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Universal Kindness

3

A decentralized monetary policy and
unconditional universal income
guarantee, implemented using
networks of social trust and
cryptocurrency – an attempt at
redistribution of wealth, and the total,
direct and immediate abolition of
poverty.

4

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5

DRAFT

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Chapter 1

Introduction, motivations, caveats

If a lot of people love each other,
the world would be a better place to live.

Johnny



Figure 1.1

49 Pierre-Joseph Proudhon, the first anarchist and yet deeply problematic person, rejected all
50 political action as a form of class collaboration and argued instead that the working class
51 can achieve its salvation through economic action alone.

52 This document presents some ideas that are in pursuit of a society that values fairness
53 and caring, intrinsically involving care of non-human nature, perhaps via some methods of
54 communalist anarchy, and that has at its core the ideas that monetary policy should not be
55 under the sole control of the wealthy, and that no one should have to work just to survive
56 and have their fundamental rights protected.

57 Described in this document is a tool of social coordination to direct progress towards such
58 a society: a monetary policy controlled by dictatorship of a proletariat. Decentralized
59 networks of social trust and decentralized networks of cryptocurrency could possibly be
60 used to create this decentralized form of coordination, a prioritised function of which would
61 be a *decentralized unconditional universal income guarantee*. In short, we're talking about:



Figure 1.2

To each according to their needs.

Here, the slogan popularized by Marx has its symmetry broken because it could be interpreted as implying that there is scarcity of the resources required to ensure the needs of the people of the world, when this is likely not the case, as suggested by global food production capabilities, shown in Figure 1.3. This is with existing food production methods, which involve the atrocity called the animal industry. Leaving aside the horror of this industry, its inefficiency is remarkable: 16 kg of plants are needed to produce 1 kg of meat. A move to veganism would make the unreality of food scarcity even more clear.

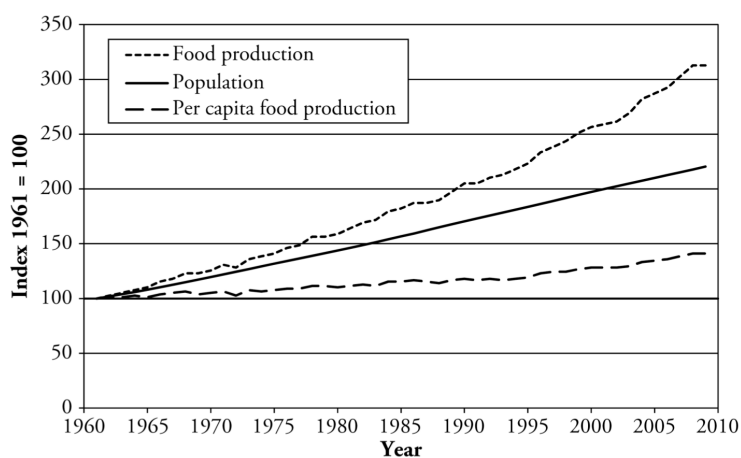


Figure 1.3: World food production from 1961 to 2009 [1]

Often socialists view an ideal economy as one in which remuneration is at least somewhat proportional to the degree of effort and personal sacrifice expended by individuals in the productive process. I argue that remuneration, or otherwise provision of fundamental needs, is a right (which is a need a person gets to demand) that should not be coupled with ability or desire to commit effort or sacrifice. I have in mind here the benefit particularly for the most vulnerable in society.

If there are scarcities of resources needed for protection of fundamental needs (and that is a big “if”), then we do at least have guidelines on what some of the most important needs are, such as the *Universal Declaration of Human Rights* [2] (UDHR), and on how needs are prioritized, an example of which is the *Corte Suprema di Cassazione* ruling on Roman

80 Ostriakov [3], who stole some food in an action that was ruled a necessity for life; “il diritto
81 alla sopravvivenza prevale su quello di proprietà” [the right to survival prevails over that of
82 property] [4], which was based on the Italian legal doctrine ‘Ad impossibilia nemo tenetur’
83 [‘No one is held to do the impossible’].

84 Poverty exists even in the wealthiest nations. For instance, Philip Alston, the United Na-
85 tions Special Rapporteur offered a statement in 2018 on extreme poverty and human rights
86 violations in the contemporary UK [5].

87
British compassion for those who are suffering has been replaced by
a punitive, mean-spirited, and often callous approach apparently
designed to instill discipline where it is least useful, to impose a rigid
order on the lives of those least capable of coping with today’s
world, and elevating the goal of enforcing blind compliance over a
genuine concern to improve the well-being of those at the lowest
levels of British society.

Philip Alston, 2018 [5]

88 If you are anarcho-curious (phrase stolen from Nathan Schneider), an introduction to the
89 topic of socialist versions of anarchism is provided by the Philosophy Tube video *Intro to*
90 *Anarchy: Power & Violence* [6]. A more full introduction to anarchism is offered by Noam
91 Chomsky in *On Anarchism* [7]. One aspect of anarchic thinking is its power to show as
92 unjustified the various forms of power, domination and hierarchy that exist in society, as
93 Chomsky puts it, “exposing power to the sunlight and seeing it evaporate” [8]. An early
94 comment on balanced anarchy yielded by computer networks was given by James Burke in
95 the 1985 documentary series *The Day the Universe Changed* [9].

In describing this utopia as “anarchism,” I might have also used an equivalent expression – “anarcho-communism.” Both terms denote a stateless, classless, decentralized society in which the splits created by propertied society are transcended by new, unalienated human relationships. An anarchist or anarcho-communist society presupposes the abolition of private property, the distribution of goods according to individual needs, the complete dissolution of commodity relationships, the rotation of work, and a decisive reduction in the time devoted to labor. As this description stands, however, we have little more than the anatomy of a free society. The description lacks an account of the physiology of freedom – of freedom as the process of communizing. The description, in effect, lacks those subjective dimensions that link the remaking of society to the remaking of the psyche.

Murray Bookchin, *Post-Scarcity Anarchism*

97 Strict self-sufficiency approaches like Mao’s backyard pig iron and Angka’s isolationism
 98 have proven to have a high likelihood of failure, and don’t conceptually work well in a
 99 world of diverse location-based resources. Scotland has wind; Sudan has sunlight. So
 100 a cautious implementation is suggested, perhaps a gradual one with voluntary groups of
 101 people choosing to coordinate, while also dealing strongly and carefully with the predatory
 102 forces of capitalism, corporatism and the like.

103 There is a tendency for human-created ideas to vastly prioritise human needs over the needs
 104 of other people and creatures and systems of life. I want to emphasise that the use in this
 105 document of words such as ‘person’ are to be extended beyond humans to others in nature,
 106 including those created by human designs. I want to emphasise also that a fairer society
 107 can be conceptualized only if there is a strong response to the climate emergency [10], and
 108 that the climate emergency has been caused to varying degrees by projects concerned with
 109 domination, profit, growth, structural violence, and general unconsidered unfairness in how
 110 humans treat other humans and life generally.

111 The book *Utopia for Realists* by Rutger Bregman makes the statistical, economic and his-
 112 torical case for open borders and implementation of a universal income guarantee. At a panel
 113 session in Davos 2019 (which was popularized by Bregman emphasising the need for vastly

114 greater taxation on extreme wealth), Bregman links the socio-economic benefits of war-time,
115 such as reducing wealth inequality, with the framing of responses to the climate emergency
116 as “the moral equivalent of a war”. This is an inventive approach that should be investi-
117 gated, because it offers the possibility of addressing the climate emergency in tandem with
118 the possibility of improving social wellbeing [11]. The *Global Green New Deal*, as supported
119 by Alexandria Ocasio-Cortez and others, might be used for this purpose [12].

120 Caveat: if the mere existence of a form of commodification, such as the system proposed
121 herein, impedes progress towards a better world, perhaps by supporting surveillance capi-
122 talism in some way, then this tool and others like it should be dismissed;

The examined life is actually not worth living.

123

Natalie Wynn [13]

124 There is a tendency for the powerful to attempt to claim nice-sounding phrases, such as
125 “Universal Credit”. The UK Universal Credit system is a welfare payments system that
126 features sanctions and resulting deaths. It is possible that the use of this terminology by
127 the UK Tory government combined with the disastrous effects of its implementation will
128 scare people that have been subjected to it into fearing any change to the existing welfare
129 system and may even induce fear of terms like “universal” because they can represent
130 oppressive and painful changes. Even terms like “benefits” are manipulative and imply that
131 welfare is not a right, but a privilege. So, I make no apologies for the use of the laborious,
132 redundancy-high, term

133 *decentralized unconditional universal income guarantee*

134 because it is more difficult to change the meaning of a larger number of words than a smaller
135 number. I explicitly exclude terms like “citizen” because an income is demandable by anyone
136 who needs it.

137

Chapter 2

138

What: some terminology

139

2.1 Terminology

140

Some slightly non-standard terminology is used in this document, so some of it is qualified

141

in Figure 2.1.

Term	Description
Guaranteed income	A guarantee of money given to a person universally and unconditionally and reliably of an amount defined by some monetary policy.
Guaranteed basic income	A guaranteed income of an amount sufficient to cover basic needs/rights.
Guaranteed median income	A guaranteed income of an amount corresponding to the median income of the relevant population.

Figure 2.1: Terminology

142 Chapter 3

143 Why and how

144 3.1 Imperial capitalism and the class system

145 The current monetary system is both impractical and unfair. Taken in political context, it
146 concentrates a disproportionate power in a tiny minority of people. This promotes inequality
147 and injustice and a wealth of other problems, and is readily abused for the purposes of
148 manipulation and control. The current system rewards and encourages greed and selfishness.

149 There are many, many ways by which the capitalism system enables wealthy individuals
150 and groups to gain political and legal and otherwise dominative and coercive power, some
151 of which are lobbying, corruption, disinformation, manipulation and threats, and many of
152 which involve the undermining of both thinking and wellbeing via stress and poverty. In
153 societies that permit capitalism (or in those that do not sandbox it), there ends up being
154 a working class – that is the people who work for someone else – and a capitalist class –
155 who are the people who have people work for them – and a middle class, which is usually
156 comprised of working class people who live comfortably with noticeable social privileges
157 relative to working class people, and those who manage the working class for the capitalist
158 class (and someone self-employed may be a member of the petite bourgeoisie).

The United States is deeply in debt – that was part of the whole Reagan/Bush program, in fact: to put the country so deeply in debt that there would be virtually no way for the government to pursue programs of social spending anymore. And what “being in debt” really means is that the Treasury Department has sold a ton of securities – bonds and notes and so on – to investors, who then trade them back and forth on the bond market. Well, according to the Wall Street Journal, by now about \$150 billion a day worth of U.S. Treasury securities alone is traded this way. The article then explained what this means: it means that if the investing community which holds those securities doesn’t like any U.S. government policies, it can very quickly sell off just a tiny signal amount of Treasury bonds, and that will have the automatic effect of raising the interest rate, which then will have the further automatic effect of increasing the deficit. Okay, this article calculated that if such a “signal” sufficed to raise the interest rate by 1 percent, it would add \$20 billion to the deficit overnight – meaning if Clinton (say in someone’s dream) proposed a \$20 billion social spending program, the international investing community could effectively turn it into a \$40 billion program instantly, just by a signal, and any further moves in that direction would be totally cut off.

Noam Chomsky, *Understanding Power*

160 This scenario suggested by Chomsky, considered with sufficient economic skepticism, is just
 161 one way by which a coordinated campaign by the wealthy can be formed against a social
 162 program in order to make it prohibitively expensive.

163 In almost all countries, income and wealth inequalities have increased vastly, partially de-
 164 fended and concealed from traditional legal systems and economics by wealth stashed in
 165 tax havens. We have changed from a post-war time of liberalized financial markets to one
 166 of rentier capitalism, wherein more and more wealth and income is siphoned by owners of
 167 financial, tangible and intellectual property, leaving even wage labour incomes to stagnate
 168 and reduce. Governments, often under the financial control of the wealthy, have increased
 169 subsidies and tax cuts for the wealthy while reducing the welfare states and making such
 170 things as welfare payments difficult to obtain, often to a deadly extent. Even more alarm-

171 ingly, we see capitalist growth destroying the environment.

172 3.2 Artificial scarcity, technologies of decentralization 173 and income

I am now convinced that the simplest approach will prove to be the
most effective – the solution to poverty is to abolish it directly by a
174 now widely discussed measure: the guaranteed income

Martin Luther King, Jr.,

Where Do We Go from Here: Chaos or Community (1967) [14]

175 The *Emergency Economic Stabilization Act of 2008* became law on 3 October 2008 for the
176 purpose of bailout of banks in the 2007–2008 sub-prime mortgage fraud.

177 While development of ideas like it took place over many years, the original *Bitcoin* paper [15]
178 was then released on 31 October 2008, in possible response to this bailout, with the coinbase
179 field of the genesis block stating “The Times 03/Jan/2009 Chancellor on brink of second
180 bailout for banks.” [16]. While the bailout act of 2008 was followed up by the *Dodd–Frank*
181 *Wall Street Reform and Consumer Protection Act* in 2010 to reduce fraudulent and risky
182 behaviour, Bitcoin has continued to grow and has resulted in the development of a vast
183 collection of other cryptocurrencies.

184 Just as Napster and BitTorrent led to a global decentralized mechanism of opposition to
185 artificial scarcity of easily-duplicable data, and a decentralized mechanism of protection of
186 certain rights, such as the UDHR Article 27(1) right to cultural participation and artistic
187 enjoyment, so too has Bitcoin become a global decentralized mechanism that bypasses au-
188 thoritarian mechanisms of enforcement of monetary policy, and a mechanism of protection
189 of certain rights, such as the UDHR Article 12 right to privacy (applicable in the case of
190 being able to access drugs currently called illegal by authoritarian regimes), the UDHR
191 Article 22 right to economic participation (of particular benefit to people in poverty who
192 cannot access banking systems and who are excluded because of risks of fraud) and the
193 UDHR Article 19 right to freedom of expression (I will accept an IOU from anyone I per-
194 sonally deem fit, thanks very much). It also assists in decreasing economic borders, such

195 as country-level sanctions and the forced sale of work for unfair rates. We see explorations
 196 of blockchain social networking with Memo [17]. We see the Bitcoin blockchain used as a
 197 notary with Satoshi Proof [18], whereby data can be reliably timestamped. We saw M-Pesa
 198 change from a measure of phone air-time to being a proxy used for money transfer. With
 199 government viewed as being substantially a form of technology, many other decentralized
 200 systems hint at other ways of forming and operating a decentralized government. One is the
 201 gradual migration of people away from brand loyalty to ratings loyalty. One is the usage
 202 of VPN servers in various countries. As seen in the VPN server loads per country shown in
 203 Figure 3.1 and Table 3.2, perhaps certain inferences could be made about the popularities
 204 of various countries in terms of their privacy, legal or government climates.

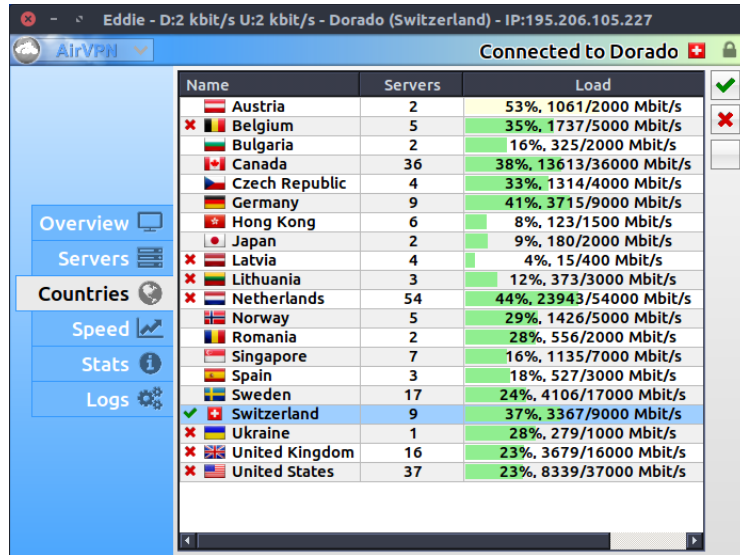


Figure 3.1: Load on VPNs of various countries in April 2019

Country	Load (%)
Austria	53
Netherlands	44
Germany	41
Canada	38
Switzerland	37
Belgium	35
Czech Republic	33
Norway	29
Romania	28
Ukraine	28
Sweden	24
United Kingdom	23
United States	23
Spain	18
Bulgaria	16
Singapore	16
Lithuania	12
Japan	9
Hong Kong	8
Latvia	4

Figure 3.2: Ordered load on VPNs of various countries in April 2019

205 Another measurement of possible interest is the degree of punishment vetted out by states
206 for various transgressions. The sheer weight of penal danger, and advertisement of such
207 punishments, to those like Chelsea Manning and Julian Assange who exposed information
208 on illegitimate power is perhaps someday guiding.

209 Article 25 of the *Universal Declaration of Human Rights* states:

210 1. Everyone has the right to a standard of living adequate for the health and well-being
211 of himself and of his family, including food, clothing, housing and medical care and
212 necessary social services, and the right to security in the event of unemployment,
213 sickness, disability, widowhood, old age or other lack of livelihood in circumstances
214 beyond his control.

215 2. Motherhood and childhood are entitled to special care and assistance. All children,
216 whether born in or out of wedlock, shall enjoy the same social protection.

217 One way to ensure these UDHR Article 25 rights is through a decentralized mechanism
218 of protection offered by a *decentralized unconditional universal income guarantee*. The de-
219 centralization aspect is critical because it ensures the global and universal nature of the
220 protection, distancing it from implementation by an authority (which could change or re-
221 scind it, as has happened for other welfare measures in semi-welfare states like the UK) and
222 reducing all borders (helping to progress to a point where no one is forced to sell their work
223 at an unfair price).

Those at the lowest economic level, the poor white and Negro, the
aged and chronically ill, are traditionally unorganized and therefore
have little ability to force the necessary growth in their income.
224 They stagnate or become even poorer in relation to the larger
society.

Martin Luther King, Jr.,

Where Do We Go from Here: Chaos or Community (1967) [14]

225 A decentralized system such as that described here *is* a means of organizing the poor.

226 It is here suggested that an unconditional universal income guarantee is a possible way to
227 undermine the inherent features of the capitalist system of oppression, domination, coercion
228 and artificial scarcity, and it is also suggested that even if an effort to undermine those

229 systems were not successful, so making the artificial scarcity an intractable problem, that
230 the unconditional universal income guarantee could be a plug-in economic mechanism that
231 acts as a constant mitigation to the capitalist system (and other oppressive systems). As
232 MLK put it, “*We have come to the point where we must make the nonproducer a consumer*
233 *or we will find ourselves drowning in a sea of consumer goods.*” [14]. The Marx/Engels
234 concept of *withering away of the state* is used to suggest that realization of the ideals of
235 socialism using the social institutions of a state makes the realized socialism self-sustaining
236 without the need for the state. In a complimentary way, though in the same spirit, the
237 unconditional universal income guarantee could be a method of withering those mechanisms
238 of oppression, both private and state, that impede both greater protection of known rights
239 and the exploration that is in pursuit of unknown rights. Use of a decentralized income
240 could be a *Propagande par le fait* [*propaganda by the deed*], a political action which is an
241 example to others and serves as a catalyst for revolution. The idea is both to inspire a spirit
242 of revolt by demonstrating that the authorities are not omnipotent, and to offer hope to the
243 downtrodden. It is an approach that was approved in 1881 at the *International Anarchist*
244 *Congress of London* [19].

245 It has been suggested that a guaranteed income is possibly best seen as a reform to the
246 existing monetary distribution systems and as something that exists in a free market econ-
247 omy. It could modestly reduce economic inequality in a number of ways, the least of which
248 is likely to be because a flat-rate regular payment represents a larger share of the income
249 of a poor person than it would for a wealthy person. It could reduce economic insecurity
250 and chronic economic uncertainty by strengthening social insurance against flexible labor
251 markets (the gig or “zero-hours”-contracts economies) and technological disruption, partic-
252 ularly the continued rise of intelligent automation [20]. It, particularly as a decentralized,
253 borderless system, could mitigate the global pandemic of stress and depression. Indeed the
254 evidence suggests that even the guarantee aspect, rather than the exact size, of the income
255 reduces the intensity and prevalence of stress, with that in itself giving people more control.
256 Both the Ontario 2017 and Finland 2017 basic income studies (both of which were ended
257 prematurely) suggested a sharp decline in domestic violence and depression. A guaranteed
258 income would also mitigate the disgusting “targeting” approach for welfare payments in-
259 flicted on poor people by governments through means-testing and behavior testing, often

260 implemented by for-profit private companies with a deadly conflict of interest. So in some
261 senses an unconditional universal income guarantee is protection of the right to economic
262 security. It also slightly disincentivises high-profit, low-effort activities. So, for example, a
263 medic is recognised as more valuable to society than someone siphoning wealth off a hedge
264 fund set up by their parent.

265 Another important consideration is that insecurity, inequality, stress and precarity may be
266 associated with neo-fascism.

267 Global warming, climate change, pollution, and falling life expectancy rates all can be
268 collected under one term: extinction. As was seen with *Mouvement des gilets jaunes* in
269 France, unfair distributions of taxation are unpopular because the poor are made to pay
270 proportionately more of their income than the wealthy. Steps in the right direction are seen
271 in Canada and Switzerland, where high fuel and other eco-taxes are imposed with proceeds
272 returned to the people in the form of “carbon” or common dividends. A cross-party group in
273 the USA has advocated a similar approach with the support of 27 Nobel Prize economists.
274 Basic income studies have shown that those that receive it tend to do more useful work that
275 is ecologically and socially desirable, as opposed to resource-depleting labor (as Bregman
276 calls it “bullshit jobs” – an example sometimes cited is that poor person selling plastic phone
277 covers in markets).

278 The 2019 paper *Basic Income for All: From Desirability to Feasibility* [21] suggests that, in
279 the UK, a *basic* income would:

- 280 • pay a significant, no-questions-asked amount of 10,400 GBP per year to a family of
281 four,
- 282 • cut child poverty by more than a third and pensioner poverty by almost a third,
- 283 • narrow the inequality gap,
- 284 • lead to gains for three quarters of all households, with the largest gains among the
285 poorest households,
- 286 • strengthen the universal element of the benefits system and reduce dependency on
287 means testing and

288 • would take the UK back to the level of social security spending of 2010, but with much
289 more progressive and universal outcomes.

290 The paper considers a few options for the introduction of a universal income guarantee,
291 seeking to address particularly the usual criticism: that the income amount is either too
292 small to make much of a difference or too generous to afford. I wish to emphasise that
293 the exact amount of the income, which is distinct from other forms of social aid, such as
294 disability support, *must* change such that it provides enough for fundamental needs. The
295 10,400 GBP number is merely a guide number that is suggested by a paper considered in
296 the context of the current political climate.

297 The 2019 paper *A Larger Us* [22] suggests three transitions that are needed for happier,
298 healthier, more resilient democracies:

- 299 • from fight-or-flight to self-awareness,
- 300 • from powerlessness to agency, and
- 301 • from disconnection to belonging.

302 I feel it is possible that the guaranteed income system proposed here could assist with the
303 second and possibly the third transitions.

304 The Stockton Economic Empowerment Demonstration (SEED) [23] is a city-led guaranteed
305 income project which involves providing at least 100 people of Stockton with a guaranteed
306 income of 500 USD for 18 months using prepaid debit cards. It plans to make a number
307 of measurements, such as changes in financial wellbeing, psychological distress and physical
308 functioning. For the case of financial wellbeing, measurements of income volatility and
309 unsecured debt will be made. In similar experiments, it has been observed that individuals
310 tend to use surplus income to pay down debt. For the case of the health indicators of
311 psychological distress and physical functioning, measurements are to be made using the
312 SF-36 survey and the Kessler 10 scale and through qualitative interviews.

313 The paper *No Strings Attached: The Behavioral Effects of U.S. Unconditional Cash Transfer*
314 *Programs* [24] summarizes the empirical evidence from three major U.S. guaranteed income
315 experiments. In these experiments, educational achievement increased, health outcomes

316 substantially improved, and there was little effect on labor market supply.

Two conditions are indispensable if we are to ensure that the guaranteed income operates as a consistently progressive measure. First, it must be pegged to the median income of society, not at the lowest levels of income. To guarantee an income at the floor would simply perpetuate welfare standards and freeze into the society poverty conditions. Second, the guaranteed income must be dynamic; it must automatically increase as the total social income grows. Were it permitted to remain static under growth conditions, the recipients would suffer a relative decline. If periodic reviews disclose that the whole national income has risen, then the guaranteed income would have to be adjusted upward by the same percentage. Without these safeguards a creeping retrogression would occur, nullifying the gains of security and stability.

Martin Luther King, Jr.,

Where Do We Go from Here: Chaos or Community (1967) [14]

318 As a decentralized plug-in, or *virus*, for existing political systems, an unconditional uni-
319 versal income guarantee system might broadly be intended to move things towards equality
320 of outcomes – for people, species and ecosystems generally (where equality of outcomes is
321 here supposed to mean broadly a fair distribution of satisfaction with life, including satisfac-
322 tion with degree of autonomy and perhaps including equality of perception), and towards
323 non-competitive behaviours. One candidate form of politics for pursuit of this is Mur-
324 ray Bookchin’s communalism. Shortcomings in the anarchic approach, however, concern
325 tyranny of the majority; specifically, the author suspects that a more protective approach
326 should be considered in order to ensure the needs of minorities instead of assuming that
327 the anarchy system perfectly undermines tyrannical, dominative and oppressive behaviours.
328 Welfare should be a part of whatever system is implemented to attempt to ensure that there
329 is a social safety net that ensures that rights such as those listed in the *Universal Declara-*
330 *tion of Human Rights* cannot be denied. An example of tyranny under a purported anarchic
331 system is the pogroms, banditry and sexual abuse in the Free Territory of Ukraine [25].

332 The feature of the proposed system of a network of social trust also has the possibility
333 of not just protecting the UDHR Article 27(1) right to cultural participation, but could

334 also increasing the extent of that right by encouraging people to participate more fully in
335 society. However, as the income is unconditional, universal and guaranteed, there should
336 be protections for those that do not wish to participate in the cultural life of society or
337 are excluded from society, such as has been the case of despised minorities, examples of
338 which have been Jewish people, sexuality minorities and gender minorities. Fully addressing
339 such social exclusion is beyond the scope of this document, but the decentralized system
340 should feature some protections against it and the system itself should not feature social
341 exclusion capabilities, the likes of which are seen in the *Black Mirror* 2014 Christmas special
342 *White Christmas* [26].

343 Rutger Bregman’s *Utopia for Realists* has a chapter *Why It Doesn’t Pay to Be a Banker*
344 which [spoiler] compares a strike of bankers and bank employees in Ireland with a strike of
345 sanitation workers in New York City. In 1968, the sanitation workers took the illegal option
346 of striking, resulting – in a matter of six days – in a declaration of a state of emergency and
347 – in a matter of nine days – in the sanitation workers getting their way. The bank employee
348 strike of 1970 lasted six months, and the Central Bank of Ireland concluded that “The Irish
349 economy continued to function for a reasonably long period of time with its main clearing
350 banks closed for business” and, indeed, the economy grew. During this strike, Irish people
351 continued writing cheques, effectively printing their own cash, with the only difference in
352 the character of the cheques being that they couldn’t be cashed at banks. Instead, dealers
353 such as publicans could act as verifiers of trust and could accept the cheques. It was a
354 decentralized monetary system and it seems to have worked because of social cohesion. I
355 myself recall that this sort of fractional reserve banking certainly did not stop after this strike
356 and was implemented in my home town of Longford via Doyle’s pub, seen in Figure 3.3.



Figure 3.3: Doyle's pub [27]

357 Bregman suggests that the fact that the Irish people implemented this decentralized banking
358 makes it clear that the society needed some form of financial sector.

359 It is beyond the scope of this document to describe and evaluate past implementations of
360 basic income and past implementations of anarchism, but the book *Utopia for Realists* gives
361 the former and histories of the Spanish anarchists, the peak implementation of modern an-
362 archism, give the latter. However, I can mention that the slogan of the CNT/FAI anarchists
363 was “Ni dios, ni estado, ni patrón” [No god, no state, no boss], widespread by the Spanish
364 anarchists since 1910.

365

I had dropped more or less by chance into the only community of any size in Western Europe where political consciousness and disbelief in capitalism were more normal than their opposites. Up here in Aragon one was among tens of thousands of people, mainly though not entirely of working-class origin, all living at the same level and mingling on terms of equality. In theory it was perfect equality, and even in practice it was not far from it. There is a sense in which it would be true to say that one was experiencing a foretaste of Socialism, by which I mean that the prevailing mental atmosphere was that of Socialism. Many of the normal motives of civilized life—snobbishness, money-grubbing, fear of the boss, *etc.* — had simply ceased to exist. The ordinary class-division of society had disappeared to an extent that is almost unthinkable in the money-tainted air of England; there was no one there except the peasants and ourselves, and no one owned anyone else as his master.

George Orwell, *Homage to Catalonia*

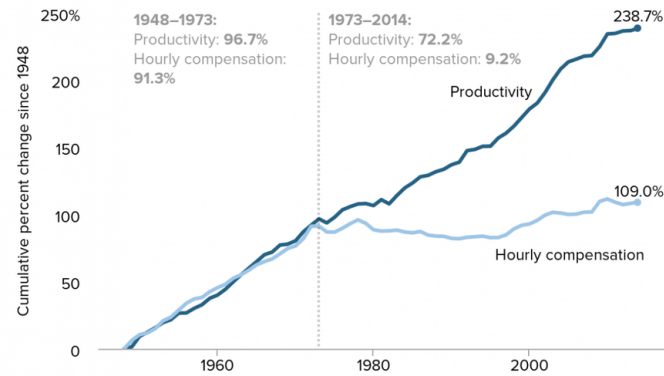
366 As summarized in the documentary about Rojava *Accidental Anarchist*, contemporary move-
367 ments such as Occupy Wallstreet, Occupy Sandy and, more recently, Extinction Rebellion
368 are collectives of direct democracy, mutual aid and, arguably, socialist forms of anarchy.

369

The opposite of government-imposed order is not chaos: there's a deeper order concealed within human society which relies not upon coercion but cooperation and trust, built not by governments or politicians, but by people who realise at last their own true power.

Carne Ross, *Accidental Anarchist* [28]

Disconnect between productivity and a typical worker's compensation, 1948–2014



Note: Data are for average hourly compensation of production/nonsupervisory workers in the private sector and net productivity of the total economy. "Net productivity" is the growth of output of goods and services minus depreciation per hour worked.

Source: EPI analysis of data from the BEA and BLS (see technical appendix for more detailed information)

Economic Policy Institute

Figure 3.4

370 With technological, educational, and medical improvements, productivity has increased mas-
371 sively over at least the last century, however, compensation has not been increasing to match
372 it, as shown in Figure 3.4. This is plausibly something of a result of a fundamental problem
373 described by Marx: ownership of the means of production, and likely many other sneaky
374 methods besides. While taxation of automation is one approach to address this disparity,
375 decentralized ownership of the means of production, perhaps by means of decentralized
376 income and wealth redistribution, and it is an approach that does not (at least at face
377 evaluations) require much battle with existing power structures.

378 In all of the unconditional universal income guarantee experiments (run everywhere from
379 New Jersey to Pennsylvania to Iowa to North Carolina to Indiana to Seattle to Denver
380 to Finland, Mincome in Manitoba, as well as some smaller ones in Africa) the approach
381 improved health and education, boosted the economy, and ended poverty. Apart from
382 new mothers, people didn't tend to work less when they received this income. In fact,
383 particularly as seen in the African unconditional universal income guarantee experiments,

384 having a reliable income enabled people to have more free time to educate themselves so
385 that they could advance to a new form of work, perhaps more enjoyable or meaningful, or
386 to start businesses or generally to take more risks. Even the likes of Nixon and Rumsfeld
387 were pretty much convinced by it [29]. *Utopia for Realists* by Rutger Bregman presents a
388 referenced analysis of the idea as it has been implemented through history.

389 While climate emergency and denial of fundamental needs are powerful justifications for
390 efforts on caring methods to undermine capitalism, there is another concern: Yuval Noah
391 Harari emphasized the urgency of building decentralized information processing systems
392 that are more efficient than fascist information processing systems in the 2018 TED talk
393 *Why fascism is so tempting – and how your data could power it* [30].

We are witnessing the gradual disappearance of the postwar British
welfare state behind a webpage and an algorithm. In its place, a
394 digital welfare state is emerging. The impact on the human rights of
the most vulnerable in the UK will be immense.

Philip Alston, 2018 [5]

395 **3.3 Decentralized unconditional universal income guar-** 396 **antee system**

A hundred times every day I remind myself that my inner and outer
life are based on the labors of other men, living and dead, and that I
397 must exert myself in order to give in the same measure as I have
received and am still receiving...

Einstein

398 It is possible that the emergence and rise to cultural prominence of cryptocurrency and
399 networks of trust, which may be viewed as an extension of the free culture movement, offers
400 a possibility of escape from the current systems of oppression and better ideas that it to
401 improve the wellbeing of creatures of this world. A combined system of a social trust graph
402 together with crypto verification is here referred to as a *crypto-trust* system.

403 Government, politics and monetary systems all can be viewed as technologies. Viewed
404 as such, societal problems are technological in origin. Most of the ideas in the current

405 monetary and political systems were designed centuries ago, and they feature limitations
406 which suggest that the imaginations of their creators were limited by the comparatively
407 primitive technology of their times. The limits of our language, so to speak, are the limits
408 of our world.

409 The speed of light appears to be an important constraint of computational efficiency; a
410 galaxy size computer would be slower than a microchip computer because of the distance over
411 which computational elements must communicate. So, computational efficiency requires
412 that we explore methods of decentralizing and distributing computations such that as much
413 local computation as possible is accomplished. A decentralized or distributed system for
414 monetary and welfare and history policies is needed for computational efficiency and will
415 become more necessary as we expand throughout the cosmos.

416 Algorithms like Bellman-Ford can be used to determine arbitrage paths and flows of value
417 between people, business, countries, city states and other entities. This, together with other
418 considerations such as the number of users to which income is due, might be used by an
419 automated decentralized unconditional universal income guarantee system to determine the
420 income amount attributed to users per unit time, and might be used for funding and bailout
421 calculations in order to improve economies.

422 An attempt has been Grantcoin, now called Manna [31]. Manna is administered by a
423 US non-profit organization. While perhaps well-intentioned and inherently against borders
424 (due to its use of a decentralized blockchain), Manna features a number of flaws, one of
425 which is the organization acting as a gatekeeper, another being the organization acting as
426 a centralized control over the monetary policy, and another being the possibility to invest
427 in the currency. It intends to model itself on the Alaska Permanent Fund, which is a form
428 of income paid to all Alaskans which arises from profits from a capital reserve fund. Its
429 emphasis is more on altruism and charity than on rights. Fundamental rights shouldn't be
430 subject to the whims of charity – that's why they're called rights. So, I view the emphasis of
431 the Manna approach as fundamentally flawed. However, the opening of the Manna mission
432 statement is perhaps worth repeating:

We, the people of the world, recognize and declare that money is a social invention which can be changed by the people according to our values. As we witness the growing scourge of inequality and its consequences, we see that the existing system is unjust and unsustainable. Recognizing and accepting the moral obligation that arises from such knowledge, we stand united in the decision to create a better alternative: a currency of conscience designed to facilitate the emergence of a more just and sustainable global economic system.

Money By the People, For the People: The Manna Vision and Mission [32]

A decentralized unconditional universal income guarantee system might be defined by the following ideas:

- Blockchain is used to ensure the integrity of the currency (well, currencies) via distributed consensus, in the manner of Bitcoin and Ethereum.
- A social trust graph is used to attempt to ensure that there is a one-to-one relationship between a user and a wallet, in other words a defence against Sybil attack. This can be supplemented by gatekeepers of various forms.
- An income rate definition or inflation/deflation algorithm, a basic version of which sets the income rate in proportion to the number of users in the system.

3.3.1 Blockchain

Blockchain is a reusable proof-of-work (effort/energy/work-based) approach to decentralized/distributed ensurance of integrity of a record. Similar approaches that are energy-efficient are under exploration currently.

The decentralized unconditional universal income guarantee system features individualized colored cryptocurrencies [33], with a specific color of currency corresponding to a proported user, which is defined when the user joins the system. The user receives income in the form of their colored currency over time, at a variable open source rate, which might be calculated by reference to the number of users in the system and by reference to more complicated

452 ideas, such as open source economic analyses to lower the time it might take to reach societal
453 economic prosperity or wellbeing more generally.

454 The Austrian school of economics, which arguably features shortcomings like pure logical de-
455 duction and a lack of scientific rigor, underlies the design of Bitcoin, with Bitcoin resembling
456 gold.

457 3.3.2 Decentralized/distributed social trust graph as Sybil defense

458 The social network Facebook has a security facility that enables a user to nominate a number
459 of friends to vouch for them when they lose access to their account, as shown in Figure 3.5.
460 This vote of confidence is a network of trust.

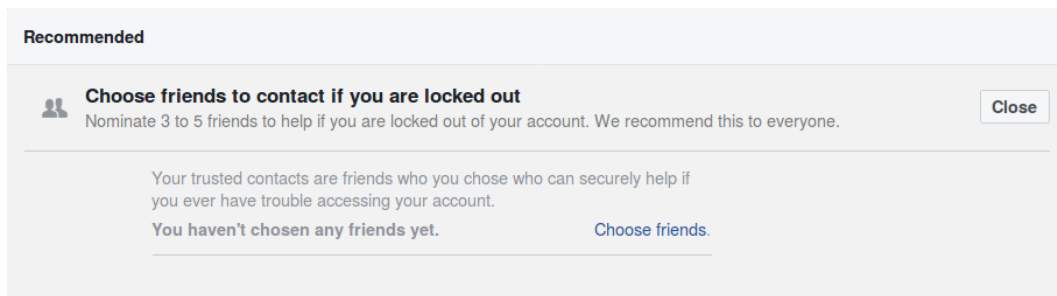


Figure 3.5: Facebook trust network

461 Graph-based Sybil defences can use social network graph properties to distinguish Sybil
462 users from legitimate users. Some assumptions in a Sybil defense strategy could be that the
463 legitimate social network graph features fewer edges between user vertices than the Sybil
464 social network graph and that a Sybil user cannot produce meaningful interactions in the
465 legitimate social network graph, even if it may infiltrate it. Other strategies have been
466 considered [34].

467 In this proposed social trust graph Sybil defense, in a sense, a social contract is being
468 created wherein a user receives money unconditionally to engage with their community. It
469 is hoped that the social trust graph will be secured fundamentally by a careful population
470 and population scale ideas like “six degrees of separation” [35], with analyses and gatekeepers
471 as supplementary protections. New users are given a currency that is worthless by default

472 and they must take steps to increase its value. These social steps are the formal barrier to
473 participation.

474 The canton of Zug is a region of Switzerland that has a low tax rate and a startup culture.
475 In 2017 Zug started to use uPort [36] for its Zug ID [37]. uPort is decentralized by storing
476 identity data on IPFS and by using the Ethereum blockchain, but the Zug ID involves
477 centralized gatekeeping by in-person verification by a city administrator. It was scheduled
478 to be used to test non-binding voting in 2018. This Sybil defense could be used but only as
479 a supplement to decentralized/distributed Sybil defences. This is because such a centralized
480 gatekeeper could make people beholden to it. Consider a bad, authoritarian government
481 implementing income using a gatekeeper. It could wait until people are familiar with this
482 form of income and dependent on it, and then could start making demands on people to
483 comply with it in order to keep receiving the income. Defences against such authoritarian
484 control must be present in the system. The idea of a basic income arises from rights, not
485 from a gatekeeper, whether that gatekeeper be a government office or a charity.

486 Gatekeepers *are* permitted in the system – one could imagine businesses, governments,
487 social groups, living groups *etc.* having specific validation requirements or other logics to
488 determine group membership. This would be a level of validation above the basic validation
489 provided by the social trust graph, a level of validation which must be reasonably achievable
490 by all users.

491 In this proposed decentralized unconditional universal income guarantee system, users have
492 the ability to trust the personal currencies of other users, which requires them to treat this
493 personal currency identically to any other currencies that they trust. As the social trust
494 graph becomes more interconnected, it is hoped that these personal currencies converge
495 on a single universal monetary system. All users receive income at the same open source
496 calculated rate, meaning that new money is distributed equally to all users at all times.
497 This income generation is the only way new money is created.

498 Strangers wanting to exchange money automatically search for a transitive chain of trusted
499 currencies between each other. The payer trades along this chain of trusted currencies, one
500 after the other, until they have one that the recipient needs. Such exchanges working in
501 practice require a reasonable number of users in the system. Up to that point, the system is

502 little more than passing IOUs between trusted users. Something like this routing capability
503 exists in the form of the Bitcoin Lightning network.

504 3.3.3 Demurrage, inflation and deflation

505 Demurrage, or negative interest, is the cost associated with holding a store of value over
506 a time [38]. For commodities such gold, demurrage is the cost of storing and securing it.
507 For currency, it can take the form of a periodic tax, such as stamp tax, on currency hold-
508 ings. The goal of demurrage currency is to ensure that cash is *cash flow safe*, wherein
509 money is sure to return into the cash flow and this is accomplished not through inflation
510 or deflation (though these are not excluded from the currency) but through periodic scrip
511 payment to ensure that the money remains valid. The idea was suggested by Silvio Gesell,
512 a German theoretical economist and anarchist libertarian socialist, as a way to undermine
513 the privileged position held by currency compared with capital goods and to undermine
514 entrenchment of the financial elite [39]. The concept has been tested in the Bavarian cur-
515 rency *Chiemgauer* which requires an effective payment of 2 % of the value of a currency
516 note every three months in order to maintain the validity of an individual bill in order to
517 undermine hoarding and also has been tested in the short-lived local Schilling currency of
518 the city of Wörgl, which appears to have protected the city from the economic depression
519 in Germany of the 1930s [40, 41]. The Swiss WIR Frank (Wirtschaftsring-Genossenschaft
520 [economic circle cooperative]) initially also featured ideas from Gesell [42]. A cryptocur-
521 rency that implements a form of demurrage is Freicoin, though Freicoin has the demurrage
522 fee paid to the developers as opposed to all other users [43]. The Freicoin documentation
523 suggests that Freicoin is an implementation of Bitcoin which loses approximately 5 % of its
524 value per year, with destroyed money taken out of circulation and minted coins created and
525 distributed to miners, with the intention that the real capital required to secure the network
526 is comparable to the payments of newly minted coins.

527 Keynes considered demurrage currencies and concluded that having currencies experience a
528 reasonable rate of inflation is preferable, and has the same effect of promoting investment
529 and spending [44].

530 Inflation is used to disincentivize hoarding and to encourage economic activity. In a basic

531 inflation scheme, all user currencies issue progressively larger amounts of income per unit
532 time, and this includes new users (ensuring that some mitigation of the Monopoly problem
533 is built into the system – new players have a fair chance in the game).

534 **3.3.4 Existence in tandem with other currencies**

535 In the case of the *Chiemgauer*, there are different rules for nonprofits and businesses. Non-
536 profits are incentivized to purchase Chiemgauer by adding 3 % to the value on converting
537 from Euros to Chiemgauer and businesses are incentivized to stay in the Chiemgauer system
538 by taking a 5 % commission from the value on converting from Chiemgauer to Euros.

539 **3.3.5 Exchange rates**

540 The default system enforces a one-to-one exchange rate between all personal currencies, but
541 less trusted users have currencies that are less valuable than established user currencies.
542 This might be addressed by empowering users to limit the amounts they are willing to
543 accept from other users. Such an approach could cautiously be suggested as a way for some
544 majority of the population (perhaps as defined democratically in code) to limit the economic
545 power of certain powerful people. Investigations resulting in the Panama Papers and the
546 Paradise Papers tell us of wealthy people of the world (often people who have that wealth
547 through little expended time or effort, sometimes called inheritance or siphoning) that are
548 part of an enormous criminal conspiracy to dodge taxes and to hoard wealth in offshore
549 accounts, yet such conspiracies are resilient to traditional economic and legal mitigations.
550 A global, decentralized monetary policy might offer a mitigation to these methods that is
551 not currently offered by existing systems of law and economics.

552 Methods of preventing bad mob rule (e.g. a population generally distrusting and discon-
553 necting from a user for reasons other than trustworthiness) should be considered. Perhaps
554 there is a gatekeeper that represents rights (as opposed to tyranny of the majority) that
555 can enforce verification of users or anonymisation of a user personal currency, though there
556 should not be a gatekeeper that can exclude a user from the decentralized unconditional
557 universal income guarantee.

558 **3.3.6 National credit**

559 This could be a part of the system that stores a small amount when it has beyond the
560 resources needed to pay all guaranteed incomes. This amount is used to ensure guaranteed
561 incomes when there are economic downturns. Could the system feature the ability to loan
562 to itself in certain circumstances? This would be decided by economists.

563 **3.3.7 Revolution**

564 The system should be reliable and resilient. Bitcoin and Ethereum have been subject to
565 intense hacking attempts and scrutiny so these should likely feature as the codebase, with
566 Ethereum being the more likely candidate because it is more easily programmable.

567 How can the proposed system draw power from the existing systems? A group of people
568 could agree to trial the system. The group will likely feature a mix of incomes and none. In
569 participating, one approach could be for participants to give some fraction of their income
570 to the system. The group should be designed such that the combined income divided
571 equally between all participants is sufficient for a income, perhaps of median value, for all
572 participants.

573 On a larger scale, the enticement of the ‘free’ currency accessible to people for a one-time
574 small degree of effort (comprising solely of installation of a program) could be enough. To
575 use the currency there is then the effort of building a few social connections/verifications.
576 Outreach in order to educate about the system would be straightforward. Perhaps people
577 like Ash Sarkar and Owen Jones could be helpful at popularisation. A contact for political
578 association could be Michael Tubbs (SEED). Contacts for technical evaluation could be
579 Stacia West (SEED) and Amy Castro Baker (SEED).

580 One noteworthy point raised in documentation on the Stockton Economic Empowerment
581 Demonstration (SEED) [23] is that a declared income, such as a guaranteed income, could
582 impact existing social welfare payments because these often are means-tested. Secrecy or at
583 least legal waivers would be needed to address this system if the groups implementing the
584 system were not able to have the guaranteed income at a basic income level. Happily tech-
585 nologies for financial privacy exist in the forms of Zcash and Monero and perhaps Ethereum

586 and private social trust authentication is a totally separate system which is merely used by
587 the cryptocurrency system.

588 Cryptocurrencies tied to the value of traditional fiat currencies such as the Euro may be
589 of assistance at the boundaries between the system proposed here and the existing capital-
590 ist world, perhaps by providing a means of uneasily-censorable use of the traditional fiat
591 currency. One suggestion is the stablecoin xEURO [45].

592 Publically demolishing the arguments of the protectors of the wealthy could involve empha-
593 sis such as that used by MLK on consumerism: *“We must create full employment or we*
594 *must create incomes. People must be made consumers by one method of the other”* [14]. I
595 suggest, having seen video of people employed to cut grass using scissors in the Democratic
596 People’s Republic of Korea and having heard reports from my parents of USSR Moscow
597 toilet attendants (one employed to greet, one to open the cubicle door, one to hand the
598 single pieces of toilet tissue and so on) that the latter must be the emphasis.

599 GEORGE:

600 You know, this used to be a hell of a good country. I can't understand what's gone wrong with
601 it.

602 BILLY:

603 Man, everybody got chicken, that's what happened. Hey, we can't even get into a, like, a second-rate
604 hotel. I mean, a second-rate motel, you dig? They think we're gonna cut their throat or somethin',
605 man. They're scared, man.

606 GEORGE:

607 Oh they're not scared of you. They scared of what you represent to 'em.

608 BILLY:

609 Hey man, all we represent to them, man, is somebody who needs a haircut.

610 GEORGE:

611 Oh, no. What you represent to them is freedom.

612 BILLY:

613 What the hell's wrong with freedom, man? That's what it's all about.

614 GEORGE:

615 Oh yeah, that's right. That's what it's all about, alright. But talking about it and being it...
616 that's two different things. I mean it's real hard to be free when you are bought and sold in
617 the marketplace.

618 'Course, don't ever tell anybody that they're not free, 'cause they gonna get real busy killin'
619 and maimin' to prove to you that they are. Oh yeah, they gonna talk to you and talk to you and
620 talk to you about individual freedom -- but they see a free individual, it's gonna scare 'em.

621 BILLY:

622 Yeah well it don't make them runnin' scared.

623 GEORGE:

624 No. It makes 'em dangerous.

625

Conversation between alcoholic ACLU lawyer George Hanson,
played by Jack Nicholson, and drug-running biker Billy, played by
Dennis Hopper, in the film *Easy Rider* (1969)

626

I believe we oughta to do all we can, and seek to lift ourselves by our own bootstraps but it's a jest to say to a bootless man that he oughta lift himself by his own bootstraps.

Martin Luther King, Jr.

627

3.4 Monetary policies with guaranteed income

628 A 2017 paper [46] emerged from the *New England Complex Systems Institute*, which was
629 founded by theoretical physicist Yaneer Bar-Yam, who is known for having predicted aspects
630 of the Arab Spring by using the observation that violence and riots occur at peaks of the
631 global food price index. The paper describes a capitalist economic system featuring two
632 main cycles that are balanced against one another, one for wages and consumption (the
633 labor cycle), and one for investment and returns (the capital cycle), while treating the role
634 of banks and government as providing monetary injections into those cycles.

635 The first cycle is that of workers receiving income and consuming goods and services. The
636 second cycle is that of the wealthy investing in production and receiving returns on their
637 investments. For growth to happen in this capitalist system, the two must be in a certain
638 balance. If there is too much money in the worker cycle then there are not enough things
639 to purchase. If there is too much money in the investment cycle then consumers don't
640 have enough money to buy things so investment doesn't happen. The paper suggests that
641 prior to 1980 there was too much money in the worker/consumer cycle, with money chasing
642 too few products, giving rise to inflation. After 1980, the balance changed the other way,
643 likely due to the Reganomics tax changes. There was too much money in the investor cycle
644 and the result has been a series of recessions, perhaps mitigated by the likes of the Federal
645 Reserve intervening by lowering interest rates in order to increase borrowing ability, in order
646 to increase consumption – while income continued to be too low.

647 The paper suggested that the way government is regulating the economy is analogous to
648 driving a car using only the accelerator and without using the steering wheel, where steering
649 corresponds to keeping the balance between the two cycles in some good proportion. While
650 Federal Reserve interventions may have helped overcome the recessions, today we are up
651 against the roadside guard rail and need to rebalance the economy by shifting money back

652 to the worker/consumer cycle.

653 The paper suggests that current approaches to correcting economic problems by reducing
654 government spending (austerity), while decreasing taxes for the wealthy in order to promote
655 investment, are wrong. They may have been somewhat helpful in 1980 but they are long
656 outdated today. Economic inequality is not simply a social justice problem, but also an
657 economic problem. Fixing economic inequality will have dramatic benefits for economic
658 growth.

659 The analysis suggested that the current USA regulation of economic activity that focuses on
660 monetary policy has missed the problem of regulating the relative strength of flows in the
661 two cycles. Simply, the presence of two flows and one control variable cannot be expected
662 on general principle to function well.

663 The paper recommends a shift towards policies that inject money into the wages and con-
664 sumption cycle in order to increase economic growth. The authors note that this is the
665 same recommendation that would arise from considering the problem of income inequal-
666 ity. So, the research supports advocates of greater income and/or government support for
667 the poor, who use a larger fraction of income for consumption. Even within this capitalist
668 thinking, the conclusion is that wages must be increased in order to create more investment
669 opportunities for the wealthy, thus advancing to a stronger economy.

670 The paper acknowledges the notable contributions of the Federal Reserve as a mitigating
671 and stabilizing influence, but notes that its abilities have reached their limits, because
672 the effectiveness of using monetary policy in and of itself as a mechanism of regulation of
673 economic growth has reached its limits. The paper goes on to predict another recession
674 on the time scale of a few years. It concludes that a new policy that redirects money for
675 consumption is needed to increase economic activity: “Traditional wealth redistribution
676 appears to be essential for renewed economic growth”.

677 Most people are workers, not investors. Since more workers are impacted when there are
678 problems with the economic systems at play, at the very least, workers should have control
679 over this balance. If workers and investors are the same thing you have a form of Marxism.

680 The system proposed here enables a rebalancing of these cycles by guaranteed income and

681 also enables members of the system to demonetize the investor class by reducing the weight-
682 ing that is the exchange rate accepted for the currencies of members of the existing investor
683 class.

Chapter 4

Other uses

4.1 Reparations, debt forgiveness and wealth redistribution

Large groups within social trust networks could conclude that they are due reparations and the system could feature some reweighting of all currencies in the system such that a large group that is due reparations is granted the reparations in the form of, say, preferential exchange rates. An ideal example would be an attempt to bring people today to the economic state they would have been at were slavery not to have happened. Conversely, large groups within social trust networks could mitigate or cancel debt of others if the debt is deemed unfair.

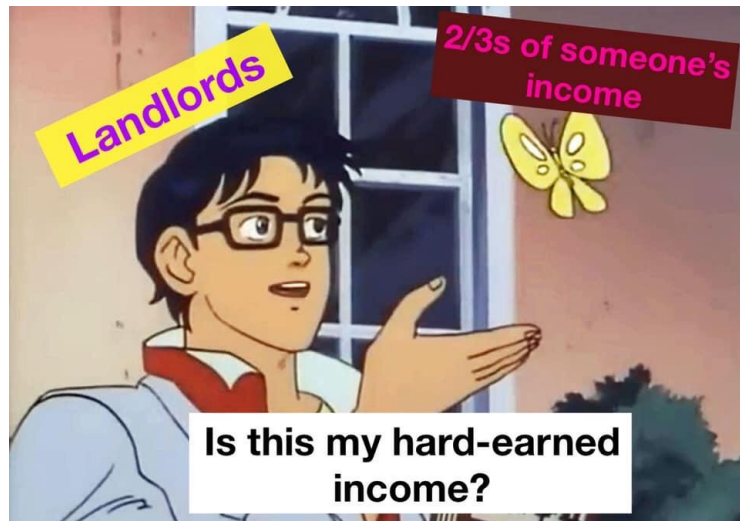


Figure 4.1

695 Economic models acknowledge the relationship between labor income and wealth inequality,
696 and also conclude that a redistributive tax (of the form of a Robin Hood tax) is successful
697 at reducing income inequality [47].

698 At smaller scales than large, perhaps country-level, reparations and debt forgiveness, other
699 debts and expenses could be mitigated. For example, in the time before landlords are
700 abolished, the exchange rates of landlords could be defined by society to be of a worth that
701 means that any rents they have received are immediately redistributed back to the renter.

702 4.2 Direct democracy

703 Switzerland is a country with one of the more direct democracies. A crypto-trust system
704 could make the running of direct democracy, popular initiatives, voting, power of recall, and
705 so on much less laborious.

4.3 Surveillance and privacy, and proletariat control over the admissability of evidence into court

Soussurveillance is personal surveillance, for example by way of a camera worn by a person. Inverse surveillance is a subset of soursurveillance and is surveillance of surveillance, usually surveillance of the surveillance activities or technologies of an authority. Soussurveillance or other small-scale surveillance systems could record to encrypted databases which are decryptable using only crypto-trust systems. For example, courts could be limited from permitting surveillance recordings to be admitted as evidence unless they have been decrypted by a majority of people in a crypto-trust system.

4.4 Credit

Smart contracts, similar to the form seen in Ether, implemented in the crypto-trust system could be used to implement forms of mutual credit bank, an interest-free loan system with credit provided voluntarily by users of the crypto-trust system.

4.5 Similar, good ideas that may not be implementable using the proposed system

While private decentralized organisations of humans and private decentralized contracts systems have been implemented to some degrees, this may be beyond the capabilities of the system proposed here. For privacy, say in purchasing delicious 1P-LSD, systems like Zcash and Monero have more developed methods of privacy than Bitcoin.

725 **4.6 Fair use of resources intended for people as opposed** 726 **to bots**

727 There is a contemporary problem with dark net markets running on Tor in the form of an
728 ongoing distributed denial-of-service attack. A network of social trust could identify the user
729 of a resource as an authentic person, while maintaining anonymity, such that the resources
730 are provided with priority given to people.

731 Chapter 5

732 Dangers

733 5.1 Borders

734 Everyone has the UDHR Article 13(2) right to leave any country and the complimentary
735 right to free migration. In *Utopia for Realists*, Rutger Bregman argues that country borders
736 (which have been enforced largely only since WWI, when border enforcement was introduced
737 as a war-time emergency measure) are the greatest form of unfair discrimination today.
738 For the case of the European migrant crisis of 2015, a protection against the tyranny of
739 the majority that was the opposition to, and oppression of, migrants, another protection is
740 open borders.

741 5.2 Tyranny of the majority

742 The framers of the United States Constitution did not envisage direct democracy because
743 they expressed that they saw a danger in the tyranny of the majority. A direct democracy,
744 monetary policy, unconditional universal income guarantee and so on implemented using a
745 crypto-trust system must have protections against tyranny of the majority. One protection
746 for this is a population educated on oppression such that it is less likely to oppress. Another
747 protection is representatives that are subject to the intense scrutiny of anarchy.

748 5.3 Transparency

749 Ivan Krastev said in his talk *Can democracy exist without trust?* [48] that there are un-
750 intended consequences associated with transparency in government systems that feature
751 humans, that transparency can be used as a way to silence humans in government. While
752 the proposed system should plausibly not intrude on this (particularly given such economic
753 privacy techniques as Zcash), it might have some unintended consequences relating to this.

754 5.4 Unintended consequences

755 Copyright was defined originally in the USA in the context of improving society; it was
756 categorically not a recognition of some form of right to censor ideas. It was designed to
757 mitigate the bad effects of individuals and groups keeping innovative ideas secret. While
758 perhaps this was laudable, the system has become subject to mass manipulation enabled by
759 monetary power and technologies such as *Content ID* [49].

760 An unconditional universal income guarantee is direct and promising but potentially as
761 complex in implementation as the current social welfare systems. A naïve approach would
762 set an income amount in stone at the lowest levels of income and would have the consequence
763 of perpetuating poverty; the dynamic approach of changing the amount to match the median
764 income is more promising. However, any of the ideas of this proposal could have many
765 unintended consequences. They should be modified or supplanted as is reasonable.

766 The curse of poverty has no justification in our age. It is socially as
cruel and blind as the practice of cannibalism at the dawn of
civilization, when men ate each other because they had not yet
learned to take food from the soil or to consume the abundant
animal life around them. The time has come for us to civilize
ourselves by the total, direct and immediate abolition of poverty.

Martin Luther King, Jr.,

Where Do We Go from Here: Chaos or Community (1967) [14]

References

- [1] D. Lam, *How the World Survived the Population Bomb: Lessons From 50 Years of Extraordinary Demographic History*, *Demography*, 48 (4), 1231–1262 (November 2011), doi:10.1007/s13524-011-0070-z, URL <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3777609/pdf/nihms335409.pdf>
- [2] United Nations, *Universal Declaration of Human Rights*, URL <https://www.un.org/en/universal-declaration-human-rights>
- [3] S. Kirchgaessner, *Theft of sausage and cheese by hungry homeless man ‘not a crime’*, *The Guardian* (May 2016), URL <https://www.theguardian.com/world/2016/may/03/theft-sausage-cheese-hungry-homeless-man-not-crime-italy>
- [4] M. Gramellini, *Il diritto di avere fame*, *La Stampa* (May 2016), URL <https://www.lastampa.it/2016/05/03/cultura/opinioni/buongiorno/il-diritto-di-avere-fame-rNMKcewcPiKTU9FvY7C0nK/pagina.html>
- [5] P. Alston, *Statement on Visit to the United Kingdom, by Professor Philip Alston, United Nations Special Rapporteur on extreme poverty and human rights* (November 2018), URL https://www.ohchr.org/Documents/Issues/Poverty/EOM_GB_16Nov2018.pdf
- [6] Philosophy Tube, *Intro to Anarchy: Power & Violence* (January 2012), URL <https://www.youtube.com/watch?v=bCAUmh99hMI>
- [7] N. Chomsky, *On Anarchism* (2013)
- [8] Noam Chomsky, *Chomsky explaining real anarchism*, URL <https://www.youtube.com/watch?v=AkvPDx2qNjM&t=11m24s>

- 788 [9] J. Burke, *Worlds Without End: Changing Knowledge, Changing Reality*, The Day
789 the Universe Changed (May 1985), URL https://www.youtube.com/watch?v=mB8_wPei2ZM
790
- 791 [10] *Climate Change: A Cross-Party Consensus for Action*, URL
792 [https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/
793 joint_committee_on_climate_action/reports/2019/2019-03-28_
794 report-climate-change-a-cross-party-consensus-for-action_en.pdf](https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/joint_committee_on_climate_action/reports/2019/2019-03-28_report-climate-change-a-cross-party-consensus-for-action_en.pdf)
- 795 [11] R. Bregman, World Economic Forum (January 2019), URL [https://www.youtube.
796 com/watch?v=r5LtFnmPruU&t=14m40s](https://www.youtube.com/watch?v=r5LtFnmPruU&t=14m40s)
- 797 [12] Wretched of The Earth, *An open letter to Extinction Rebellion* (May 2019), URL
798 <https://www.redpepper.org.uk/an-open-letter-to-extinction-rebellion>
- 799 [13] N. Wynn, XOXO Festival (November 2018), URL [https://www.youtube.com/watch?
800 v=0Ix9jxid2YU&t=3m10s](https://www.youtube.com/watch?v=0Ix9jxid2YU&t=3m10s)
- 801 [14] M. L. King, Jr., *Where Do We Go from Here: Chaos or Community* (1967)
- 802 [15] S. Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (October 2008), URL
803 <https://bitcoin.org/bitcoin.pdf>
- 804 [16] S. Nakamoto, *The Times 03/Jan/2009 Chancellor on brink of second bailout for banks.*
805 (January 2009), URL https://en.bitcoin.it/wiki/Genesis_block
- 806 [17] *Introducing Memo* (April 2018), URL <https://memo.cash/introducing-memo>
- 807 [18] *Satoshi Proof*, URL <https://github.com/ligi/SatoshiProof>
- 808 [19] M. Abidor, *Death to Bourgeois Society: The Propagandists of the Deed* (2016)
- 809 [20] S. Santens, *Deep Learning Is Going to Teach Us All the Lesson of Our Lives:
810 Jobs Are for Machines* (March 2016), URL [https://medium.com/basic-income/
811 deep-learning-is-going-to-teach-us-all-the-lesson-of-our-lives-jobs-are-for-machines-7c64](https://medium.com/basic-income/deep-learning-is-going-to-teach-us-all-the-lesson-of-our-lives-jobs-are-for-machines-7c64)
- 812 [21] *Basic Income for All: From Desirability to Feasibility*, Compass (2019)
- 813 [22] The Collective Psychology Project (May 2019), URL [https://www.
814 collectivepsychology.org/wp-content/uploads/2019/05/A-Larger-Us.pdf](https://www.collectivepsychology.org/wp-content/uploads/2019/05/A-Larger-Us.pdf)

- [23] S. Martin-West, A. C. Bake, S. Balakrishnan, K. Rao and G. Y. Tan, *Pre-Analysis Plan: Stockton Economic Empowerment Demonstration* (December 2018), URL https://static1.squarespace.com/static/59d55793268b96ccff4ff70e/t/5c0eb980575d1fbc6d9996ed/1544468865166/SEED_PaP_V2+%281%29.pdf
- [24] I. Marinescu, *No Strings Attached: The Behavioral Effects of U.S. Unconditional Cash Transfer Programs* (May 2017), URL http://www.marinescu.eu/Marinescu_UBI_review_2017.pdf
- [25] *Free Territory*, URL https://en.wikipedia.org/wiki/Free_Territory#Criticism
- [26] C. Brooker, *White Christmas*, Black Mirror (December 2016), URL <magnet:?xt=urn:btih:49f2d942c054cd5bbf932e1e921642eebe110bf7>
- [27] *Doyle's Bar and grocery* (September 2017), URL <https://www.facebook.com/Doyles-Bar-and-grocery-1060055107349764>
- [28] *Accidental Anarchist: Life Without Government* (2017), URL <https://www.youtube.com/watch?v=XudWK8ua2WA>
- [29] R. Bregman, *Nixon's Basic Income Plan* (May 2016), URL <https://www.jacobinmag.com/2016/05/richard-nixon-ubi-basic-income-welfare>
- [30] Y. N. Harari, *Why fascism is so tempting – and how your data could power it* (April 2018), URL https://www.ted.com/talks/yuval_noah_harari_why_fascism_is_so_tempting_and_how_your_data_could_power_it
- [31] *Manna Whitepaper* (2015), URL https://drive.google.com/file/d/1uRTC_hjabk_Ps1C4qLyGDFV8yTHYLj3W/view
- [32] *Money By the People, For the People: The Manna Vision and Mission* (2015), URL <https://drive.google.com/file/d/1issWZCMhPJYFoOrABpCcSxkYfA3WPBaj/view>
- [33] *Colored Coins whitepaper*, URL https://docs.google.com/document/d/1AnkP_cVZTCMLIzw4DvsW6M8Q2JC01IzrTLuoWu2z1BE
- [34] M. Al-Qurishi, M. Al-Rakhami, A. Alamri, M. Alrubaian, S. M. M. Rahman and M. S. Hossain, *Sybil Defense Techniques in Online Social Networks: A Survey* (January 2017),

- doi:10.1109/ACCESS.2017.2656635, URL <https://ieeexplore.ieee.org/document/7828091>
- [35] *Six degrees of separation*, URL https://en.wikipedia.org/wiki/Six_degrees_of_separation
- [36] *uPort*, URL <https://www.uport.me>
- [37] D. Cummings, *uPort Announces Zug Digital Ethereum ID Pilot* (July 2017), URL <https://www.ethnews.com/uport-announces-zug-digital-ethereum-id-pilot>
- [38] *Demurrage (currency)*, URL [https://en.wikipedia.org/wiki/Demurrage_\(currency\)](https://en.wikipedia.org/wiki/Demurrage_(currency))
- [39] *Silvio Gesell*, URL https://en.wikipedia.org/wiki/Silvio_Gesell
- [40] *Chiemgauer*, URL <https://en.wikipedia.org/wiki/Chiemgauer>
- [41] *Wörgl*, URL https://en.wikipedia.org/wiki/W%C3%B6rgl#The_W.C3.B6rgl_Experiment
- [42] *WIR Bank*, URL https://en.wikipedia.org/wiki/WIR_Bank
- [43] *Freicoin: a peer-to-peer digital currency delivering freedom from usury*, URL <http://freico.in>
- [44] J. M. Keynes, *The General Theory of Employment, Interest and Money* (1936), URL <https://www.marxists.org/reference/subject/economics/keynes/general-theory/ch23.htm#vi>
- [45] *xEURO: most transparent and legally compliant stablecoin automatically convertible to fiat* (2019), URL <https://xeuro.online>
- [46] Y. Bar-Yam, J. Langlois-Meurinne, M. Kawakatsu and R. Garcia, *Preliminary steps toward a universal economic dynamics for monetary and fiscal policy*, arXiv e-prints, arXiv:1710.06285 (October 2017), URL <https://arxiv.org/abs/1710.06285>
- [47] T. Fischer, *Can Redistribution by Means of a Progressive Labor Income-Taxation Transfer System Increase Financial Stability?*, Journal of Artificial Societies and So-

- 868 cial Simulation, 20 (2), 3 (2017 2017), ISSN 1460-7425, doi:10.18564/jasss.3405, URL
869 <http://jasss.soc.surrey.ac.uk/20/2/3.html>
- 870 [48] I. Krastev, *Can democracy exist without trust?* (2012), URL [https://www.ted.com/](https://www.ted.com/talks/ivan_krastev_can_democracy_exist_without_trust)
871 [talks/ivan_krastev_can_democracy_exist_without_trust](https://www.ted.com/talks/ivan_krastev_can_democracy_exist_without_trust)
- 872 [49] *Content ID (algorithm)*, URL [https://en.wikipedia.org/wiki/Content_ID_](https://en.wikipedia.org/wiki/Content_ID_(algorithm))
873 [\(algorithm\)](https://en.wikipedia.org/wiki/Content_ID_(algorithm))