Discussion of Anton Korinek and Lee Lockwood, "Public finance in the Age of AI: A Primer

Matthew Weinzierl, HBS and NBER

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The prospect of transformative artificial intelligence (TAI) means that we may be rapidly approaching a moment of major innovation in public finance policy, in line with the creation of the social welfare state in the late 19th century, the introduction of modern personal income taxation in the early 20th century, the expansion of estate and wealth taxes in the mid-20th century, and the rise of value added taxes as a dominant form of consumption taxation in the latter half of the 20th century. Each of these innovations was a response (sometimes belatedly) to a major shift in the economy, and it seems possible, even probable, that TAI will encourage another such innovation.

Anton Korinek and Lee Lockwood's paper takes a bold look at how this AI-driven restructuring of public finance theory, policy, or both might play out. As I discuss below, it emphasizes a set of changes – especially an expansion in the scope and sophistication of consumption taxation and an embrace of capital income taxation – for which the authors worry we are unprepared. I see these changes as closer to existing practice and thus more easily implemented if required. I also emphasize other threats – especially from the displacement of workers and challenges to the legitimacy of the overall political-economic system – that I see as providing more powerful reasons for changes that go beyond conventional public finance. But these differences in analysis drive home the value of this paper, which is as a call to action for public finance theorists to prepare themselves and the broader public for the changes that will be required to meet the moment.

Stage 1: The rise of the AK model, and what to do about displaced workers

The first major claim in Korinek and Lockwood's paper is that we will end up *actually living* in a Y=AK world, a fate previously reserved for residents of macro theory papers. The idea is seemingly simple: if TAI continues to improve, it will eventually surpass human capabilities in all but a quantitatively negligible set of jobs, removing any reason for the market to employ or compensate human labor. This is what Korinek and Lockwood call Stage 1 of the rise of TAI. In Stage 1, even comparative advantage won't rescue human labor from irrelevance, presumably because the scale of TAI will be so enormous that directly human output will be negligible.

The extent to which TAI will make humans truly obsolete is uncertain, of course. Korinek and Lockwood acknowledge that some human capabilities may not be displaced, though they clearly think that set is limited. Daron Acemoglu (2025) has recently forecast a far slower, and perhaps indefinitely more limited, extent of displacement. But he too acknowledges that he could be wrong. Certainly, one does not have to look far to find AI executives and others warning of human obsolescence at an unprecedented, overwhelming scale.

But that debate beside the point here, as howsoever that uncertainty resolves, Korinek and Lockwood's Y=AK forecast is a useful provocation. If we take for granted that the capital share of income will rise dramatically due to TAI, will labor income taxation remain the most natural or feasible source of government revenue? If not, how should public finance policy respond?

Korinek and Lockwood emphasize that an increased use of consumption taxation will be required, and I suspect they are right (even if the labor share of income stays well above zero). Why will we need to use consumption taxes more? After all, if output has boomed due to TAI and humans have found ways to generate value with their labor, the rise of the capital share may not decrease the *level* of labor income, and we could – in principle – continue taxing labor income. True, but capital income will be enormous in

that scenario, and likely highly concentrated (as may be labor income). If we are not going to tax capital income (more on that later), consumption taxation is one way to spread the gains from TAI, so it seems likely to increase. Moreover, if output growth is muted, and TAI is largely displacing human labor, then the need for consumption taxation to fund government will be all the greater.

A shift toward consumption taxation would, as Korinek and Lockwood point out, raise the return to sophistication in its design and implementation, including in the taxation of complements to untaxable activities that Korinek and Lockwood explain in the section "The return of Ramsey…" and which draw on the lessons of Atkinson and Stiglitz (1976). I am not entirely convinced that the benefits would outweigh the costs of such nuances, but to be candid it's hard to be sure, given that TAI will surely alter what "human activities" are untaxed, as well. Reducing evasion of consumption taxation may rise in importance with the role of the tax, though probably more for political than economic reasons if the size of the economic pie grows as much as is promised.

That said, if the central contribution of this paper is to make us aware of how TAI could force a major innovation in public finance policy, we will want to look beyond a shift to consumption taxation. Taxing consumption is commonplace in most high-income countries, namely through VATs, and even in the United States the tax deductibility of many forms of saving makes the income tax resemble (at least for most households) a progressive consumption tax. Especially if we end up living in a time of abundance due to TAI, the relatively low consumption tax rates required to fund the state's activities (including redistribution) would not – it seems to me – shock the system, nor would the relatively small distortions due to nonuniformities in effective consumption taxation merit much attention.

Instead, let me suggest that we will have bigger fish to fry. That is, the most likely need for a major public finance innovation will be in another feature of Stage 1 that Korinek and Lockwood address: the massive displacement of workers from their current (and future) careers. We face the daunting prospect of moving from an economy in which not working is the exception to one in which working is the exception. After all, the shift to a consumption tax in Stage 1 of Korinek and Lockwood's model is driven by its implication that *nobody* is working in their economy (i.e., the labor share of income is zero).

Here, I will depart from Korinek and Lockwood, who recommend addressing this displacement with a Universal Basic Income (UBI) at scale. The debate over UBI is a rich one, and it may be impossible to know the full effects of a large, indefinite UBI until we try one. But it is certainly possible – and my intuition is that it is likely – that such a UBI will prove limited in its ability to help societies healthily navigate the rise of TAI. Korinek and Lockwood's model has limited fiscal instruments, so a UBI is the only tool through which they can pursue redistribution inside it. But one of the great contributions of Mirrlees (1971) to public finance theory was to make nonlinear tax a centerpiece of the analysis, and I would encourage us to use that toolkit to find an alternative way to use consumption tax revenue to support those displaced. One option would be to support large negative tax rates that encourage work of various kinds, including both tasks that are not remunerative today but deliver substantial personal meaning as well as new tasks – perhaps created with the help of new public investment in dynamic areas such as the development of space – that tap into uniquely human talents.

Stage 2: The decline of consumption, whether taxing capital is radical, and the legitimacy of the system

Perhaps the most dramatic claim in Korinek and Lockwood's paper is that TAI will eventually displace humans as the main consumers of economic output. In what they call Stage 2, human consumption will be such a small share of output that taxing it will generate too little income to achieve our public goals, such that the only tax base remaining will be capital income and wealth. Thus, we will be compelled to

tax capital income (i.e., that income earned by TAI), violating the conventional wisdom of many (though not all) modern optimal tax theorists. Our policy problem will become one of deciding how much distortion to future output we're willing to tolerate in the interests of raising tax revenue today.

Given how far Stage 2 is from the economies to which we are accustomed, it may be useful to differentiate between two versions of this scenario.

In one version, humans are still in charge of the TAI, and I am less concerned than are Korinek and Lockwood about our ability to use capital taxation. First, in this hypothetical world abundance is everywhere, such that discouragement of investment through taxing capital income seems at most a minor concern. Second, while Korinek and Lockwood are right that capital taxes are unconventional in modern tax theory, they are commonplace in practice. Why? Let me suggest that this is one area in which I agree that now-standard public finance theory requires radical rethinking. In conventional modern optimal tax theory, the objective is a form of generalized utilitarianism. As Korinek and Lockwood point out, the Atkinson-Stiglitz theorem generally tells us that capital taxation is undesirable with such an objective. But, as I have argued in past work (Weinzierl, 2018), taxation serves a broader, arguably deeper purpose: to legitimate the political-economic system. While taxing capital owners may discourage capital accumulation, it may also generate legitimacy benefits far greater than those efficiency costs. And if most countries have decided this is the case today – justifying the taxation of dividends, interest, capital gains, and corporate profits – how much more likely will they be to do so in Stage 2, when the owners of TAI have benefited so dramatically?

In the second version of Stage 2, humans are not in charge of the TAI. This version seems to be closer to what Korinek and Lockwood have in mind, but I admit to being confused about whether humans are somehow still in control of the tax system in this version. They write, "we now consider autonomous capital. This… represents a qualitative shift where capital deployment may serve objectives other than human consumption." In this scenario, why would the TAI "allow" us to tax its "owners," whoever those might be? If we assume that taxation is still possible in this version, I agree that the only real question is how to tap the TAI's activity to serve humans, and if a capital tax is the right way to think about that, then the tension does seem to be a classic harvesting one. But I can't shake the feeling that taxation will not really be meaningful in this version, where TAI has gone so far beyond us.

Summing up

Korinek and Lockwood have done the important work of stating clearly, in the language of economists, why they foresee a need to reshape our public finance systems in the face of the challenges posed by TAI. Of highest priority, to my mind, will be supporting those who are displaced from their occupations and bolstering the legitimacy of our political-economic systems. Fortunately, the long history of thinking and experimentation in public finance gives us tools that could plausibly meet that challenge.

References

- Acemoglu, D., 2025. The simple macroeconomics of AI. *Economic Policy*, *40*(121), pp.13-58.
- Atkinson, A.B. and Stiglitz, J.E., 1976. The design of tax structure: direct versus indirect taxation. *Journal of Public Economics*, *6*(1-2), pp.55-75.
- Mirrlees, J.A., 1971. An exploration in the theory of optimum income taxation. *The Review of Economic Studies*, *38*(2), pp.175-208.
- Weinzierl, M., 2018. Revisiting the classical view of benefit-based taxation. *The Economic Journal*, *128*(612), pp.F37-F64.