

FIXING CAPITALISM'S GOOD JOBS PROBLEM

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Introduction

Capitalism is not a rigid system. It has evolved and changed over time, shaped by local history, social pressures, and crises. Today, it is commonplace to contrast the “state capitalism” of China with the less state-directed version in the West. But even within Europe and North America, there are significant differences among Nordic corporatist and the Anglo-American variants of the market economy. And all these contemporary models of capitalism differ from the historical versions that prevailed until the emergence of the welfare state after the 1930s.

Markets are not self-creating, self-regulating, self-stabilizing, or self-legitimizing. Hence, every well-functioning market economy relies on non-market institutions to fulfill these roles. Often put in place by the state, these institutions range from property and contract enforcement systems to social insurance and income redistribution mechanisms. Capitalism’s adaptability derives from the inherent plasticity of such arrangements. Even property rights, typically considered the cornerstone of a market economy, can be repackaged and reconfigured in an almost infinite variety of ways.² What counts as property and where its boundaries lie are questions to which there have not been immutable answers.

The malleability of capitalism is its great strength. Crises of capitalism are as old as capitalism itself. Yet each time, capitalism has survived, reforming and adapting itself to new challenges.

The two biggest challenges today’s capitalism faces are climate change and social inclusion. In its own way, each of these two challenges is existential. Climate change threatens humanity through its potentially catastrophic consequences for our physical environment. The economic, cultural, and spatial divides that have deepened within countries in recent decades, on the other hand, threaten the viability of our societies and polities.

In this paper, we address the second of these challenges. We argue that the conventional welfare state policies centering around education, training, progressive taxation, and social insurance are on their own inadequate to address today’s inclusion challenge. We propose a multi-pronged strategy aimed directly at the productive sphere of the economy and targeting an increase in the supply of “good jobs” – jobs that provide a middle-class living standard, a sufficiently high wage, good benefits, reasonable

¹ This paper is prepared for a special issue of the *Oxford Review of Economic Policy* on “Capitalism: What Has Gone Wrong, What Needs to Change, and How Can It Be Fixed?” It draws heavily on Rodrik and Sabel (2021) and Rodrik and Stantcheva (2021). We thank Derek Morris, the editors, and participants at the conference for useful comments.

² It is useful in this context to consider how China has managed to provide effective property rights incentives and contract enforcement through institutional arrangements that differ greatly from conventional Western ones (Rodrik 1996, Qian 2017).

levels of personal autonomy, adequate economic security, and career ladders.³ The main elements of this strategy are: (i) active labor market policies linked to employers; (ii) industrial and regional policies directly targeting the creation of good jobs; (iii) innovation policies that incentivize labor-friendly technologies; (iv) international economic policies that facilitate the maintenance of high domestic labor/social standards.

These elements are connected both by their objective – expanding the number of good jobs – and by a new approach to regulation that is collaborative and iterative rather than top-down and prescriptive. We shall emphasize the importance of new institutional arrangements that enable strategic long term information exchange and co-operation between governments and firms (as well as between the general public and policy makers) – underscoring the need for joint endeavor by public, private, and civic sectors to deliver improvements for all. In the rest of the paper, we will discuss this approach and illustrate it in the context of the four specific elements of the good-jobs strategy.⁴

Stating the problem and the general approach

One of the fundamental problems of contemporary capitalism is its failure to produce adequate numbers of good jobs to sustain a prosperous and growing middle class. Quantitative indicators of this can be found in measures of labor market polarization, rising spatial inequality, declining job stability, greater self-reported economic insecurity, and declining middle-class income shares (Autor and Dorn 2013, OECD 2019, Eurofound 2017). Figure 1 shows the collapse in the number of jobs for medium-skill occupations in leading advanced economies. This figure is taken from OECD (2019) and similar results can be found in studies by Autor et al. (2020) and McKinsey Global Institute (2020). Even in countries (such as France) where there does not seem to have been a marked deterioration in overall inequality, these labor market syndromes are acutely felt (Rodrik and Stantcheva 2021).

The disappearance of good jobs is not just an equity problem. It is a broader social problem since declining labor market opportunities produce a wide variety of social ills such as family breakdown, crime, and substance abuse (Case and Deaton 2020). It is also a political problem as it fosters the rise of authoritarian and nativist populism (Rodrik 2021). It is even a problem for economic efficiency and growth insofar as it slows down the dissemination of innovation from the more advanced sectors and firms to the rest of the economy through the creation of more productive jobs in the middle of the skill distribution.

How should we deal with this problem? It is useful to consider our options with the help of a matrix that categorizes different types of remedies for inequality (Figure 2). First, we divide policies into pre-production, production, and post-production stage interventions. For our purposes, this is a better categorization of policies than the more conventional pre-distribution versus redistribution distinction. It distinguishes between policies that affect endowments people bring to markets (such as education and skills) and policies that influence production, employment, and investment decisions (such as industrial

³ Osterman (2020) provides a very valuable set of case studies on what can be done to increase good jobs in specific industries. See also Ton (2014), which discusses how it may be in many firms' self-interest to enhance the quality of the jobs they offer.

⁴ This paper focuses on advanced economies. Many developing economies seemed to have been doing better prior to the pandemic, on the back of export-oriented industrializing strategies. However, even before the pandemic there were signs that their growth models were running out of steam (see Diao et al., 2019, and Rodrik, 2018).

policies or labor-market regulations). Second, we divide interventions into those that intend to redress inequities at the bottom, middle, or top of the income distribution. Minimum wages, for example, target the incomes of the working poor while wealth taxes target those at the very top. It is possible to fill all nine cells of the table with examples of contemporary policies, as is done in Figure 2.

The matrix clarifies the differences between alternative approaches to equity and inclusion. The current policy discussion in the U.S., for example, focuses almost exclusively on the first and third rows of the matrix: how to address poverty at the bottom and concentration of income at the very top. The traditional welfare state model operates largely within the first and third columns too: it targets the educational and other endowments of workers before they join labor markets on the one hand and ex-post redistribution through taxes and social insurance policies on the other. The government's role is to finance education, engage in progressive taxation, and provide social insurance against idiosyncratic risks such as unemployment, illness, and disability. In either case, the assumption is that good middle class jobs will be available to all with adequate education and skills.

We need a different -- or at least complementary -- approach when inequality and economic insecurity are structural problems, and when the inadequacy of good middle class jobs is driven by secular trends such as technology and globalization. Preparing young workers for the labor market and reskilling older workers for newer occupations will not work if firms are not supplying an adequate quantity of good jobs. This calls for targeting the middle cell of the matrix, focusing on direct interventions in the productive sphere with the goal of expanding the supply of middle-skill jobs.

We will discuss what such a good-jobs strategy might look like under four separate headings below. Two points are worth making at the outset. First, good jobs cannot be generated by fiat; they are contingent on higher productivity and the expansion of good firms. The proposed strategy is one that specifically focuses on productivity enhancements along the middle spectrum of the labor market. Second, the strategy requires an approach to governance and regulation that differs from the standard ex-ante, arms' length model that is familiar to economists. We will elaborate on that governance model after we discuss the specific elements of the strategy.

Active labor market policies linked to employers

Active labor market policies are programs that aim to increase the beneficiaries' prospect of finding employment or increasing earnings. European programs in this domain include skills training and certification, employment subsidies, public sector employment, and assistance with job search. Studies on their impacts have generally yielded mixed results (Caliendo and Schmidl, 2016). However, a particular approach to skills training, called "sectoral training programs" in the U.S., has produced much more encouraging results.

Sectoral programs differ from general training courses in that they are oriented towards the need of particular employers and require much greater cooperation with them. They also provide a wider range of customized services to job seekers. Exemplified by Project Quest in San Antonio, Texas, they entail: training in soft skills as well as occupation-specific skills and credentials; partnerships with community colleges and employers; extensive wraparound and follow-up services in addition to training and job placement; and a dual-customer approach that involves employers as well as job seekers. Sectoral training programs have been evaluated repeatedly through randomized methods and have been shown to produce significant and sustained gains for participants (Maguire et al., 2010; Roder and Elliott, 2019; Schaberg, 2017; Katz et al., 2020).

Key to their success is their targeting of specific industries or occupations that have the potential to create more local employment. Program staff work closely with employers, and the firms themselves may serve on the programs' boards. Training courses are designed in close cooperation with prospective employers. Strong links with labor unions and local governments help too, as these provide additional vehicles through which workers can be placed. As the relationship develops, employers start to see these programs as an important asset. Since firms benefit from the training, they are willing to cooperate with the program and sometimes even adjust their employment practices. Increased trust between employers and training agencies can pay off in the form of higher productivity for the firm as well as increased labor market opportunities for job seekers.

Despite their success, such programs have remained very small and limited in scope.⁵ In the U.S., they are associated with non-governmental civic or community organizations rather than state agencies. In Europe, there are extensive networks of Public Employment Services (PES) which, however, typically operate at arms' length from employers and provide limited services to workers. More recently, some PES (in Germany and Sweden, for example) have experimented with greater employer-orientation.

There is an opportunity to enhance training and active labor market policies by transforming them into vehicles of sustained engagement and collaboration with local (and prospective) employers. The provision of customized services to both job seekers and employers can help achieve multiple objectives. It makes training and job placement more effective. It makes it possible to reach workers who might otherwise drop out of the labor market because of particular circumstances (such as lack of transport, child care, or specific gaps in education). It might not only enhance the productivity of local firms through qualified employees, but also induce them to adapt their employment and human resources practices to the needs of local labor markets.

Ultimately, the full *quid pro quo* – more good jobs in return for more good workers – can be realized only when businesses recognize the benefits of the services provided to them by public sector training and placement agencies. Therefore, moving beyond placement to productivity requires not just the right institutional designs but also a process of building trust among social partners – employers, workers' organization, and public agencies such as the PES. Developing the requisite social capital will necessarily take time. It will also require complementary interventions in the areas of industrial and innovation policies, to which we turn next.

Industrial and regional policies targeting the creation of good jobs

Despite economists' apparent aversion against "industrial policies," the latter have always been part of most governments' arsenals, simply changing shape and focus (and, sometimes, just names) as economic priorities and fashions evolved. In the U.S., the practice of industrial policy has a long history, even if the term has carried a note of disrepute until very recently. It has taken a wide range of forms – from the Defense Advanced Research Projects Agency (DARPA) to Small Business Administration programs, to widespread state-level business incentives. In Europe, even though state aid is generally frowned upon, investment incentives for small businesses and lagging regions remain rampant. In recent years, the need for industrial policy has been articulated more explicitly and forcefully. The challenges of transition to a green economy, geographic divides, digitalization, and the perceived threat of Chinese

⁵ President Biden's infrastructure plan commits Federal resources to scaling up sectoral training programs, and is an important first step.

competition in high-tech industries have highlighted the urgency of public action to stimulate investment and innovation in particular industries and regions.

While employment creation is almost always a subsidiary goal of these programs, industrial incentives are rarely designed around the imperative of good jobs. For example, in what is one of the best studies of industrial policy, a paper by Criscuolo et al. (2019) analyzes the effects of the Regional Selective Assistance (RSA) program in Britain. The program aimed to maintain and expand employment in low-income, high-unemployment areas, but was essentially a subsidy to capital. Firms could apply to the government with specific investment plans, either to finance new capital equipment or to modernize existing plants. If approved, the government financed up to 35 percent of the investment. The program did have a significant effect on employment in smaller firms according to Criscuolo et al. (2019), but it did not directly subsidize good jobs or other activities that may have had a more direct impact on jobs.

A second consideration is that business incentives work best when they are customized and targeted to specific needs of firms, and when they are part of an iterative dialog between firms and government agencies. The traditional caricature of industrial policy, in which bureaucrats choose a set of economic activities to be promoted, select pre-determined incentives (e.g., tax rebates or subsidized credit), and then impose hard conditionality on the receiving firms does not accurately characterize how industrial policy was actually implemented in Japan, Taiwan, South Korea, or China. Successful programs tend to revolve around a process of strategic collaboration, in which firms' needs, market opportunities, and appropriate remedies are discovered over time, with policies revised as learning takes place.

Tim Bartik of the Upjohn Institute has been a long-term observer of business incentives in the U.S., and his synthesis of the evidence provides a valuable perspective that can apply equally well to other contexts (Bartik, 2019, 2020). The current approach revolves largely around significant tax breaks that often go to large corporations and are not properly targeted or designed. They also involve a very large cost per job created. Bartik makes several recommendations. First, business incentives should focus on areas that are distressed – i.e., areas that truly need them. Second, the incentives should focus on sectors or firms that are likely to have high job creation potential. Third, public assistance should focus less on tax incentives (and on encouraging physical investment) and more on specific public services needed by firms, such as customized business services, zoning or infrastructure policies, local amenities, and skills training. Fourth, business assistance should be viewed as a portfolio of services rather than a particular incentive, with the actual mix attuned to local conditions.

Bartik's recommendations echo ideas that have developed over the last couple of decades into a new conception of industrial policy (Evans, 1995; Hausmann et al., 2008; Rodrik, 2007, 2008; Sabel 2007; Fernández-Arias et al., 2016; Ghezzi, 2017). Under this conception, the government is not presumed to know where the market failures are beforehand and, therefore, does not determine *ex ante* what the specific policy instruments are. Industrial strategy consists of a collaborative process of "discovery" involving business and agencies of the state, where the objective is to identify the constraints and opportunities over time, and to design interventions appropriately. As learning takes place, policies are revised, refined, and sometimes reversed. We know such practices are feasible because they already exist in a number of policy domains; Rodrik and Sabel (2020) discuss water-quality regulation in Europe and promotion of high-tech innovation through DARPA in the U.S., while Ghezzi (2017) discusses their application to modern agriculture in Peru.

In return for services provided by state agencies, firms would be asked to make provisional commitments on specific quantities of jobs they will create at different qualification levels (i.e., low

salaried employees, medium-salaried employees, etc.). Firms would be encouraged to pool proposals when they make use of common inputs – as would be the case for workers with particular skills or infrastructure. Other conditionalities might be included as well. A firm might be asked to work with local suppliers to improve their management or technological capabilities. Or a firm that is considering outsourcing part of its production to a foreign county may be asked to delay doing so for a number of years, in case productivity improvements at home may render those plans unnecessary. The firm may be required to arrange for additional training for some of its employees.

A particular objective would be to connect business incentives more tightly with the kind of labor market and training programs discussed previously. While labor market interventions may do a good job of preparing jobseekers for good jobs, their effects will remain limited if there is not a corresponding increase in the supply of good firms and of good jobs in existing firms.

Innovation policies that incentivize labor-friendly technologies

In 2016 Elon Musk announced that Tesla’s Model 3 would be built in a new, fully automated car factory. Codenamed “Alien Dreadnought,” the project would allow robots in the factory to operate beyond human speed, with raw materials coming in at one end and finished cars rolling out the other. By mid-2018 it was clear that automation was not working as expected and Tesla was driven close to financial collapse. The company was forced to launch a new assembly line full of human workers. Musk would say later: “people are way better at dealing with unexpected circumstances than robots.”⁶ “Yes, excessive automation at Tesla was a mistake.... Humans are under-rated,” he conceded on Twitter.

Tesla’s automation mistake is revealing for several reasons. First, it highlights how production techniques relying on human labor can still dominate automation when it is impossible to fully account for uncertainty and routinize all tasks. Second, it is indicative of the excessive faith many business leaders often place on new technologies. Third, it reminds us that technology adoption is a choice: businesses face a range of options about what kind of innovations to use and deploy – choices that have significant implications for the workforce – and sometimes, society as a whole – but are not typically internalized in the decision-making process.

The usual discussion around the labor market implications of new technologies is curiously one-sided. The direction of technological change – whether it augments or replaces labor – is taken to be essentially pre-determined and out of our control. It is workers and society at large that have to adjust to technological change – rather than the other way around. But as the late Anthony Atkinson emphasized, the determination of the direction of technological change cannot be left to firms and innovators alone (Atkinson, 2015, 115-118). This argument has been picked up more recently by Daron Acemoglu (2019) (see also Korinek 2019, and Rodrik and Stantcheva, 2020).

The direction of technological change depends on several conditions that may be amenable to policy influence. First and most directly, government-funded and directed innovation programs make decisions about what kind of innovations to promote. Defense-related and green technologies are examples. Employment-friendly technologies – those that augment rather than replace labor – could be part of those priorities, though they are not at present. Second, private sector innovation incentives can be

⁶ <https://www.teslarati.com/inside-tesla-tent-based-model-3-production-assembly-line-profitability/>

skewed because of prevailing financing methods or policies. Venture capital, for example, naturally seeks areas where the returns can be capitalized relatively quickly by investors. This may exclude innovations where the gains are longer term or reaped by society at large (Lerner and Nanda, 2020).

Third, most advanced economies tax capital income more lightly (through depreciation allowances and various incentives of the type we discussed previously) and tax labor more heavily (through personal income taxes, social insurance contributions, and payroll taxes). An unintended consequence of such a tax system is to make it more attractive to firms to economize on labor by investing in machinery, to an extent that may be socially suboptimal (Acemoglu et al., 2020).

Finally, the direction of technological change also depends on the balance of power between employers and employees. When workers have a say in the workplace, management has to get buy-in from them before major technologies are deployed and work is restructured. This can result in a modern version of Luddism – aversion to any kind of innovation that appears to threaten jobs. But it can also be a useful counterweight to adverse incentives in the system encouraging too much automation or the adoption of what Acemoglu et al. (2020) call “so-so” technologies.⁷ In short, the direction of technical change, in addition to its rate, depends on a wide range of factors, many of which could be influenced by societal and governmental decision-making.

As a matter of logic, the gap between skills and technology can be closed in one of two ways: either by increasing education to match the demands of new technologies, or by redirecting innovation to match the skills of the current (and prospective) labor force. The second strategy, which gets practically no attention in policy discussions, is worth taking seriously. It may be possible to direct technology to better serve the existing workforce’s needs, in addition to preparing the workforce to match the requirements of technology.

Acemoglu and Restrepo (2018) have argued that it is possible to countervail present technological trends and push innovation in a direction that creates new, labor-augmenting tasks. They cite three areas. First, they suggest AI could be used in education in order to create more specialized tasks for teachers, personalize instruction for students, and increase effectiveness of schooling in the process. Second, they note a similar potential in healthcare, which is perhaps closer to realization. AI tools can significantly enhance the diagnostic and treatment capabilities of nurses, physicians’ aides, and other medical technicians, allowing a priori “less skilled” practitioners to perform tasks that only physicians with many more years of professional education have traditionally undertaken. Third, Acemoglu and Restrepo (2018) mention the use of augmented and virtual reality technologies in manufacturing, enabling humans and robots to work together in performing precision tasks (rather than the latter replacing the former). Such technologies are based on smaller, more nimble robots that also enable greater customization of production in response to specific customer needs. Indeed, companies such as BMW and Mercedes are building their automation plans around human work, which they have found allows both for greater reliability and more customization in production.

These considerations suggest some broad directions for policy. Prevailing fiscal regimes can be reviewed to ascertain whether there are excessive incentives for investment in automation. Employment considerations can be incorporated directly in the existing regime of tax incentives for R&D. The selection criteria could revolve around the margins of choice we discussed previously. “So-so” innovations that directly replace labor without significant overall productivity benefits would be favored

⁷ “So-so” technologies are those that substitute labor, but are not that much more productive at the task than workers are, thus not increasing productivity sufficiently.

the least, and innovations that augment labor of low and medium skills and create new, labor-absorbing tasks would be favored the most. Governments could apply a “prospective employment test” when determining their public spending priorities for innovation. In the EU, for example, employment considerations appear to play virtually no direct role in the construction of the innovation portfolio or in the design of the European Green Deal. One possibility, among many, is to devote a portion of the European Fund for Strategic Investments (EFSI) to experiment in developing labor-friendly technologies.

In addition, governments can directly encourage the introduction and dissemination in the private sector of learning organizations that empower workers. The goal would be for such organizational forms – based on teamwork, development of cognitive, social, and soft skills, workers’ autonomy and continuous learning – to replace Taylorist or lean organizational models where feasible. Finally, public policy can play a role in shaping public consciousness about the social and employment consequences of innovation. A public that is more aware about the choices we have is likely to expect more from innovators. It would be highly desirable to have a shift in the public narrative on technology that recognizes innovation can be directed in a more labor-friendly direction.

International economic policies that safeguard high domestic labor/social standards

Are the policies of the sort we have discussed here that induce domestic firms to expand good jobs feasible in a globalized economy? What if firms evade domestic responsibilities by outsourcing, hiding in tax shelters, or if they lose competitiveness and markets share to firms in countries with lower standards? The principal safeguard against such a race to the bottom is that the good-jobs strategy is as much about enhancing productivity – especially for lagging firms – as it is about jobs. It recognizes that good jobs require good firms. Enhanced productivity makes domestic firms better at global competition and should reduce incentives for outsourcing and moving abroad. Therefore, there is no inherent conflict between the good-job strategy and the open economy.

Nevertheless, such policies can be buttressed by supportive international economic policies. One approach is to negotiate international agreements that uphold higher standards. Greater international cooperation and information exchange on taxation of corporations and wealthy individuals would help. So would the incorporation of enforceable labor-rights provisions in international trade and investment agreements. But in view of the heterogeneity among countries and the limitations of enforcement on sovereign nations, international standard-setting on taxes and labor regulations can go only so far.

A complementary approach would be to incorporate in domestic trade policy an explicit safeguard mechanism for addressing imports that threaten to undermine domestic social and labor standards. One of us has described elsewhere an anti-social dumping procedure designed to achieve that objective, which we summarize here (Rodrik 2019). Explicit “safety valves” allowing countries to raise trade barriers under certain conditions is a means for enhancing the legitimacy of international trade and outsourcing in general. This is a principle already embodied in “fair trade” provisions of trade agreements.

When international trade operates just like any domestic form of market competition, it makes little sense to set it apart and treat it differently from other approaches for dealing with inequality and insecurity in labor markets at large (using unemployment compensation, progressive tax systems, active labor market policies, employment-friendly macro policies, etc.). But when trade entails practices that violate laws or norms embodied in domestic institutional arrangements, and thereby undercuts domestic social bargains, it may be more legitimate to restrict the import flows that have the alleged

effect. Restrictions on imports should not be permissible merely because wages in an exporting country are low. But trade may be considered unfair when competitive advantage is gained through the violation of worker rights.

A policy that targets social dumping must distinguish between true social dumping and ordinary market competition. Therefore, it needs a domestic investigatory process of fact finding, as in the case with regular anti-dumping. The investigative process in each country would: (i) determine that the imports in question do threaten to undermine a domestic standard or widely held social norm, (ii) gather public testimony and views from all relevant parties, including consumer and public-interest groups, importers of the product(s) concerned, and exporters to the affected country, and (iii) ascertain whether there exists broad support among these groups for the application of the safeguard measure in question.

Ordinary protectionism would not have much chance of success if groups whose incomes would be adversely affected by trade restrictions – importers and exporters – were necessarily part of the deliberative process and the investigative body had to determine whether these groups also support the safeguard measure. At the same time, when deeply and widely held social norms are at stake, these groups are unlikely to oppose safeguards in a public manner, as this would endanger their standing among the public at large. Imagine, for example, that forced labor was used in producing goods for export in country X, or that labor rights were widely and violently repressed. Exporters to country X and downstream users of X's products may find it difficult to publicly defend free trade with this country.

In less clear-cut cases, the main advantage of the proposed procedure is that it would force a public debate on the legitimacy of trade and when it may be appropriate to restrict it. It would be incumbent on governments to ensure that the requirements of democratic deliberation are fulfilled: Are the views of all relevant parties, including consumer and public-interest groups, importers and exporters, civil society organizations, sufficiently represented? Is all relevant evidence, scientific and economic, brought to bear on the final determination? Is there broad enough domestic support in favor of the opt-out or safeguard in question? These procedural requirements echo those in the existing WTO Agreement on Safeguards, although the scope of its application would be greatly enlarged.

This procedure would force a deeper and more representative public debate on the legitimacy of trade rules and on the conditions under which it may be appropriate to suspend them. The most reliable guarantee against abuse of opt-outs is informed deliberation by the polity at large. The requirements that groups whose incomes would be adversely affected by the opt-out – importers and exporters – participate in the deliberations and that the domestic process balance the competing interests in a transparent manner would minimize the risk of protectionist measures benefiting a small segment of industry at large cost to society. A safety valve that allows principled objections to free trade to prevail makes it easier to repress protectionist steam. A deepening backlash against trade may in fact be rendered more likely in the absence of a clause against social dumping.

A new model of governance

The regulatory model that underlies the good-jobs strategy we have outlined here differs from the standard, arm's length regulation model of economists. In the conventional approach, regulatory agencies set explicit guidelines that regulated entities have to meet, and consultation between the regulator and those entities is limited typically to resolving differences. There are fixed limits on permissible behavior and a schedule of fines for violating them. This model does not apply well to circumstances with high-dimensional uncertainty.

In the present context, the objective itself (“good jobs”) is imprecise and multi-dimensional; it needs to be operationalized in a way that is both evolving and context-dependent. Furthermore, creating good jobs depends on a wide array of decisions on investment, technological choice, and business organization, the consequences of which are unknowable *ex ante*. Technological and operational possibilities are highly uncertain, and neither firms nor government agencies have the information needed to devise concrete behavioral schedules from the outset. Hence the interaction between the government and firms must take as its starting point the provisionality of ends and means and the need for disciplined review and revision. Targets and instruments for good-job creation must remain provisional, to be revised as new information comes in. The task of governance is to establish an information exchange regime that induces firms and other entities to cooperate with the government and adjust their strategies in the desired direction in a context of extreme uncertainty.

Such iterative, collaborative practices have become established in industries as diverse as biotechnology, IT and advanced manufacturing, as well as in policy regimes such as food safety, water quality, civil aviation, and the promotion of advanced technologies (Rodrik and Sabel, 2019). And similar practices abound in successful programs in labor markets, business incentives, and technology promotion, even though these do not typically constitute explicit and self-conscious departures from the standard regulatory model. Many state agencies have considerable experience of working closely with SMEs, using a wide range of instruments (loans, guarantees, equity participation, export credits, training, management counseling, access to technology and networks). Development banks have the capacity to screen firms, monitor their progress, and intervene at various stages of their lifecycle. Successful regional investment incentive programs, such as the RSA mentioned previously, entail considerable discretion on the part of state agencies, and require significant monitoring and ongoing negotiations with private firms.

Concluding remarks

We conclude by mentioning four specific advantages of the proposed approach. First, it is explicitly and self-consciously structuralist. It aims to shape production, innovation, employment incentives and relationships *in situ*, instead of taking them as given and only addressing their consequences after the fact, through taxes and transfers. As such, it advocates a transition from the traditional welfare state to a productivist and innovation-driven welfare state. Second, it moves us away from the institutional fetishism reflected in the traditional distinction between markets and states. It pushes us to think in terms of complementarities between private actors and state agencies and collaborative, iterative rule making under extreme, multi-dimensional uncertainty. Third, it does away with the equity versus growth dichotomy or trade-off: economic growth is possibly only through the diffusion of good, productive jobs from the advanced to the lagging sectors and regions of the economy; good jobs are possible only if there are productive firms. Finally, the general approach to regulatory governance highlighted in the paper is open ended and can be applied within different domains and at different levels of the economy and society. Potentially it opens up of a path of radical institutional reform from gradualist beginnings. Today’s reforms may eventually cumulate to a revolutionary transformation of the capitalist system.

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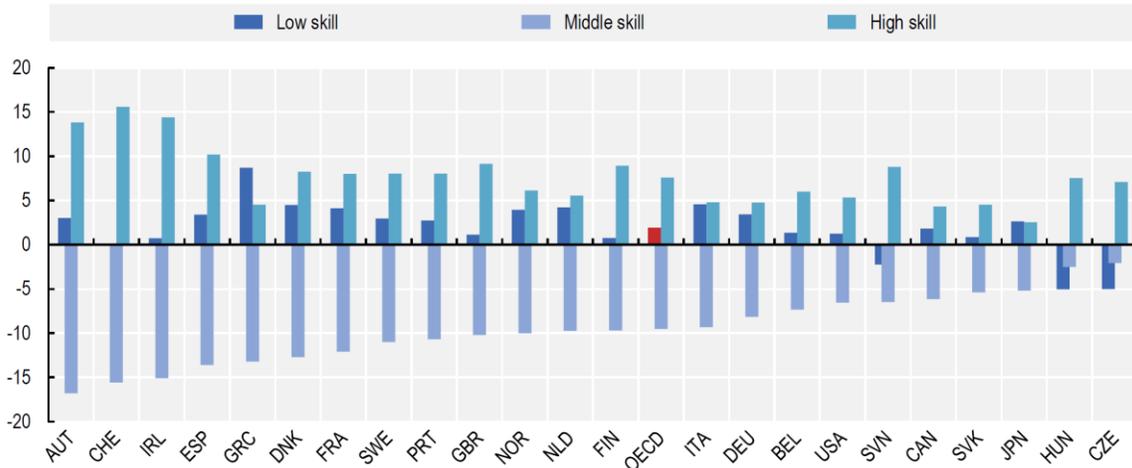
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Figure 1: Labor market polarization

Percentage point change in share of total employment, 1995 to 2015



Note: High-skilled occupations include jobs classified under the ISCO-88 major groups 1, 2, and 3., that is, legislators, senior officials, and managers (group 1), professionals (group 2), and technicians and associate professionals (group 3). Middle-skilled occupations include jobs classified under the ISCO-88 major groups 4, 7, and 8, that is, clerks (group 4), craft and related trades workers (group 7), and plant and machine operators and assemblers (group 8). Low-skilled occupations include jobs classified under the ISCO-88 major groups 5 and 9, that is, service workers and shop and market sales workers (group 5), and elementary occupations (group 9).

Source: OECD (2017^[90]), "How technology and globalisation are transforming the labour market", in *OECD Employment Outlook 2017*, https://doi.org/10.1787/empl_outlook-2017-7-en.

Source: OECD (2019)

Figure 2: Remedies for inequality

		At what stage of the economy does policy intervene?		
		pre-production	production	post-production
What kind of inequality do we care about?	bottom	endowment policies (health, education); UBI	minimum wage; job guarantee;	transfers (e.g., EITC); full-employment macro policies
	middle	public spending on higher education	industrial relations & labor laws; industrial & innovation policies	safety nets, social protection
	top	inheritance/estate taxes	competition policy	wealth taxes