It is wonderful to join you all at the Brookings Institution today to talk about occupational licensing. While the study of occupational regulation has a long history, dating back to the days of Adam Smith, recently more academics and policymakers have begun to recognize the importance of this issue and its effects on the labor market—a trend that is starting to catch up with the growth in occupational licensing itself.¹ I want to thank the scholars at Brookings, including Ron Haskins who organized this event today, for the role they have played in this increased awareness.

When designed and implemented carefully, licensing can offer important health and safety protections to consumers and the public, as well as benefits to workers. However, licensing policies can be designed in many different ways, and the ways in which they are designed and implemented affect workers’ access to jobs, the wages they are paid, the ease with which they can move across State lines, as well as consumers’ access to essential goods and services.

According to recent data, 25 percent of workers are in occupations requiring a State license, up from less than 5 percent in the early 1950s. Licensing requirements vary dramatically from State to State, and cover workers ranging from physicians and lawyers to barbers and manicurists.

Today, I am going to discuss this growth in occupational licensing in the broader context of what appears to be the growing importance of “economic rents.” Economists define rents as the return to a factor of production like capital, labor, or land that exceeds what is needed to keep that factor of production in the market. Examples of such rents include monopoly profits and the unearned benefits of preferential government regulation.

The canonical economic explanation of income inequality is grounded in competitive markets, in which changes in technology and education shift the supply and demand for labor in a way that increases the dispersion of wages. However, a growing number of economists have argued that the growing prevalence of economic rents has also played a critical role in the rise of inequality.² According to this “rents view,” investors or highly-paid workers are receiving much more income than they would require to undertake their production or work. In addition, the allocation

¹ Adam Smith. 1776. An Inquiry into the Nature and Causes of the Wealth of Nations, Book I, Ch. 10, Part II.
of time and energy to the pursuit of rents (“rent-seeking”) hurts productivity by diverting that capital away from more innovative pursuits. Thus, policies designed to reduce rents can both reduce inequality and improve productivity, defying the oft-stated view that there are always tradeoffs between efficiency and equity.

One such policy—the subject of today’s forum—is removing overly burdensome and unnecessary occupational licensing requirements. In these remarks, I will summarize a recent report that was prepared by the Department of the Treasury’s Office of Economic Policy, the Council of Economic Advisers (CEA) and the Department of Labor. I will also talk about our Administration-wide efforts to reduce overly burdensome and unnecessary licensing, including the work of the Department of Defense (DoD) to enable service members to earn civilian licenses and credentials, a call to action by First Lady Michelle Obama and Dr. Jill Biden to reduce the licensing obstacles faced by military families and returning veterans, the President’s Budget proposal to assist States in licensing reform through grants at the Department of Labor, our efforts to raise awareness of the issue through our report and forums like this, and our outreach efforts to get States to adopt the best practices I will outline today.

**Effects of Rents on Income Inequality and Efficiency**

Economic rents can exacerbate income inequality through two principal channels. First, increases in the aggregate level of rents tend to skew the income distribution, since these rents are unequally distributed to begin with. Second, changes in the distribution of rents (regardless of their level) can increase inequality. Importantly, both the expansion and the redistribution of rents are often achieved through unproductive “rent-seeking” behavior among private actors. As a result, both channels threaten not only to increase inequality, but also to reduce efficiency.

Since rents typically accrue to the top of the income distribution, increases in the aggregate level of rents tend to directly increase inequality. For example, firms can engage in anti-competitive behavior (forming monopolies or oligopolies) to raise prices and capture more rents for their investors and management. Under this view, fostering more competitive markets will increase efficiency while reducing inequality. A number of policy mechanisms designed to reduce aggregate rents—supported by economists ranging from Milton Friedman to Joseph Stiglitz—can help achieve this, including increasing antitrust enforcement, reducing zoning and other land use restrictions and appropriately balancing intellectual property regimes.

The second channel through which rents increase inequality is the increasingly unequal division of existing rents. For example, given frictions in labor markets, the job matching process can produce a surplus that is split between employers and employees based on their relative bargaining power. As worker bargaining power in the United States has diminished due to decreased unionization and increased globalization, this division has increasingly favored

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employers or managers. Under this view of rents, the goal is less to use competition to reduce rents and more to ensure that they are distributed fairly, for example by expanding collective bargaining and worker’s voice more broadly.

As I will discuss in greater detail, the growth of licensing appears to be one of the ways that rents and the reallocation of rents have increased inequality. Unlike labor unions, which can reduce inequality by decreasing variation in wages and reallocating rents from employers to workers, licensing does not appear to reduce wage dispersion for licensed workers. In fact, licensing requirements can exacerbate inequality by shifting resources to those who obtained licensed jobs and away from those who cannot and reallocating rents from often lower-income consumers to producers. This is especially problematic when obtaining a license requires paying large upfront costs, including tuition and lost wages from educational requirements, which many low-income workers cannot afford.

Both the creation and the redistribution of rents are often achieved through “rent-seeking”—when economic actors allocate resources toward capturing more rents for themselves rather than pursuing productive investments. In the context of licensing, investments required to obtain a license are not always justified by improvements in worker skill or product quality—and in these cases, are best viewed as unproductive rent-seeking. Lobbying for preferential regulation (such as licensing requirements) is one classic example of rent-seeking, and it can often be successful because it benefits a concentrated interest while imposing diffuse costs. In addition, the regulated insiders have superior knowledge that they can use to shape the understanding and practices of the regulatory agencies, an example of the broader phenomenon of regulatory capture.

It is important to note that not all economic rents—and not all licensing requirements—are undesirable. For example, in a perfectly competitive market, the price settles at a level below that which some buyers would be willing to pay, and above that which some sellers would be willing to accept. The rents collected by these buyers and sellers are widely considered one of the chief benefits of market competition. In addition, temporary monopoly power can be an incentive for additional innovation—one of the goals of our patent system. Similarly, well-designed licensing requirements can benefit consumers and the public by providing greater information about quality and incentivizing providers to invest in quality improvements.

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Nevertheless, rents, the increasingly unequal division of rents, and rent-seeking behavior are often highly problematic and appear to have become more so over time. For example, as Peter Orszag and I identified in a recent paper, recent years have witnessed a strikingly large and growing disparity in return to invested capital for major corporations. Other pieces of evidence include the divergence between corporate profits and real interest rates, increased concentration in a number of industries, and the growth of the financial sector as a share of GDP.

The Case of Occupational Licensing

The source of economic rents that I will primarily focus on today is occupational licensing, a form of regulation that requires individuals who want to perform certain types of work to obtain the permission of the government. As documented in Kleiner and Krueger (2013), the share of the U.S. workforce covered by State licensing laws grew fivefold in the second half of the 20th century, from less than 5 percent in the early 1950s to 25 percent by 2008. Although State licenses account for the bulk of licensing, the addition of local and Federal licensed occupations further raises the share of the workforce that is licensed to 29 percent.

Figure 1
Share of Workers with a State Occupational License

Licensing is usually justified on the grounds that it improves quality and protects the public against incompetent or dangerous practitioners. This argument is strongest when low-quality practitioners can potentially inflict serious harm, or when it is difficult for consumers to evaluate provider quality beforehand. Few people, for example, would feel comfortable traveling in a

commercial plane flown by an unlicensed pilot or having a medical procedure performed by an unlicensed physician.

Even when health and safety are not an issue, increasing consumer information through regulation can be beneficial. If consumers are unable to distinguish between high- and low-quality providers before purchasing a good or receiving a service, then low-quality providers can remain in the market without being recognized as such, reducing the average quality in the market and diminishing incentives for other providers to invest in quality improvements.9 Furthermore, if consumers are sufficiently concerned about getting a low-quality provider, then informational uncertainty may depress demand for goods and services. Consumers who would otherwise purchase a product if they knew it were high-quality might forgo their purchase if the quality were uncertain. Licensing is one possible way to address these problems by forcing providers to meet certain quality benchmarks, and creating greater incentives to invest in increased training and skill development.10

However, there is evidence that some licensing requirements create economic rents for licensed practitioners at the expense of excluded workers and consumers—increasing inefficiency and potentially also increasing inequality. First, the employment barriers created by licensing raise wages for those who are successful in gaining entry to a licensed occupation by restricting employment in the licensed profession and lowering wages for excluded workers. For example, researchers found that 100 additional hours of required training decreased the number of Vietnamese manicurists by almost 18 percent in a State.11 Estimates find that unlicensed workers earn 10 to 15 percent lower wages than licensed workers with similar levels of education, training, and experience.12

Second, research finds that more restrictive licensing laws lead to higher prices for goods and services, in many cases for lower-income households, while the quality, health and safety benefits do not always materialize. With the important caveat that most of the quality literature on licensing focuses on very specific examples, most empirical evidence does not find that stricter licensing requirements improve quality, public safety or health.13

Finally, State-specific licensing requirements create barriers to entry for out-of-State licensed practitioners and so reduce mobility across State lines. Since most occupations are licensed at the State level, licensed practitioners typically have to acquire a new license when they move across State lines, which can entail—among other things—fulfilling new education, training, or testing

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12 Kleiner and Krueger (2010).
13 For a review of the literature on the labor market effects of occupational licensing, see CEA et al. (2015).
requirements. Figure 2 shows substantial differences in the likelihood of moving across State lines between workers in highly licensed occupations and other workers, while there are only modest differences between the two groups in the likelihood of moving within a State. These impacts are also much larger for younger licensed workers, in the age range where adult mobility is higher as workers are choosing where to start their careers.

Figure 2
Difference in Migration Rates of Workers in Most vs. Least Licensed Occupations

As shown in Figure 3, overall geographic mobility has been declining since the 1970s in the United States.\textsuperscript{14} Although it is unlikely that licensing is the sole driver of this change—the rise in licensing predates the decline by at least two decades and short-distance moves have declined alongside long-distance moves—licensing is playing a contributing role. This can reduce the ability of workers to move to where wages are higher, and may also be contributing to the decline in labor market fluidity.\textsuperscript{15} This in turn suggests that licensing may be contributing to a range of challenges facing labor markets, including reduced labor force participation, higher long-term unemployment, and higher part-time employment.\textsuperscript{16}


Licensing may have especially harmful impacts on certain populations. For example, military spouses, who are highly mobile and frequently have to relocate across State lines, have a difficult time obtaining a new license each time they move.17 Our licensure system can also prevent immigrants who have considerable training and work experience abroad from applying their skills in the United States, since they often do not meet the relevant licensing requirements.18 In addition, licensing laws often contain blanket exclusions for the formerly incarcerated or those with criminal records, regardless of whether their records are relevant to the job for which they are applying.19 This renders a great number of individuals – as many as one in three Americans has some form of criminal record (either for an arrest or a conviction) – ineligible for a large share of jobs, in turn perpetuating unstable economic situations for these individuals.20

Why Has Licensing Increased?

There are two ways to account for the increase in State licensing over the past few decades. One possibility is that this increase reflects changes in the composition of our workforce. For example, certain heavily-licensed professions in fields such as health and education have experienced substantial employment gains over the past few decades. As shown in Figure 4, the

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share of the workforce in the education and health fields rose from less than 13 percent in the late 1960s to over 22 percent today.

**Figure 4**

*Share of Workforce in Education and Health Services*

However, CEA analysis shows that the growing share of workers in these heavily licensed occupations can only explain part of the overall increase in licensing, and that the majority of this increase is due to more occupations becoming licensed over time. Figure 5 compares the documented share of the licensed workforce to a series that adjusts for changes in workforce composition, but holds the fraction licensed in each occupation constant at 2008 levels. The results suggest that only a little more than one-third of the increase in the percentage of workers licensed at the State level from the 1960s to the 2008 estimate is explained by the changing composition of the workforce. This means that the remaining roughly two-thirds of the growth in licensing comes from an increase in the number of licensed professions.

**Figure 5**

*Percent Licensed Over Time: Estimated and Counterfactual*
The importance of an increase in the number of licensed occupations—not just the number of licensed workers—suggests that licensing has expanded considerably into sectors that were not historically associated with it. Figure 6 shows that among licensed workers today, fewer than half are in health care, education, and law—traditionally very highly licensed occupations. Instead, large shares of licensed workers today are in sales, management and even craft sectors like construction and repair.

![Figure 6: Share of All Licensed Workers in the 12 Occupations with the MostLicensed Workers](image)

A trend toward increasing skill and job training requirements over time may be one factor in the political process behind more licensing.\(^{21}\) In addition, some argue that by identifying qualified practitioners, licensing can spur demand for licensed workers by reducing consumer uncertainty about the quality of the licensed service. In this way, licensing itself can increase the number of licensed workers.\(^{22}\) Indeed, there is evidence from the turn of the 20th century that licensing was adopted in response to increased specialization and technological developments that made it more difficult for consumers to judge the quality of professional services.\(^{23}\)

Another view—grounded in the rent-seeking hypothesis—is that that producer groups tend to be much more politically influential than consumer groups. Licensing is a policy with concentrated benefits (for the licensed practitioners) and diffuse costs (for consumers and would-be practitioners). Thus, practitioners have a greater interest in licensing and may be better able to influence policy through their active professional associations.\(^{24}\) Indeed, licensing boards are


often populated by members of the regulated professions, and some States have in place statutory requirements that governors appoint only those individuals nominated by a State professional association to serve as licensee members of a licensing board. Empirical work suggests that a licensed profession’s degree of political influence is one of the most important factors in determining whether States regulate that occupation. Finally, the fact that licensing boards are often revenue neutral, and in some cases, even revenue generating, may play a role, as legislators considering a new licensing proposal often do not have to grapple with the prospect of finding additional funding.

**Variation in Licensing across States**

As documented by Kleiner and Vorotnikov (2015), States vary dramatically in their rates of licensure, ranging from a low of 12 percent of workers in South Carolina to 33 percent in Iowa (Figure 7). These large differences in licensing prevalence suggest that States are not treating occupations equivalently with regard to whether they do or do not require a license. For example, an Institute for Justice analysis of 102 low- and moderate-income occupations licensed in at least one State found that only 15 occupations were licensed in 40 States or more, and the average occupation was licensed in only 22 States. According to estimates from the Council of State Governments, over 1,100 jobs were licensed, certified, or registered in at least one State. Of this number, fewer than 60 were regulated by all the States.

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Swankin (2012)

Kleiner (2015). Interestingly, this variation in licensing prevalence appears not to be driven by differences in occupational mix across States. To see this, we used data from the Survey of Income and Program Participation (SIPP) to test how State licensing rates would change if every State had the same occupation mix but kept their own licensing rates within occupations. This resulting picture was very similar to the actual distribution of shares licensed across States, indicating that differences in occupational mix are not the primary determinant of State licensing differences.


States vary not only in the share of workers with a license, but also in the difficulty of obtaining a license. State licensing laws vary in terms of the substantive requirements they impose, such as examinations, fees, minimum amounts of education, training or experience, and language requirements. Though it is difficult to obtain comprehensive data on licensing burdens, information collected by the Institute for Justice on 102 low- and medium-wage occupations provides a sense of the range of licensing burden across occupations and across States, in terms of education and experience prerequisites, licensure fees, examinations, and minimum age requirements. States range from Pennsylvania, where it takes an estimated average of 113 days (about four months) to fulfill the educational and experience requirements for the average licensed occupation examined, to Hawaii, where it takes 724 days (about two years).\textsuperscript{31}

\textsuperscript{31} Carpenter et al. (2012).
Best Practices for Occupational Regulation

Drawing on promising State policies, the Administration has developed several best practices that States can apply to ensure that their licensing policies safeguard the well-being of consumers, while maintaining flexibility in the labor market and opportunities for workers.\(^{32}\)

**First, States should ensure that licensing restrictions are closely targeted to protecting public health and safety, and are not overly broad or burdensome.** For example, when determining the boundaries of the licensed activity or “scope of practice,” policymakers should endeavor to allow practitioners to offer services to the full extent of their competency and knowledge, even if this means that multiple professions are licensed to offer overlapping services.\(^{33}\) Policymakers should also refrain from categorically excluding individuals with criminal records from occupational licenses, and instead should only exclude those individuals whose convictions are recent and relevant, and pose a legitimate threat to public safety. Twenty-

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32 See CEA et al. (2015) for a more detailed list of best practices.

five States and the District of Columbia have no standards in place governing the relevance of conviction records of applicants for occupational licenses (Figure 9). In some cases, alternative forms of occupational regulation, such as State certification, may offer a better balance between consumer protections and flexibility for workers.

Second, States should put in place “sunrise” review processes to facilitate a careful consideration of new licensing proposals’ costs and benefits each time a new licensing law is proposed. Currently, 13 States have in place some sort of sunrise law, while 32 States maintain some sort of sunset process (which applies cost-benefit analysis to existing licensing laws), and 10 States have both.\(^{34}\) For example, since 1995, Maine’s Department of Professional and Financial Regulation has conducted a sunrise review of any proposed legislation that would establish an occupational licensing board or expand a current practitioner’s scope of practice.

\(^{34}\) The Council on Licensure, Enforcement, and Regulation defines sunset and sunrise reviews as follows: “Sunset is the automatic termination of regulatory boards and agencies unless legislative action is taken to reinstate them... Sunrise is a process under which an occupation or profession wishing to receive State certification or licensure must propose the components of the legislation, along with cost and benefit estimates of the proposed regulation. The profession must then convince the legislators that consumers will be unduly harmed if the proposed legislation is not adopted.” Council on Licensure Enforcement and Regulation. Sunrise, Sunset and State Agency Audits (http://www.clearhq.org/page-486181).
According to Maine’s Department of Professional and Financial Regulation, only one occupation has acquired a licensed status in the past 15 years.35

Finally, States should expand reciprocity agreements and harmonize licensing requirements to increase workers’ mobility across state lines. For example, many States have reciprocity agreements that allow the open practice of law by lawyers who have been admitted to the bar of another State. A different approach, taken by the Nurse Licensure Compact (NLC), is for States to construct a separate, multi-State license that installs a common set of qualifications for all compact members.36 DePasquale and Stange (2014) find that NLC adoption increases the probability of interstate commuting among nurses.37 Other professions are constructing their own interstate compacts: a separate interstate compact was recently created for physicians,38 and one

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35 Maine Revised Statutes Title 32 § 60-J (http://legislature.maine.gov/statutes/32/title32sec60-J.html); Maine Department of Professional and Financial Regulation. 2015. Private Correspondence.
is under construction for physical therapists. Ideally, however, States would establish a compact that applied to a range of different professions.

One danger is that when States are harmonizing their licensing requirements or creating an interstate compact, they may settle on a level of licensing that is inappropriately stringent or may favor the lowest common denominator. For example, regulators may decide to bar all workers with criminal records from obtaining a license or participating in the compact, even when the criminal record is not specifically relevant to practice in an occupation. In general, States should avoid simply adopting the licensing requirements of the most stringent States.

**Federal Reform Efforts**

While licensing reform takes place primarily at the State level, the Administration is committed to collaborating with States to make progress on this issue. The report released in July provides policymakers with more detailed information on trends in occupational licensing and its effects on the labor market, and recommends a broader set of best practices. Following up on the report’s release, the Administration is conducting outreach to State policymakers and encouraging them to adopt the best practices I have outlined today: reducing excessively burdensome licensing requirements (for example, limiting categorical exclusions for individuals with criminal records), putting in place sunrise review processes, and expanding reciprocity agreements and harmonizing licensing requirements across States. The President’s FY2016 Budget also includes $15 million in new discretionary funding at the Department of Labor to identify, explore, and address areas where licensing requirements create barriers to labor market entry or labor mobility.

The Administration has also worked to reduce licensing burdens for veterans, service members, and military spouses. Under the President’s direction, the Department of Defense established the Military Credentialing and Licensing Task Force in 2012, charged with identifying and creating opportunities for service members to earn civilian occupational credentials and licenses through partnerships with national certifying bodies. With the help of the Task Force’s efforts and those of First Lady Michelle Obama, thousands of service members have earned or are in the process of earning industry-recognized information technology certifications, as well as machinist, logistics, welding, and engineering certifications for high-demand manufacturing jobs. In addition, building on First Lady Michelle Obama and Dr. Jill Biden’s call to governors in 2012, the Administration has partnered with States to streamline State occupational licensing for service members, veterans, and their spouses.

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Conclusion

Although I have focused today on occupational licensing, there are many other contexts in which rents affect the economy. For example, another subnational barrier is overly stringent land-use restrictions, which can create rents and reinforce inequality by discouraging low-income families from moving to high-mobility areas.\textsuperscript{42} Rents and rent-seeking behavior deserve more attention as drivers of rising inequality and slowing productivity growth. While rents are not observed directly and are therefore difficult to estimate with confidence, the available empirical evidence suggests that they are growing in importance and that the economic policy debate is turning in their direction.

Licensing is only a small part of the effort to tackle inequality and raise real incomes. But when the problem we are facing is so large, we cannot afford to leave any stone unturned in addressing it. And we certainly cannot afford not to take measures that would provide greater opportunities for Americans while making the economy more efficient.

References

Figure 1
Source: The Council of State Governments (1952); Greene (1969); Kleiner (1990); Kleiner (2006); and Kleiner and Krueger (2013), Westat data; CEA Calculations.

Figure 2
Source: Census Bureau, American Community Survey 2010-2013; CEA Calculations.
Note: Number is calculated from an OLS regression controlling for race, citizenship, sex, citizenship, number of children, marital status, education, income, year, and state. Ages 25 to 65 were included.

Figure 3
Source: Molloy, Smith, and Wozniak (2014).
Note: Migration rates of the civilian population age 16 and up from the Current Population Survey. Post-1989 migration rates are calculated from microdata and exclude imputed values. Sample details are given in Molloy, Smith and Wozniak (2011) and Saks and Wozniak (2011).

Figure 4

Figure 5

Figure 6

Figure 7
Source: Kleiner and Vorotnikov (2015), Harris data.

Figure 8
Source: Carpenter et al. (2012).
Note: Sample of 102 lower- and middle-skill occupations. Hours averaged over all licensed occupations from the sample of 102, by state.

Figure 9
Source: Legal Action Center.

Figure 10