One of the major economic and social achievements of the 20th century in developed countries was the establishment of employment protection and social insurance systems that provided income stability. Labor markets in the developing world are characterized by high informality, low union membership, and minimal social insurance coverage, which pose challenges to long-term socio-economic development. What is causing this divergence even while incomes are rising rapidly in developing countries? Several factors stand out: (i) the changing nature of manufacturing and the early transition to the service economy in developing countries; (ii) continued high growth of the labor force; and (iii) the adoption of complex, comprehensive systems ahead of the necessary administrative and governance capacities. Developing countries might improve performance by seeking new paths as they strive for less hazardous, more secure work places.

What is the issue?

The creation of modern industrial enterprises in the 18th and 19th centuries in developed countries brought the world of work out of the household. This shift of economic activity from household farms and firms to wage jobs in organized workplaces was initially difficult for workers, as 19th century factories were grueling and hazardous places. But what emerged from the shift eventually resulted in individual income stability over the business cycle and over the life cycle, including protection from major idiosyncratic income risks such as loss of earnings due to job loss, ill health, and inadequate savings for old age.

Two key sets of laws brought this about this landmark achievement:

1. **Employment protection legislation**, which provides protection against discrimination, arbitrary hiring and firing, employer abuse of power against employees, and danger in the workplace.
Social insurance legislation, which transfers income to people over time as specific loss-of-income events occur. Known as income smoothing, this is achieved through mandatory participation (risk pooling), with contributions collected from wages.

These protections came about through collective action by the labor force, most prominently by unions. Employment covered by these protections has come to be known as formal employment.

Modern wage-paying enterprises were critical to the development of these systems for a number of reasons. First, when work takes place in an enterprise, the associated risks to employee earnings and income are not under the control of the worker, and thus are insurable. This is a big difference compared to self or family nonwage employment. In nonwage employment, the individual or the household makes most of the decisions that determine income risks, including what to produce when, how to produce it, and where to sell it. This means that, for example, the income risk associated with an economic downturn or an injury while working cannot be insured as the individual’s own behavior affects the risk and therefore the insurance payment. Second, wage payments by an enterprise are easy to tax and compliance is in turn easier to monitor, as an enterprise has to keep track of the payments anyway. Third, the presence of many workers in one location makes organizing for collective action easier.

In cases where risk was not dependent on the behavior of the individual as employer (such as old age and long-term disability pensions), coverage was extended to the self-employed and employer-owners. For example, France’s old-age pension system dates back to 1910, but mandatory coverage for the nonfarm self-employed was only added in 1948, while self-employed farmers were only added in 1952. Coverage of the self-employed in the U.K. was added at about the same time, and coverage of the self-employed in the U.S. was added in 1954. As created, the systems implicitly assumed a nuclear family without divorce. Families of workers were expected to benefit through the insured’s benefit or, in the case of death, survivor benefits. As women increased their participation in the labor force, additional benefits such as maternity leave and leave to care for a dependent family member were added. The growth of less traditional families and changing roles within families brought about innovations such as paternity leave, and old-age pension systems were also gradually adjusted to take account of life events such as divorce.

After World War II, social insurance was considered so fundamental that it was incorporated as a right in the Universal Declaration of Human Rights, passed by the U.N. in 1948. The expectation was that developing countries would offer coverage similar to that of developed countries to their existing wage labor force. As their economies grew, a greater share of the labor force would transition into formal employment—sooner rather than later. After all, by early in the 20th century, European countries had already extended coverage to the majority of their employed population, because these people were already wage employees. For example, 60 percent of the labor force
in France and two-thirds in Germany were covered by the public pension system in 1920.\(^3\) By the 1950s, participation was mandatory in most developed countries for all economically active citizens, with only a few specific exempted classes such as military and students working as apprentices.

Unfortunately, coverage has not expanded rapidly in the developed world. Although all countries in the world have created some semblance of a social security system, only 27 percent of world population has access to a comprehensive social security system, according to the International Labor Organization (ILO).\(^4\) The reasons are as follows:

- **Globally, only 50 percent of employment is in a wage job.** In poor countries in Africa and South Asia, the share is as low 20 percent.

- **A large share of wage employment in developing countries is casual, not subject to a contract** (also called informal employment). Even formally registered firms in Africa report that up to half of their employment is informal.

- **Most nonwage employers in developing countries do not formally register as self-employed service providers,** but rather as household farms or firms. The latter are generally not in the earnings tax net, either because they are too poor or their earnings are difficult to verify. If income cannot be estimated, it cannot be insured.

- **Partly as a result of above trends,** only a small share of wage and salary employment is unionized.\(^5\) This means that while laws mandating social security coverage may be on the books, collective action mechanisms in civil society to ensure implementation are missing.

The lack of formal employment in developing countries has been termed a *missing employment transformation*.\(^6\)

**Why has employment transition slowed or stalled?**

Not only is the modern enterprise the most efficient form of production organization, it is also an ideal risk-sharing entity, once a certain employment size has been reached. During industrialization, developed countries created large, specialized production units. The productivity of labor in these firms allowed the spread of worker protection and social insurance, as employees were happy to receive both cash earnings and benefits in kind in the form of worker protection and insurance. The lack of globalization meant that international competitiveness was not a strong driver of employment or wages, as only the local labor market mattered. By the time the service economy took hold as the major employer in developed countries, the employment transition had already taken place. While service sector firms tend to be smaller in developed countries, they are still formal and pay wages. A significant share is unionized (e.g., grocery clerks, bank tellers, and drivers).
Developing countries are not able to follow this path for a few reasons. First, the nature of industrial production has changed with globalization. Second, their demographics are fundamentally different. Third, the nature of the social security systems which have been put in place.

**Modern deindustrialization.** A number of studies have recently noted the increasing capital intensity of industrial processes, especially manufacturing but also construction. As transportation and logistics costs have fallen and industrial goods have become internationally traded, quality standards and standardization have gone up. Both are more effectively achieved with automation. This has reduced the labor content of industrial products, especially the less skilled labor content, which is the type of labor plentiful in developing countries. As a result, while the share of real manufacturing in total output has remained high in developing countries since 1960, manufacturing employment as a share of total employment has gone down. Whereas European countries employed over half of their labor force in industry during their industrial employment peak, industrial powerhouses such as China and Vietnam only employ about 25-30 percent of their labor force in these sectors. In Latin American countries the share is even lower, as their industrial output is lower and the share of services is higher in GDP. In the low- and lower-middle-income countries of sub-Saharan Africa, the share of industrial sector wage employment is only about five percent.

Development economists have expressed considerable doubt that today’s low-income countries will be able to match the manufacturing export performance East Asia; they are more likely to point to a future of commercialized agriculture and services, as well as a capital-intensive mineral-exporting sector. Privately-owned service sector firms tend to be smaller, and in developing countries they stay informal. Productivity tends to be lower, as do earnings. This makes expansion of traditional developed country employment protection and social security coverage more difficult, not the least because it is harder to monitor compliance with a large number of small firms.

**Demographics.** Informal employment is the opposite of formal employment; on every dimension it is less secure. Not only do people working in the informal economy not participate in in social security schemes (by definition), they have to manage a broad range of economic risks themselves, including weather shocks, loss of markets, and lost work time due to ill health. Demographics are the reason informality remains such a large share of the labor force in developing countries. Creating firms takes capital, technology, and knowledge, including management skills as well knowledge about market access. Even when the number of modern formal firms is growing rapidly, if the labor force is growing even more rapidly, the share of the labor force absorbed by the growing modern sector will not increase very fast. For example, in many countries in sub-Saharan Africa, the private sector was creating wage jobs at two-to-three times the rate of growth.
of the GDP between 2000 and 2010. But the base was very small, so the share of the labor force employed in this sector expanded only slightly. Cross country evidence shows that the share of the labor force in informal employment only declines substantially once labor force growth falls below about 1–1.5 percent.\textsuperscript{11} In sub-Saharan Africa, fertility and population growth remain high, much higher than in developed countries at the beginning of the 20th century. The labor force is growing at nearly three percent, and the population is very young and getting younger. A young population tends to depress savings and investment as well, slowing private sector development.

\textbf{Bundled social protection.} Following the lead of developed countries, as well as the advice and standards set by international organizations, developing countries have passed legislation creating the same type of comprehensive coverage provided in developed countries—despite lacking the tax base or the institutions to manage and govern system. As a result, the systems in developing countries tend to have high payroll tax rates but poor benefits and limited coverage. Enforcement of employment protection legislation is spotty and enforcement and adjudication of claims is time consuming for firms and employees. High administration costs as a share of revenues leave fewer resources to pay social insurance claims. Most importantly, the labor productivity in many firms is not high enough to fund the costs of the required nonwage benefits (including payroll taxes), nor are they equipped to pay a competitive wage (one that encourages employees to come to work instead of striking out on their own or working informally). Alternatives that would provide a lower, but less costly, rate of protection are resisted by both those currently covered and those who aspire to be covered. Administrative reforms have proven difficult as well, as social insurance budgeting and administration is inherently complex and nontransparent. Yet both are needed for traditional social protection to expand coverage in the small business and nonwage sectors.\textsuperscript{12}

\textbf{What can be done in developing countries?}

Social insurance system coverage issues are not limited entirely to developing countries. The expansion of the “gig” economy, which is really a resurgence of nonwage employment enabled by digital platforms, has started to challenge traditional sources of income security in developed countries as well. Because expansion of this type of work coincided with the aftermath of the 2007-8 financial crisis, some attribute the expansion to the low aggregate demand during the ensuing recession. In reality, many people in the U.S. work in the gig economy for the same reason that many people in developing countries work informally—the desire for flexibility and autonomy.\textsuperscript{13} Consumers are benefitting from Uber and Task Rabbit; so is business (e.g., the growth of Amazon’s Mechanical Turk).

These platforms are taking off in emerging market as well. Many small emerging market businesses sell on Ebay (and remain small). China’s Alibaba enables small businesses to sell to a vast Asian market, as well as to the world beyond. Alibaba is planning to expand to Africa. Kenya’s M-
Pesa banks the unbanked, including informal traders and small business. SleepOut, Airbnb, and booking.com of Kenya, attract business to small hotels and B&Bs. E-commerce is creating jobs for local logistics providers (delivery services, etc.). But are these platforms creating formal jobs? There is no evidence of that yet. Owners of small B&Bs may be richer because they can fill their beds more often by using SleepOut, but they still do not have disability insurance. In principle, M-Pesa, could help governments do a better job of monitoring employment and collecting employment taxes to fund coverage, but this would require tackling other longstanding tax administration issues in Kenya.

Some countries chose to expand pension coverage in the 20th century by creating a universal, noncontributory system. Examples include the British National Health Service or Denmark and Australia’s universal old-age and disability pensions system funded out of general revenues. The universal pension systems are called “first tier” systems because they provide a bare minimum living standard. Developing countries with aging populations might consider this approach. In countries such as those in sub-Saharan Africa, where half of the population is under the age of 18, this approach would be problematic as the old-age dependency burden is very low, and there is a large gap in life expectancy between the rich and the poor. Child benefits seem to be a more effective way to fight poverty.

One obstacle to effective administration of social insurance (and tax systems) is the lack of a unified personal identification system. Advances in biometrics have led countries such as India to introduce such systems for all government transfer payments. Privacy issues have been raised over this approach, but it may be one area where technology can enable the efficient expansion of the welfare state.

Finally, there is no reason why emerging markets have to travel the path that developed countries did. Mobile telephony showed the benefits of leapfrogging approaches in the face of intractable, poorly functioning public utilities. Unfortunately, there does not seem to be much innovation going on in this space. Examples of potential innovative ways of providing social protection to the informal sector include:

- To solve the problem of collective action when those who might benefit are in very small economic units, organize providers of services who use online platforms so they can lobby for a minimalist system which meets their needs.

- For the nonwage employment to become safer, the individual and the household have to be persuaded to modify their behavior. Why not try nudges and social platforms to change behavior instead of regulation?
1 Technically, a wage is a payment per hour for work, while a salary is a payment per day/week/month, unrelated to actual hours worked during the day. A wage employee can thus claim overtime, while a salary employee cannot. As shorthand, in this paper we use the term “wage” to stand for both wages and salaries. But a wage employee does not include someone paid by the item (piece-work) nor does it include the self-employed, who may charge customers by the piece, task, or the hour.

2 If the presence of insurance can encourage the insured to behave in a significantly more risky fashion, a moral hazard occurs, which blocks insurance systems from functioning efficiently, if at all. For this reason, long-term disability pensions for the self-employed usually have a significant waiting period before the benefit is provided, and may be only provided in the case of major disability. This deters people from taking excessive risks, knowing that they will not bear high costs.


8 This is the case even with nominally nontraded goods such as construction services or tourism.


10 In South Africa, minimum wage violations are much more common in the service sector compared with the industrial or agricultural sectors. See Bhorat, Kanbur, and Stanwix 2015. Partial Minimum Wage Compliance.

11 See discussion in Porta and Shleifer 2014. Informality and Development.

12 Several low income countries have tried to extend contributory health insurance pensions systems to nonwage workers. This has been more effective than expanding pension coverage, in part because of existing public health care systems. See ILO 2014, op cite.


14 Most retirees in these countries also have a contributory pension which they “funded” (or built up an entitlement) while they were working.