7) To what extent can the rise of the knowledge economy explain increasing earnings inequalities in high income countries?

To answer this question, we must first unpack the term "knowledge economy" and clarify the assumptions inherent in the formulation of the question itself. The very term already implies a particular worldview, and so we must sketch out a working definition of the knowledge economy that acknowledges the *political* implications of that definition. After all, theories around the knowledge economy have a direct impact on the range of political possibilities for shaping its contours—the degree to which the knowledge economy is seen as a "natural" phenomenon is the degree to which policy makers will be less inclined to correct for any perceived shortcomings, particularly when it comes to rising inequality. Consequently, how we conceive of the knowledge economy and what it represents is of strong political importance. In that vein, this essay will examine the link between the knowledge economy and rising income inequality from two main perspectives: the more common one, drawing on orthodox macroeconomic theories, and a more critical one, drawing on heterodox theories. We conclude that the knowledge economy suffices to account for a large proportion of the increased income inequality in advanced economies as long as the definition includes the often-overlooked political decisions that have shaped it, and that the narrative around this relationship is of strategic importance for limiting potential in *combatting* said inequality.

Let's begin with the orthodox view of the knowledge economy, in which intellectual labour, becomes an increasingly important factor of production and education is a driver for economic growth (Patrick, 2013). This transition is part of a larger structural shift, in the advanced economies, from Fordism (characterised by reliance on large-scale manufacturing corporations) towards a more service- and knowledge-based economy (Iversen and Soskice, 2015). This has coincided with a rise in income inequality across the advanced economies in the last 40 years (Piketty, 2014), though not to the same extent among all countries—most notably, the US and the UK have reached particularly high levels of inequality. In both countries, there is a strong link between rising income inequality and rising financialisation, with an emphasis on these two nations' outsized role in the global financial system.

On the other hand, financialisation isn't the whole story—technological development also plays a role. Goldin and Katz (2007) explain this link with their theory of skills-biased technological change, whereby the rise of the high technology sector resulted in the creation of a number of high-wage jobs that favoured more educated workers, while simultaneously automating away or otherwise worsening the availability of lower-wage jobs. The concomitant phenomenon of globalisation has allowed for particular individuals, able to reap the benefits of greater access to markets and greater capital mobility, to command higher wages, which is compounded by the creation of winner-take-all markets that themselves arise from network effects (Brynjolfsson and McAfee 2014). At the same time, changing labour market institutions in the forms of declining trade union movements, weakened employee protection regulation and fraying welfare states have a part to play as well, and can exacerbate income inequality by weakening protections for those who are unable to access the newly created higher-skilled jobs. The extent of this varies among nations, most notably depending on whether the nation is a liberal market economy (with weaker labour market institutions and higher income inequality, e.g., the US and the UK) or a coordinated market economy (e.g., the Scandinavian countries), in line with Hope and Soskice (2016). In this vein, Hope and Martelli (2017), in a working paper published by our very own Inequalities Institute, perform a comparative study of income inequality across nations and demonstrate that strong

labour market institutions, including high degrees of collective bargaining as well as well-enforced employment protection legislation can reduce inequality through wage compression.

At this juncture, it is useful to critically assess the theories above and, in particular, uncover their limitations. After all, technological development is never some sort of natural and neutral process that unfolds without human intervention, whose negative impacts on inequality are buttressed only *ex post* by already-existing labour market institutions. The other side of the story is the degree to which *ownership* of technology has been appropriated by private corporations operating under a particular paradigm, and the role that plays in changing income inequality. It is important to note that many technological innovations in recent decades were funded and pioneered by the state , but due to the prevailing neoliberal consensus in the advanced economies, the actual proceeds of such technological development were overwhelmingly appropriated by private corporations, with the state playing a crucial role in enforcing a strong intellectual property regime (Mazzucato, 2013). Concurrently, as part of the turn toward neoliberal policy in the wider economy, there was a move away from the Fordist model of lifelong, secure employment and towards leaner business models characterised by more flexible labour (Srnicek, 2016). In recent years, we've seen the rise of what is often called the "gig economy", representing the apotheosis of such a transition: the desire of private corporations to shed assets and externalise costs as much as possible, coupled with the platform technology that allows them to do exactly that. The result is the polarisation of labour (Stigliz, 2012) whereby we see the creation of many poorly-paid, insecure jobs—culminating in the rise of the "precariat" class (Standing)—simultaneously with the creation of many well-paid jobs, for example in the financial industry or in the high technology sector. These two types of jobs are deeply entwined—as we see in the case of Uber, whereby a small number of well-paid software engineers and product managers create the technology used to control a comparatively enormous workforce of drivers, who experience extremely precarious employment conditions in a way that approximates the "day labourer" market of bygone days (Srnicek, 2016).

As a result, it's important that we consider the teleological aspect of the so-called knowledge economy. It's not merely a case of rewarding workers for acquiring knowledge through education—i.e., investing in their own human capital—and the vertiginous salaries commanded by the top 1% are not merely a reflection of "their superior ability to reap the rewards of their talents and the greater complexity of their roles", as Hope and Martelli suggest (2017, p.10). Such a statement may be descriptively true, but the wording implies a positive value judgment which is worth unpacking if we wish to build a more considered understanding of the situation. To what degree are the "talents" of the 1% simply due to being in the right place, at the right time, with the right credentials, and to what degree is the excess income they accrue the direct result of decreased wages and working conditions of those on the other end of global value chains?

This is a very pertinent question in our present era of stupefying inequality, when Amazon CEO Jeff Bezos is able to draw an enormous income while many of the workers in his warehouses rely food stamps (Barnes, 2018). In these circumstances, it becomes crucial to critically assess how we got to this point, and in particular examine the role of prevailing narratives around the "knowledge economy" as proposed by academics and policy makers in legitimating the present system. The role of ideology is key here: as Piketty (2014) points out, the primary role of "meritocracy" discourse—especially strong in the United States, which Piketty describes as "hypermeritocracy"—is to justify existing patterns of inequality through claiming a link between reward and "merit", where "merit" is an amorphous quality whose definition is, of course, set by those who are already in power. This narrative is especially relevant in the context of the

knowledge economy, where education level and type (i.e., what degree someone has) is often used as a stratifying tool that results in seemingly-justified levels of income inequality.

Finally, an important perspective to consider is that the knowledge economy is not based on knowledge as such, but on the *exploitation* of knowledge—the financial enclosure of the digital commons, enforced by an intellectual property system that encourages the creeping commodification of technology rather than its use for public good (Moulier-Boutang, 2007). This is important to remember given the way the knowledge economy has accelerated income inequality in many advanced nations—just because it has done so in the past, it does not mean it will always do so, even irrespective of the labour market institutions that Hope and Martelli analyse—that is part of the story, but the *ownership* of technology is another part. If we treat the knowledge economy as this apolitical phenomenon, separate from cultural, social and economic norms around ideas of "meritocracy", then we miss an opportunity to reshape the narrative in terms of what the technologies behind the knowledge economy can actually do: far from merely playing policy catch-up to mitigate the corrosive effects of the high-tech sector on inequality, we could be using it to drastically reduce inequality while improving living standards for all. The "knowledge economy" may, so far, have contributed to rising income inequality, but the future is yet unwritten.

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Feedback

Another excellent (in all respects) and very thoughtful essay with a potentially optimistic conclusion. The knowledge economy is situated economically and in terms of the politics that have shaped it which makes for both a discussion of the economic implications with respect to inequality and how they are understood politically recognising differences between states by alluding to the variety of capitalism perspective but also grounding the suggestion that alternatives are possible. Mark 77