ERA Review

Journal of Economic Reform Australia

Vol 10 No2, ISSN 2202-0934 (Print), 2202-0942 (Online)

For a just and sustainable society

Mar-Apr 2018

A just social wage and a job guarantee*

Steven Hail

In the USA, the UK and Australia, as in many other countries, the low paid have not participated in the benefits of economic growth. Policy makers should use a job guarantee to raise the real wage for the lowest paid, end involuntary poverty and reduce income inequality. $US16 per hour is the just minimum hourly wage in the USA and Australia, and something close to $US14 per hour is the current equivalent in the UK.

Source: Flickr cc

The US federal minimum wage, as set by Congress, has been $US7.25 per hour for almost a decade. It is not raised automatically over time in line with the cost of living, and does not even apply to a variety of workers, including those reliant on tips. In 2011, nearly 4 million Americans were on or below the federal minimum wage, making up more than 5% of all hourly paid workers (Bureau of Labor Statistics 2016). This means not just relative poverty, but absolute poverty. A full-time job pays about $US15,000 a year, if you are getting the federal minimum wage. It is impossible to live with independence, security and dignity on that wage, even for a single adult with no dependents.

As of September 2017, 29 states and Washington DC had minimum wage rates above the federal minimum, but none of them match the recommended minimum wage for the US in this policy note, and almost none of them even come close, as we shall see.

The national minimum wage in Australia is $AU18.29 per hour, a figure which is revised every year by the Fair Work Commission. There are fewer exemptions than in the US, and casual workers get at least a 25% casual loading on top of this hourly rate. Converting the rate to US dollars at the PPP exchange rate of $AU1.00 = $US0.68, this equates to

a minimum hourly wage of $US12.44, or more than 70% above the current US federal minimum. The standard full-time working week in Australia is 38 hours, as opposed to the 40 hours for US workers, but even so a full-time worker on the Australian minimum would make about $AU36,000, or $US24,500. Thus Australia's national minimum wage looks generous by current US standards, but the recommended minimum for Australia workers in this policy note will nevertheless be significantly above its current level.

In the UK, the minimum wage - now renamed the national living wage - is revised by the Government each year, but it doesn't provide much of a living at its current rate of GBP7.50 per hour. Admittedly this is close to $US11 per hour, at a PPP rate of exchange of GBP1.00 = $US1.44, and since the UK first introduced a legal national minimum wage in 1999 those relying on it in the UK have done far better than their US counterparts. Working a 40-hour week, as in the US calculation, implies an annual income of GBP15,600, or about $US22,500. Once again, this is far above the US level, but not high enough to operate as a just minimum.

The US had a federal minimum wage back in 1970, and Australia had something broadly equivalent. There was no legal minimum wage in the UK, prior to 1999, but by looking at how well the bottom 5% or so of the income distribution were fairing, it is possible to come up with a rate for 1970 we can use as a benchmark today.

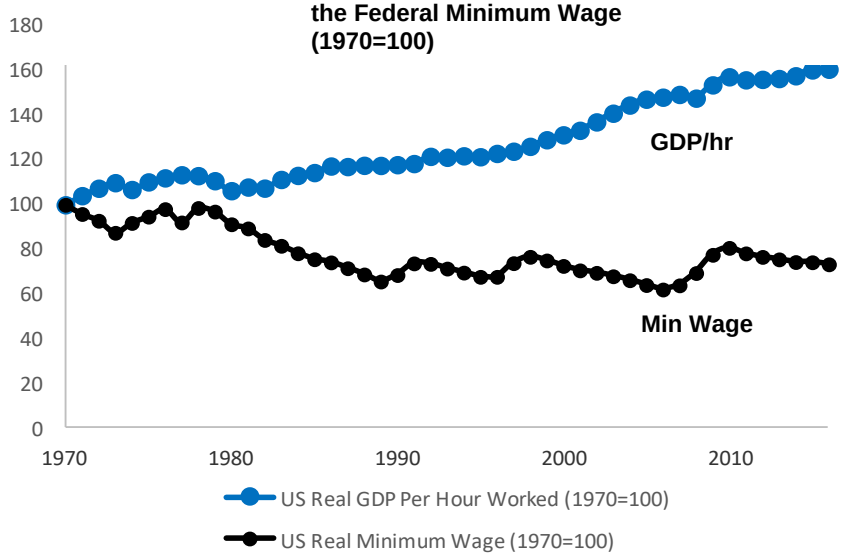
There are a variety of reasons for taking 1970 as a benchmark. It was the end of a decade of social revolution; there had been 25 years of close to full employment; it was just before the collapse of the Bretton Woods System, the first oil price spike, and the era of stagflation; it was the beginning of the first of the two decades in which the surrender of the political left to what became known as neoliberalism would take place (Mitchell and Fazi 2017); it was close to the point where the low paid stopped participating in the benefits of rising productivity. The post-war era of a more equal distribution of income and wealth than had existed before was about to come to an end.

From the perspective of 2018, the relative position of the lowest paid workers in the distribution of income in 1970 serves as a point of comparison we can associate with a greater degree of social justice. We will identify approximate minimum wage rates in the USA, Australia and the UK which would need to apply now to return to the lowest paid people something like their share in the benefits of national productivity, and will explain how to make good the promise of restoring this just minimum social wage as a right for all.

We will do this by comparing what has happened to the real value of the minimum wage, or its equivalent, in each country, with what has happened to Real GDP per hour worked, in each country.

Figure 1 makes the comparison for the US. Charts showing how median hourly wages have not kept up with productivity, or how income has been redistributed from labour to capital, or from the bottom 90% to the top 10%, or 1%, or even 0.1%, have become familiar in recent years. It comes as no surprise, therefore, that those on the federal minimum wage have done particularly badly. In an economy which has for many years been productive enough to end absolute poverty for good, millions of people have been left in poverty,

Figure 1: US Labor Productivity and the Federal Minimum Wage (1970=100)



for reasons rooted not in economics, but in ideology.

It is not just that those on the federal minimum wage have not shared in the benefits of rising productivity over time. In the USA, uniquely among these three countries, they have not even kept up with the cost of living. The real minimum wage in 2016 was 27% below its 1970 level. This is a national disgrace, and a reflection of the complete political failure of the progressive left in US politics, since the late 1970s.

For those in full-time employment, to maintain the real value of the federal minimum wage at its 1970 level, it should by 2016 have been not USD 15,000 a year, but USD 20,500 a year. To raise the real federal minimum wage in line with increases in US labour productivity, the wage should now be not USD 20,500, but over USD 33,000. In other words, the federal minimum wage needs to be more than doubled.

A just federal minimum wage should be close to USD 16 per hour. Senator Bernie Sanders was entirely correct in his call for at least $US15 per hour, and in fact even this is not quite enough to be just, given the productivity of the US economy. The issue remains how, in the modern US economy, it would be possible to guarantee people the right to work as many hours as they might choose, up to the normal full-time working week, at a guaranteed minimum of 15 or even 16 bucks an hour. We will answer this question below.

Turning to the case of Australia, Figure 2 shows that things look a little better for the lowest paid than they do in the US, but they still don't look entirely fair. The major attack on the low paid didn't happen in Australia until later than in the US, and even then, did not involve a major decrease in the real minimum wage. The real value of the national minimum wage, or its earlier equivalent,

Figure 2: Australia Labour Productivity and Minimum Wage Rates (1970=100)

in Australia has essentially gone nowhere since 1982. However, Real GDP per hour worked has risen substantially. To identify a socially just national minimum wage in Australia, we need to close the gap between the two lines in Figure 2.

This would have required a minimum annual wage in full-time employment of about $AU47,000 in 2016 ($US32,000), which is close to $AU24 /hr. Australia does not need to double its national minimum wage, unlike the USA, but it. does need to increase this wage rate substantially, by more than 30%. Even one of the world's highest national minimum wage rates has not kept pace with the benefits of technological change and rising labour productivity. Australia's national minimum wage is far too low. It should be the equivalent of about $US16 /hr, which is also the recommendation we have made for the USA.

Australia in 1970 was a very equal society, even though this is no longer the case in 2017. The USA in 1970 was not so equal, and its low paid citizens were not treated so equitably as in Australia. Given higher labour productivity in the USA than in Australia, we should be looking to take low paid American workers beyond their relative position in 1970, in which case 17 or even 18 bucks an hour might be an appropriate federal minimum wage across the USA. The Sanders-endorsed push for $15 per hour seems moderate, and not a radical suggestion at all. The goals of $US16 /hr for the US and $AU24 /hr for Australia are realistic.

Comparisons with the past are more difficult in the case of the UK. There was no national minimum wage at all before 1999, and even the old wage councils did not exist for most of the 1990s. Consequently, the data for the UK are less reliable, but still good enough for us to identify approximately a just minimum social wage in that economy in 2017. The UK data is shown in Figure 3.

The first things to strike the eye in Figure 3 are the improvement in the

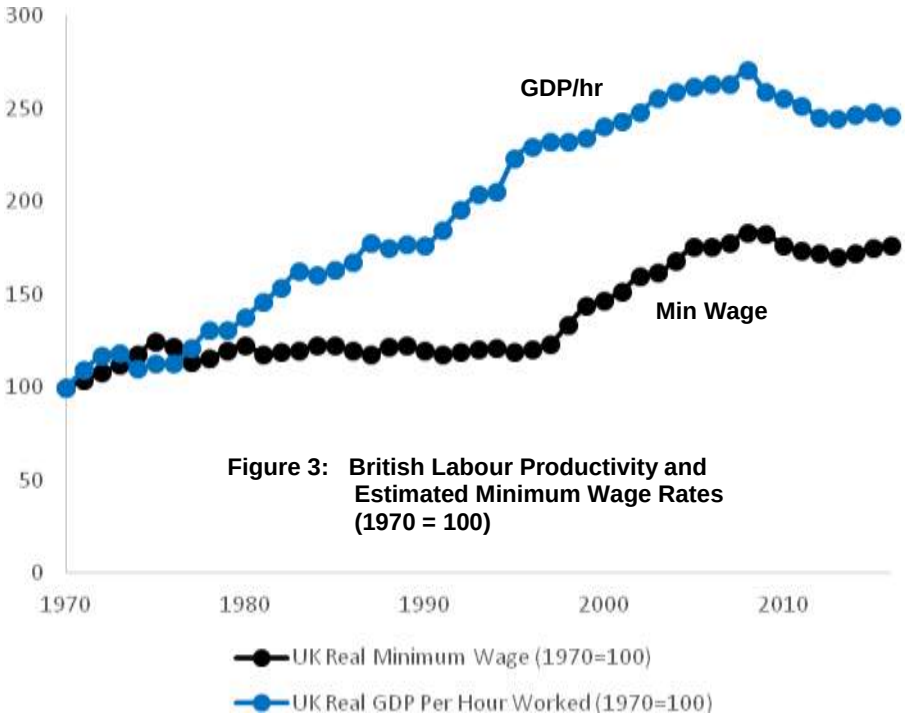


Figure 3: British Labour Productivity and Estimated Minimum Wage Rates (1970 = 100)

position of the lowest paid workers on the introduction of a national minimum wage in the late 1990s; and the unusual decrease in labour productivity in the UK, during the post-Great Recession period of austerity, zero hours contracts and falling wages. Overall, the real wages of the lowest paid improved over time, but almost the whole of this improvement happened during the Labour Government of 1997-2010. The Conservative years of 1979-97 saw labour productivity rise nearly 80%, but no increase in the real incomes of the lowest paid at all – only an increase in the likelihood of their unemployment, underemployment or insecure employment, and a far less progressive system of taxes and transfers.

Taking productivity per hour worked into account, a just full-time minimum wage in the UK by 2017 would be about GBP 20,000, or $US28,800 at the PPP rate. This equates to an hourly rate of GBP 9.50, or $US13.70. It is slightly lower than for the USA or Australia, since the UK is a lower productivity economy. Nonetheless, it involves a more than 25% increase in the UK's national living wage. It would raise it slightly above the current voluntary living wage as promoted by the UK Living Wage Foundation, and paid by many employers, which applies to more than 150,000 workers across the UK.

There is clearly a need, based on a right for all to participate in the benefits of rising national productivity, as well as on any reasonable calculation of how much it is necessary to earn to enjoy a secure and dignified life, to raise national minimum wages rates dramatically, in

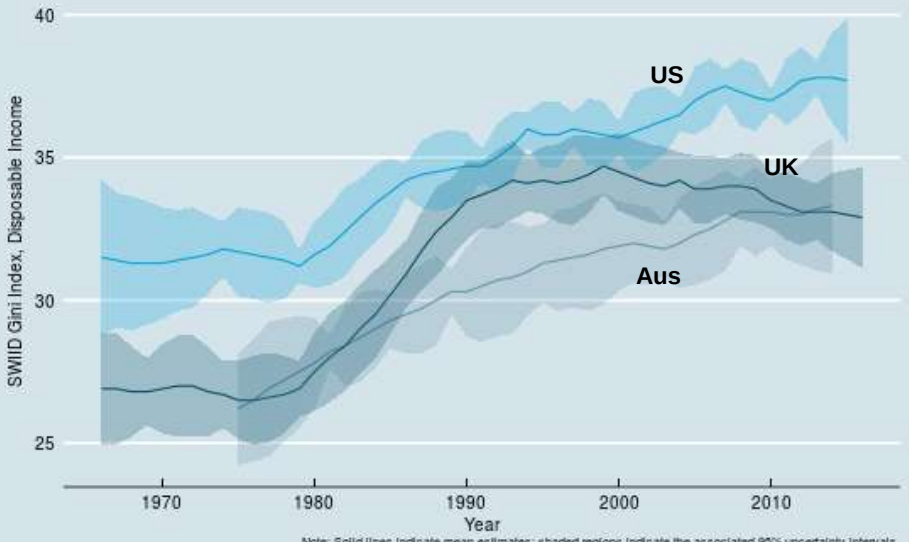
both Australia and the UK, to more than double the federal minimum rate in the USA, and to never again allow it to fall behind the cost of living and the overall progress of the economy.

Politicians used wrongly to complain that people were being paid more than they had earned (Callaghan 1976). Generations of politicians on the Right, with the acquiescence of those on the Left, have changed the world so it is now clear people are earning for others what they are not being paid themselves. We have allowed our leaders to facilitate a shift from labour income to capital income, and we have let them use the threat of unemployment to keep people on poverty wages, and within insecure jobs.

It's not just the lowest paid who have fallen behind. Even those on average incomes have failed to enjoy the benefits of rising productivity (Mitchell 2013). Those benefits have increasingly gone to the rich and the super-rich. This has been reinforced by a shift to a far more punitive system of social welfare, and much less progressive system of taxation, in each of these countries, since the 1970s. This is especially clear in the US, but it is true in all three countries.

Inequalities of both income and wealth have risen since the 1970s, and in each of these countries levels of inequality which have not been seen for decades have been restored. The rising inequality of disposable incomes is shown in Figure 4. Australia and the UK have become more unequal societies than the US was in the 1970s, and inequality in the USA has risen to a level comparable to that of a low-income country dictatorship. All this must be reversed.

Figure 4: Comparable inequality of disposable incomes (Gini Index) for Australia, the United Kingdom and the United States (1965-2016)



An essential tool for restoring the relative position of low income groups in all these societies must be a significant, and in the case of the USA very dramatic, increase in national minimum wage rates. However, the minimum wage isn't the minimum at all if you are in an in an excluded occupation, young, unemployed or underemployed. For a radical increase in the statutory minimum wage rate in a country to transform the lives of the lowest paid, it must be combined with a guarantee of employment at that minimum wage. A job guarantee at the minimum social wage is a requirement for a just and sustainable society.

This is achievable, in each of the countries considered in this policy note. All we have done is to allow for rising average labour productivity. The benefits of fifty years of growth have not been being shared by the low paid, and this is especially true in the USA. It is time to share those benefits more widely than before, to create a more equal and healthy, more sustainable society.

Our aim should be that families could, if they chose, get by on a single and secure income. The low paid should not be driven into debt, or forced to take multiple jobs at poverty wage-rates. Given tight full employment at a just social wage, absolute and extreme relative poverty, and extremes of inequality, could be eliminated, as should have happened long ago, and each country would be a very different place. Many of the social problems we face today would be more manageable (Wilkinson 2006).

It requires a shift back from capital income to labour income, and that means challenging the income shares and political influence of the 1%. It means reversing the trend towards inequality which has in fact been facilitated by more than 30 years of neoliberal politics and economics, and contributed towards a wide variety of social ills (Wilkinson 2006). It requires a commitment to full employment and to a society with not only equality of opportunity but a far greater equality of outcomes.

It requires the support of a federal job guarantee, offering just social wage rates to those the private and non-guarantee public sector does not employ. It would put pressure on the private sector labour market to raise low wages. It would encourage the automation and gradual elimination of some low productivity jobs, but that would free those workers to do better and more sustainable jobs, and it would be the responsibility of the government to guarantee those better and more rewarding jobs are available (Forstater 2003, 2016).

A gradual further shift over time to minimum hourly wage rate of something like USD 20 an hour (at 2017 prices) would allow people to transition to a shorter working week and shorter working lives, without forcing them into poverty.

The potential for a centrally-funded but locally administered, universal and permanent job guarantee to set an effective minimum social wage which will eliminate involuntary poverty; to extend the human right to paid and socially productive employment to all; to act as a counter-cyclical macroeconomic stabiliser; to progressively transform the definition of work deemed worthy of remuneration; to enhance the wellbeing of millions of people, and to contribute towards social inclusion and social stability; and to do all of this without compromising ecological sustainability

has been explained in depth in an extensive literature (Kaboub 2007; Mitchell 1998; Tcherneva 2014).

The real value of this minimum social wage should be set immediately at a level which restores to the low paid their fair share of national income distribution, accounting for increases in both the cost of living and the benefits of technological change and rising labour productivity over the past half-century. It should not be seen as a mechanism to keep wages down, as is the case with the threat of unemployment at the moment. Instead, the goal should be to raise the relative wage of low paid people, and by doing so to engineer a much greater degree of income equality (Mitchell 2013).

Any inflationary consequences should be negated by an increase in tax rates on those at the top of the wealth distribution, to create space for the low paid to spend more out of their higher incomes, without pushing the economy beyond its productive capacity. A movement towards a more progressive tax system, such as the one which existed fifty years ago, alongside a radical increase in real minimum wages rates, supported by a job guarantee, would play a major part in a transition to a future of sustainable prosperity (Tcherneva 2015).

* Forthcoming as a Binzagr Institute for Sustainable Development Policy Note

Dr Steven Hail is a lecturer in economics at Adelaide University and is an ERA member.

References

1. Bray, J.R 2013, Reflections on the Evolution of the Minimum Wage for Australia: Options for the Future, Social Policy Institute Working Paper 01/2013, Crawford School of Public Policy, ANU
2. Bureau of Labor Statistics 2016, 'Characteristics of Minimum Wage Workers 2011', Labor Force Statistics from the Current Population Survey, https://www.bls.gov/cps/minwage2011.htm
3. Callaghan, J 1976, Leader's Speech, British Labour Party Conference, http://www.britishpoliticalspeech.org/speech-archive.htm?speech=174, accessed 23 Nov 2017
4. Deakin, S & F. Green 2009, 'One Hundred Years of British Minimum Wage Legislation', British Journal of Industrial Relations, 47: 205–213
5. Forstater, M 2003, 'Public Employment and Environmental Sustainability', Journal of Post Keynesian Economics, vol 25, no 3, pp 385-406
6. Forstater, M 2016, '"Jobs for All." Another Dream of the Rev. Dr. Martin Luther King Jr.', Policy Note No. 110, Binzagr Institute for Sustainable Prosperity
7. Kaboub, F 2007, 'Employment Guarantee Programs: A Survey of Theories and Policy Experiences'. Working Paper No 498, Levy Economics Institute, New York
8. Mitchell, W 1998, 'The Buffer Stock Employment Model and NAIRU: The Path to Full Employment', Journal of Economic Issues, vol 32, no 2, pp 547-555
9. Mitchell, W 2013, 'The Job Guarantee is a progressive vehicle for change', blog post, http://bilbo.economicoutlook.net/blog/?p=26396, accessed 23 November, 2017
10. Mitchell, W & T. Fazi 2017, Reclaiming the State: A Progressive Vision of Sovereignty for a Post-Neoliberal World, Pluto Press, London
11. Office for Nat Statistics 2017, RPI All Items Index: Jan 1987 = 100, http:///www.ons.gov.uk
12. Organisation for Economic Co-operation and Development 2017, Levels of GDP per hour worked; National Minimum Wages at Current Prices in NCU; Consumer Prices; PPP exchange rates, OECD Statistics, http://stats.oecd.org/, accessed 25 November 2017
13. Solt, F. 2016, 'The Standardized World Income Inequality Database', Social Science Quarterly 97, SWIID Version 6.1, October 2017
14. Tcherneva, P 2014, 'The Social Enterprise Model for a Job Guarantee in the United States', Policy Note 2014/1, Levy Economics Institute of Bard College, New York
15. Tcherneva, P 2015, 'Completing the Roosevelt Revolution: Why the Time for a Federal Job Guarantee Has Come', Policy Note No. 108, Binzagr Institute for Sustainable Prosperity
16. US Department of Labor 2017, Minimum Wage Laws in the States – September 30, 2017,

Wage and Hour Division (WHD), https://www.dol.gov/whd/minwage/america.htm#Washington
17. Wilkinson, R 2006, 'The Impact of Inequality', Social Research, 73, No.2, pp 711-732

Student debt slavery

Bankrolling financiers on the backs of the young

Ellen Brown

Higher education has been transformed from a public service into a lucrative cash cow for private investors.

Source: Flickr cc

The advantages of slavery by debt over "chattel" slavery – ownership of humans as a property right – were set out in an infamous document called the Hazard Circular, reportedly circulated by British banking interests among their U.S. banking counterparts during the U.S. Civil War. It read in part:

"Slavery is likely to be abolished by the war power and chattel slavery destroyed. This, I and my European friends are glad of, for slavery is but the owning of labor and carries with it the care of the laborers, while the European plan, led by England, is that capital shall control labor by controlling wages. "

Slaves had to be housed, fed and cared for. "Free" men housed and fed themselves. For the more dangerous jobs, such as mining, Irish immigrants were used rather than black slaves, because the Irish were expendable. Free men could be kept enslaved by debt, by paying them wages that were insufficient to meet their costs of living. On how to control wages, the Hazard Circular went on:

" This can be done by controlling the money. The great debt that capitalists will see to it is made out of the war, must be used as a means to control the volume of money .... It will not do to allow the greenback, as it is called, to circulate as money any length of time, as we cannot control that."

Student Debt Peonage

Slavery by debt has continued to this day, and it is particularly evident in the plight of students. Graduates leave

college with a diploma and a massive debt on their backs, averaging over $37,000 in 2016. The US government's student loan portfolio now totals $1.37 trillion, making it the second highest consumer debt category behind only mortgage debt. Student debt has risen nearly 164% in 25 years, while median wages have increased only 1.6%.

Unlike mortgage debt, student debt must be paid. Students cannot just turn in their diplomas and walk away, like homeowners can do with their keys. Wages, unemployment benefits, tax refunds and Social Security checks can be tapped to ensure repayment. In 1998, Sallie Mae (the Student Loan Marketing Association) was privatized, and Congress removed the dischargeability of federal student debt in bankruptcy, absent exceptional circumstances. In 2005, this lender protection was extended to private student loans. Because lenders know that their debts cannot be discharged, they have little incentive to consider the ability of student borrowers to repay. Most students are granted a nearly unlimited line of credit. This, in turn, has led to skyrocketing tuition rates, because university managers know the money is available for payment; a situation which has created the need for students to borrow even more.

Students take on a huge debt load with the promise that their degrees will be the doorway to jobs allowing them to pay it back, but for many the jobs are not there or are not sufficient to meet expenses. Today nearly one-third of borrowers have made no headway in paying down their loans five years after finishing their course, although many of these borrowers are not in default. They make payments month after month consisting only of interest, while they continue to owe the full amount they borrowed. This can mean a lifetime of tribute to the lenders, while the loan is never paid off, a classic form of debt peonage to the lender class.

All of this has made student debt a very attractive asset for investors. Student loans are pooled and repackaged into student loan asset-backed securities (SLABS), similar to the notorious mortgage-backed securities through which home buyers were caught in a massive debt trap in 2008-09. The nameless, faceless investors want their payments when due, and the strict terms of the loans make it more profitable to force a default than to negotiate terms the borrower can actually meet. About 80% of SLABS are backed by government-insured loans, guaranteeing that the investors will get paid even if the borrower defaults. The onerous federal bankruptcy laws also make SLABS particularly safe and desirable investments.

But as economist Prof Michael Hudson observes, debts that can't be paid won't be paid. As of September 2017, the default rate on student debt was over 11% at public colleges and was 15.5% at private for-profit colleges. Defaulted borrowers risk damaging their credit and their ability to borrow for such things as homes, cars, and furniture, which reduces consumer demand and constrains economic growth.

Investing in Human Capital: Student Debt and the G.I. Bill

It hasn't always been this way. Until the 1970s, tuition at many state colleges and universities was free or nearly free. Education was considered an obligation of the public sector, and costs were kept low.

After World War II, the federal government invested heavily in educating the 15.7 million returning American service personnel. The goal of the Servicemen's Readjustment Act of 1944, or G.I. Bill, was to facilitate their reintegration into civilian life. By far its most popular benefits were financial assistance for education and housing. Over half of G.I.s took advantage of this educational provision, with 2.2 million attending college and 5.6 million opting for vocational training. At that time there were serious shortages in student housing and faculty, but the nation's colleges and universities expanded to meet the increased demand.

The G.I. Bill's educational benefits helped train legions of professionals, spurring post-war economic growth. It funded the education of 450,000 engineers, 240,000 accountants, 238,000 teachers, 91,000 scientists, 67,000 doctors and 22,000 dentists, 14 future Nobel laureates, two dozen Pulitzer Prize winners, three Supreme Court justices, and three presidents of the United States. Loans enabled by the bill also boosted the housing market, raising home ownership from 44% before the war to 60% by 1956. Rather than costing the government, the G.I. Bill turned out to be one of the best investments it ever made. The legislation is estimated to have cost $50 billion in today's dollars and to have returned $350 billion to the economy, a nearly sevenfold return.

That educational feat could be repeated today. The government could fund a public education program as Lincoln did, by simply issuing the money or having the central bank issue it as a form of "quantitative easing for people." Infrastructure funded with government-issued US Notes in the 1860s included not only the transcontinental railroad but the system of free colleges and universities established through federal land grants.

The exponential rise in college costs occurred only after the government got into the student loan business in a big way. The 1965 Higher Education Act was part of President Lyndon Johnson's Great Society agenda, intended "to strengthen the educational resources of our colleges and universities and to provide financial assistance for students in postsecondary and higher education"

The Act increased federal money given to universities, created scholarships, gave low-interest loans for students, established a National Teachers Corps, and included a PLUS loan program that allowed parents of undergraduate and graduate students to borrow up to the full cost of attending college.

Unfortunately, the well-intended Act had the perverse effect of driving up tuition costs. The availability of federally guaranteed loans allowed colleges and universities to raise their prices to whatever the market would bear. By the mid-1970s, tuition was rising much faster than inflation. But costs remained manageable until the late 1990s, when the federal student loan business was turned over to the control of private banks and investors with aggressive collection practices, converting federally-guaranteed student loans from a public service into an investor boondoggle.

Meanwhile, in many countries within Europe university tuition is still free, including Denmark, Estonia, Finland, Germany, Norway, Slovak Republic, Slovenia, Sweden and Turkey. But providing an affordable education for the next generation is evidently not a priority with our government. Only 3%

of the federal budget is spent on education – not just for college loans but for school programs of all sorts, from kindergarten through graduate school. Compare that to the outlay for military spending, including Veterans Affairs and other defense-related departments, which consumes over half the federal budget and is an obvious place to cut. But there are no signs that our government is moving in that direction.

Source:

https://ellenbrown.com/2017/12/26/student-debt-slavery-bankrolling-financiers-on-the-backs-of-the-young/

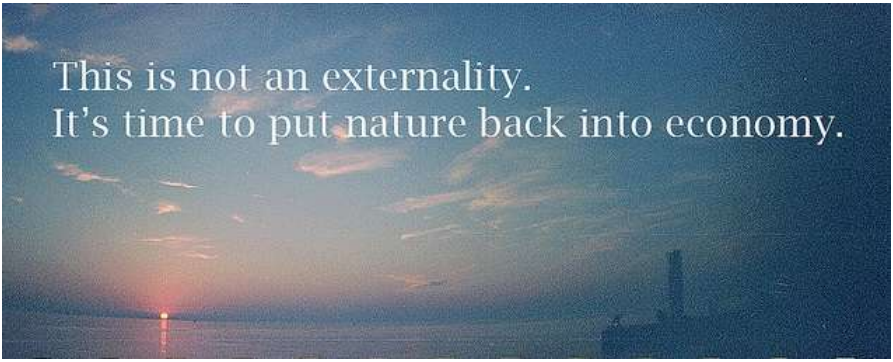
Originally published on Truthdig.org.

Ellen Brown is an attorney, chairman of the Public Banking Institute, and author of twelve books including Web of Debt and The Public Bank Solution. A thirteenth book titled The Coming Revolution in Banking is due out soon. Her 300+ blog articles are posted at EllenBrown.com.

A qualitatively improving steady-state economy as an alternative to continued growth

Philip Lawn

A successful economy is one that increases the well-being of a nation's citizens in an ecologically sustainable and equitable manner. Empirical evidence indicates that growth is now failing to augment the well-being of people in countries with high gross domestic product because it increases costs faster than benefits.[1] More disconcertingly, biophysical indicators reveal that high-GDP economies are well beyond the ecosphere's capacity to sustain them.[2] While growth was a successful strategy for high-GDP countries during times when their economies were small relative to the containing ecosystem, this is no longer the case.



Source: Flickr cc

A successful economy in a world where economies are large relative to the containing ecosystem requires a new strategy—one oriented towards a steady-state, or physically non-growing, economy. There is, however, no blueprint for a successful steady-state economy. Hence, it is impossible to know what it would look like. Nevertheless, it is possible to say something about the precepts by which a successful steady-state economy should operate and the likely advances they would facilitate and engender.

First and foremost, a steady-state economy must exist at a scale that is consistent with the ecosphere's sustainable carrying capacity. To

achieve this, quantitative restrictions (e.g., harvesting quotas and emissions caps) must be imposed to limit the rate of throughput to one that is within the ecosphere's ability to regenerate new resources and assimilate wastes. The need for explicit quantitative restrictions is necessary because market prices -- and this includes government-adjusted prices -- can only reflect relative scarcities, while sustainability is a matter concerning absolute scarcities. The fact that market prices reflect relative scarcities is what makes them good allocative signals with the capacity to facilitate a more efficient use of the incoming resource flow. However, efficiency gains will not reduce the total use of resources if they are overwhelmed by the throughput-increasing effect of a larger volume of economic activity. [3] Unfortunately, market prices cannot prevent this from occurring. Only some explicit restrictions placed on the rate of resource throughput can.

Importantly, since some economies are larger than what can be sustained by the ecosphere in the long run, some countries will need to reduce their rate of resource throughput. These nations will be compelled to downsize their economies prior to stabilizing them at a more appropriate physical scale.[4] It should be added that economic downsizing would not only benefit corpulent high-GDP countries, but would provide also the "ecological space" for impoverished nations to experience some welfare-increasing growth before they, too, must eventually make the transition to a steady-state economy.[5]

Second, because the aggregate rate of resource throughput is the product of a nation's population and per capita resource consumption, another important component of a steady-state economy is a steady-state human population. For this reason, high-population nations need to introduce population stabilization policies much like high-GDP nations need to introduce quantitative throughput restrictions to reduce and stabilize their per capita resource consumption.

Third, a successful steady-state economy must be characterized by a just distribution of income and wealth. To achieve distributional equity, tax and transfer systems should be used to guarantee a minimum liveable income for the poor and to impose a maximum income limit on the rich. The latter is needed to ensure that the order-of-magnitude income difference between the richest and poorest citizens is socially acceptable -- a matter more crucial once growth cannot be used as a "rising tide to lifts all boats." Some people would argue that the imposition of a 100 percent marginal tax rate at the designated maximum income would stifle incentive and initiative. Others, like me, would argue that any income above a certain level amounts to an "economic rent" (i.e., unearned income) which should be confiscated for reasons of fairness. Moreover, as an economic rent, income above the maximum limit can be confiscated without distorting the supply of labour and all forms of capital. As for a minimum liveable income, it should be guaranteed by way of legislation ensuring decent minimum wages and minimum conditions of employment and by introducing a publicly funded employer-of-last-resort scheme.[6] Given the important role that work plays in one's psychological health, the latter is preferable to an unconditional demographic grant. Moreover, if appropriately designed, an employer-of-last-resort scheme can ensure full employment in a steady-

state economy by always rendering labour the most limiting factor of production.[7]

Fourth, with sustainability and equity concerns resolved, markets should then be harnessed to efficiently allocate the incoming resource flow. And crucially, the prior imposition of throughput constraints and distributional limits would internalize ecological realities and objective values into market prices. Raising the price of natural resources and the cost of particular production methods would compel firms to improve their operations qualitatively rather than increase their output to maintain profitability.[8] Consequently, there would be a new economic reliance upon other factors:

(a) maximizing the use-value generated through production (which would increase benefits)

(b) reducing the resource intensity of production by fully exploiting existing resource-saving technologies and by developing new ones (which would reduce costs)

(c) better organizing the production process to increase labour productivity and reduce many social ills (which would increase benefits and reduce costs)

Increasing labour productivity is important because it would lead to higher hourly wages and the opportunity to reduce the length of the working week. This would allow people to increase the time devoted to non-economic pursuits. It would also facilitate job sharing, thus making it easier to achieve full employment within the context of a non-growing economy.

Fifth, one of the key requirements of a successful steady-state economy is the adequate supply of low resource-demanding and waste-generating infrastructure. Most contemporary infrastructure does not fall into these categories. Furthermore, almost all infrastructure has characteristics of public goods. Clearly, in making the transition to a qualitatively-improving steady-state economy, the economic role of the public sector is likely to increase. This means that the private sector must be willing to have some of its spending power reduced by government taxation in order to allow governments to acquire, in a non-inflationary way, the productive resources they need to provide more useful and environmentally benign forms of critical infrastructure.[9]

Finally, the success of any transition to a steady-state economy is largely determined by the nature of the global economy within which all national economies operate. The free and easy mobility of international capital means that international trade is undeniably governed by the principle of absolute advantage (absolute profitability) and by global market prices that fail to reflect both the true cost of resource use and the productive contribution made by many of the world's workers.

Under current trading arrangements, any country that elected to adopt steady-state economic policies would be severely disadvantaged in a competitive sense. The potential impact

of this has almost certainly deterred national governments from implementing steady-state economic policies, which is starkly demonstrated by the lack of any genuine attempt by a country to make the transition to a steady-state economy. A high priority for any government contemplating a steady-state economy must be a concerted diplomatic effort to bring about a global economy based on internationalization rather than globalization.[10] Without such a change, international co-operation of the type needed to induce a shift to a steady-state economy at the global level is unlikely to materialize.

Assoc Prof Philip Lawn is an ecological economist attached to the Centre of Full Employment and Equity at the University of Newcastle.

Source: https://www.humansandnature.org/economy-philip-lawn

Notes

[1] Philip Lawn and Matthew Clarke, eds., Sustainable Welfare in the Asia-Pacific (Oxford, U.K: Edward Elgar, 2008).
[2] Global Footprint Network, Ecological Footprint Atlas (Oakland, CA: Global Footprint Network, 2010).
[3] Herman E. Daly, Ecological Economics and Sustainable Development: Selected Essays of Herman Daly (Northampton, MA: Edward Elgar, 2007); Philip Lawn, "On the Ehrlich-Simon Bet: Both Were Unskilled and Simon Was Unlucky," Ecological Economics 69 (2010): 2045-46.
[4] J. Martinez-Alier, U. Pascual, F.-D. Vivien, and E. Zaccai, "Sustainable De-Growth: Mapping the Context, Criticisms, and Future Prospects of an Emergent Paradigm," Ecological Economics 69 (2010): 1741-47.
[5] Lawn and Clarke, Sustainable Welfare in the Asia-Pacific.
[6] William Mitchell and Joan Muysken, Full Employment Abandoned: Shifting Sands and Policy Failures (Cheltenham, U.K.: Edward Elgar, 2008).
[7] Philip Lawn, "Wake Up Economists! Currency-Issuing Central Governments Have No Budget Constraint," Munich Personal RePEc Archive (2011), http://mpra.ub.uni-muenchen.de/28224.
[8] Philip Lawn, "Is Steady-State Capitalism Viable? A Review of the Issues and an Answer in the Affirmative," in Ecological Economics Reviews, ed. R. Costanza, K. Limburg, and I. Kubiszewski (New York: New York Academy of Sciences, 2011), 1-25.
[9] Philip Lawn, "Facilitating the Transition to a Steady-State Economy: Some Macroeconomic Fundamentals," Ecological Economics 69 (2010): 931-36; "Wake Up Economists!"
[10] Daly, Ecological Economics and Sustainable Development.

The 'mystery' of low wages

Editor

" When nonproducers can claim as rent a portion of the wealth created by producers, the right of the producers to the fruits of their labour is to that extent denied. "

- Henry George, *Progress and Poverty*

Editorial commentary: Many Georgists now recognise that tackling the obscene growth of inequality in the modern world requires taxing the earnings and/or wealth of the extremely rich and that this should be the main focus, since it is the financiers, investment bankers and chief executives who now receive most of the rents.

What Is a steady state economy?

Editor

The following has been extracted from the website of CASSE (Center for the Advancement of the Steady State Economy):- http://www.steadystate.org/wp-content/uploads/CASSE_Brief_SSE.pdf

Sound byte

A steady state economy is a truly green economy. It aims for stable population and stable consumption of energy and materials at sustainable levels.

Definition of a steady state economy

A steady state economy features relatively stable size. It is ideally established at a size that leaves room for nature and provides high levels of human wellbeing. The term typically refers to a national economy, but it can also be applied to the economy of a city, region, or the entire planet. The size of an economy is generally determined by multiplying population by the amount that each person consumes. This quantity in a steady state economy neither grows nor contracts from year to year.

Herman Daly, the dean of ecological economics, defines a steady state economy as...

"an economy with constant stocks of people and artefacts, maintained at some desired, sufficient levels by low rates of maintenance throughput, that is, by the lowest feasible flows of matter and energy from the first stage of production to the last stage of consumption."

So a steady state economy aims for stability or mildly fluctuating levels in population and consumption of energy and materials.

To get a feel for how this works, consider a mature forest. It does not grow in size, but it is a living system with a complex web of parts.

Remarkably diverse species cooperate and compete within the forest, and new species and ecosystem functions develop over time.

Just like in the forest, stability in a steady state economy is very different from stagnation. Ecological economists actually call this kind of stability a dynamic equilibrium. This fancy term means that a steady state economy is dynamic – it changes and develops over time, but it remains balanced with the natural environment. The idea is to right-size the economy, to find the Goldilocks size that's not too small and not too big, but just right.

Rules for a steady state economy

Good economic policies strive to achieve societal goals like sustainability and fairness with the least amount of impingement on individual freedoms. Following this principle, achieving a steady state economy requires adherence to only four basic rules or system principles that are hard to argue with:

(1) Maintain the health of ecosystems and the life-support services they provide.

(2) Extract renewable resources like fish and timber at a rate no faster than they can be regenerated. (3) Consume non-renewable resources like fossil fuels and minerals at a rate no faster than they can be replaced by the discovery of renewable substitutes.

(4) Deposit wastes in the environment at a rate no faster than they can be safely assimilated.

Benefits of a steady state economy

A steady state economy is the only type of economy that is sustainable over the long term. It is an economy that meets people's needs without undermining the life-support services of the planet. It represents the ultimate social movement toward a better world for all. Life is downshifted as overconsumption, congestion, sprawl, and unfair trade practices fade away. People instead focus on community, relationships, sufficient consumption, and the things that really matter in life.

Myths and reality

Misconceptions about the steady state economy can be decisively refuted :

Myth	Reality
Failure to grow causes economic turmoil and unemployment.	Our current economy is structured for growth. When consumption slows in a growth economy, recession ensues. But a steady state economy is precisely and intentionally structured for stability. It's the stability that provides a good life for citizens and eliminates turbulent boom/bust cycles.
A steady state economy requires a socialist regime.	Market structures are employed to allocate resources efficiently, but some vital decisions (e.g., how big to grow) are kept outside the market. A steady state economy will feature a mix of private and public ownership of economic resources.
We'll be mired in poverty.	Economic growth has not eradicated poverty. The condition of having a stable and sustainable population in a steady state economy allows more resources per person.

Sources

Czech, B. 2006. Steady State Economy. Encyclopedia of Earth. Eds. Tom Tietenberg et al., National Council for Science and the Environment, Washington, DC.
Czech, Brian and Herman Daly. 2004. The Steady State Economy – What It Is, Entails, and Connotes. Wildlife Society Bulletin 32(2): 598-605.
Daly, Herman. 1991. Steady-State Economics. Island Press, Washington, DC. 286pp.
Daly, Herman and Joshua Farley. 2003. Ecological Economics: Principles and Applications. Island Press, Washington, DC. 450pp.

Bank income and spending

John Hermann

One of the most common difficulties many people encounter in understanding the mechanics of the contemporary financial system lies in their failure to understand the difference between stocks and flows.

For example they might have difficulty understanding why commercial bank interest income is a flow while at the same time the credit money created by banks is a stock. One difference lies in the fact that bank credit money creation entails no change in bank equity (equal to assets - liabilities, also known as net worth), while bank interest received represents a temporary increase in equity. From a conventional accounting perspective, that temporary increase in

its equity enables a commercial bank to spend in order to accommodate its many costs - including such things as interest paid to depositors, shareholder dividends, salaries, overheads, tax - and also to acquire new investments.

Bank equity is not money

The financial assets of a bank are its (a) reserves, (b) investment securities and (c) loan securities. The investment and loan securities are also liabilities of the borrowers and/or security issuers. However some of these bank assets are not matched by bank liabilities, and bank equity is defined to be a measure of the mismatch.

One should be aware of the difference between an **operating account** - which does not contain entities that can function as money, and a **transaction account** - which (if positive) always contains some form of money. In order for something to function as money, it requires the existence of a marketplace of players who have access to it, accept it, and use it for transactional purposes.

When a bank wishes to spend into the real economy in order to accommodate any of its costs, it creates new credit money. And commensurately, it marks down its operating account , which reduces its equity. Bank equity is not money, so when a bank spends there is no monetary transfer within the real economy. That is, bank equity does not make up any part of the monetary aggregate M1. Any expectation that if something can be given a monetary value then it can function as money is unwarranted. When a bank lends or spends, the money supply temporarily increases. While when a bank receives a retail payment, the money available to the public is temporarily reduced.

One also should recognise that banking institutions have no need for bank credit money and do not store it. Banks can create or destroy credit money simply by adjusting the entries in the accounts of bank depositors. If these entries are in credit, then they are at the same time depositors' assets and banks' liabilities. For this reason, a deposit (of credit money) in a bank is not a loan to the bank, as some people have been

misled into believing, because anything that is borrowed is necessarily an asset of the borrower.

Reserves

Lending and spending by a bank are facilitated in large measure by the volume of the bank's equity in relation to the totality of the bank's risk-weighted assets (the ratio between these two is known as capital adequacy). Also bank lending and spending operations effectively transfer reserves between banks. In this explanation we have in mind a broad definition of the word "reserves", which can embrace such things as (i) cash held in bank vaults and tills (or currency reserves), (ii) exchange settlement funds (or creditary reserves), and (iii) bank-held short-term government securities ("near money"). The first two may be thought of as "narrow" state fiat money, and the last may be thought of as a part of "broad" state fiat money.

Reserves held by commercial banks are not part of the money supply, and neither are they interchangeable with bank credit money. We have a dual monetary system consisting of state fiat money (bank reserves plus currency) and bank credit money. These two forms of money tag along with each other with every transaction involving a bank, but they don't mix. Members of the public and non-bank businesses have no access to banking reserves. Banks never lend or spend reserves into the real economy - never. That line is never crossed. Reserves created by the central bank remain entirely within the banking system, and are transferred between banks as and when required.

For countries like Australia and Canada which possess no formal requirements for reserves holdings by banks (other than that their credit balance must remain positive as a condition for the continuation of their depository facility with the central bank), the commercial banking institutions have no incentive to hold more creditary reserves than they require to satisfy their expected exchange settlement operations and their liquidity management. This is especially the case if they can obtain better interest returns from holding investments.

Investment securities

Lets us suppose that a bank decides to purchase an investment security from a bond dealer. The bond dealer might have purchased it from another dealer. Pursuing the sequence of such buying and selling by various dealers, one arrives ultimately at a first transaction in which a dealer purchased a newly created security from either (a) a corporation, (b) a federal government agency, (c) the central bank, in association with its open market operations. In some of these transactions, reserves were returned to the government or the central bank. In particular the return of reserves to the government facilitates spending and/or lending by the government into the real economy.

The various operations described above always occur as a result of the temporary increase in bank equity derived from interest payments and are monetary flows. Implying that bank interest income is not a static entity and is therefore a flow.

Retained earnings

It is sometimes supposed and stated that the portion of bank income which is held in the form of "retained earnings" or "retained profit" represents ongoing withdrawal of money from the real economy, thereby appearing to justify (at least in part) the claim by advocates of the so-called "debt virus hypothesis"

that money must be created specifically to accommodate the interest paid to banks for the retail loans they advance. However this claim can be shown to be illusory, when the various monetary flows associated with the creation of this component of bank equity are carefully investigated.

Bank retained earnings form part of a bank's equity, and overwhelmingly take the form of securities originally purchased from a federal Treasury agency. As stated previously, banks prefer not to hold on to more than a very minimal level of reserves, and to retain only the estimated coins and banknotes they require for satisfying the immediate needs of their customers.

The purchased securities may be subdivided into those that are purchased directly from Treasury and those that are purchased from a securities dealer. Direct Treasury purchases free up government fiscal space, which facilitates government spending into the non-bank private sector (limited only by the necessity to constrain undue inflationary pressures). Purchase from a dealer enables that dealer to purchase other securities from another source, with the intention of making a profit from the interest margin. In addition, a certain fraction of these assets also will be purchased by the central bank, as part of its open market operations. In practice a sequence of borrowing and lending operations by security dealers occurs, providing each dealer in the chain with substantial income, and the money thus obtained will be largely spent into the real economy in order to accommodate the dealer's living costs.

The important consequence of all this is that, one way or another, the purchase and repurchase of these assets assists the flow of money through the economy, rather than having the money saved or stored in some way.

Bank interest income

Let's consider the repayments on a loan made by a commercial bank to a retail borrower. One might ask why the loan interest received increases the bank's equity while the loan principal received does not. In order to fully understand this, one should carefully examine the way in which the respective transactions are accounted.

The simplest conceivable model for demonstrating the financial mechanics would have an economy containing a single commercial bank (and note that for such an idealised single-bank economy there will be no need for exchange settlement funds).

Let us suppose that the borrower possesses a loan account (account 1, into which the bank creates the initial demand deposit) and a savings account containing previous savings (account 2, which pays interest on deposits). In this simple model, the borrower does not actually spend the newly created bank credit money, but uses it to create a deposit in account 2 as collateral in support of business activities for a convenient period of time, after which time the full payment of principal and interest will have been made. It should be recognised that the original creation of each of these accounts entailed no change in bank equity.

The original bank loan advance created two assets and two liabilities; thus the loan security is the bank's asset and the borrower's liability, while the deposit of bank credit money is the borrower's asset and the bank's liability.

1. Repayment of principal using bank credit money

The repayment of principal is an exact

reversal of the original creation of two assets and two liabilities. The net result is that there is no change in bank equity.

2. Repayment of interest using bank credit money

The repayment of interest entails a reduction in the borrower's assets and in the bank's liabilities. This reduction in bank liabilities without a commensurate reduction of bank assets implies an increase in bank equity.

3. Repayment of interest using currency (coins and banknotes)

The borrower withdraws from account 2 at some stage in order to obtain the currency (which withdrawal entails no change in bank equity) and at a later time will pay that currency to the bank as loan interest. There are two possibilities here. The first is that the transactions will occur within the timeframe allocated for the bank to compute its equity (the accounting period), and for this case the net result is a reduction in the level of bank liabilities without a commensurate change in bank assets.

The second possibility is that the borrower withdraws currency from account 2 and places it in a wall safe for a period of time exceeding the bank's timeframe for computing its equity, before using it to pay the interest. In the latter situation, arguably the interest payment may be identified with an increase in the level of bank assets (more specifically, currency reserves) without a commensurate change in bank liabilities.

Analysis of the accounting procedures will be obviously more complicated for a multi-bank system, particularly if the existence of creditary reserves and the operations of a central bank are taken into account. The model for a two-bank system is a little more complicated but still straightforward, and the transfer of reserves between the spending bank and the payee's bank must be taken into account.

The zombie TPP is back

Jane Kelsey

Abridged from the New Zealand-based *The Daily Blog*.

OK, it's (almost) official. The zombie Trans-Pacific Partnership, widely criticised as a huge, undemocratic corporate power grab, has been restored to life*.

What's the latest move, and is it at all irreversible? In Japan on January 24, 11 Pacific Rim countries, including Australia, reached a deal to resurrect the TPP — a year to the day after United States President Donald Trump announced the U.S. was withdrawing.

The draft text remains unchanged, except for some provisions around institutional rules for the deal, the wording of which we have yet to see.

Some items will be suspended, pending the U.S. re-entry. These include most, but not all, of the toxic rules that would expand the profits of multinationals (like Google), Big Pharma, and Hollywood.

Changes to measures around the right of foreign companies to sue the government have been trimmed around the edges, but the main legal risks and corporate powers remain untouched.

All this was settled by the last ministerial meeting in Vietnam in December. There were four outstanding issues, including Canada's demand for a stronger cultural exception.

Eleven Pacific Rim countries have reached a deal to resurrect the Trans-Pacific Partnership

The Canadian government was seen as the main stumbling block. In Japan, Canada cemented a deal that involves side letters on culture, and protecting local content of automobiles. That is still not going to be an easy sell for Canada's Justin Trudeau government at home, but by playing hardball it at least won some concessions.

The signing is set for Chile on March 8. Japan has suggested the new text may not be released until after it is signed — including the side letters that Canada and other countries have negotiated. The travesty of democracy lives on.

* The latest version of the deal is called the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) **-** Ed.

Source: https://thedailyblog.co.nz/2018/01/25/the-zombie-tppa-is-back/

Elizabeth Jane Kelsey is a professor of law at the University of Auckland and is a prominent critic of globalisation.

Australian financial regulators need policing

Andrew Schmulow

A Productivity Commission report which analyses competition in the financial sector has pointed out that our finance regulators have become enablers of an industry that is an impediment to our economic competitiveness and exploitative of their most loyal customers.

It demonstrates the need for a board to oversee the conduct of our financial regulators, policing the bodies that are supposed to be keeping our financial system in check.

It could not have come at a worse time for our big four banks. Perennially pilloried for their rampant market misconduct (fraudulently manipulating benchmark interest rates) and their equally rampant abuse of upwards of hundreds of thousands of consumers across every one of their retail operations at one stage or another – financial advice, life insurance and credit card insurance, just to name a few.

The Australian Securities and Investments Commission (ASIC) recently launched a bank-bill swap rate manipulation case against the Commonwealth Bank, but only across a very narrow range of infringements. The bulk of the infringements can't be prosecuted because ASIC has dithered for so long, the statute of limitations has run out,

Source: Flickr cc

and the alleged crimes have proscribed.

And what of our other financial regulator - the Australian Prudential Regulation Authority (APRA)? The Productivity Commission reckons that APRA's ham-fisted use of macro-prudential tools, usually used to reduce risk in our financial system, has benefited the big four banks to the tune of A$1 billion.

APRA has been criticised for pursuing stability in a manner that has killed competition, hurt consumers, and starved small businesses of life-giving capital. The dominance by a few banks, whose profits are based on runaway property prices, is a systemic threat.

The result being that small banks are squeezed out, with big banks raking in higher rates, and investors offsetting higher rates against their taxes amounting to an estimated A$500 million in deductions. As the old saying goes, when your only tool is a hammer, every problem looks like a nail.

Who will regulate the regulators?

So what to do about ASIC and APRA? Back in 2014, the Financial System Inquiry recommended a board of oversight – a regulator for the regulators – to ensure that the regulators discharge their mandates.

So, for example, to ensure that ASIC acts like a cop, not a co-op; that APRA acts with foresight and finesse, as opposed to damaging competition. APRA and ASIC pushed back at the time, and the Abbott government rejected the recommendation.

Now to add impetus to the Financial System Inquiry recommendation, the Productivity Commission says there is a lack of transparency and accountability exhibited by our regulators. Add to that the implications regarding regulator's efficacy that comes with the establishment of the Financial Services Royal Commission. The public deserves better than this.

A regulator policing the regulators – a Financial Regulator Assessment Board – would conduct ex post analyses of how regulators had discharged their mandates, evaluate their policies and the efficacy of their policy tools. It would

be a sober second thought, and a crucial mechanism of double redundancy – to pick up on crucial elements that the regulator may have overlooked.

The idea has form. The UK has created something similar, called a Financial Policy Committee. This body's aim is to review the UK regulators, keeping a look-out for where the next "bombshell" may come from.

That development in turn builds on the work of James Barth, Gerard Caprio and Ross Levine whose research indicates that regulators simply cannot be trusted to perform these crucial functions as the guardians of finance, without oversight. The researchers call their proposed board of oversight the "Sentinel", and point out that no industry is more adept and more practised at suborning the guardians of finance than banks and insurers. Sound familiar?

Australia's financial system is increasingly governed by a lawless financial sector, presided over by regulators that are at best misguided, and at worst captured. A board of oversight is the least we can do.

Source:
https://theconversation.com/australias-financial-regulators-need-policing-91396?

Dr Andrew Schmulow is a senior lecturer in Law, University of WA

Source: Flickr cc

Everyone has a need to feel a sense of self-worth and self-actualization – that he or she believes his or her existence is meaningful. Unfortunately, the Industrial Revolution wrongfully instilled a social norm that self-worth should primarily come from the work ethic – if you work hard, you will be rewarded. But because of AI, jobs based on repetitive tasks will soon be gone forever. Therefore we need to redefine the idea of work ethic for the new workforce paradigm. The importance of a job should not be solely dependent on its economic value but should also be measured by what it adds to society. We should also reassess our notion that longer work hours are the best way to achieve success and we should remove the stigma associated with service professions. — Kai-Fu Lee

Utopia or nightmare? The answer lies in how we embrace self-driving, electric and shared vehicles

Jake Whitehead and Michael Kane

This is a controversial issue, and readers are invited to respond with comments.

Source: Flickr cc

Emerging transport disruptions could lead to a series of nightmare scenarios and poorer transport systems unless we have sensible and informed public policy to avoid this. Of course, some foresee a utopian scene: self-driving electric vehicles zipping around our cities serving all our transport needs without road accidents or exhaust fumes. But the shift to this transport utopia might not be as straightforward as some think.

In a newly published paper [1] we have explored potential problems linked to vehicle electrification, autonomous vehicles, the sharing economy and the increasing density of cities. We examined what could happen if these four trends are not all properly managed together.

Much has been written about the potential benefits of these disruptions:

(a) electric vehicles powered by renewable energy could cut costs and fossil fuel emissions, and eliminate the significant impacts of pollution on public health and the environment;
(b) shared vehicles could reduce transport costs and traffic volume;
(c) autonomous vehicles could eliminate traffic accidents, reduce congestion and increase mobility for everyone;
(d) increasing urban density could bring significant economic benefits through efficiency gains when people and businesses are closer together.

However, the interplay between these trends could also result in nightmare scenarios. We developed a Future Mobility Disruption Framework to investigate what could happen if even one of these trends is not actively managed.

Nightmare 1: vehicle electrification + autonomous vehicles + increasing urban density

If policy fails to support and manage a shift away from private vehicle ownership towards car-sharing, then several negative impacts are likely. In this scenario, electric cars will be cheaper to run and still privately owned. This could encourage more people to drive and create more traffic. The convenience of self-driving cars with low operating costs might also encourage a shift away from traditional public transport and could conceivably cause its collapse.

Nightmare 2: autonomous vehicles + increasing urban density + shift towards sharing economy

If people shift from private car ownership towards shared, autonomous vehicles, significant transport cost savings could be possible. By replacing public transport systems, shared vehicle services could arguably provide cheap transport for all. While these benefits are obvious, without vehicle electrification, the use of fossil fuels would significantly increase emissions. Though a reduction in emissions is plausible with a shift away from private vehicle ownership, the low cost and convenience of shared vehicles could lead to higher demand and more trips, thus increasing emissions. This pollution would increase rates of premature deaths and diseases in our cities, and worsen the impacts of climate change.

Nightmare 3: increasing urban density + shift towards sharing economy + vehicle electrification

We would again see a shift away from private vehicle ownership towards shared, electric vehicles. This would reduce transport and pollution-related health costs However, in this scenario, the vehicles would not be autonomous. The shared vehicle fleet would require human drivers. This would result in higher costs, less efficiency and more accidents. Ultimately, this would be a barrier to the long-term sustainability and widespread use of shared vehicles.

Nightmare 4: shift towards sharing economy + vehicle electrification + autonomous vehicles

So what would happen in the face of three of the transport disruptions occurring without increasing urban density? Electric and autonomous vehicles would significantly reduce transport costs. Combined with the availability of shared services, this would lead to a substantial shift away from private vehicle ownership towards shared, electric, autonomous vehicles (SEAVs). These vehicles would be efficient, safe and convenient, with minimal environmental impacts. At first this would seem like the ideal scenario to aim for. However, it ignores the potential impacts on urban form and density.

Without policies supporting urban density and public transport, a shift towards SEAVs would probably encourage sprawling, car-dominated cities as people would have fewer reasons to live close to work. SEAVs would be cheap and convenient. They could pick people up from their front door and drop them directly at their destination. People would likely not be as concerned with road congestion as they could carry out other activities during the trip – even working during the drive.

If people feel less restricted in where they choose to live, they might opt for larger houses and lots, further away from cities. This would not only place additional demands on infrastructure but also have a significant impact on

the natural environments surrounding our cities.

This form of lower-density living would discourage active transport options, like walking and cycling, which would have negative health impacts. Urban sprawl could also have negative economic impacts as people and businesses spread out and lose the benefits of being close together.

Managing disruptions as a whole

Each of the four trends could independently yield many benefits. However, an examination of the four nightmare scenarios reveals that, without holistic planning and policy support for all four disruptions, negative unintended consequences are likely. Planners and policymakers must consider how these disruptions will interact.

As detailed in our paper, a range of possible policy interventions is available for managing the risks associated with these trends. These include reform of road taxation, supportive regulation and integrated planning.

Only a holistic approach to managing these disruptions will enable us to arrive at a future transport utopia. More discussion about these transport disruptions can be found in a forthcoming book, *Three Revolutions* [2].

1. http://www.tandfonline.com/doi/full/10.1080/07293682.2018.1424002

2. https://islandpress.org/book/three-revolutions

Source: The Conversation, 16 Feb 2018
https://theconversation.com/utopia-or-nightmare-the-answer-lies-in-how-we-embrace-self-driving-electric-and-shared-vehicles-90920

Authors:

Jake Whitehead is Research Fellow, The University of Queensland.

Michael Kane is Director, *Innovation and Economic Strategies, Economic Development Queensland;* and Research Associate, Curtin University Sustainability Policy Institute, Curtin University.

Comment from Graham Strong:

They lost me at scenario 3. There's an interchangability between electric and autonomous vehicles that wasn't discussed. Nor were the levels of autonomy. The details matter because it made me sceptical about the articles basis. Why is an assumption made about more electric cars = more accidents when its probable that the default for all electric cars will be some level of autonomy i.e. emergency braking. Research from modelling or opinion? Scenario 3 seemed to presuppose that all autonomous vehicles will be level 5 (fully auto) and ICE powered. That was very confusing.

Jake Whitehead in reply:

To clarify, the scenario's explored here are describing the extremes. That doesn't necessarily mean that they will or won't happen, but to simply explore the worst case scenario to prompt further thought, debate and research into how we can try to avoid these extreme outcomes.

The assumption is full autonomy; again we didn't go into different levels of autonomy because we were examining the extremes in each direction.

In scenario 3 it is describing a no/limited autonomy future (SAE levels 0/1/2). It is not saying that electric cars will result in more accidents, but that there would be more accidents with human drivers compared to fully autonomous vehicles.

As you correctly point out, most EV's are likely to come with some level of autonomy - and already do - and as such will assist in reducing accidents. One of the key points here is that AV's may not necessarily be electric (and vice versa) without the correct policy settings.

There is a real risk that Australia will become a dumping ground for the world's most polluting vehicles (arguably we already are) without reasonable efficiency and emissions standards, and this could continue to apply in a self-driving vehicle future.

The benefits of job automation are not likely to be shared equally

Shahid Shahiduzzaman, Marek Kowalkiewicz and Rowena Barrett

Source: Flickr cc

While companies might reap significant gains in productivity from automating certain jobs, this won't necessarily lead to pay rises for everyone. The evidence suggests that some businesses might pass on the gains to some workers, but not to all.

Some 40% of all jobs are predicted to disappear with automation in Australia. The jobs most likely to go first will be those that can be easily codified, those that are repetitive, simple, structured or routine: think of jobs in manufacturing or those that involve form processing or driving a vehicle.

More than thirty years ago, economist Robert Solow wrote: " …you can see the computer age everywhere but in the productivity statistics". At the time his comment created intense discussion, especially in the context of the spread of technology. But it has recently been challenged.

Now we are starting to see the effect of automation everywhere and especially in productivity and economic statistics. It's expected that automation will make a A$2.2 trillion boost to productivity in Australia between 2015 and 2030. But whether productivity gains will be redistributed equally, remains highly questionable.

The growing divergence

There is an economic argument that workers' wages should grow in line with productivity growth and in doing so improve everyone's living standards. Although there is overwhelming data about rising economic surpluses from automation, recent evidence indicates that the growth of productivity and the growth of workers' wages are not actually linked.

For example, U.S. research shows a large divergence between productivity and median hourly compensation growth, from 2000 to 2011. Similarly, in Australia, we found wage growth has been lagging productivity growth across most sectors of the economy.

Average productivity growth was much higher than average wage growth in most sectors of the Australian economy during 2012-16.

Since the 1970s, across most OECD countries, the share of income going to wages has been decreasing, and the share being reinvested in capital (for instance cash reserves, equipment and machinery) has been increasing.

Clearly, profits arising from productivity gains have been going to capital rather than labour, reflecting growing income inequality in general.

Where the benefits of automation go

Automation eliminates or replaces many routine tasks performed by people at work. Research shows a growing polarisation in the job market, where highly skilled and educated workers are commanding good jobs, while those in unskilled roles or other positions with lower levels of education required are low paid.

Given that highly skilled workers are in high demand, these workers are more likely to receive the financial gains from automation or others in mid or senior level managerial roles. Indeed, CEO compensation has been growing much faster than average workers' wages.

The ratio of CEOs' pay to workers' average pay in large US corporations was 20:1 in 1965, and it rose to a whopping 271:1 in 2016. What these signs point to is that those with less bargaining power are less likely to reap the rewards from productivity gains from automation.

Wage expectations of the tech savvy worker

When real (human) workers produce more by putting in more time or energy, they expect, and agitate for, a larger share of the gains. But when automation (rather than longer hours or more sweat) leads to increased productivity, and subsequently increased profits, it's less clear which workers should (or could) receive the increased share of the gains.

Businesses also don't have an incentive to distribute a share of the gains back to the workers. We can see this for example in pharmaceutical services, which are becoming increasingly automated, yet workers are faced with low starting salaries. In such a highly competitive industry, the businesses are instead incentivised to pass on the gains to customers in terms of lower prices of goods and services they offer, rather than wages.

In economics, it is often said that a rising tide lifts all boats. What this means is that everyone in society benefits from economic development and productivity.

But it's not clear this will happen in an automated world. In the immediate future, there is no evidence to suggest that economic surplus from automation will be used to fund higher wages.

Workers may see some reward if their skills are valuable, rare and difficult to codify and automate. This value of being in high demand may be the incentive for workers to reskill or to look at how they organise to negotiate their share of the rewards.

Source: The Conversation, 5 Feb 2018
https://theconversation.com/the-benefits-of-job-automation-are-not-likely-to-be-shared-equally-90859?

Shahid Shahiduzzaman is Research Fellow, Digital Economy, QUT
Marek Kowalkiewicz is Professor and Chair in Digital Economy, QUT
Rowena Barrett is Head of School of Management , QUT

ERA membership 2018

If you are not a subscribed ERA member, or have not yet resubscribed for 2018, please consider doing so now. We rely on members' subscriptions and donations in order to cover the costs of our activities, including the printing and posting of the ERA Review to those who require a hard copy, and organising public events. The cost is $20 per calendar year for regular members, $15 concession (pensioners and students), with $10 for each additional family member, forwarded by post as a cheque or as a money order made out to ERA, or as a credit transfer between accounts. The ERA account details are provided on page 32. It is also possible to join or renew membership using the payment facility available on the ERA website.

Ten drivers damaging the living world

Editor

The following drivers of unsustainability identified by recent ACF commissioned research were found to be strongly interconnected and mutually reinforcing:

1. The dominant world paradigm of free markets, individualism and technological progress.

2.Undervaluing of the natural world and increasing disconnection from nature.

3. Endless pursuit of economic growth through unrestrained free markets.

4. Corporate marketing and associated overconsumption.

5. Social tendencies to discount risks that don't seem immediate and reject risks that seem overwhelming, and the psychological desire to conform.

6. Media that tend to reflect and reinforce established power structures.

7. Persistent human population growth.

8. Technological advances that amplify human impact on the natural world.

9. Government and market institutions that ignore environmental degradation.

10. Limited access to environmental justice within the legal system.

The absurdity of the budget deficit hysteria

There is nothing insidious or inherently sinister about government budget deficits per se. As the economist Stephanie Kelton argues:

"Government spending adds new money to the economy, and taxes take some of that money out again. It's a constant churning of pluses and minuses, and their minuses become our pluses. When the government spends more than it gets in taxes, a 'deficit' is recorded on the government's books. But that's only half the story. A little double-entry bookkeeping paints the rest of the picture. Suppose the government spends $100 into the economy but collects just $90 in taxes, leaving behind an extra $10 for someone to hold. That extra $10 gets recorded as a surplus on someone else's books. That means that the government's -$10 is always matched by +$10 in some other part of the economy. There is no mismatch and no problem with things adding up. Balance sheets must balance, after all. The government's deficit is always mirrored by an equivalent surplus in another part of the economy."

- Marshall Auerback

Source: https://www.alternet.org/news-amp-politics/lies-behind-deficit-hysteria

ECONOMIC REFORM AUSTRALIA (ERA) INC

Economic Reform Australia (ERA) is a not-for-profit, non-political organisation established in 1993 to offer a broader understanding of how economics affects the lives of Australians. ERA educates and advises decision-makers and the wider community about the economic foundations of a society characterised by social justice and ecological sustainability.

ERA's Patrons

Prof Stuart Rees, Prof Frank Stilwell, Prof Michael Pusey, Dr Evan Jones, Prof Steve Keen, Prof David Shearman, Dr Ted Trainer, Dr Shann Turnbull

Further information

era.org.au

Ph: (+61 8) 8264 4282

facebook.com/
EconomicReformAustralia

E: hermann@chariot.net.au
Member queries: 08 8344 2350

PO Box 505, Modbury,
SA 5092, Australia

Beyond Bank Australia,
BSB 325-185, A/C No 02228579
Payment queries: 08 8264 4282

Membership of ERA is open to all who agree with its objectives and overall philosophy. Forward A$20.00 per annum (A$15 concession) plus A$10 extra for each additional family member, with the new member's address, telephone and fax numbers, plus email address to The Treasurer, P.O. Box 505, Modbury, SA 5092, Australia

New members may calculate the part of the year remaining, remit the appropriate pro-rata amount and also consider the option of paying for the following year. All cheques to be payable to Economic Reform Australia or one can pay by direct credit transfer with the payee's name added to the payment information. ERA's account details are: Beyond Bank Australia, BSB 325-185, A/C No 02228579).

Members are entitled to receive the regular ERA publication *ERA Review*, to vote at ERA meetings and participate in organized activities. Meetings are held at 2pm on the last Saturday of each month at 111 Franklin Street Adelaide SA. Submissions to *ERA Review* should possess relevance, accuracy and a good literary standard.