

Labour vs. Leisure:

A Colonial History

Open the index of any undergrad economics textbook, and you'll find nestled under the letter B the 'backwards-bending labour supply curve'. Just like a lot of economic and financial jargon, the backwards-bending labour supply curve sounds inherently technical, and dull. But excavate its past and you find, first, that it was a key component in the long history of economics as a coercive, colonial science. Secondly, it was a way of thinking about the work of millions of people that facilitated exploitation and expropriation from the Highlands of 18th century Scotland to the gold mines of 20th century South Africa. Thirdly, it was not a benign, retrospectively-theorised concept but a crude device used by colonial elites to maximise low-wage labour, exports and profits - cleaving the days, weeks and years of recently-colonised lives into 'labour' and 'leisure'.

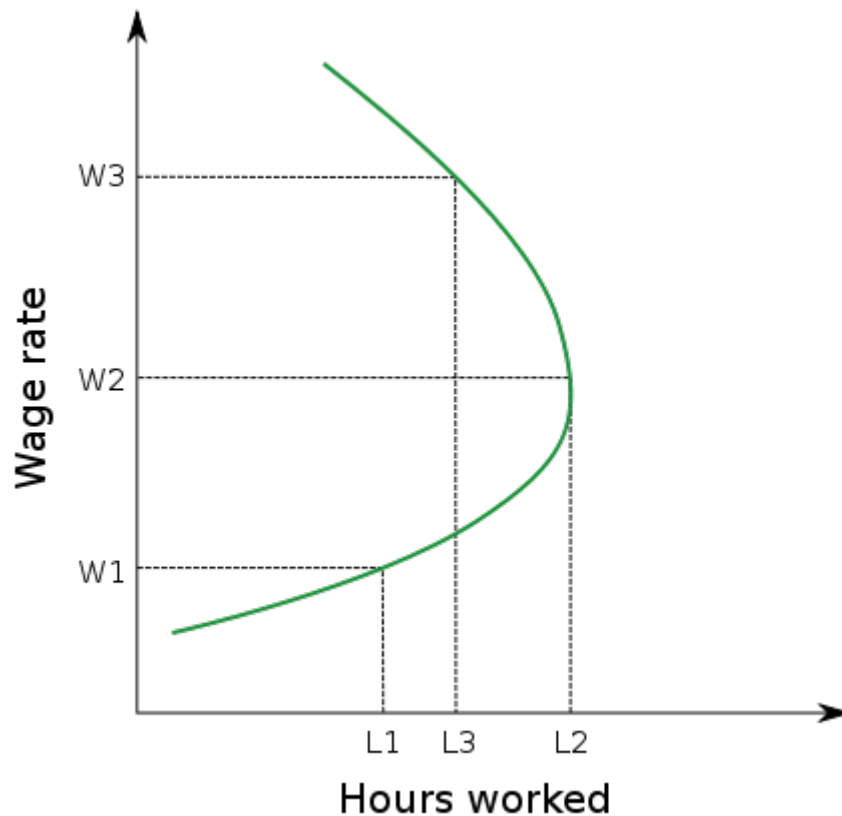
A history of this curve shows that at different moments Ireland, Scotland and South Africa were all newly 'civilised' places, freshly engulfed within an expanding market-orientated British empire, where economic theory justified the perpetuation of a subsistence-wage economy. Integral to the broader colonial project of mapping, measuring, defining, confining, enclosing and coercing the world and its populations, the backwards-bending labour supply curve remains incredibly logical - but - simultaneously, exploitative and oppressive. Put simply, for most of us, it is utter bullshit - in two important senses:

Empirically, like many economic ideas of the Enlightenment period it is complete rubbish - an imagined scenario that historically didn't play out.

But more than this, it is an idea that in practice nevertheless had huge power - justifying wages that barely ensured subsistence, and the immiseration of millions of lives.

Mercantilist economics and Enlightenment Britain

The backwards-bending labour supply curve sets out a scenario where workers prefer 'leisure' over 'labour'. It asserts that once workers have earned a 'subsistence income' they are satisfied, and therefore work less (L3) at higher rates of wages (W3), when it is easier to quickly accumulate a subsistence income, and more (L2) at lower wage rates (W2), when it is harder.



Mercantilist economists after the Glorious Revolution of 1688 first theorised the roots of this idea on the basis of workers' 'depraved' morals. The chief concern of mercantilist economists in this new age of empire was how to maximise net exports - and in order to do so they looked to maximise the 'supply of labour'. Advocates of mercantilism believed that 'the supply of labour' was maximised when wages were set at as low as possible (conveniently, low-wage labour also allowed the manufacturer to sell his commodity at a lower price and capture trade for 'the good of the nation'). W2 was not a good wage, but a bare subsistence wage that on its own allowed workers to just about exist. It was believed, however, that if workers (easily seduced by vice, copious eating and excessive drinking) were paid more than subsistence wages, their increased incomes would foster depravity and laziness. Arthur Young in his 1771 book *Eastern Tours* declared: "Every one but an idiot knows that the lower classes must be kept poor or they will never be industrious; I do not mean, that the poor of *England* are to be kept like the poor of *France*, but, the state of the country considered, they must (like all mankind) be in poverty or they will not work."¹ His contemporary Powell similarly regurgitated: "If a person can get sufficient in four days to support himself for seven days, he will keep holiday the other three; that is, he will live in riot and debauchery."²

For the quintessential mercantilist Sir William Petty - statistician, surveyor and the 'father of economics' and the modern census - employers "should allow the Labourer but just wherewithal to live; for if you allow double, then he works but half so much as he could have

¹ Quoted in E.S. Furniss, *The Position of the Labourer in a System of Nationalism*, (New York, 1920).

² Quoted in E.J. Berg, 'Backward-Sloping Labor Supply Functions in Dual Economies - The Africa Case', *Quarterly Journal of Economics*, 75:3 (1961).

done and otherwise would which is a loss to the Publick of the fruit of so much Labour.”³ Noting in his 1690 book, *Political Arithmetick*, “It is observed by Clothiers, and others, who employ great numbers of poor people, that when Corn is extremely plentiful, that the Labour of the poor is proportionally dear: And scarce to be had at all (so licentious are they who labour only to eat, or rather to drink)”, Petty even advocated keeping up the price of corn during periods of glut to ensure that workers remained trapped in work, and were prevented from enjoying idleness (and leisure).⁴

To justify his proposals, Petty dismissed the ‘outdated’ use of pre-Enlightenment reasoning in favour of cold-hard number-crunching, and conclusions expressed in ‘terms of number weight or measure’. Petty understood “vile and brutish” British workers in terms of abstract aggregation - the new sciences of ‘political arithmetick’ and ‘political economy’ - to make observations that even if “*not already* true, certain and evident, yet may be made so by the Sovereign Power.”⁵ In reality, the data he used was often defective and incomplete. He invoked spurious numbers to support his conclusions and his dodgy ‘arithmetick’ was openly satirized in Jonathan Swift’s *Modest Proposal*.⁶ But Petty nevertheless had an enduring legacy. To measure was to understand, and to understand was to control the futures of millions of workers.

On the one hand the roots of the backwards-bending labour supply curve tells a history of workers’ resistance. Appalling urban working conditions and exhausting 13-14 hour days meant that people at all costs avoided work in the wage economy if they could, and did not react when wages fluctuated on a narrow spectrum between subsistence and very low pay. Thus the ‘supply of labour’ often did not react positively to marginally increased wages - people only worked for wages when they had no other choice, when they needed money just to subsist.

On the other hand it reflects the concurrent enclosure of common land the theory appeared alongside. If they earned more than subsistence wages, and saved, then workers could exist outside the wage economy at least for a few days, weeks or months. Men like Petty however were integral to shutting this option down - actively destroying alternative livelihoods and traditional practices of commoning in order to create ‘modern farms’ and a modern workforce. Caught in a ‘poverty trap’ when employed at bare subsistence-level wages, increasing numbers of workers found themselves stuck in waged work, getting-by from week to week but with no way of escaping employment, saving or earning an alternative income. At the same time the broader nascent capitalist system to expanded on the back of the surplus

³ W.Petty, ‘A Treatise of Taxes and Contributions’, in W. Petty, *Tracts: Chiefly Relating to Ireland, Containing: A Treatise of Taxes and Contributions, Essays in Political Arithmetick, The Political Anatomy of Ireland*, (London, 1719), p.78.

⁴ W. Petty, ‘Political Arithmetick’ in W. Petty, *Tracts: Chiefly Relating to Ireland, Containing: A Treatise of Taxes and Contributions, Essays in Political Arithmetick, The Political Anatomy of Ireland*, (London, 1719), p.240.

⁵ W. Petty, ‘Preface’ in W. Petty, *Tracts: Chiefly Relating to Ireland, Containing: A Treatise of Taxes and Contributions, Essays in Political Arithmetick, The Political Anatomy of Ireland*, (London, 1719), p.207.

⁶ M.N. Rothbard, ‘Sir William Petty and the Mathematics of Power’, *Mises Daily Articles* accessed <https://mises.org/library/sir-william-petty-and-mathematics-power>

value of their labour. Like many of Petty's ideas, the optimal maximisation of labour supply at subsistence wages was not an empirical finding, but an idealised outcome "made so by the Sovereign Power" of the army and the gallows.⁷

Civilising Mission

Petty's 'political economy' described how people reacted to the encroaching wage economy, but this was only after existing livelihoods outside the waged economy had been violently destroyed. As chief cartographer in newly-colonised 1650s Ireland, Petty oversaw the repayment of Cromwell's victorious army through the mapping and redistribution of seized communal land. Expropriating and enclosing hundreds and thousands of acres, Petty compensated troops on the one hand, and on the other forced Irish to migrate to England en-masse as "spare hands to superlucrate millions and millions", boosting the supply of subsistence-wage labour.⁸

By the 18th century, with the Irish subdued, the military prowess and clan laws of Highlander tribes of Scotland were seen as one of the last remaining threats to Britain's expanding market economy.⁹ After the Highlanders' invasions of England in 1715 and 1745, and the two aborted attempts of 1708 and 1719, they were increasingly seen as an exposed rear flank who refused to engage in capitalist relations. Highlanders had to be 'civilised', refined and effeminated. After the defeat of the 1745 Jacobite Rising, the 1747 Heritable Jurisdictions Act abolished the judicial rights of clan chiefs, and the 1746 Act of Proscription outlawed Highland dress. The 'civilisation' of the Highlanders, however was not an ideal but a violent act. Replacing Highland *clan* law with Roman *civil* law, Enlightenment intellectuals argued for the homogenisation of legal codes under a *process* of civilisation, closing down of existing Highland practices of clan law and commoning that posed a threat to British markets. Championing the ideals of Roman civil law, the modern Scottish legal system, in contrast to the burdensome case-by-case practice of clan law and English common law, provided a uniform process for the buying and selling of commodities, including land, which assured 'freedom' and trade.

Rolled out across Scotland, Ireland and England, civilisation then was a process, integral to broader enclosure movement, through which communal traditions were eradicated, common land was expropriated and commoners across the British Isles lost their rights to strip-farming, wood-collecting, kitchen-gardening, chicken-rearing and pig-keeping - and were coerced into the wage economy.¹⁰ The mercantilists' wage theory in turn ensured that when working they received no more than subsistence wages.

⁷ P. Linebaugh, *The London Hanged: Crime and Civil Society in the Eighteenth Century* (London, 2003).

⁸ W. Petty, 'Political Arithmetick', p.277.

⁹ G.C. Caffentzis, 'On the Scottish Origins of 'Civilization'', in S. Federici, *Enduring Western Civilization: The Construction of the Concept of Western Civilization and its Others* (London, 1995).

¹⁰ P. Linebaugh, *Stop Thief! The Commons, Enclosure and Resistance* (Oakland, 2014).

By the late 19th century, the heirs of William Petty dominated the economic thought of imperial Britain. Industriousness and the Protestant work ethic had been internalised by the British middle classes, whilst idleness, laziness and debauchery had been exported to the new 'peripheries' of empire. In recently-colonised spaces, officials were called on by Kipling, the bard of empire, to combat preferences of leisure over labour and:

Take up the White Man's burden, The savage wars of peace—
Fill full the mouth of Famine And bid the sickness cease;
And when your goal is nearest The end for others sought,
Watch *sloth and heathen Folly* Bring all your hopes to nought.

South Africa in the Early 20th Century

By the 1890s the idea that Africans inherently preferred leisure to labour had become "the *idea fixe* of the colonial officers", ideas which by the 1930s "produced the so-called theory of the backward-bending supply curve of labour".¹¹ Mercantilist ideas, properly codified in a 'labour supply curve', were pedalled time and time and time again - but were refuted by the resistance of South African workers to low wage work, and an emerging cohort of intellectual elites who wrote back against empire.

In 1886 gold was discovered in South Africa's Transvaal region. By 1991 these seams would produce 40% of all the gold *ever* mined - but the ore was of such low quality that if they had existed in Australia, Britain or the United States they would have never been profitably mined. With the expense of capital equipment relatively fixed, the cost savings required were only made through extraordinarily 'cheap' black labour whose real wages never increased from the 1890s through to the 1970s. In the early 1890s, the Annual Report of the Chamber of the Mines justified reduced wages through the, now-familiar, assertion that:

In support of a general reduction of wages, if possible by a fixed tariff, it is forcibly argued that the high wages now paid are themselves a principle reason of short supply...it is found that the average period of service among our Kaffirs is much shorter than in districts in which a lower rate of wages is paid.¹²

Again in 1902 and 1903, when the South African gold mines again substantially reduced wages, the line was pedalled: "It is not anticipated that a reduction in the rate of wages will tend to reduce the supply of labour. A native usually goes on working until he has obtained a definite sum of money with which to return to his country."¹³

Finally in 1929, when pressed by newly-formed African trade unions for a minimum wage across South Africa's gold mines, it was argued:

¹¹ R. Cohen, 'Introduction' in A.T. Nzula, I.I. Potekhin, A.Z. Zusmanovich & H. Jenkins, *Forced Labour in Colonial Africa*, (London, 1979), p.17.

¹² Berg, 'Backward-Sloping Labor Supply Functions'.

¹³ Berg, 'Backward-Sloping Labor Supply Functions'.

There appears to be no good reason for raising the wages of natives living under tribal conditions and who come into the labour market at intervals. If it were done, it is possible that, as they would be able to save as much money as they do at present by working for a shorter period, it would have the practical effect of reducing the supply of unskilled labour *without material advantage to anyone*.¹⁴

At the same time, in the metropole, economists were transforming mercantilist ideas about 'labour supply' into theories about 'labour supply curves' that were, at first, 'backwards-sloping' and subsequently 'backwards-bending'.

Frank Knight first theorised the backwards-sloping labour supply curve in his 'ground-breaking' 1921 book *Risk, Uncertainty and Profit* stating, if wages were raised "a man previously at the perfect equilibrium adjustment works as before and earns a proportionately higher income...he must evidently lay out part of his new funds for increased leisure; i.e. buy back some of his working time or spend some of his money by the process of not earning it."¹⁵ Knight's footnote to this point is telling,: "The facts as to the shape of the supply curve of labor from given laborers are well known to employers of native workmen in backward countries, especially the tropics."

The myth of the lazy British worker had thus transferred across the Atlantic into the myth of the lazy black worker - the British economist PJD Wiles quipping in his 1956 book *Price, Cost and Output* "This backward sloping supply curve applies to nearly all forms of labor. It is not in any way confined to semi-tribal Africans or to British miners...we all have a ceiling to our standard of living, and as we approach it we all fight shy of extra work. The phenomenon is nearly universal."¹⁶

In 1930, Lionel Robbins broke the "unanimity of expert opinion" to assert the labour supply curves were backwards-bending; sloping forward at lower levels of income, and only bending round to slope backwards at higher wage levels as work is 'substituted' for leisure (as in figure 1). Dismissing Knight's "implicit appeal to the 'law' or assumption of the declining marginal utility of units of income", Robbins asserted that evidence "does not seem to justify the assumption that this curve must *always* cut a rectangular hyperbola negatively."¹⁷

But Robert Sambo, a worker in Zimbabwe, offered a far more cutting critique of colonial economics and structural violence in Southern Africa: "In most of the farms my people work from 12 to 14 hours a day. Their quarters are not fit for human beings, and their food is cheap or rotten meal and salt; to get meat is to wait until one beast is dead. If they cry to their masters for being overworked, their masters hit them. When they go to the nearest police

¹⁴ W. Ballinger, *Race and Economics in South Africa* (London, 1934).

¹⁵ F. Knight, *Risk, Uncertainty and Profit*, (New York, 1921), p.117.

¹⁶ P.J.D. Wiles, *Price, Cost and Output* (Oxford, 1956), pp. 155-156.

¹⁷ L. Robbins, 'On the elasticity of the demand for income in terms of effort', *Economica*, 29 (1930); I Falgueras-Sorauren, 'New Lights on the Robbinsian Theory of Work Supply', *Scottish Journal of Political Economy*, 57:4 (2010).

station to report and get their assistance, the police officers instead of calling the master to come and answer the charge against him he only talks to him through the phone. Having received the reply that 'The bloody niggers were loafers and that they did not wish to work', the police officer then answers that alright, 'I will fix them up', he then slaps them on their faces and commands them to go back to work or else they will get arrested if you leave your work again."¹⁸

Indeed, the 'aggregate supply of South African labour' showed itself not only to be positively related to wages, but highly responsive to wage cuts. After the 1902 wage reductions the South African mines found themselves in the midst of the most severe labor shortage in the history of the industry, a shortage which was undoubtedly a response to the mines' wage policy.¹⁹ It turned out reducing wages did not increase the labour force, but led to a sharp drop off in the number of workers; and forced mine owners to recruit 'cheap' indentured labourers from Mozambique, Malawi and, even further afield, China.

Workers in Southern Africa did internalise ideas about prudent waged work and sought out 'self-improving' employment - often at the cost of huge personal hardship. Clements Kadalie, Robert Sambo's colleague in one of the first black trade unions in South Africa, the Industrial and Commercial Workers' Union (ICU), walked from Malawi to South Africa in 1915 "in search of a higher civilised life" - but the 'civilisation' he found was a colonial society where communal land had been expropriated and subsistence wages were the norm for all workers but a few.²⁰ In the face of William Petty's 'political arithmetick' they reacted through go-slows, desertion, the forming of trade unions, and writing newspaper articles and tracts calling out the British for their farcical 'civilising' mission.

Kadalie explicitly rejected the "hypocrisy of British Imperialism" and its so-called system of 'free labour', under which thousands of workers were "employed and bridled under the 'Recruiting System' ...unable to do according to their conscience for fear of imprisonment or repatriation to their native territories", whilst for Albert Nzula, a fellow ICU trade unionist and one of the first black South African Marxist theoreticians, "given sufficient land, the African population would support themselves by their own farming, and would not go to work in the mines...[For mining to take off, Africans] would need to be dispossessed of their land. The British imperialists could not, therefore, leave the land in the hands of the peasants, and would have to confiscate it."²¹ Nzula made clear that the problem was not that Africans had an overwhelming preference for leisure over labour, but that miners were heavily exploited, working conditions were atrocious and living conditions were appalling: "The wages of the black South African miner...are perhaps the lowest in the capitalist world, and bear no comparison whatsoever with those of European and American miners...In 1928-29

¹⁸ South African National Archives, Pretoria. PM 1/2/328 PM93/12 Deportation of Robert Sambo (1928-1929)

¹⁹ Berg, 'Backward-Sloping Labor Supply Functions'.

²⁰ C. Kadalie, *My Life and the ICU*, (London, 1970).

²¹ C. Kadalie, 'Political Storms in Africa', *The Messenger*, (August 1925); A.T. Nzula, I.I. Potekhin, A.Z. Zusmanovich & H. Jenkins, *Forced Labour in Colonial Africa*, p.39.

the wages of white miners ranged between £251 and £288 per annum, whilst those of the black miners never exceeded £31.”²²

Lionel Robbins’ 1930 backwards-bending labour supply curve then had shifted the debate - but only marginally. His curve maintained the illusion that workers choose how much they worked and obscured the structural violence of the capitalist state, an illusion critiqued by Sambo, Kadalie and Nzula. Colonial era liberals, and the neoliberals of today, have always trumpeted freedom and choice - but they historically have eroded and restricted our ‘choices’: removing rights to common goods, enclosing common spaces and destroying livelihoods that existed outside the capitalist system. For Scottish trade unionist William Ballinger, South Africa of the 1920s was “merely repeating, with startling clearness and undesirable completeness, the excesses which marred the growth of the industrial state in the Old World.”²³ A theory that propped up exploitative employment practices from 17th century Britain to 20th century South Africa, the backwards-bending labour supply curve, was integral to this, and is still a mainstay of undergraduate economics.

Freely undertaken work can undoubtedly be joyful - yet few of us have any freedom to choose whether to work or not. Rather than comprehending how the world actually worked, the backwards-bending labour supply curve obscured structural violence and violently projected a model of how people *should* work, justifying low-wage labour regimes that saw real wages for workers stagnate at subsistence-levels. An essential part of the tool-kit that built Britain’s imperial project, and the modern world, the curve was theoretically bullshit - but had huge power over millions of people’s lives. Even today, the assumption that, given the choice, people won’t work if they don’t have to remains an underhand, but influential postulation: our current economic system is still premised on the idea that people *have* to engage in the modern economy and work for wages, that our lives have to be rationally divided between labour and leisure. In our current conundrum, Basic Income perhaps provides the latest and most forward-thinking arguments in a long campaign of the workers against the assumptions of William Petty and colonial officials’ backwards-bending labour supply curve. But this campaign for ‘sloth and heathen folly’, ‘riots and debauchery’ can look to the histories of dodgy economics, stolen rights, resistance and past commons, as well as foresight, to stake out an egalitarian new future.

A fully referenced version of this essay can be found at: _____

*The best introductions to the history of the commons are Peter Linebaugh & Marcus Rediker, *The Many-Headed Hydra: Sailors, Slaves, Commoners and the Hidden History of the Revolutionary Atlantic* (Boston, 2000) and Peter Linebaugh, *Stop Thief! The Commons, Enclosure and Resistance* (Oakland, 2014).*

²² A.T. Nzula, I.I. Potekhin, A.Z. Zusmanovich & H. Jenkins, *Forced Labour in Colonial Africa*.

²³ Ballinger, *Race and Economics in South Africa*, p.40.