financial security.

Sarah looked online and found a list of chamber of commerce endorsed programs. Two programs were within 20 miles and they received the endorsement based on the outcomes they achieved for program graduates. One was an earn and learn program, which Sarah liked because she could not afford to stop working.

Sarah made an appointment to speak to an admissions officer, who began by looking at Sarah's Talent Opportunity Score (i.e., a risk-based score used to inform financing decisions). Given Sarah's profile, the admissions officer flagged that she did face a number of access and completion risks, but the program she was looking to attend significantly mitigated those risks and improved her score. Her score also made her eligible for a publicly subsidized, employer-backed ISA. The admissions officer also suggested a couple of elective courses that could position Sarah well for future changes in the economy.

Her employer of record was a staffing agency that paid the cost of tuition and fees in full and secured, for Sarah, part-time employment at one of the employers that were backing the ISA fund. Upon completing the program, she was given competitive preference for hiring.

Sarah was now working full time with zero debt. She provided 5 percent of her earnings back to the fund that made an equity investment in her. She would normally have paid 7 percent of earnings, but Sarah had qualified for a publicly subsidized rate given her Talent Opportunity Score.

Everything was going well until a pandemic hit and Sarah found herself temporarily dislocated from her job. Because Sarah used an ISA and her income dropped below a threshold, she no longer had to share her earnings. What is more, Sarah had taken advantage of an income insurance policy that, if activated, would protect her earnings up to 80 percent for a full six months, which could provide the opportunity to add new and more relevant skills.

Lastly, Sarah had a lifelong learning account where her employer provided $500 each year and a dollar for dollar match. Should Sarah wish to go back to school and reskill, she could use her account which had $3,300 already saved.

This initiative seeks to do more than simply advance a new framework for organizing the talent finance ecosystem, it also seeks to forge a new consensus and to build a movement. Similar to other Chamber Foundation-led initiatives, this effort will build a broad-based network of public and private partners and stakeholders to explore the paper's recommendations and, more importantly, take action.

We will begin by using the Talent Finance paper and initial set of recommendations to kick off a virtual event series. This series will provide public-private forums to dive deeper into the topics raised and recommendations made throughout the paper. The event series will be followed by the release of the previously mentioned SHRM survey findings that will address employer adoption of and interest in talent finance innovations including public-private approaches. Leading up to and through the event series the Chamber Foundation will be curating interviews, research, best practices, and other content to help enrich the discussion and raise awareness of the initiative and the partnerships that follow.

Following the initial series of forums, the Chamber Foundation plans to kick off a series of design workshops. The purpose of these design workshops will be to further explore, document, and curate new public-private talent finance instruments. They will also be used to identify promising pilots and partnerships where there is strong or emerging employer leadership and where there are early adopters of new talent finance products and services.

The design workshops will use tools and templates to help participants design their own talent finance innovation. These tools will provide templates that enable innovators to identify where their solution fits in the talent finance ecosystem and how it can be designed in ways that are consistent with Talent Finance's guiding principles. The design workshops will also allow innovators to begin exploring HR accounting standards and other reporting metrics needed to ensure that innovations create shared value, are transparent, and can grow and scale. They will also provide opportunities to explore the underlying data and technology infrastructure needed to make them work.

We implore you to be part of the change we need, so that together we can promote economic advancement for workers, learners, and employers, while also closing the opportunity gap. If you or members of your network are interested in joining the movement, contact Jason A. Tyszko, vice president, U.S. Chamber of Commerce Foundation, at **jtyszko@uschamber.com**.

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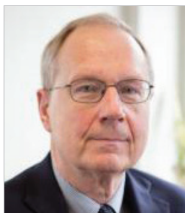

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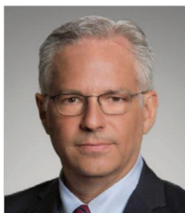

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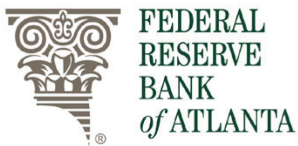
ACKNOWLEDGEMENTS

THANK YOU TO OUR PARTNERS



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*Please note, while members of the review committee provide insight and opinions on the draft white paper and initiative, this does not imply an endorsement.

ENDNOTES

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